Australian Government

Jobs and Skills Australia

New perspectives on old problems

Gendered Jobs Work and Pay

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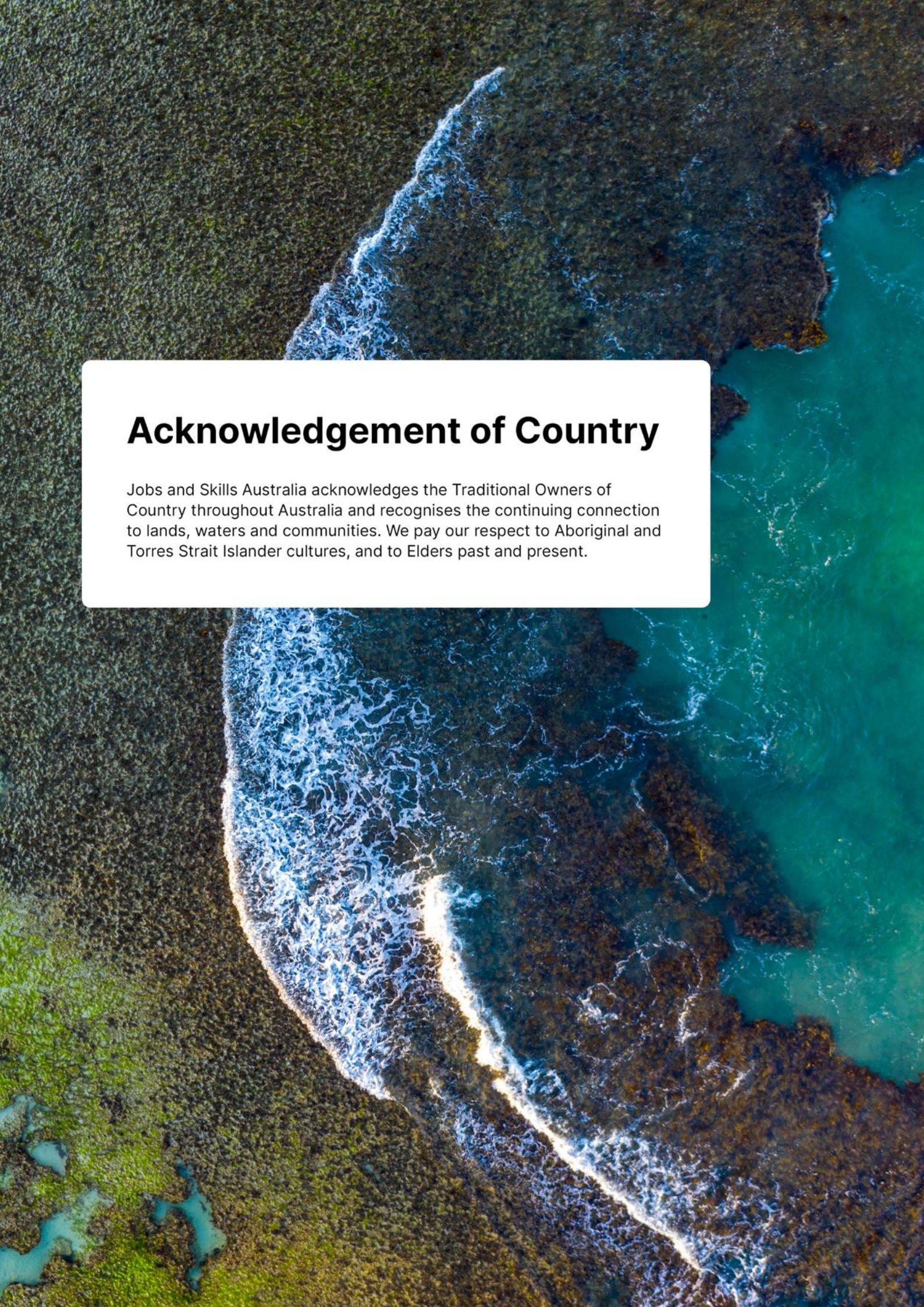

Acknowledgement of Country

Jobs and Skills Australia acknowledges the Traditional Owners of Country throughout Australia and recognises the continuing connection to lands, waters and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures, and to Elders past and present.

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Executive Summary

Jobs, work and pay are highly gendered in Australia—contributing to significant gender economic inequality. Accelerating progress towards gender economic equality requires improving gender balance across work, jobs and pay—and the education and training choices, pathways and divides that lead into them.

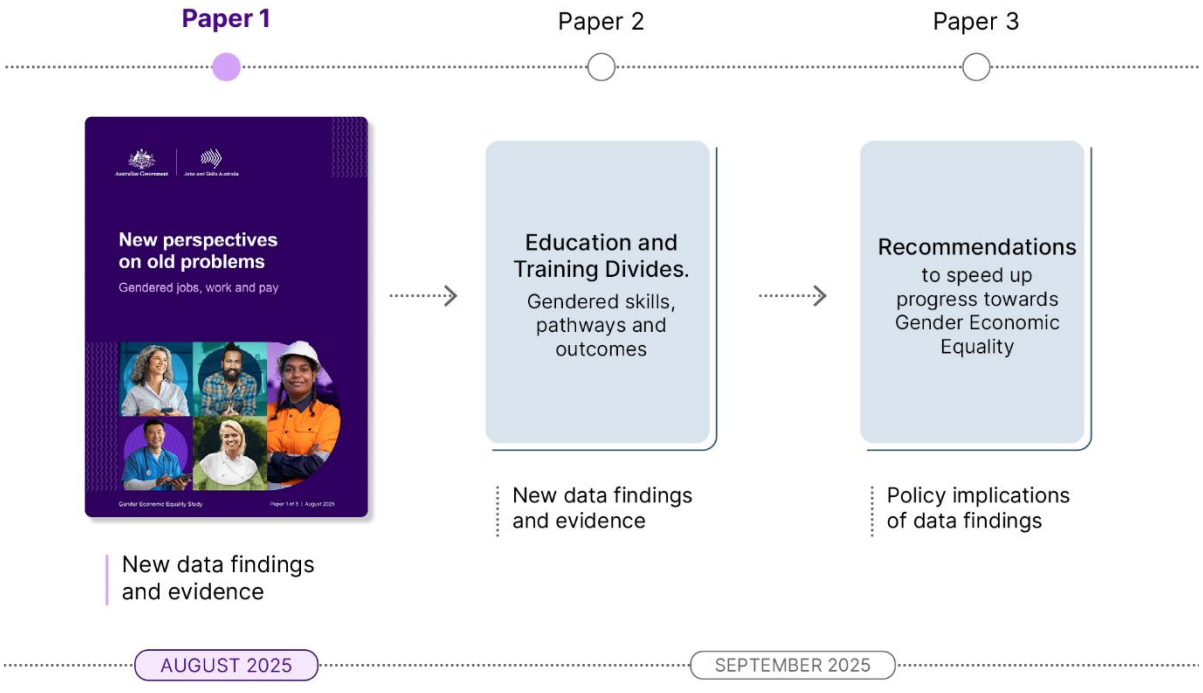
In this Study we provide new perspectives, data and evidence to support both goals. Improving gender balance across the labour market and skills system is essential—not only to boost productivity and expand opportunities, but also to shift the underlying gendered 'norms', behaviours and expectations that continue to dominate our society and economy.

This first data findings paper (Paper 1) of the Gender Economic Equality Study presents new data and insights on the gendered division of jobs, work and pay.

Our second data findings paper (Paper 2), to be released in early September, will shift analytical focus to gendered skills, training pathways and outcomes.

In late September 2025, our third and final publication (Paper 3) will explore the policy implications of findings from papers 1 and 2, offering recommendations to accelerate progress towards gender economic equality.

Figure 1: Gender Economic Equality Study planned publications



Part 1: New perspectives on occupational segregation

In this paper, we introduce the Gender Segregation Intensity Scale (GSIS) and use it to frame new perspectives, data, evidence and policy implications analysis across the study's three papers. The GSIS is a new and more detailed approach for measuring and understanding segregation intensity across the Australian Labour market. The GSIS reveals how gendered Australian jobs, work and pay really are and how gendered occupational segregation is particularly difficult to shift.

In 2021, only 21% of the Australian workforce worked in gender balanced occupations, and around 70% of occupations had the same gender segregation intensity they had in 2006.

Other key findings on gendered occupational segregation include:

- There has been a broad gender balancing of managerial and professional occupations over time, and growth in female dominated occupations, including:
  - Ambulance Officers and Paramedics, Dental Practitioners and Barristers, which became less segregated, changing from male dominated to gender balanced
  - Veterinarians and School Principals, which shifted away from gender balanced and tipped into being moderately female dominated
  - Aged and Disabled Carers and Pharmacy Assistants, which more males are working as, but this didn't translate into shifts on the GSIS.
- Occupation shortages typically worsen as gender segregation intensifies, particularly in almost completely male dominated occupations.
- Higher skill level jobs (Skill Level 1 and 2) are more likely to be gender balanced, and Skill Level 3 and 4 are where segregation is particularly acute.
- Almost completely male dominated occupations make up most jobs at Skill Level 3 and many are in shortage. There is clear historical gender bias in how we identify, describe and categorise occupations. We understand male dominated jobs in far more detail (for instance, there are 66 almost completely male-dominated jobs but only 16 almost completely female dominated jobs). The move to a new occupation classification—the Occupation Standard Classification for Australia (OSCA)—is better addressing this.

Gendered occupational segregation is a clear problem that needs addressing across the interconnected jobs and skills systems, including through early interventions in education and training pathways, such as when formative study choices are being made in early schooling. This will be explored further in Paper 2 of this study.

We also use the GSIS to frame intersectional insights into how occupations and industries are not just gender segregated but also divided along other demographic lines, including for First Nations people and CALD migrants.

Just as gendered norms reinforce the gendered divisions of jobs, work and pay in Australia, norms around race, culture and ethnicity, along with established pathways (e.g. migration) also shape which jobs different groups of workers gravitate towards, succeed in or can get stuck in. Both individual choices but also structural discrimination and bias are at play in these dynamics.

Key intersectional insights from this study for First Nations workers are that:

- First Nations workers are more concentrated in community and personal services occupations (e.g. Education Aides and Welfare Support Workers), and several large employing almost completely male dominated trade occupations compared to the total workforce.
- First Nations workers are more likely to work in highly gender segregated jobs and less likely to work in gender balanced jobs, and there are unique gender segregation trends across these workers.

Likewise, CALD workers are over or underrepresented in certain jobs across the economy and are slightly more likely to work in gender balanced occupations than the total population or First Nations counterparts.

CALD workers are overrepresented in some occupations (IT, health, driving, hospitality, etc) and underrepresented in others (teaching, law, farming; highly male dominated trades, emergency services, police, etc).

Gender segregation patterns across CALD workers are also unique:

- The growth in female dominated occupations, across health and care, aligns with growth in CALD dominated occupations.
- CALD females have played a significant role in the broader gender balancing of higher skill level managerial and professional occupations over time (e.g. in health, IT and accounting).
- CALD males have higher shares of health roles, including Aged and Disabled Carers and Registered Nurses, compared to males across the economy. These occupations are less gender segregated among CALD workers than the total workforce.
- Occupations like Doctors, Accountants, Software Programmers, and Civil Engineers have both become more gender balanced and increasing culturally diverse at the same time.

For First Nations workers and CALD workers, changes in selected occupations identify important and promising changes that are contributing to broader occupation growth and gender segregation changes over time.

To explore the occupational gender segregation over time, for all jobs and across different groups of people like First Nations workers or CALD workers, see the JSA Gender Segregation Intensity Scale Dashboard.

We also draw on qualitative insights from the lived experience of workers from diverse backgrounds—including different genders, CALD and culturally and racially marginalised (CARM) communities, migrants, age groups, and LGBTQIA+ identities—across a range of occupations and qualifications. These insights are drawn from research specifically commissioned for the study that included nine focus groups and 15 in-depth interviews.

Like our quantitative findings, the qualitative data revealed that gender inequality is deeply entrenched in the workforce. It is further compounded by intersecting factors such as, race and varies depending on industry gender segregation and life stage.

We will continue to reference these findings throughout the study, especially in Paper 3, which focuses on the policy implications of both our quantitative and qualitative research.

Part 2: New perspectives on gender pay gaps

This Paper presents three new perspectives on gender pay gaps to expand the evidence base and accelerate progress towards gender equality. The Study complements existing national measures, by introducing additional and unique approaches to fill key data gaps—particularly around detailed occupational and intersectional pay gaps.

We report pay gaps for 688 occupations across the economy, along with intersectional pay gap data for First Nations people, CALD people and migrants.

We also develop a new accumulated 10-year gender pay gap measure to better capture the longer-term and life course impacts of gender economic inequality.

You can explore all 688 occupational gender pay gaps in the JSA Gender Pay Gap Dashboard.

Our key findings on occupational gender pay gaps include:

- In 2020-21, the accumulated 10-year occupational gender pay gap was 30.7%, which is greater than the single year point-in-time gender pay gap (25.7% in 2022-23).
- Males are outearning females in 98% of the 688 occupations and only 2% of occupations have a relatively neutral pay gap.
- There are over 100 occupations where the pay gap is over 25% and almost 30 occupations with a pay gap over 35%.
- Some of the occupations with the highest gender pay gaps in the country are in the male dominated trades, health and finance.
- Gender pay gaps widen and worsen at the highest grades of segregation intensity but there are still high gender pay gaps in some gender balanced occupations.
- There are high gender pay gaps in management jobs across industries of varying gender segregation intensity, pointing towards the enduring problem of both vertical and horizontal gender segregation in the Australian labour market.
- Differences in patterns, hours and amount of work explain some, but at times very little, of the variation in occupational pay gaps.
- Gender pay gaps increase with age and peak among 40-54 year olds at 29.6%. However, the 'motherhood penalty' is clearly seen in the accumulated 10-year gender pay gaps, with females aged 25-39 years old seeing the worst subsequent economic outcomes.
- Both total workforce and occupational gender pay gaps have been decreasing over time and this reflects similar trends to the most recent WGEA and ABS analysis of Australia's gender pay gaps.

Without intersectional pay gap data and analysis, "the true state of gender equality in the economy is not being reflected and therefore is not being fully leveraged to drive targeted action" (PM&C 2021).

Our Study has begun filling these pay gaps, which show that:

- Regardless of which pay gap measure or benchmark is used, First Nations females have the highest gender pay gaps in Australia. Compared with all Australian males, they had a

gap of 35.3%, which was almost 10 percentage points higher than for females generally and for CALD females (which were both similar).

- First Nations males also have the highest gender pay gaps among male cohorts at 19.3% but is still below all of the pay gap measures for different groups of females. CALD and migrant male pay gaps are far lower at under 5%.
- The First Nations female 10-year gender pay gap was 38.1%, more than 7 percentage points higher than for females generally and for CALD females (which were both similar).
- In contrast, accumulated gender pay gaps for First Nations males were lower than the single year point-in-time measures (19.3% to 16.7%), while the accumulated measure was almost double the point-in-time measure for CALD males (4.2% to 8.5%).
- As at the total workforce level, pay gaps have been decreasing for First Nations people, CALD people and migrants.

JSA will publish an Intersectional Gender Pay Gap Dashboard in the coming months to support further insights.



Paper 2: Additional insights coming on education and training divides

Across both Parts 1 and 2 in this paper, we consistently highlight that the way we identify, measure and describe jobs or pay is highly gendered. This is reflected in occupation classifications, both internationally and in Australia, which mirror gender bias embedded in labour market structures and limit our understanding of women's jobs, work and pay compared with men. Female dominated jobs have been far less disaggregated in occupation classification systems and in data in most countries, even those with rich and detailed labour market data, like Australia.

In Paper 2: *Education and Training Divides—Gendered Skills, Pathways and Outcomes*, which will be released in early September 2025, we further address these evidence gaps with the first ever insights into gender segregation in occupations that are now specifically identified under the new OSCA.

In developing OSCA, the ABS has sought to better address the gender bias in our national occupational classification system and official statistics. JSA has partnered with the ABS through this study to produce the first ever analysis that demonstrates the value of these improvements for understanding occupational segregation and the greater recognition of

female dominated occupations in the labour market. From an international perspective, OSCA positions Australia as leader in how to better understand gendered work, jobs and pay and, as a result better, to support efforts towards economic equality.

Paper 3: From data and findings to recommendations for change

The data and findings in this in this paper point to the need for policy change if we are to accelerate progress towards gender economic equality. In Paper 3, we will present recommendations, drawing on the six themes that have emerged throughout this first paper:

- Australia's workforce remains highly gender segregated, and there are clear connections with gendered choices, divides and outcomes across education and training pathways. This is a serious challenge that needs actors across these systems to come together to make progress.
- Gendered occupational segregation is complex and difficult to shift. However, there are encouraging examples of gender balancing change over time that we can supercharge into accelerating trends, along with leveraging lessons on how to make progress on more stubborn patterns of occupational segregation.
- Gendered occupational segregation is a problem for addressing occupation shortages—with clear economic impacts—and this worsens at selected skill levels and in male dominated occupations. This has significant skills-system policy implications. Also, the occupational, industry and workplace culture and high pay gaps in traditionally male dominated occupations need to change for Australia to make faster and broader progress on balancing out our highly gender segregated workforce.
- There are very large gender pay gaps that are visible at the detailed occupation level, with some particularly high gaps in certain occupations, even in gender balanced or highly female dominated occupations. All need attention. For example, our data findings can focus policy makers attention on addressing the high gender pay gaps in particular occupations such as almost completely male dominated trades—all of which are in national shortage and key to Australia's Net Zero transition and Future Made in Australia reform—when designing policy levers to encourage women into them. It is also important to have policies focused on retaining women in these occupations, including upskilling opportunities and other career-long enabling supports.
- Intersectional insights show nuanced policy actions are needed to address significant sources of compounding gendered and racial discrimination in the world of work, education and training—particularly for First Nations females in this country. But intersectional insights also highlight how different groups of workers contribute significantly to broader positive segregation changes in the labour market. Our Study demonstrates the value of intersectional data, approaches and analysis and these should be part of ongoing work to progress gender economic equality.
- The GSIS should be used to monitor shifts in detailed occupational gender segregation over time, alongside detailed occupational gender pay gaps. Ongoing monitoring should identify the gendered jobs and work that need the most serious intervention or offer the biggest return on investment opportunities for speeding up progress to gender economic equality.

Introduction

Jobs, work, and pay are highly gendered in Australia, which leads to significant gender economic inequality.[1] To speed up progress towards gender economic equality, there is a need for more nuanced and targeted perspectives, evidence and data to develop more effective policy interventions. This JSA Study is designed to do just that, and this Paper (Paper 1) offers new perspectives on two key policy challenges: gendered occupational segregation and gender pay gaps.

In Part 1 of this paper, we offer four new perspectives on occupational segregation to fill key evidence gaps and speed up progress towards gender economic equality:

1. **A new and more detailed approach for measuring and understanding segregation intensity across the Australian labour market: the new Gender Segregation Intensity scale (GSIS)**. The GSIS measures four intensities of occupational segregation, and we apply it throughout the study to provide new perspectives on old problems, including the extent of occupational segregation. In this first Paper, we provide occupational snapshots across the GSIS to deepen our understanding of gender segregation. We also apply the scale to ongoing labour market challenges like occupational shortages and explore intersections with Skill Level trends. We also demonstrate how the GSIS can be used to monitor progress towards gender economic equality itself under the Working for Women: A Strategy for Gender Equality.
2. **Intersectional insights into how occupations and industries are divided along other lines, not just gender**. For example, how some jobs or workers suffer 'double' segregation based on their First Nations status or culturally and linguistically diverse (CALD) identity and background, along with gender. We take a snapshot of the top 20 occupations across the total Australian population, as well as for CALD people and First Nations people to demonstrate this and identify the differing gendered segregation trends for these workers. This new perspective adds more nuance to our understanding of occupational segregation and supports more targeted and relevant policies. It also starts Australia down the path of exploring more detailed intersectional insights, which can be expanded to other groups (e.g. people with disabilities) in future JSA analysis.
3. **Analysis of how gendered segregation has changed over time**. Using the GSIS, we look at segregation shifts over the 15 years from 2006 to 2021, including for First Nations and CALD workers. We also explore changes over time at different occupational levels—from groups of occupations to individual occupations—as well as for the top growing occupations.
4. **Life course analysis**. We provide insights into how occupational gender segregation changes at different ages. For example, how some occupations shift from gender balanced to female dominated at older middle age and what this means for women's economic wellbeing and broader gender economic equality. We also offer an analysis of

[1] We talk about 'Gender' throughout the paper and Study but acknowledge that data used by the Study is limited to 'Sex'. This is why we mostly refer to females and males when specifically discussing data, and women and men more broadly in analysis where appropriate. We acknowledge the complexities and limitations of this in our Consultation Paper and our Technical Paper 1.

segregation intensity by age group to see whether younger or older workers are more likely to work in gender balanced or increasing gender segregated jobs across the GSIS.

In Part 2, we offer three new perspectives on Australia's gender pay gaps, for each occupation. Our Study expands the evidence base and demonstrates how additional pay gap improves our understanding of both occupational segregation and broader economic inequality, in more nuanced ways. Our new perspectives complement the existing gender pay gap measures from the Australian Bureau of Statistics (ABS) and Workplace Gender Equality Agency (WGEA) by providing:

1. **More detailed occupational insights**—for 688 occupations
2. **Intersectional insights**—including for First Nations people, CALD people and migrants
3. **Longitudinal insights**.[2]

> *"Addressing gender inequalities can improve growth, productivity, competitiveness and the sustainability of economies. As an example, closing gaps in labour force participation and working hours may result in an average boost of 9.2% to GDP across OECD countries by 2060. Intersectional analysis is a tool that can be used to better understand the drivers of these gender gaps and how to address them." (Nicol and Kim 2023)*

Across all, we provide comparisons over time and use an age cohort and life course lens to start identifying the cumulative lifetime disadvantage of gender economic inequality, including 10-year gender pay gap figures. We also explore how gender pay gaps increase as gender segregation intensifies and how occupational gender pay gaps exist, even in occupations where patterns and hours of work are more similar.

Across both Parts 1 and 2 in this paper, we consistently highlight that the way we identify, measure and describe jobs or pay is highly gendered. This is reflected in the occupation classifications themselves as noted in the executive summary.

While OSCA has made great progress in addressing gender bias, some gendered imbalances remain. Continuing gender bias in data systems and structures translates into continuing gender bias in labour market analysis, including our understanding of female dominated jobs pay, settings and inequities. This has policy implications. For example, slower policy reform in gender undervaluation and work value cases, as Cortis et al. (2023) found in their recent national profile of occupational segregation. What is invisible in data also becomes invisible in the policy process. The more detailed occupational pay gap data the Study presents, at both the ANZSCO 6-digit and 4-digit level, combined with the new GSIS, are significant contributions to unveiling some of this invisibility. We can move towards understanding segregation and pay gap drivers and possible solutions at the detailed occupational level that we should be focusing on.

[2] In comparison to existing WGEA employer reported data and ABS employer survey-based pay gap data, we use linked administrative data in PLIDA, which combines information on income, employment, education and demographics as our principal data source. Information on the differences between these complementary ABS, WGEA and JSA measures are summarised in Part 2 in various breakout boxes and visuals, and more detailed methodological approaches can be found in Technical Paper 1.

Key concepts of occupational segregation

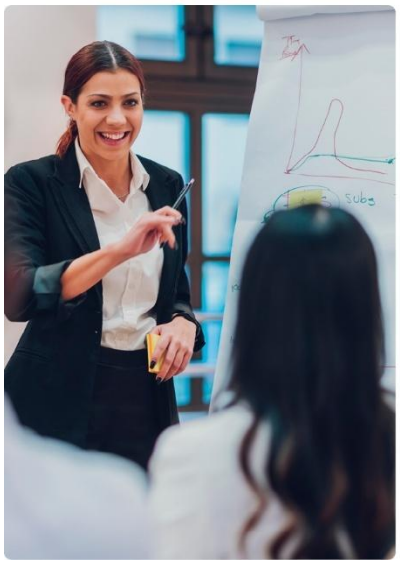
Occupational gender segregation is a term that explains how jobs and industries across the economy are divided (segregated) along gender lines. For example, there are far more women in nursing than construction, whereas jobs like accountants and retail managers have a roughly even split of men and women.

There are different types of occupational segregation:

- **Horizontal segregation** occurs when there is majority of one gender across a workforce. For example, the Preschool and School Education industry is horizontally gender segregated, as its workforce is 78% female, while the Building Construction industry is 82% male.
- **Vertical segregation** (often referred to as "the glass ceiling") occurs when there is an imbalance between the gender split of the overall workforce and the senior leadership positions within it. For example, in the Preschool and School Education industry men make up 45% of CEO equivalent positions, despite making up only 22% of the overall workforce.

These two types of gender segregation compound in their effects. Even in industries that are mostly compromised of females (as an outcome of horizontal segregation), leadership positions can still be disproportionately held by men (reflective of vertical segregation).

There is also the concept of **intra-occupational segregation**, which is how occupations that exist across multiple industries, for example administration workers or cooks, remain gendered in both female and male dominated industries but lead to different patterns of pay that reflect broader segregation trends and inequities. For example, pay for the female dominated occupations of cooks and administrators is far lower in the far more feminised sector of aged care than the masculinised industry of mining.



Drivers of occupational segregation

There has been significant recent work to identify and understand what drives gender segregation in the workforce both in Australia and internationally (Carranza et al. 2023; CEDA 2023; WEO-SOWG 2024a). In both, drivers are generally split into supply and demand side drivers.

Supply side factors focus more on the worker, whereas **demand side factors** focus more on the employer. For example, gendered norms shape education and training choices on the supply side whereas sexual discrimination during recruitment or in the workplace are on the demand side. Wider socio-cultural gender norms also feed significantly into both—shaping worker and student decisions on the supply-side and employer decisions on the demand side. A selected but not exhaustive list is visualised below.

Supply side drivers

1. Education opportunities and choices
2. Distribution of unpaid care and work
3. Access to Capital
4. Mobility

Demand side drivers

1. Workplace culture
2. Employment structures
3. Recruitment practices
4. Evaluation and promotion practices

For further detail on the difference between supply and demand side factors and their role in maintaining occupational gender segregation in Australia specifically see Women's Economic Outcomes Senior Officials Working Group's 'Background paper: analysis of supply-side drivers using HILDA data' (WEO-SOWG 2024b).

Part 1: New perspectives on occupational segregation

Gendered occupational segregation is incredibly resistant to change and has not shifted significantly over the last 30 years (CEDA 2023; Lind and Colquhoun 2021). It is also unlikely to shift anytime soon, despite recent intentional policy efforts to intervene. JSA employment projections show that the way jobs and work are segregated along gender lines will largely remain the same over the next decade (JSA n.d.). The training pipelines into occupations also mirrors the existing segregation of the labour market.

It is also well known that occupational segregation:

- is one of the major drivers of gender economy inequality and pay gaps
- impacts economic productivity, prevents opportunities and contributes to skills shortages and underutilisation
- impacts women's safety, with female dominated jobs having the most exposure to workplace violence (Safe Work Australia 2024).

We also know that the glacial change in gendered norms is a huge part of the challenge. Cultural norms around which gender is suited to what type of work stubbornly remain. We also know that many of the policy levers and interventions we have explored so far are not working or are not working fast enough (Lind and Colquhoun 2021; WEO-SOWG 2024a). This is partly because there are large evidence gaps in country level diagnostics; cross country comparisons; changes over time; and effective policy solutions on how to change norms (Carranza et al. 2023). This part of Paper 1 aims to fill one of these gaps by introducing a new country level diagnostic: the Gender Segregation Intensity Scale (GSIS).

The new Gender Segregation Intensity Scale (GSIS)

> *"The unequal distribution of men and women across and within job types, is often at the heart of gender disparities in labour market outcomes. It is responsible for much of the gender gap in wage, job quality and employment trajectories. It may also underlie the labour market expectations of men and women and reinforce norms on gender roles, which in turn drive their differential access to assets and investments in skills, perpetuating employment [occupational] segregation. Employment segregation has important implications for gender equality and a country's economic productivity and it appears in developed and developing countries alike." (Carranza et al. 2023)*

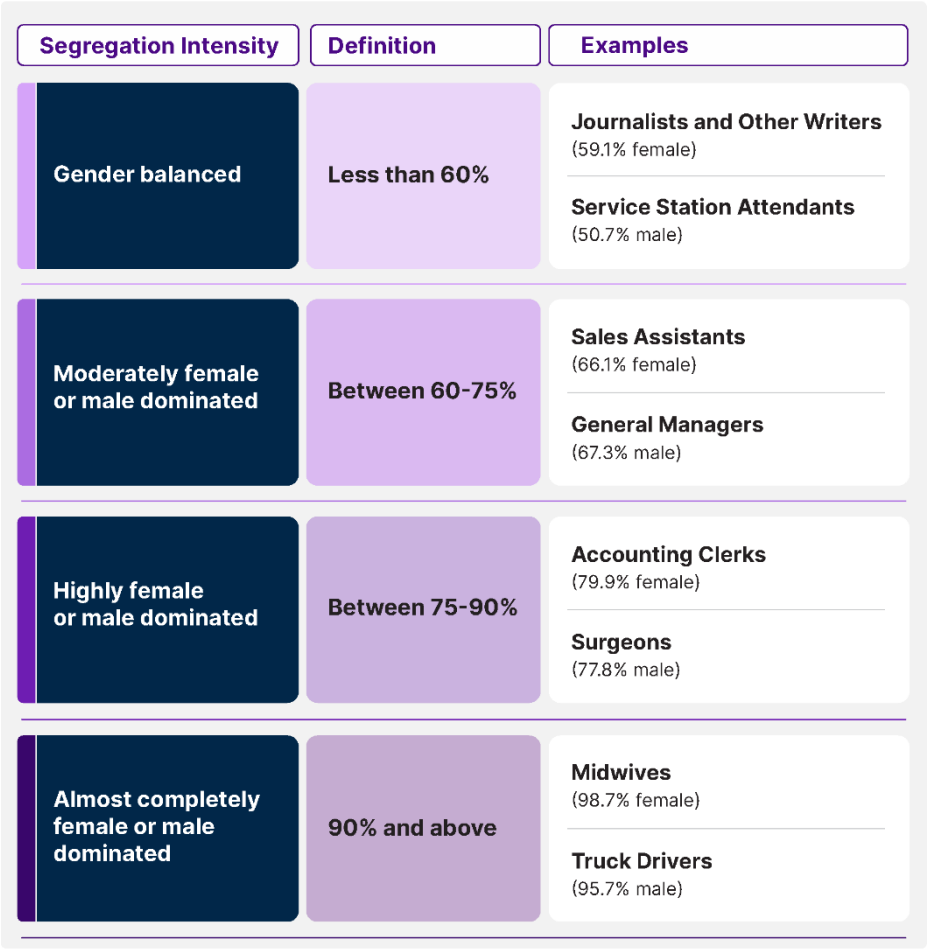
As the above quote illustrates, occupational segregation is important to identify, understand and monitor because it is at the heart of gender disparities in labour market outcomes and impacts a country's broader economic productivity. Gender pay gaps are also intrinsically linked to both and this is why JSA has elected to provide new perspectives and two new approaches to identifying, understanding and monitoring these two policy challenges in future. In this section we introduce the GSIS and identify how it draws upon previous

approaches to capture the intensity or extent of gender segregation in industries and occupations.

The new Gender Segregation Intensity Scale (GSIS) measures four different categories of segregation: gender balanced, moderately female or male dominated, highly female or male dominated and almost completely female or male dominated. These categories are based on the increasing share (%) of an occupation by one gender. The four categories and occupational share definitions or ranges are pictured in Figure 2 below.

Like previous approaches, the GSIS can be applied to different occupation classification levels—from the eight major groups of occupations down to the 688 individual occupations. While this Study focuses on occupation, it can also be used to categorise other data, such as industries, types of businesses, employment status or working arrangements.

Figure 2: The new Gender Segregation Intensity Scale



Note: The above examples are ANZSCO digit-4 and the GSIS Dashboard is at this occupational classification level.[3]

[3] We apply the GSIS to different occupational levels ranging from the most aggregated major occupation group (ANZSCO 1-digit) to the most disaggregated (ANZSCO 6-digit). In Paper 1, we apply the GSIS to ANZSCO 1-digit to offer high-level insights on changes over time and at the most detailed level ANZSCO 6-digit for new evidence on gender pay gaps. However, in all three papers we mainly apply the GSIS to ANZSCO Digit-4 occupations to allow an intersectional analysis across different types of workers including First Nations and CALD workers. The accompanying GSIS dashboard therefore uses ANZSCO 4-digit data and the Occupational Gender Pay Gap dashboard uses ANZSCO 6-digit.

The GSIS follows conventional definitions used in Australia and internationally which have generally measured segregation by occupational shares and used either a 60/40%, 70/30%, or 75/25% split (Borland 2022; Carranza et al. 2023; Lind and Colquhoun 2021; Preston and Whitehouse 2004, WGEA 2019). Some of these approaches have also measured segregation based on the differences between how many hours males and females worked as opposed to their overall share of an occupation, or by combining gender shares of industries shares in their measurements. For example, the recent and comprehensive National Data Profile on Gender-Based Occupational Segregation in Australia used an 80/20% occupation gender share measure combined with a 60/40% industry share and a workforce size criterion (of over 10,000) to identify 29 particularly highly feminised occupations for analysis (Cortis et al. 2023).[4]

The National Data Profile also identified seven occupations with a gender share of above 80%, coupled with measures of above 90% and 96% female shares, to further identify occupations for industrial and policy action.

The GSIS can be used in the same way and throughout the study, we identify and highlight occupations in the four different segregation intensities to identify different challenges and garner the attention of policymakers to develop useful interventions to address them.

Similarly, the GSIS could also be adapted in the future to include a combined occupational and industry segregation measurement or lens, like the national profile. JSA recommends this be considered after ANZSIC is updated (ABS 2022) to address some of its inherent gender bias, in line with the ABS's recent efforts and progress with OSCA.

The GSIS is intended to be used for labour market and skills systems analysis, including monitoring progress towards gender economic equality itself under the Working for Women: A Strategy for Gender Equality. For example, looking at occupation segregation intensities are useful for understanding persistent occupational shortages and challenges in meeting demand for jobs at particular skill levels.

It is important to note that even though the GSIS grades of segregation intensity are based on male or female occupational shares, we recognise that all jobs and every aspect of the labour market and skills system is gendered—socially, culturally and economically. Work, pay, training pathways, qualifications, and even skills themselves are gendered. For example, negotiation skills are coded masculine and are sometimes seen as exclusive to executive or strategic professional roles, but we know early childhood educators also use complex and high-level negotiation skills every day during sensitive conversations with parents about their children's neurodiversity or delayed development. Likewise, aged and disability support workers use their negotiation and interpersonal skills to negotiate clients with high needs or dementia.

The undervaluation of these skills is gendered and a key reason that more female dominated jobs have been historically low paid, as many researchers and the Fair Work Commission have shown (Hatcher et al. 2024; Hatcher et al. 2025; Junor 2021). We will delve more into

[4] This measure identified 29 occupations or 9% of the total Australian workforce in this category. Among these 29 occupations, 11 occupations were over 90% female, and 18 occupations were between 80-90% female. The profile analysed the workforce characteristics, pay and undervaluation of the 29 occupations as a highly feminised category as well as a subset of seven occupations that were 96% female. This subset of occupations were Midwives, Early Childhood Teachers, Dental Assistants, Child Carers, Beauty Therapists and Veterinary Nurses (Cortis et al. 2023).

gendered skills, training pathways and outcomes in Paper 2, including the gendered and cultural undervaluation of skills of First Nations people (Young et al. 2024).

However, when we refer to different extents or grades of gender segregation intensity in this paper, we want to remind readers that all jobs are shaped by gendered social norms, patterns, barriers and structures—even those we refer to as gender balanced.

Key things to know about the GSIS

- The GSIS is a scale to measure the extent or intensity of gendered occupational segregation across the workforce.
- It has four scales of intensity based on female and male occupational shares ranging from less than 60% for a relatively gender balanced intensity to more than 90% at an almost completely male or female dominated at the highest intensity.
- The four scales are: gender balanced (less than 60%), moderately female or male dominated (60-75%), highly female or male dominated (75-90%) and almost completely female or male dominated (90% and above).
- The GSIS provides new perspectives on old problems when applied to existing labour market trends and challenges.
- It is intended to be a common framework and language for labour market and skills systems analysis, including monitoring progress towards gender economic equality itself under the Working for Women: A Strategy for Gender Equality.

A more detailed understanding of occupational segregation and shortages using the GSIS

Using the GSIS demonstrates how gendered Australia's labour market really is. Around half of the total workforce are in occupations that are at the highly and almost completely gendered segregation intensity, where 75% or more of the workforce is either female or male.

In fact, 21% of the Australian workforce—around one in five or 2.3 million workers—are at the highest segregation intensity in occupations that are either 90% or more male or female dominated. Likewise, only 21% of the Australian workforce can be considered to be working in occupations that are gender balanced. By international comparison, Australia, like a range of other OECD countries, is also a very gender segregated labour market (see page 21).

Table 1: Workforce count and share of workforce %, ANZSCO 4-digit count and occupation shortage across the Gender Segregation Intensity Scale

Segregation Intensity	Occupation Count (by 2021)	Workforce count	Workforce %	% of assessed occupations in shortage*
Gender balanced (below 60%)	75	2,429,520	21%	25%
Moderately male or female dominated (60-74%)	101	3,241,926	29%	20%
Highly male or female dominated (75 - 89%)	100	3,334,555	29%	33%
Almost completely male or female dominated (90%+)	82	2,327,915	21%	67%

Source: ABS, 2021 Census of Population and Housing, based on place of usual residence. JSA (2024) Occupation Shortage List.

Applying the GSIS to existing labour market trends and challenges also offers new perspectives on old problems. For example, further highlighting the gendered drivers of occupation shortages (previously known as skills shortages). Or how occupational segregation impedes labour market productivity, mobility, agility and skills transferability which are key to ensuring a dynamic economy that can respond to shifting demands and needs.

Training pathways, retention challenges and suitability gaps contribute to both occupational segregation and skills shortages, so it is not surprising that, as gender segregation intensifies, so does the likelihood of occupation shortages. JSA highlighted this in its most recent occupation shortage analysis (JSA 2024a). Indeed, 70% of assessed jobs that were in shortage (either nationally or regionally) in 2024 fell into the highly or almost completely male or female dominated intensity scale. The occupation shortages worsen at the 'almost completely male, or female dominated' scale, where over half of these occupations were in shortage (55%). See Table 2 below.

Furthermore, if we look at the gender splits within and across the GSIS, the occupation shortages in male dominated jobs becomes even starker. 73% of almost completely male dominated occupations were in shortage in 2024, compared to 47% of occupations that were almost completely female dominated. 38% of highly male dominated occupations were in shortage compared to 28% of highly female dominated occupations.

This trend was even evident in gender balanced occupations, with 31% of those with a higher share of males in shortage, compared with 18% of gender balanced occupations with a higher female share.[5]

[5] There are still varying gender splits within the gender balanced occupations. More than half (44 out of the 75 occupations) have male or female shares within a 45-55% range, and five of them have an approximate 50% male and female share. If we exclude these five, the remaining gender balanced occupations are relatively evenly split (34 with more female versus 36 male).

Table 2: Gender splits across the Gender Segregation Intensity Scale for total workforce count and % share

Segregation Intensity	Occupation Count (by ANZSCO 4-digit)	Workforce count	Workforce %	% of assessed occupations in shortage*
Gender balanced	75	2,429,520	21%	25%
Moderately male dominated	51	1,359,277	12%	21%
Moderately female dominated	49	1,882,649	17%	20%
Highly male dominated	56	1,288,720	11%	38%
Highly female dominated	45	2,055,835	18%	28%
Almost completely male dominated	66	1,657,198	15%	73%
Almost completely female dominated	16	670,717	6%	47%

Source: ABS, 2021 Census of Population and Housing, based on place of usual residence. JSA (2024) Occupation Shortage List.

Note: percentages may not add up to over 100% due to rounding, not all ANZSCO 4-digit occupations are assessed for shortages but see Technical Paper 1 for more details. Occupations classified as 'nfd'/'not further defined' have been removed from this analysis. Any instances of workforce count totals and proportions also exclude ANZSCO 4-digit 'not further defined' (nfds) occupations.

If we look at the gender splits within and across the GSIS to explore workforce shares, we find that highly female dominated occupations make up the largest proportion of the Australian workforce. In fact, combined female dominated jobs across the segregation scale made up around 41% of the total workforce in 2021.[6] However, there are more than twice as many people working in almost completely male dominated occupations compared with almost completely female dominated (15% and 6%). It is also noteworthy that:

- Females and males are equally likely to work in gender balanced occupations
- Females are more likely to work in jobs across the two middle moderately or highly gendered categories on the GSIS
- Males are far more likely to work in almost completely gender dominated occupations.

Moreover, if you focus on the distribution of the number of occupations (358 at the ANZSCO 4-digit level), rather than the share of the workers, the skew towards male dominated occupations in the classification is clear. Male dominated occupations are identified and described in far more detail leading to more detailed understanding of their jobs, work and pay including trends such as occupations shortages.

As noted earlier, we will explore new OSCA insights in Paper 2 to demonstrate this further and we will highlight the policy implications of these data findings in Paper 3. There are clear

[6] This does not include counting gender balanced occupations with higher female shares.

implications for the skills system in relation to the relationship between occupation shortages and gender segregation intensity and how to intervene in these at the system level.

How does Australia compare internationally?

The World Bank (Carranza et al. 2023) found some consistent gender segregation trends across their 80-country analysis that also reflects gender segregation trends across Australia. For example, workers in mining, transport, trades, and manufacturing are male dominated along with ICT professionals, executives, senior officers or legislative workers. As in Australia, female dominated occupations are in health, teaching, services and sales.

Using the Duncan index methodology[7], across all 80 countries Australia's labour market was found to be more gendered than many others, having a higher Duncan index than 72% of countries. For example, Australia has a more gendered labour market than Southeast Asian countries like the Philippines, Malaysia and Thailand, but had a similar level of gendered labour market to other OECD countries like Norway and Denmark.

Our own Study analysis also indicates that Australia's highly gendered segregated workforce reflects that of other countries like New Zealand and Canada, which is summarised in the supporting Technical Paper 1.

There were also a handful of countries that defied gender stereotypes for certain occupations. For example, the only country where the building trade was not male dominated was in Indonesia. Importantly, the World Bank study also found that there were no jobs that were inherently or universally male or female and that "several occupations are male dominated in some countries, gender balanced in some, and female dominated in others" (Carranza et al. 2023). For example, ICT professions are male dominated in 77 of the 80 countries in the sample (both developed and developing) while females dominated the services sector in every region of the world except South Asia.

Occupational snapshots across the GSIS

Gender balanced (less than 60% male or female)

- There are 75 ANZSCO 4-digit occupations that are gender balanced.
- There are some very large employing gender balanced occupations, with the top employing occupations ranging between 115,000 to 200,000 workers in size. Examples include Retail Managers, Accountants, Commercial Cleaners, Contract, Program and Project Administrators, Advertising, Public Relations and Sales Managers and Kitchenhands.
- One in four (25%) gender balanced occupations that are assessed are in national shortage.

[7] The Duncan index is a measure that calculates what percentage of an occupation's workforce would have to change in order to achieve an equal distribution of males and females. An index value closer to 0 indicates a more equal distribution of males and females in an occupation.

- The larger employing gender balanced occupations in shortage are Advertising, Public Relations and Sales Managers, Solicitors and General Practitioners.
- Almost half (45%) of gender balanced occupations are Skill Level 1.
- Many managerial and professional gender balanced occupations have grown considerably in recent years.

Table 3: A sample of 16 gender balanced ANZSCO 4-digit occupations and their male and female % share of employment

Gender balanced occupations	Male share (%)	Female share (%)
Livestock Farm Workers	58.9%	41.1%
Ambulance Officers and Paramedics	56.0%	44.0%
Chemists, Food and Wine Scientists	58.3%	41.7%
Actuaries, Mathematicians and Statisticians	56.4%	43.6%
Policy and Planning Managers	41.4%	58.6%
Training and Development Professionals	40.8%	59.2%
Commercial Cleaners	41.3%	58.7%
Corporate Services Managers	40.3%	59.7%
Retail Managers	48.8%	51.2%
Real Estate Agents	48.8%	51.2%
General Practitioners and Resident Medical Officers	51.0%	49.0%
Other Information and Organisation Professionals	50.5%	49.5%
Finance Managers	50.3%	49.7%
University Lecturers and Tutors	49.3%	50.7%
Call or Contact Centre and Customer Service Managers	52.3%	47.7%
Research and Development Managers	48.4%	51.6%

Source: ABS, Census of Population and Housing, 2021

Moderately female or male dominated (between 60 to less than 75%)

- There are 49 moderately female dominated and 51 moderately male dominated ANZSCO 4-digit occupations.
- Many of the larger employing occupations at this segregation intensity are concentrated in retail, sales, logistics and hospitality (e.g. Sales Assistants or Storepersons). Secondary School Teachers are another notably large occupation in this category.
- Like gender balanced occupations, professional and managerial occupations in this segregation category have grown considerably from 2006 to 2021.
- Around one in five (20%) moderately male and female dominated occupations are in national shortage.
- Chefs and Secondary School Teachers are two larger employing occupations in shortage at this segregation intensity.

- Most, moderately male and female dominated occupations are at Skill Level 1 (43% and 51% respectively). There are more moderately female dominated occupations categorised as Skill Level 5 compared to moderately male dominated occupations.

Table 4: Top 16 moderately male dominated and moderately female dominated ANZSCO 4-digit occupations by % share of employment

Moderately male dominated occupations	Male share (%)	Moderately female dominated occupations	Female share (%)
Crop Farmers	74.8%	Health and Welfare Services Managers	74.5%
Supply, Distribution and Procurement Managers	74.4%	Waiters	74.4%
Geologists, Geophysicists and Hydrogeologists	74.4%	Welfare Support Workers	74.3%
Plastics and Rubber Factory Workers	74.3%	Public Relations Professionals	74.2%
Other Miscellaneous Labourers	74.1%	Human Resource Professionals	73.6%
Importers, Exporters and Wholesalers	73.9%	Checkout Operators and Office Cashiers	73.6%
Manufacturers	73.8%	Educations Advisers and Reviewers	73.6%
Storepersons	73.6%	Complementary Health Therapists	73.2%
Canvas and Leather Goods Makers	73.5%	Archivists, Curators and Records Managers	73.1%
ICT Sales Professionals	73.1%	Indigenous Health Workers	72.6%
Print Finishers and Screen Printers	73.1%	Other Sales Support Workers	72.6%
Chefs	72.8%	Animal Attendants and Trainers	71.8%
Land Economists and Valuers	71.9%	Medical Imaging Professionals	71.6%
Performing Arts Technicians	71.8%	Private Tutors and Teachers	71.0%
ICT Support and Test Engineers	71.6%	Special Care Workers	70.0%
Police	71.2%	Medical Laboratory Scientists	69.9%

Source: ABS, Census of Population and Housing, 2021 Note: occupations selected based on the highest % of males or females in that occupation.

Highly female or male dominated (75% to less than 90%)

- There are 45 highly female dominated and 56 highly male dominated ANZSCO 4-digit occupations.
- The largest employing highly male dominated occupations are often in the information technology field, such as ICT Managers, Software and Applications Programmers, or driving-related occupations, such as Delivery Drivers. The largest employing highly female dominated occupations are often in healthcare, such as Registered Nurses (over 260,000 workers) and Aged and Disabled Carers, or personal service occupations such as Hairdressers or Domestic Cleaners.

- Almost one in three (32%) highly male dominated occupations are Skill Level 1. One in four (24%) highly female dominated occupations are Skill Level 1.
- The top growing highly female dominated occupations in this category are Aged and Disabled Carers, Registered Nurses and Nursing Support and Personal Care Workers. All are in national shortage.
- The fastest growing highly male dominated roles are in Information Technology.

Table 5: Top 16 highly female dominated and highly male dominated ANZSCO 4-digit occupations by % share of employment

Highly male dominated occupations	Male share (%)	Highly female dominated occupations	Female share (%)
Plastics and Rubber Production Machine Operators	90.0%	Practice Managers	89.7%
Fire and Emergency Workers	89.6%	Diversional Therapists	89.6%
Other Mobile Plants Operators	89.5%	Enrolled and Mothercraft Nurses	89.5%
Miners and Shot Firers	89.5%	Office Managers	89.4%
Gardeners	89.3%	Education Aides	88.6%
Other Cleaners	89.4%	Registered Nurses	88.3%
Deck and Fishing Hands	89.2%	Library Assistants	87.3%
Telecommunications Technical Specialists	88.7%	Pharmacy Sales Assistants	87.3%
Forestry and Logging Workers	88.3%	Nurse Managers	87.1%
Car Detailers	88.2%	Payroll Clerks	86.7%
Other Stationary Plant Operators	88.2%	General Clerks	86.4%
Auctioneers and Stock and Station Agents	88.2%	Personal Care Consultants	85.3%
Upholsterers	88.0%	Primary School Teachers	85.1%
Engineering Managers	87.6%	Special Education Teachers	85.1%
Other Farm, Forestry and Garden Workers	87.4%	Visual Merchandisers	84.8%

Source: ABS, Census of Population and Housing, 2021

Note: occupations selected based on the highest % of males or females in that occupation. Occupations are classified into the GSIS based on the percentage share of males and females to 1 decimal place. Due to rounding in the above table, some occupations will have 90.0% gender splits despite still being in the highly female or male dominated category.

Almost completely female or male dominated (90% and above)

- There are only 16 almost completely female dominated occupations and 66 almost completely male dominated occupations.

- There are 11 occupations with a 99% share of males. Midwives are the only occupation with a 99% female share.
- Skill level differences at this segregation intensity are very different for almost completely female and male dominated occupations. Almost half (48%) of almost completely male dominated occupations are Skill Level 3 whereas almost half (44%) of almost completely female dominated occupations are Skill Level 1 (44%).
- Many of the largest employing almost completely male dominated occupations are in national shortage (for example Truck Drivers, Electricians, Carpenters and Joiners).
- The fastest growing almost completely female dominated roles are in Teaching and Healthcare and many of these were also in national shortage (such as Child Carers, Early Childhood Teachers, Midwives, Occupational Therapists, and Audiologists and Speech Pathologists/Therapists).
- The fastest growing almost completely male dominated occupations are primarily in the Technicians and Trades and Machinery Operators and Drivers major occupation groups.

Table 6: A full list of the almost completely female dominated (16 only) and 16 almost completely male dominated ANZSCO 4-digit occupations by % share of employment

Almost completely male dominated occupations	Male share (%)	Almost completely female dominated occupations	Female share (%)
Bricklayers and Stonemasons	99.1%	Midwives	98.7%
Plumbers	99.0%	Early Childhood (Pre-primary School) teachers	97.6%
Carpenters and Joiners	98.9%	Dental Assistants	97.5%
Concreters	98.9%	Personal Assistants	97.1%
Roof Tilers	98.9%	Beauty Therapists	96.9%
Airconditioning and Refrigeration Mechanics	98.8%	Veterinary Nurses	96.2%
Structural Steel and Welding Trades Workers	98.8%	Child Carers	95.6%
Sheetmetal Trades Workers	98.8%	Secretaries	95.6%
Plasterers	98.8%	Nutrition Professionals	93.5%
Structural Steel Construction Workers	98.7%	Receptionists	93.5%
Panelbeaters	98.5%	Audiologists and Speech Pathologists/Therapists	93.2%
Glaziers	98.4%	Florists	93.1%
Motor Mechanics	98.1%	Child Care Centre Managers	91.8%
Metal Fitters and Machinists	98.0%	Occupational Therapists	91.0%
Electricians	97.9%	Bookkeepers	90.5%
Motor Vehicle Parts and Accessories Fitters	97.7%	Nurse Educators and Researchers	90.4%

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

Occupational Skill Level and the GSIS

We already know that skill difference doesn't explain occupational segregation (Carranza et al. 2023) but understanding how gender segregation intensifies at different skill levels has important policy implications and intersections. When applying to the GSIS to the five skill levels of occupations, based on ANZSCO, we can see some notable trends that are worth exploring in more detail.

Higher skill level occupations are more likely to be gender balanced. Almost half (45%) of the gender balanced occupations are at Skill Level 1. Females and males are equally likely to work in these higher skill occupations. Likewise, many Skill Level 2 occupations are gender balanced or at the first gendered segregation intensity grade (moderately gender dominated, where 60-75% of the workforce is either female or male).

In contrast, Skill Level 3 and 4 are far more gender segregated. In fact, Skill Level 3 is the most, with 69% of employment in occupations that are almost completely gendered, with a far higher ratio of almost completely male dominated roles and a much higher rate of skill shortages. Indeed, males account for 68% of employment at Skill Level 3, whereas females account for a larger share of employment at every other skill level.

While Skill Level 3 only accounts for 15% of total employment across the Australian economy, it accounts for more than a third (37%) of occupations in shortage. Increasing the share of females in these occupations will be important in addressing shortages, highlighting the importance of shifting gender segregation.

Skill Level 4 is the least gender balanced with the lowest number and proportion of gender balanced occupations and most (71%) falling at the gendered or highly gendered segregation intensity.

Skill Level 5 occupations have a more even spread across the segregation scale. While not as gender balanced as the higher skill level roles of Skill 1 and Skill 2, they are more gender balanced that Skill 3 and Skill 4.

Females are more likely to work in gendered or highly gendered occupations than males overall but are also far less likely to work in almost completely gendered occupations than males. When they do, it is in higher skilled health and education roles, such as Midwives and Early Childhood (Pre-primary School) Teachers. Females in Skill Level 4 and 5 are also far less likely to work in almost completely gendered occupations.

In Paper 2, we will explore how the usefulness of this skill level analysis will increase with the move from ANZSCO to OSCA, and what it shows around divides in education and training pathways and outcomes. We also discuss how this work will inform current policy reforms around tertiary harmonisation.

Table 7: Share of total workforce % by gender segregation intensity and occupational skill level

Skill Level	Gender balanced	Moderately female or male dominated	Highly female or male dominated	Almost completely female or male dominated
ALL Workforce				
Skill Level 1	30%	32%	31%	8%
Skill Level 2	36%	24%	33%	7%
Skill Level 3	12%	6%	13%	69%
Skill Level 4	8%	25%	45%	22%
Skill Level 5	23%	53%	16%	9%
ALL workforce	21%	29%	29%	21%
Females				
Skill Level 1	29%	32%	33%	6%
Skill Level 2	35%	19%	36%	11%
Skill Level 3	19%	9%	17%	55%
Skill Level 4	7%	25%	55%	13%
Skill Level 5	25%	59%	15%	1%
ALL workforce	22%	30%	35%	13%
Males				
Skill Level 1	30%	32%	28%	10%
Skill Level 2	37%	30%	29%	4%
Skill Level 3	9%	5%	11%	76%
Skill Level 4	8%	26%	35%	31%
Skill Level 5	20%	47%	16%	17%
ALL workforce	20%	27%	24%	28%

Source: ABS, Census of Population and Housing, 2021 ANZSCO digit-4.

What is skill level?

As defined by the ABS, skill level is a measure of the amount of formal education and training, work experience, or on-the-job training required for an occupation. This is important in understanding the intersections between the labour market and skills system. There are five skill levels across this classification, with Skill Level 1 the highest and Skill Level 5 the lowest.

Typically, higher skill level occupations such as Registered Nurses, Accountants and Chefs (Skill Level 1 and 2) require university or advanced Vocational Education and Training (VET) qualifications. Skill Level 3 occupations primarily require VET based qualifications with apprenticeship and traineeship pathways at the Certificate III/IV level. For example, many of the almost completely male dominated trades and almost completely female dominated heath, education and care jobs are at this skill level. Skill Level 4 and 5 occupations such as Sales Assistants, Aged and Disabled Carers and Truck Drivers generally require a qualification at the Certificate I/II/III level or the completion of secondary school education.[8]

Occupational snapshots: Skill Level across the GSIS

Skill Level 1 occupations

- There are 123 occupations classified as Skill Level 1, the most for any skill level.
- Skill Level 1 occupations are typically the least gender segregated, and females have increased their share of these jobs over the 15 years from 2006 to 2021. Skill Level 1 and 2 occupations are the most gender balanced.
- There are 11 moderately female dominated occupations at this skill level, and these are largely in health or education (for example Registered Nurses, Nurse Managers, Primary School Teachers, Special Education Teachers, and Social Workers).
- There are 29 highly male or female dominated Skill Level 1 occupations and most of these are male dominated (18 occupations) and in engineering and IT occupations. For example, Software and Application Programmers, ICT Managers, Database and Systems Administrators, and ICT Security Specialists, Telecommunications Engineering Professionals, Civil Engineering Professionals, Mining Engineers and Engineering Managers.
- Only 13 occupations are almost completely male or female dominated at this skill level. The seven almost completely female dominated occupations are mostly in health and care (Child Care Centre Managers, Nutrition Professionals, Audiologists and Speech Pathologists/Therapists, Midwives, and Nurse Educators and Researchers). The six almost completely male dominated occupations are predominantly in engineering, construction, and IT.

[8] Skill Level 1 relates to bachelor's degree or above qualification; Skill Level 2 relates to Advanced Diploma or Diploma; Skill Level 3 relates to Certificate IV or III (including at least 2 years on-the-job training); Skill Level 4 relates to Certificate II or III; Skill Level 5 relates to Certificate I or secondary education.

Skill Level 2 occupations

- There are 45 Skill Level 2 occupations and most fall on the two middle segregation intensities of moderately female or male dominated (11) or highly female or male dominated (16). Of those that are highly gender dominated, nine are female dominated and seven are male dominated.
- Many of the highly female dominated occupations are health and care related, such as Practice Managers, Enrolled and Mothercraft Nurses, and Medical Technicians. The highly male dominated occupations include specialist technicians across Architecture, Building, Surveying, Engineering and ICT.
- Only 12 skill level occupations are gender balanced and six are almost completely male or female dominated. Personal Assistants and Secretaries are the two almost completely female dominated occupations while Engineering Draftspersons and Technicians, and Marine Transport Professionals, are on the almost completely male dominated side.

Skill Level 3 occupations

- There are 70 Skill Level 3 occupations, and these occupations are the most gender segregated across all five skill levels.
- Only ten of these occupations at this skill level are gender balanced.
- More than half (53%) of Skill Level 3 occupations are in the almost completely male or female dominated intensity and almost all of these are almost completely male dominated (32 out of 37).
- Twenty-five of these occupations have an above 95% male share and many are related to trades.
- Only Florists, Child Carers, Veterinary Nurses, Bookkeepers and Beauty Therapists have almost completely female dominated workforces at this skill level.
- Only eight occupations at this Skill Level are moderately male or female dominated, and only another 15 are highly male or female dominated. These are the lowest number of occupations at these gender segregation intensities across all skill levels.

Skill level 4 occupations

- There are 69 occupations at Skill Level 4, and most (65%) are in the two middle segregation intensities of moderately or highly female or male dominated.
- Moderately female dominated occupations at this skill level are largely in services, hospitality, and clerical occupations. Bar Attendants and Baristas and Waiters are also two of the highest employing occupations, with Information Officers and Call or Contact Centre Workers also having large female shares.
- Moderately male dominated occupations at this skill level are diverse, with Storepersons, Sales Representatives, and Transport and Despatch Clerks being the largest employing occupations.
- The split of highly female or male dominated occupations at this skill level is even and diverse. Aged and Disabled Carers, Nursing Support and Personal Care Workers, General Clerks and Accounting Clerks are on the highly female dominated side whereas

Machinery Operators and Drivers represent most of the highly male dominated roles. For example, Delivery Drivers, Bus and Coach Drivers, and Drillers, Miners and Shot Firers.

- Skill Level 4 has the lowest number and proportion of occupations that are gender balanced (only 10%).
- Like Skill Level 3, most of the almost completely male or female dominated occupations at this skill level are on the male side (15 out of 17) are consist mainly of Machinery Operators and Drivers, with Truck Drivers being by far the largest employing occupation.

Skill Level 5 occupations

- There are 51 occupations at Skill Level 5 and these are more evenly spread across the GSIS, but not quite as gender balanced as Skill Level 1 occupations.
- Of the 12 occupations that are gender balanced, the largest occupations are Commercial Cleaners, Kitchenhands, and Packers.
- The 15 that are either moderately male or female dominated are mainly sales and process working roles. The sales roles differ between being moderately male and female dominated. For example, Sales Assistants (General) and Checkout Operators and Office Cashiers, the two largest employing occupations in this category, are moderately female dominated, while ICT Sales Assistants, Fast Food Cooks (which often incorporates a sales role) and Other Sales Assistants and Salespersons are moderately male dominated.
- The 15 highly male or female dominated occupations are a diverse mix of labouring, process working, and other roles. For those that are female dominated, Housekeepers, Cafe Workers, and Domestic Cleaners are the biggest employing occupations, while for male dominated, Couriers and Postal Deliverers, Garden and Nursery Labourers, and Product Assemblers are the largest.
- Of the nine almost completely gender dominated occupations, all are male dominated and consist mostly of labourer and process worker occupations.

Occupational Segregation: Key Findings

- The new Gender Segregation Intensity Scale (GSIS) reveals how gendered the Australian labour market is: around half of the total Australian workforce works in jobs at the two highest levels of gender segregation intensity, where 75% or more of workers are either female or male.
  - Within this 75%, 21% of the Australian workforce work in jobs that are almost completely gendered (over 90% male or female dominated)
  - Only 21% of the Australian workforce work in jobs that are gender balanced, and females and males are equally likely to work in these occupations.
- Females and males are equally likely to work in gender balanced occupations. Females are more likely than men to work in jobs at the moderately or highly female dominated segregation intensity. In contrast, men are far more likely to work in almost completely male dominated occupations.
- Combined, female dominated occupations make up the largest proportion of the total workforce.
- At the highest segregation intensity, most occupations are almost completely male dominated jobs.
  - There are 66 almost completely male dominated occupations but only 16 almost completely female dominated occupations.
  - This points to the historical gender bias in occupation classifications and labour market analysis, and the importance of continuing to make progress in the move from ANZSCO to OSCA.
  - Almost completely male dominated jobs are more than double the workforce size of almost completely female dominated jobs on the scale (1.65 million compared to 670,000 workers).
- Skills shortages typically worsen as gender segregation intensifies and are more common in male dominated occupations.
  - 70% of occupations assessed as in shortage (either nationally or regionally) fall into the highly or almost completely male or female dominated intensity groups.
  - Across every category in the GSIS, occupations with a higher share of males were more likely to be in shortage than those with a higher share of females.
- There are clear trends between skill levels across the GSIS.
  - Higher skill level jobs are more likely to be gender balanced, particularly the highest skill level roles (Skill Level 1).
  - Skill Level 3 jobs (generally requiring Certificate III/IV VET apprenticeship and traineeship qualifications) are the most gender segregated, and almost completely male dominated occupations make up most jobs at this skill level.
- By international comparison, Australia, like a range of OECD countries, has a relatively high level of occupational gender segregation.

Moving towards an intersectional understanding of gendered occupational segregation

In addition to Australian males and females being more concentrated in some jobs across the economy, different groups of people, such as First Nations people, culturally and linguistically diverse (CALD) people, and migrants are also more likely to work in some jobs over others.

In addition to differences by gender, differences in work, jobs and pay also reflect race, ethnicity, and cultural background. This means some people can be segregated or concentrated in jobs based on both their gender and other characteristics or identities. Gender segregation patterns for these different groups of people can therefore differ from broader workforce trends. These jobs also may suffer from even more acute impacts of segregation, through worse pay and conditions that reflect compounding forms of gender and other discrimination.

> *"Gari Yala revealed that a significant proportion of First Nations employees experience workplace racism and exclusion, as well as excessive cultural load and additional workplace demand" (Kiss 2025).*

Understanding these unique patterns of gender segregation not only deepens our understanding of occupational segregation overall but is also key to tackling broader and intersecting disadvantage across the Australian labour market and skills systems. It is critical to making progress towards gender economic equality for First Nations people, CALD people, and migrants, who face risks of compounding forms of gender and other discrimination in workplaces and training settings across the country (Australian Human Rights Commission 2020; Carangio et al 2020; Diversity Council Australia 2022; Haque and Haque 2022).

Just like there are drivers of gendered occupational segregation, there are also drivers of other division in the labour market. For example, just like gendered norms reinforce the gendered divisions of jobs in Australia, norms around race, culture and ethnicity, along with established pathways (e.g. migration) shape which jobs different groups of workers gravitate towards, succeed in or can get stuck in.

Historically, migrant workers in countries across the world have been overrepresented in dangerous, precarious, low-paid and low-quality jobs, and in many cases, this continues to today (European Union 2020; FECCA 2021; Houkamau et al 2024; International Labour Organization 2021). In the case of First Nations Australians, many in the past were not even paid for their work. Stolen wages are a key part of Australia's labour market history (Yoorrook Justice Commission 2025; Young et al 2025).

> *"CARM people face intersecting and systematic barriers to employment which limit their economic participation, career development, pay and overall job security… This inequality is not limited to migrant groups, however, second or third generation CARM people who have grown up in Australia, have Australian qualifications and work experience, and a knowledge of Australian workplace norms, still experience racism across hiring, promotion and career developments systems and processes" (Chapter 4: Gender and Culturally and Racially Marginalised Employees | genderequalitycommission.vic.gov.au, accessed July 2025)*

To move towards a more intersectional understanding of the Australian labour market, we need to understand these drivers and the jobs that First Nations and CALD workers, female or male, are highly concentrated in, or notably absent from.

In this section, we apply the GSIS to First Nations and CALD workers separately to investigate the intersections between these trends. We also provide a comparative and intersectional snapshot of Australia's top 20 employing occupations across the total workforce, First Nations and CALD workers in 2021 to reveal how occupational gender segregation intensifies or differs across these cohorts.

Moving towards this more intersectional understanding of the Australian workforce is important so we can develop more effective policy solutions and enablers for workers who face higher risks of compounding disadvantage and more broadly develop more effective policy solutions to occupational segregation.

We acknowledge that the analysis in this paper is only a start and a demonstration of the potential of intersectional analysis. Disability status, sexual identity, visa status, geography, relationship status, neurodiversity and many other identity, socio-economic and background factors can also account for intersecting and compounding disadvantage in the world of work, jobs and pay.

JSA is committed to further exploring and expanding an intersectional understanding of the labour market and skill system. This study, and particularly this paper, has started with a focus on the intersections between gender and First Nations status, and gender and CALD and migrant status, as a first step.

Key things to know about the CALD proxy used in this Study

- To support intersectional analysis, this Study needed to identify CALD people across a range of data to develop a reasonably rigorous though unavoidably imperfect proxy.
- We combined and adapted two of the variables from the ABS Standards for Statistics on Cultural and Language Diversity to do so. Namely, a person's country of birth and language used at home.
- We defined people as CALD if their country of birth was an Other Than Main English Speaking Country (OTMESC) or if their language used at home was not English (including those who were born in Main English Speaking Countries (MESC), other than Australia.
- The Study fully acknowledges the challenges with this proxy especially the MESC variable. To manage some of its limitations we include insights on migrants who arrived as a child or an adult to add an additional intersectional layer throughout the study.
- While there are two intersectional groups in focus in this paper, we intentionally report on First Nations Australians and CALD Australians as two separate and distinct groups of people. First Nations people have been identified in data according to their Indigenous status.
- You can read further about the challenges, limitations and how JSA and others could improve the CALD proxy in the future in Technical Paper 1.

New perspectives on gender segregation: First Nations workers

While occupations are clearly segregated at a far higher intensity by gender, there are key segregation patterns in Australia's workforce that go beyond gender. First Nations workers are far more likely to work in Community and Personal Services roles and less likely to work in Professional roles (JSA 2023). For example, a high number of First Nations people work as Welfare Support Workers, which is a higher skill and less gender segregated (though still moderately female dominated) occupation. It is in the top 20 employing occupations for First Nations workers, but only in the top 40 employing occupations for the total Australian workforce and is outside the top 50 employing occupations for CALD workers.

Welfare Support Workers is also an occupation that will be disaggregated into separately identifiable jobs and specialisations under OSCA (for example Family Violence Practitioner, Child Protection Practitioner, Mental Health Worker and Financial Counsellor (Community)) along with various managerial roles in community and personal services (such as Aged Care Team Leader, Disability Team Leader, Early Education Childhood Room Leader and Family Day Care Coordinator). This means, under OSCA we will have a more detailed understanding of these important females dominated roles and be able to better recognise leadership and higher skill positions across this role, including among First Nations workers.

More broadly, First Nations workers are more likely to work in more highly gender segregated roles as Table 8 shows. Only 10% of First Nations Australians work in gender

balanced occupations, and they are more likely to work in almost completely male or female dominated jobs compared to the total workforce (26% compared to 21%).

This partly reflects a higher concentration of First Nations males in trades and labouring jobs (including in the mining industry), and First Nations females in traditionally female dominated care, education and health related roles. First Nations workers are therefore more likely, in line with the earlier analysis, to work in more segregated occupations in shortage and in VET-qualified Skill Level 3 jobs.

Table 8: Employment share of total workforce and First Nations workforce by gender segregation intensity

Gender segregation intensity	Total workforce %	% of First Nations workforce
Gender balanced	21%	10%
Moderately male or female dominated	29%	31%
Highly male or female dominated	29%	33%
Almost completely male or female dominated	21%	26%

Source: ABS, 2021 Census of Population and Housing, based on place of usual residence.

Unfortunately, First Nations workers are often concentrated in lower skilled work because of external drivers that they have limited capacity to influence—including:

- government and ‘mission’ limiting and deficit-based assumptions about what Indigenous employment looks like (Anthony 2004; Young et al 2024)
- systemic racism in educational institutions which makes it disproportionately harder for them to access and complete formal educational qualifications which in turn are needed to secure higher skill roles. This includes the accumulation of low-level VET certificates due to a lack of choices in courses offered, or the high cost and time needed to travel, particularly in remote areas (Guenther et al 2017)
- workplaces often lack diversity, respect, cultural safety, and adequate supports for First Nations workers, such as a lack of acknowledgement for First Nations peoples' lived experience and cultural knowledge as expertise (Australian Human Rights Commission 2020; Young et al 2024)
- "Mob often choose roles that want to give back to mob, which are roles which are undervalued and underpaid." (personal communication from CIPW, 18 July 2025)
- employers sometimes inappropriately view Indigenous workers as a subset of CALD workers and assume the drivers of inequities are the same for CALD and First Nations workers, but this is not the case
- First Nations employment is unique and warrants separate and unique attention. Beyond occupational segregation differences, this need for specific attention is further reinforced by the intersectional gender pay gap findings of this Study, which point to the compounding disadvantage both First Nations females and males currently face. JSA acknowledges the importance of exploring co-designed solutions and enablers to intervene in these unique drivers, high pay gaps, and significant challenges for First Nations Australians and that:

"The Indigenous employment narrative is primarily told by non-Indigenous peoples, perpetuating foundations of indentured employment (both formal and informal), an absence of fair wages and fair working conditions, and exclusion from the labour and employment markets more generally, except at the very low skill, low pay level and an absence of expectation of quality work and opportunity for job and career development" (UTS CIPW n.d.).

New perspectives on gender segregation: CALD workers

In contrast to First Nations workers and the total workforce, CALD workers are slightly less likely to work in highly gendered segregated jobs. As Table 9 below shows, they are more likely to work in gender balanced occupations (24% compared to 21% across the total Australian workforce) and have a slightly lower share of workers in almost completely gendered occupations (14% compared to 21%).

Table 9: Employment share of total workforce, CALD workforce and First Nations workforce by gender segregation intensity

Gender segregation intensity	Total workforce %	% CALD workforce	% of First Nations workforce
Gender balanced	21%	24%	10%
Moderately male or female dominated	29%	33%	31%
Highly male or female dominated	29%	29%	33%
Almost completely male or female dominated	21%	14%	26%

Source: ABS, 2021 Census of Population and Housing, based on place of usual residence.

Looking at their respective shares of the Australian workforce, CALD workers account for around 21% of workers (on average), but this varies across occupations. CALD workers are significantly over or underrepresented in some jobs across the economy and there are again unique gendered patterns within and across this.

For example, there are 10 jobs where more than half the workforce is CALD. The top three are Automobile Drivers (71%), Chefs (60%) and Software and Applications Programmers (56%). CALD workers are also over-represented in Meat Boners and Slicers, and Slaughterers, Meat, Poultry and Seafood Process Workers, Personal Care Consultants, Packers, ICT Support and Test Engineers, Sewing Machinists and Dental Practitioners, where they make up between 50 to 56% of these workforces.

Skill Level 1 jobs like Telecommunications Engineering Professionals, Social professionals, Accountants, Electronics Engineers, General Practitioners and Resident Medical Officers, Pharmacists and various Information Technology roles also have a heavy reliance on CALD Australians, accounting for over 40% of workers in these occupations. Similarly, IT, engineering, scientist and specialist health roles like Surgeons, Psychiatrists and Medical Laboratory Scientists also all have workforces that are over a third CALD.

Female CALD workers are also more likely to work in these roles, and we explore this further in our next section, in looking at changes over time. Despite the high CALD proportion of the workforce, qualitative findings from the Study's focus groups reinforce research of a glass and cultural ceiling in the Information Technology sector (Cassells and Duncan 2019). See

Technical Paper 1 for more information on the qualitative research commissioned for the study.

> *"For a 100m sprint, everyone starts from the start line. But for people whose first language isn't English, they start from a different starting line. In Australia, most of the executive roles are taken by Aussie people and all the bottom roles are taken by migrants."*
>
> *(CALD male focus group participant aged 40-54 years, Software Engineer)*

CALD workers represent more than a third of workers in lower skill level jobs across care, banking, hospitality, food manufacturing, warehousing, and machine operating.

In contrast to these occupations with higher shares of CALD workers, a range of occupations generally have lower shares, such as those related to teaching, law, farming; major almost completely male dominated trades like plumbing, electrical and carpentry, and emergency services, such as paramedics, and police; all have less than 10% CALD representation.

> *"Equality is absolutely important…you need a place where people feel like they can be open. It is better when you have a diverse group of people. Everyone has implicit biases—but you get less bias when you work across different groups of people to come to a consensus."*
>
> *—CALD male focus group participant, Accountant*

Many large employing and female dominated occupations of various segregation intensity also have high CALD shares. For example, Registered Nurses (33%), Child Carers (31%) and Aged and Disabled Carers (32%).

In contrast to these health and early education roles, large employing female dominated teaching occupations have particularly low CALD representation. School Principals are the nineth least diverse occupation in Australia with CALD workers only accounting for 4% of that occupation, followed by Primary School Teachers, Middle School Teachers, Special Education Teachers, Secondary School Teachers and Education Aides (7%, 8%, 9%, 11% and 12% CALD, respectively).

Early Childhood (Pre-primary School) Teachers are far closer to the total share of the workforce, at 21%, and are one of the jobs that experienced very high CALD worker growth over the 15 years from 2006 to 2021 (rising from only 8% CALD in 2006). In contrast, the CALD share of the secondary and primary school teacher workforce has increased by around one percentage point over the same time.

Further attention needs to be given to this lack of CALD representation, and the extent to which this occupational segregation is a combination of gender segregation and other forms of discrimination, barriers and disincentives, and a broad range of potential factors across the jobs and skills systems (e.g. education and training choices and pathways).

"If you don't speak enough, you are too passive, and if you speak up, you are bossy. You cannot get it right."

—CALD female focus group participant, Primary School Teacher

When looking across all occupations, and how they compare with the 21% CALD share of the total Australian workforce, we find that there are just over 141 occupations where CALD workers are above this average (and 107 jobs where the workforce is arguably over-represented at 26% or more CALD). In contrast, there are 217 occupations where they are under this 21% average (including 140 jobs where CALD workers are quite underrepresented and less than 16% CALD).

While occupations are clearly segregated at a far higher intensity by gender, there are key CALD segregation patterns in Australia's workforce that go beyond gender.

An intersectional snapshot of Australia's Top 20 occupations

This section offers a comparative snapshot of Australia's top 20 employing occupations across the total workforce, First Nations workers and CALD workers to demonstrate further how gendered occupational segregation varies between different groups of people. It also highlights the kinds of occupations that both provide opportunities but also rely on First Nations and CALD workers.

We found that there are only three jobs that sit in all three top 10 employing occupations lists across the total Australian workforce, First Nations and CALD workers: General Sales Assistants, Child Carers, and Aged and Disabled Carers—all of which are female dominated.

Within the top 20 there are a further seven occupations in all three lists: Registered Nurses, General Clerks, Truck Drivers, Commercial Cleaners, Storepersons, Kitchenhands and Retail Managers. The differences outside these 10 shared and large employing occupations are telling. Tables of the top 20 employing occupations for total Australian, First Nations and CALD workers are provided below but you can explore even more in the GSIS dashboard.

Table 10: Top 20 employing occupations and employment share of ALL workers in 2021 and the proportion of ALL workforce male and female

Occupation	% of ALL workforce	% ALL workforce Male	% ALL workforce Female
ALL workforce	**100.0%**	**50.8%**	**49.2%**
Sales Assistants (General)	4.5%	33.9%	66.1%
Registered Nurses	2.3%	11.7%	88.3%
General Clerks	2.2%	13.6%	86.4%
Aged and Disabled Carers	2.0%	23.3%	76.7%
Retail Managers	1.7%	48.8%	51.2%
Primary School Teachers	1.5%	14.9%	85.1%
Child Carers	1.4%	4.4%	95.6%
Truck Drivers	1.4%	95.7%	4.3%
Receptionists	1.4%	6.5%	93.5%
Accountants	1.4%	46.5%	53.5%
Secondary School Teachers	1.4%	37.8%	62.2%
Commercial Cleaners	1.2%	41.3%	58.7%
Storepersons	1.2%	73.6%	26.4%
Advertising, Public Relations and Sales Managers	1.2%	54.9%	45.1%
Electricians	1.2%	97.9%	2.1%
Contract, Program and Project Administrators	1.1%	42.8%	57.2%
Software and Applications Programmers	1.0%	80.7%	19.3%
Kitchenhands	1.0%	44.9%	55.1%
Carpenters and Joiners	1.0%	98.9%	1.1%
Office Managers	1.0%	10.6%	89.4%

Source: ABS, Census of Population of Housing, 2021

Note: The ABS perturbs Census TableBuilder data to avoid the release of confidential information. Given perturbation and rounding, the sum of percentage shares may not equal 100%. All data are rounded to one decimal place.

The top 20 jobs for First Nations workers

There are 12 occupations that are shared across both the top 20 occupations for First Nations workers and the total Australian workforce but the differences between the list are telling. Namely, Education Aides and Welfare Support Workers as well as several large employing almost completely male dominated trades, which are far bigger employing occupations of First Nations workers than among the total Australian workforce. For example, Drillers, Miners and Shot Firers, Carpenters and Joiners, and Electricians, and Metal Fitters and Machinists are more common employing occupations for First Nations males. Sales Assistants (General) is a huge employing occupation of First Nations females.

In fact, most of the top 10 employing occupations of both CALD and First Nations workers are almost all female dominated occupations (six and eight respectively). Among both

cohorts, there is a slightly higher concentration in hospitality and sales roles, mainly as Checkout Operators and Office Cashiers, and Bar Attendants and Baristas.

In relation to differing gender segregation trends, First Nations males are more likely to work as Education Aides and Welfare Support Workers than their non-Indigenous counterparts, meaning these jobs are less female dominated compared to the broader workforce. Likewise, more First Nations females work in some of the highly dominated male or almost completely male dominated jobs in their top 20. For example, Truck Drivers, Drillers, Miners and Shot Firers, Electricians and Metal Fitters and Machinists.

There is only one Skill Level 1 occupation in the top 20 occupation list—Registered Nurses. It is the 11th biggest employing occupation of First Nations workers, and the growth in this Skill Level 1 occupation among First Nations workers is almost four times greater than the growth across the total workforce (206% compared with 52%). This is a positive trend, mirroring the growth in male dominated trades, of First Nations females and males filling shortages in skilled jobs.

For First Nations males, after Truck Drivers and Sales Assistants, the next four largest employing occupations were all trades - Drillers, Miners and Shot Firers, Carpenters and Joiners, Electricians, and Metal Fitters and Machinists. For these four trades, which are generally in shortage across Australia, First Nations representation in these occupations is generally higher than for their representation in total employment overall.

Table 11: Top 20 occupations of First Nations workers in 2021 and % share of First Nations workforce shares by ALL, male and female workforce and ALL workforce male and female

Occupation	% of total workforce	% First Nations share of workforce	% First Nations Male share	% ALL workforce Male share	% First Nations Female share	% ALL workforce Female share
ALL workforce	**100.0%**	**2.1%**	**50.8%**	**50.8%**	**49.2%**	**49.2%**
Sales Assistants (General)	4.5%	5.7%	30.0%	33.9%	70.0%	66.1%
Aged and Disabled Carers	2.0%	3.0%	21.6%	23.3%	78.4%	76.7%
General Clerks	2.2%	2.6%	14.0%	13.6%	86.0%	86.4%
Education Aides	0.9%	2.4%	21.6%	11.4%	78.4%	88.6%
Truck Drivers	1.4%	2.3%	90.9%	95.7%	9.1%	4.3%
Welfare Support Workers	0.6%	2.3%	32.8%	25.7%	67.2%	74.3%
Child Carers	1.4%	2.0%	4.8%	4.4%	95.2%	95.6%
Commercial Cleaners	1.2%	1.9%	30.3%	41.3%	69.7%	58.7%
Receptionists	1.4%	1.7%	6.3%	6.5%	93.7%	93.5%
Drillers, Miners and Shot Firers	0.5%	1.5%	84.3%	89.5%	15.7%	10.5%
Registered Nurses	2.3%	1.4%	10.5%	11.7%	89.5%	88.3%
Kitchenhands	1.0%	1.3%	41.6%	44.9%	58.4%	55.1%
Checkout Operators and Office Cashiers	0.9%	1.3%	21.8%	26.4%	78.2%	73.6%
Carpenters and Joiners	1.0%	1.2%	98.7%	98.9%	1.3%	1.1%
Storepersons	1.2%	1.2%	77.5%	73.6%	22.5%	26.4%
Bar Attendants and Baristas	0.8%	1.2%	29.5%	38.1%	70.5%	61.9%
Contract, Program and Project Administrators	1.1%	1.2%	33.1%	42.8%	66.9%	57.2%
Retail Managers	1.7%	1.2%	40.1%	48.8%	59.9%	51.2%
Electricians	1.2%	1.1%	95.1%	97.9%	4.9%	2.1%
Metal Fitters and Machinists	0.8%	1.1%	95.2%	98.0%	4.8%	2.0%

Source: ABS, Census of Population of Housing, 2021.

New perspectives on gender segregation: First Nations workers

- The Australian workforce is not just gender segregated but divided along other demographic lines. Intersectional analysis shows that different groups of people, such as First Nations Australians, are more likely to work in some jobs over others.
- First Nations workers are more concentrated in community and personal services occupations than the total workforce. For example, in jobs as Education Aides and Welfare Support Workers. First Nations workers are also slightly more likely to work in sales occupations and several large employing almost completely male dominated trade occupations.
- First Nations workers are more likely to work in highly gender segregated jobs and far less likely to work in gender balanced jobs. This also reflects a higher concentration in VET-qualified Skill Level 3 jobs - generally across trades for First Nations males and health, education, and care roles for First Nations females
- The occupational segregation analysis supports research that First Nations workers face unique challenges and discrimination in the world of work, training and education. As The Centre for Indigenous People and Work (CIPW) notes, "mob often choose roles that give back to mob but these occupations are lower paid and undervalued" (personal communication from CIPW, 18 July 2025).
- Registered Nurses is the only Skill Level 1 occupation in the top 20 First Nations occupation list. It is the 11th biggest employing occupation of First Nations workers, and the growth in this Skill Level 1 role is almost 4 times greater than growth across the total workforce. This is a positive trend, mirroring the growth for First Nations males in trades, where First Nations workers have good opportunities to contribute and benefit from Net Zero by 2050, Future Made in Australia and other reforms.
- There are also unique gender segregation trends within First Nations workers.
  - First Nations males are more likely to work as Education Aides and Welfare Support Workers than non-Indigenous males, rendering these jobs less female dominated on the GSIS scale than the broader workforce.
  - First Nations females are more likely to work in some of the male or almost completely male dominated jobs than non-Indigenous females, such as Truck Drivers, Drillers, Miners and Shot Firers, Electricians and Metal Fitters and Machinists.

The top 20 jobs for CALD workers

The top 20 occupations for CALD workers have some notable differences compared to the top 20 occupations for the total Australian workforce (12 of the top 20 jobs are common).

Looking at the top 20 occupations for CALD workers, they are more likely to be health, hospitality, accounting and IT roles. The two health occupations CALD workers are more likely to work in, compared to overall Australian or First Nations workers, are General Practitioners and Resident Medical Officers, and Nursing Support and Personal Care Workers.

Both these occupations have a high reliance on CALD workers, who account for 45% of workers in these occupations that are in shortage nationally and across every state and territory. This high share also partly explains the similar gender split for CALD workers and the total workforce.

In addition to CALD workers being more likely to work as Aged and Disabled Carers, CALD workers make up a much larger proportion (32%) of these two critical key occupations in the health care and social assistance industries.

The four hospitality roles are Chefs, Kitchenhands, Waiters and Delivery Drivers. Chefs are notable for being in persistent shortage, with a high reliance on CALD workers (60% of all workers in that occupation). The presence of IT base roles in the top 20 list of occupations, such as Software and Applications Programmers (56% CALD) and ICT Managers (35% CALD) also demonstrates the important role that CALD Australians play in those occupations.

Accounting Clerks and Accountants are in the CALD top 20 employing occupations. Accountants are the fourth largest employing occupation of CALD workers, and the 10th largest across Australia. Accounting Clerks also don't feature in the First Nations top 20 employing occupations. Additionally, various jobs in the top 20 like Accountants illustrate the different gendered trends across this group of workers. Namely:

- Accountants are also more female dominated for CALD workers, with a 62% share compared to the 54% share and gender balanced segregation intensity seen for the total workforce.
- CALD females are more likely to work as Software and Applications Programmers, meaning this role is considered to have a moderately male dominated segregation intensity among CALD workers but highly male dominated in the total workforce.
- CALD males have a bigger share of Retail Managers and CALD females are a larger share of Packers and Storepersons than is seen for males and females in the total workforce.
- Aged and Disabled Carers also have a different gender segregation intensity among CALD workers compared with the total workforce, it is moderately rather than highly female dominated across this cohort. This is partly because CALD males are more likely to work in this occupation and other health roles like Registered Nurses, compared with other males in the workforce. In fact, male Registered Nurses and Aged and Disabled Carers have more than doubled their CALD workforce share over the 15 years from 2006-2021. We explore this further in this paper, when we explore changes over time.

Apart from Accountants, a comparison of the most common occupations for CALD females and males highlights gender segregation trends that resemble broader patterns in the total workforce. Registered Nurses, Sales Assistants (General), Aged and Disabled Carers, and Child Carers, are the occupations with the most CALD females. Whereas, Software and Applications Programmers, Chefs, Sales Assistants (General), Truck Drivers and Commercial Cleaners are the largest employing occupations of CALD males.

It is also worth noting that both CALD and First Nations workers are considerably over-represented in Sales Assistants roles and reflects both the concentration of these workers in entry level and junior roles but also their younger age profiles.

Table 12: Top 20 employing occupations of CALD workers in 2021 and the proportion of CALD workforce and ALL workforce male and female

Occupation	% of ALL workforce	CALD share of ALL workforce	% CALD workforce Male	% ALL workforce Male	% CALD workforce Female	% ALL workforce Female
ALL workforce	**100.0%**	**22.8%**	**51.3%**	**50.8%**	**40.7%**	**49.2%**
Sales Assistants (General)	4.5%	17.3%	37.7%	33.9%	62.3%	66.1%
Registered Nurses	2.3%	32.6%	16.8%	11.7%	83.2%	88.3%
Aged and Disabled Carers	2.0%	31.8%	27.6%	23.3%	72.4%	76.7%
Accountants	1.4%	42.9%	38.4%	46.5%	61.6%	53.5%
Software and Applications Programmers	1.0%	56.1%	74.6%	80.7%	25.4%	19.3%
Commercial Cleaners	1.2%	43.3%	46.2%	41.3%	53.8%	58.7%
Chefs	0.8%	60.4%	75.2%	72.8%	24.8%	27.2%
Child Carers	1.4%	31.2%	2.2%	4.4%	97.8%	95.6%
Nursing Support and Personal Care Workers	0.9%	45.2%	20.2%	20.8%	79.8%	79.2%
Retail Managers	1.7%	24.4%	56.3%	48.8%	43.7%	51.2%
Storepersons	1.2%	29.5%	66.8%	73.6%	33.2%	26.4%
Kitchenhands	1.0%	34.3%	42.0%	44.9%	58.0%	55.1%
General Clerks	2.2%	15.8%	17.3%	13.6%	82.7%	86.4%
Packers	0.5%	53.4%	33.9%	40.4%	66.1%	59.6%
Truck Drivers	1.4%	18.4%	98.1%	95.7%	1.9%	4.3%
Delivery Drivers	0.6%	42.2%	89.5%	86.8%	10.5%	13.2%
General Practitioners and Resident Medical Officers	0.6%	45.4%	52.9%	51.0%	47.1%	49.0%
Waiters	0.8%	32.4%	27.9%	25.6%	72.1%	74.4%
Accounting Clerks	0.9%	26.4%	23.9%	20.1%	76.1%	79.9%
ICT Managers	0.7%	34.8%	75.3%	76.4%	24.7%	23.6%

Source: ABS, Census of Population of Housing, 2021.

New perspectives on gender segregation: CALD workers

- CALD workers are over or underrepresented in some jobs across the economy and there are again unique gendered patterns within and across this.
- CALD workers are slightly more likely to work in gender balanced occupations and slightly less likely to work in highly gendered segregated jobs than the total Australian workforce.
- There are occupations in the economy where CALD workers make up more than half of the workers, which is more than double their share of the total workforce (23%). The top three occupations with the highest CALD segregation intensity are Automobile Drivers (71%), Chefs (60%) and Software and Applications Programmers (56%).
- There are also occupations where CALD workers are underrepresented including in teaching, law, farming; highly male dominated trades like plumbing, electrical and carpentry; and emergency services, paramedics, and police; all of which have less than 10% CALD representation.
- CALD workers also represent more than a third of workers in lower skill level jobs across care, banking, hospitality, food manufacturing, warehousing, and machine operating.
- However, CALD workers, and CALD females have played a significant role in the gender balancing of Skill Level 1 managerial and professional occupations over time. Skill Level 1 jobs like Telecommunications Engineering Professionals, Accountants, Electronics Engineers, General Practitioners and Resident Medical Officers, Pharmacists and various Information Technology roles have a heavy reliance on CALD Australians, accounting for over 40% of workers in these occupations.
- Similarly, IT, engineering, scientist and specialist health roles like Surgeons, Psychiatrists and medical Laboratory Scientists also all have workforces that are over a third CALD.
- The top 20 occupations among CALD workers highlight several unique gender segregation trends such as higher female shares across Accountants, Software and Applications Programmers, Packers and Storepersons compared to the total workforce.
- CALD males also have higher shares of health roles such as Aged and Disabled Carers and Registered Nurses compared to their total male population counterparts. These occupations are less gender segregated among CALD workers.

Changes in female employment and education over time

Australian women's rapidly increasing workforce participation, educational attainment and likelihood to work full-time has been reflected in major changes in jobs, work and pay across the economy over time.

Over the 15 years from 2006-2021:

- Female employment grew more than male employment (40% and 27% respectively). Employment growth for First Nations females and CALD females was also stronger than their male counterparts.
- There was a broad shift to higher Skill Level occupations (especially Skill Level 1 over Skill Level 3 and 5) and this shift was most pronounced for female employment.
- The share of females aged 25-39 with a bachelor's degree or higher rose from 28% to 46%.
- The share of females aged 25-39 years with a Certificate III qualification or above rose from 48% to 72%.

In addition to these changes over time for women, the First Nations and CALD share of the total workforce has also increased significantly over this time. The First Nations share of the total workforce increased from 1.3% in 2006 to 2.1% in 2021 and the CALD share increased from 15% to 23%.

Gendered occupational segregation over time 2006-2021

While there have been some modest changes in occupational segregation intensity over time (both at the ANZSCO 1-digit and 4-digit levels) Australia's labour market has remained highly gender segregated. This is also the case when looking at changes across the top growing occupations in the economy over the same time.[9]

Changes over time at the major occupation group level

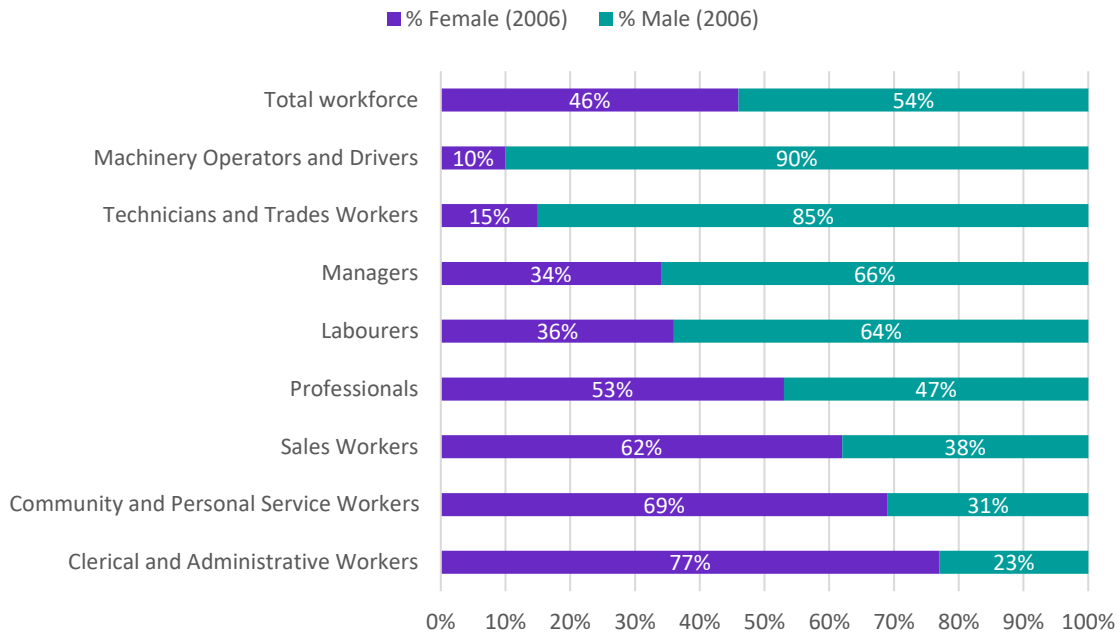
In the 15 years from 2006 and 2021, there were no shifts across the GSIS for the eight major occupational groups, despite some modest changes in their gender splits. The most notable modest change was the increasing female share of Managers, which rose by almost 6 percentage points. This was not quite enough to shift it down the GSIS to gender balanced as males accounted for 60.4% of managers in 2021.

Another modest change was that females increased their workforce share in Professionals by 3 percentage points, reflecting a broader trend of women’s growing presence in higher skill level roles.

There was relatively small changes across the more traditionally female and male dominated occupation groups over the 15 years, as shown in Figure 3 and Figure 4.

[9]To capture the full picture of occupational change between 2006 and 2021, we identified a selection of the top growing occupations by two measures in our study. These two measures identify the largest and fastest growing occupations over the time. See Technical Paper 1 for more detail on the methodology.

Figure 3: 2006 gender splits of major occupational groups



Source: ABS Census of Population and Housing, 2006.

Figure 4: 2021 gender splits of major occupational groups

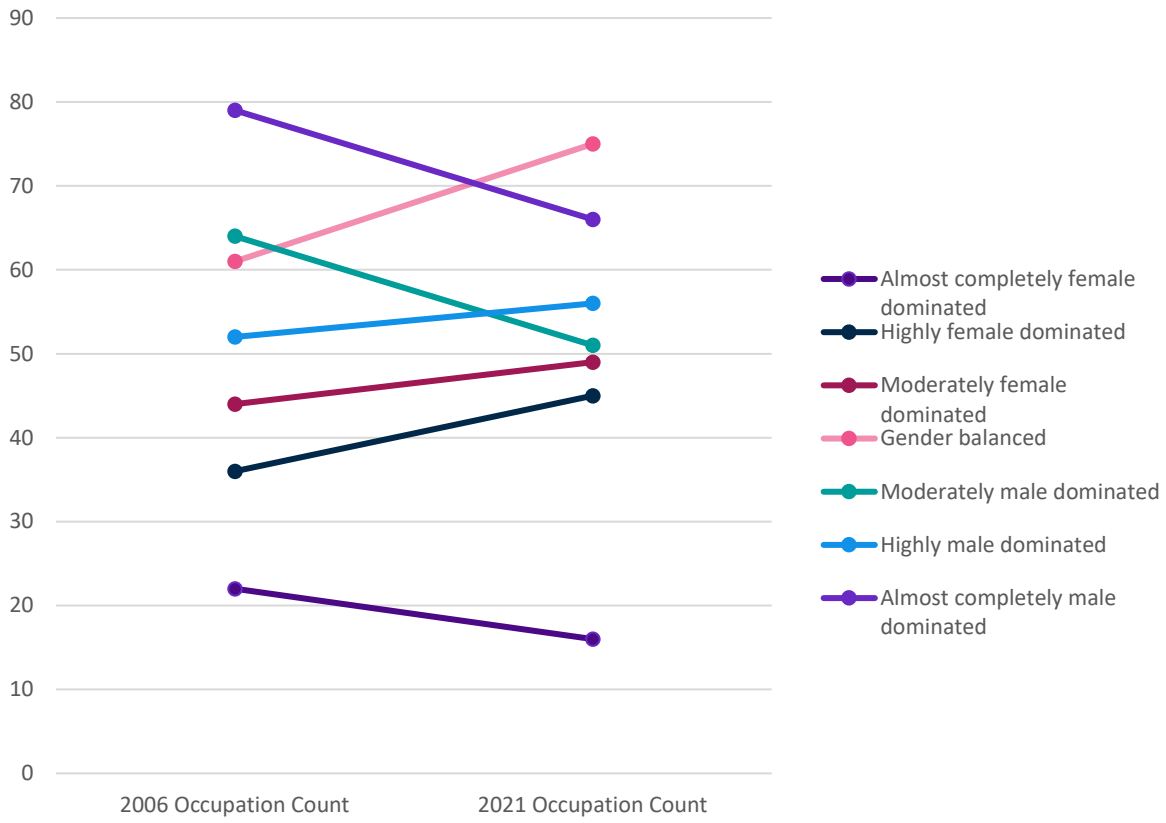
Source: ABS Census of Population and Housing, 2021.

Changes over time at a more detailed occupation level

At the more detailed occupational level, we also found that of the 358 ANZSCO 4-digit occupations, most (247) did not see a change in their gender segregation intensity in the 15 years between 2006 and 2021. This means 69% of occupations maintained the same gender segregation category between 2006 and 2021.

Of the remaining 31% of occupations, around one third (31%) saw their gender segregation intensify and around two-thirds (68%) saw their intensity reduce, around half of which shifted into gender balance.

Figure 5: Count of ANZSCO 4-digit occupations by segregation intensity, from 2006 to 2021



Source: ABS, Census of Population and Housing, 2006 and 2021.

For the 111 (31%) occupations where there was a change in their gender segregation intensity category, it was encouraging to see a clear increase in gender balanced occupations across the GSIS, from 60 occupations in 2006 up to 75 in 2021.

Positively, most of these occupations (72%) were shifting from male dominated to gender balanced. This hints at emerging and hopefully continuing shifts, changing cultural norms, or existing policy initiatives and levers, and each warrant their own specific examination.

Some notable examples of gender balancing occupations are Ambulance Officers and Paramedics, which saw female representation climb from 26% to 44%, Dental Practitioners from 31% to 47% and Barristers from 22% to 38%.

In the case of Ambulance Officers and Paramedics, this workforce shifted down the GSIS from moderately male dominated to gender balanced. When applying an age cohort lens to this occupation, there are even more nuanced segregation shifts, which we explore in the next section of the paper.

Table 13: Change in gender segregation intensity from 2006 to 2021 for ANZSCO 4-digit occupations

Gender segregation intensity	2006 Occupation count (%)	2021 Occupation count (%)
Almost completely female dominated	6%	4%
Highly female dominated	10%	13%
Moderately female dominated	12%	14%
Gender balanced	17%	21%
Moderately male dominated	18%	14%
Highly male dominated	15%	16%
Almost completely male dominated	22%	18%

Source: ABS Census of Population and Housing, 2006 and 2021.

Other changes over time include occupations shifting away from gender balance and becoming more gender segregated over the 15 years from 2021 (6% of occupations), with the majority of these were becoming more female dominated.

- For example, in 2006, 46% of Veterinarians were female, and this increased significantly to 67% in 2021.
- Likewise, School Principals went from a 50/50 split of males and females, to 65% female in 2021. While this does indicate women's increasing leadership and promotion in this sector, vertical segregation in this workforce remains an issue. OSCA has introduced a new Assistant School Principal occupation, and we will explore whether this changes vertical gender segregation trends in this important workforce in Paper 2.
- A total of 18 occupations shifted from gender balanced into moderately female dominated but remained close to gender balanced and could shift back into gender balance in coming years.
  - Several Skill Level 1 managerial, analyst and health-sector related occupations, such as Pharmacists, Advertising and Marketing Professionals, Intelligence and Policy Analysts, Human Resource and Other Education Managers are part of this trend.
  - For example, Pharmacists increased their female workforce from 56% in 2006 to 64% in 2021.
  - The larger shifts (an increase share by 10 percentage points or more in shift to females) were among Dental Hygienists, Technicians and Therapists, Optometrists and Orthoptists, and Judicial and Other Legal Professionals.
- Although many of the larger changes for ANZSCO 4-digit occupations did involve an increasing female workforce, just over one in four occupations (28%) did see an increase in the male workforce share. While this didn't always translate into a shift across the GSIS, some examples are worth highlighting. Namely, Aged and Disabled Carers saw the male workforce share rise from 15% to 23%; an important increase given its size and its projected growth with increasing demand in the Health care and social assistance industry.
- Similarly, another highly female workforce of Pharmacy Sales Assistants more than doubled its male workforce share from 5% to 13%, shifting this occupation's gender segregation intensity from 'almost completely female dominated' to 'highly female dominated'. In fact, the changing segregation intensity of occupations in this industry are

worth further investigation. Pharmacists offer an interesting case study in terms of CALD segregation, and horizontal and vertical occupation segregation. OSCA is creating new occupations in this industry, disaggregating Pharmacy Technician into Community Pharmacy Technician and Hospital Pharmacy Technician, which we will explore in Paper 2.

"In pharmacy, a lot of owners are male despite 80-85% of pharmacists in the company being female. As a young female wanting to look into ownership, it's quite disappointing to see that. It makes me feel like I have to work harder to prove that I can do it."

—Female focus group participant aged 30-44 years, Pharmacist

"I did hear that the owner prefers male pharmacists…they were calling it the 'boys club' and the boys were all getting along very well with each other."

—CALD Female focus group participant aged 30-44 years, Pharmacist

Despite the rapid increasing female share of the Pharmacists occupation, research and qualitative commentary shows that vertical segregation of the occupation continues, with females having disproportionately low representation in leadership positions and ownership of pharmacies (Andalo 2019; Martin et al. 2021).

This is not unique to pharmacies, with females far less likely to work as owner managers across the economy. As the below breakout box shows, 66% of owner managers are male, making this type of employment moderately male dominated.

New perspectives on gender segregation of owner managers

In addition to exploring gender segregation intensity by occupations for different groups of people based on identity and demographics, it is also possible to look at different groups of workers based on their employment and working arrangements (e.g. their relationship to the employing business, their hours, when they work, how they work).

In Part 2, we highlight some of the gendered differences in the hours that people work and are paid for to contextualise our gender pay gap findings but here we want to highlight that there is also gender segregation among business ownership across the Australian workforce.

- ABS Labour Force statistics show that males are almost twice as likely to work as owner managers in their main job, compared with females (19% of employed males in 2025, compared with 11% of females).
- As a share, despite females accounting for 48% of total employment in 2025, they account for only 34% of owner managers, making this form of work moderately male dominated.
- This is more acute for people working as owner mangers of businesses with employees, of whom only 30% were female, compared with of businesses without employees, which was approaching being considered relatively gender balanced at 37%.
- The gendered differences in people working as owner managers or operators of their own businesses, and how this varies by occupation, by type of business or industry, warrants further analysis.

Figure 6: Female share of people working as owner managers with and without employees, and female share of workforce

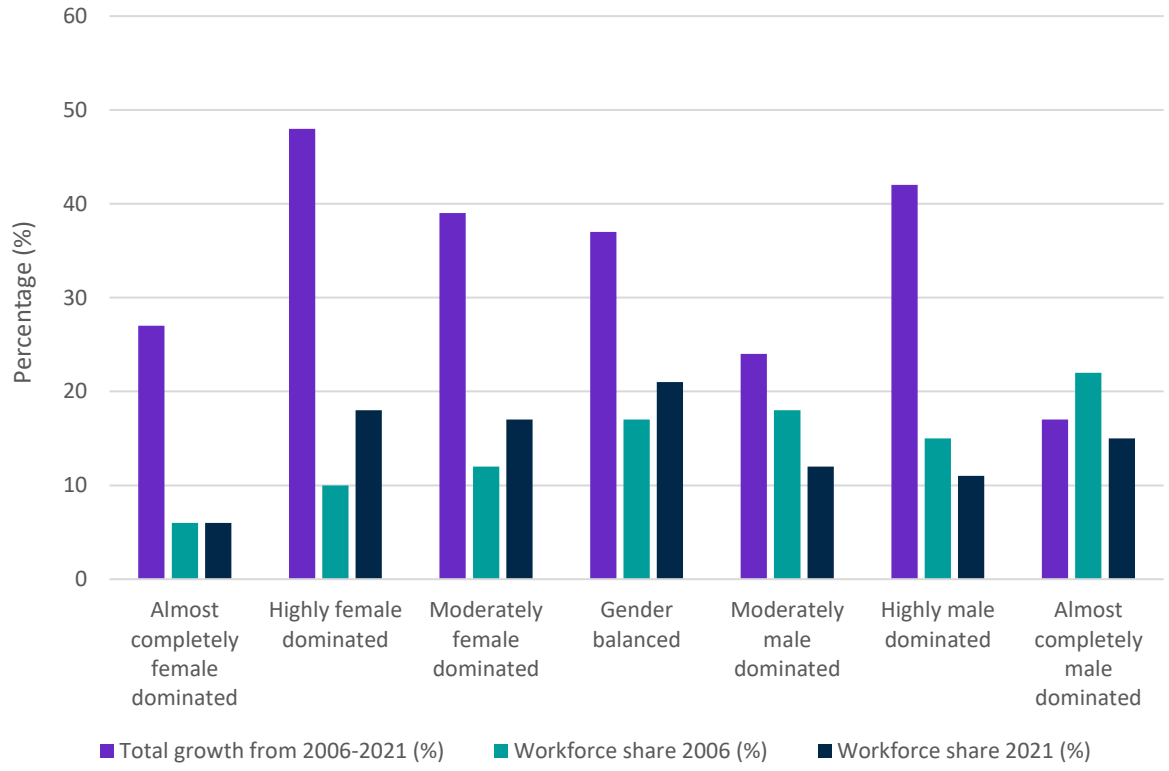
Source: ABS, Labour Force Survey, Detailed, EM6 'Status in employment', May 2025

Changes over time across the top growing occupations

When looking at shifts in gender segregation intensity across the top growing occupations over the 15 years from 2006 to 2021, these changes become even more pronounced. Highly female dominated, large employing occupations saw the strongest growth over the period. Whereas, highly gendered and gender balanced occupations were heavily represented in the growing occupations.

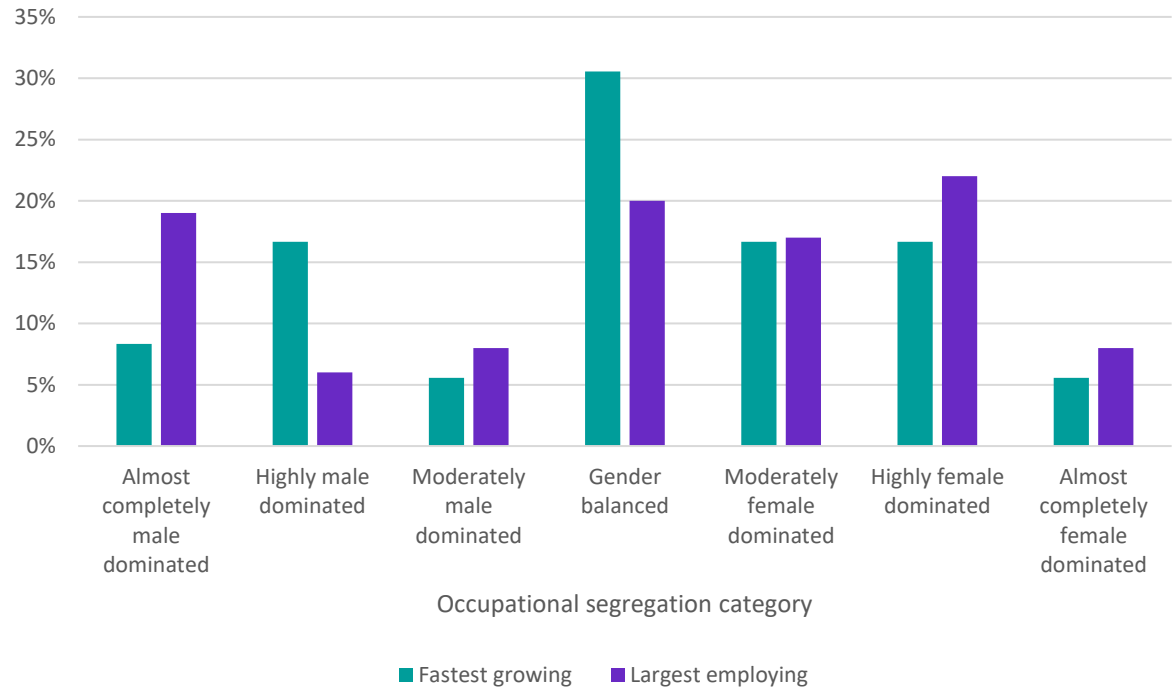
Many of the fastest growing jobs were in health care and service occupations such as Aged and Disabled Carers, Occupational Therapists, Speech Professionals and Audiologists, Health and Welfare Services Managers and Psychologists); and managerial occupations such as Policy and Planning Managers, ICT Managers, Health and Welfare Service Managers.

Figure 7: Total growth % (from 2006 to 2021) and workforce share (2021) by gender segregation intensity



Source: ABS, Census of Population and Housing, 2006 and 2021.

Figure 8: Percentage share of the top 10% (36 occupations) top growing occupations by segregation intensity 2021



Source: ABS, Census of Population and Housing, 2006 and 2021.

The same trend occurs across the top growing jobs where professional roles are shifting to gender balanced, or becoming slightly more female dominated is also apparent. Advertising and Sales Managers, Advertising and Marketing Professionals, Management and Organisation Analysts, Other Specialist Managers, and Generalist Medical Practitioners were all part of this change. These changes reflect increasing female employment in high-skill and high-growth areas of the workforce, particularly in business, health, and analytical professions.

Examples of five occupations that directly shifted into gender balance on the GSIS is presented in Table 14 below.

Table 14: Top growing occupations that shifted to gender balance from 2006 to 2021

Occupation	Segregation Intensity 2006	Segregation Intensity 2021
Advertising, Public Relations and Sales Managers	Moderately male dominated	Gender balanced
Management and Organisation Analysts	Moderately male dominated	Gender balanced
Generalist Medical Practitioners	Moderately male dominated	Gender balanced
Kitchenhands	Moderately female dominated	Gender balanced
Commercial Cleaners	Moderately female dominated	Gender balanced

Source: ABS, Census of Population and Housing, 2006 and 2021.

Within the top growing occupations there were professional occupations that shifted away from gender balance to being moderately male or female dominated. These included but were not limited to Advertising and Marketing Professionals, and Secondary School Teachers.

Overall, the changes above point to some progress on gender segregation in large employing and fast-growing occupations. Increasing female employment and education, and a range of labour market factors such as access to early childhood education and care, opportunities from occupation shortages and COVID disruption, appears to be translating into some gender balancing of professional occupations.

However, it is also important to note that a high share of females continue to work in healthcare (nursing, care work), education, and retail roles, and that gender segregation in these occupations has not changed much over the 15 years.

Qualitative findings from the Study's focus groups on a number of the almost completely male dominated occupations indicate limited shifts in the workplace culture, which continues to hinder the attraction and retention of women to occupations that are almost completely male dominated. This could be playing a role in their continued choice and pursuit of more female dominated occupations. The high gender pay gaps across almost completely male dominated roles discussed in Part 2 of this paper also point to continuing gendered differences in these occupations.

"As a woman in truck driving, I feel like I'm frowned upon and that I've stepped in someone else's space… Gender equality doesn't exist… and I don't see it happening. I'll probably have to die and my kids to take over before it happens. [Gender equality] is a mindset, it's what your parents teach you… and you cannot change a mindset—you would need to rehire or revamp your whole organisation… in order to shift the mentality for both men and women."

—Female focus group participant aged 30-44 years, Truck Driver

"Whenever I go out to greet customers, I'm assumed to be an admin instead of a proper locksmith."

—Female focus group participant aged 18-29 years, Locksmith

"There were older men who felt that females did not belong in construction."

—Female LGBTQIA+ focus group participant, former construction worker

Changes over time: Key Findings

- Across the 15 years from 2006 and 2021, gendered occupational segregation remained relatively similar when looking across two different occupational levels (high level and detailed level), and the top growing occupations.
- There were no shifts across the GSIS for the eight major occupational groups but females did increase their share in some groups, particularly managers, and the gender balancing of these jobs is an identifiable trend.
- At the detailed occupational level (ANZSCO 4-digit level), just under 70% of occupations remained at the same gender segregation intensity that they were at in 2006. 12% of jobs saw their gender segregation intensify and 12% saw their intensity reduce.
- Most occupations that did shift on the GSIS were part of a gender balancing trend: around a third (32%) shifted directly into gender balance and positively 72% of these occupations were shifting from male dominated to gender balanced.
  - Examples of gender balancing occupations are Ambulance Officers and Paramedics, Dental Practitioners and Barristers.
  - Many of the occupations shifting away from gender balance were tipping into moderately female dominated on the GSIS, such as Veterinarians and School Principals.
  - Several occupations also shifted from gender balanced into female dominated but remained close to gender balanced and could shift back into gender balance in coming years. Several Skill Level 1 managerial, analyst and health-sector related occupations are part of this change.
- The share of moderately and highly male dominated occupations generally remained the same over the 15 years. However, there was a decline in the share of both almost completely male and female dominated occupations on the GSIS.
- Many of the larger changes for ANZSCO 4-digit level occupations involved increasing female shares but, male shares increased in roughly one in four occupations. These generally didn't translate into a shift on the GSIS, but Aged and Disabled Carers and Pharmacy Assistants are notable examples.
- When looking at top growing occupations, similar trends were seen:
  - 75% of the top employing occupations did not shift on the GSIS and females continue to work overwhelmingly in healthcare (nursing, care work), education, and retail roles.
  - Highly female dominated almost doubling their workforce share and the next fastest area of growth was in gender balanced occupations. Many of these growing occupations were in health care and managerial occupations.
  - Several professional roles shifted to gender balance, or became slightly more female dominated such as Advertising, Sales, Organisation and Specialist Managers. Generalist Medical Practitioners were also part of this change.

An intersectional snapshot of segregation changes over time

To further demonstrate why intersectional investigations of gender segregation are important and can offer more nuanced insights, this section explores changes over time for First Nations and CALD workers.

In each section, we look at the extent changes over time in the GSIS reflect or differ from the total workforce trends, including across the top growing occupations unique to these different groups of workers. We also offer occupational snapshots of different gendered growth patterns for these workers. In doing so, we identify unique gendered trends that differ from and align with the broader gender segregation changes over time that we are seeing.

Changes over time: First Nations workers

Between 2006 and 2021, there were more diverse changes across the GSIS for First Nations workers compared to the total workforce.

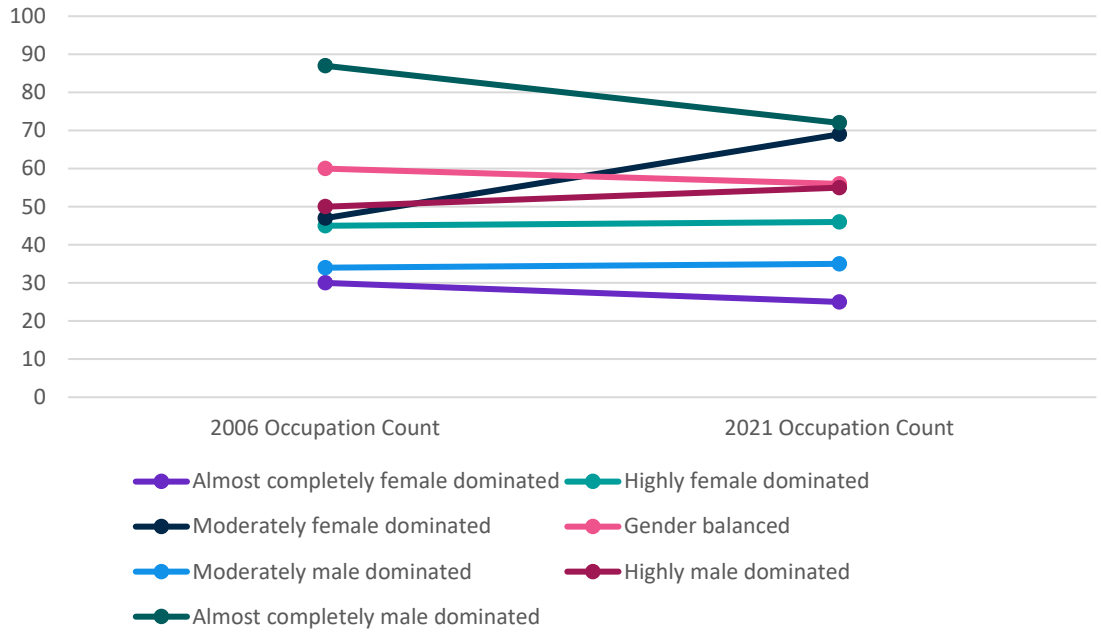
There was a lower proportion of occupations remaining at the same gender segregation intensity on the GSIS—64% compared to 69% across the total workforce.[10]

The broader gender balancing trend seen for the total workforce was not seen for First Nations workers, with more occupations becoming female dominated than gender balanced across this cohort. In fact, over half (53%) of First Nations workers were in moderately, highly or almost completely female dominated occupations in 2021, compared to just under a third (31%) for the total workforce.

Several occupations also become more male dominated for First Nations workers - at various intensities across the scale—than compared to the total workforce.

[10] Due to the smaller number of First Nations workers in a range of occupations some of the diversity in changes across the GSIS more so reflect large compositional shifts in a smaller group of people than broader changes in gender segregation over time. For example, there are complete gender flips from moderately female to male dominated segregation intensity among these workers in some occupations unlike across the total workforce and CALD workers but the smaller sample size (under 20 workers in some occupations) is at play.

Figure 9: Count of ANZSCO 4-digit occupations by First Nations gender segregation intensity, from 2006 to 2021



Source: ABS, Census of Population and Housing, 2006 and 2021.

When applying the GSIS to the top growing occupations for First Nations workers the biggest shares of the growing jobs were either highly or almost completely male or female dominated jobs. For female dominated occupations, several roles (5 of the top 10 largest growing) were in healthcare and community services, trades and labouring occupations featured prominently among the male dominated occupations.

The largest employing occupation that shifted on the GSIS for First Nations workers was Sales Assistants (General). This was the largest employing occupation for First Nations people in 2021 and shifted downwards on the GSIS from highly to moderately female dominated. The only other two occupations in the top 10% employing occupations (36) that increased their male share and shifted on the GSIS were Kitchenhands and Gardeners which went from female dominated to gender balanced and highly male dominated to almost completely male dominated respectively.

Table 15: Shifts in gender segregation intensity across the top growing occupations for the First Nations workers from 2006 to 2021

Occupation	Segregation intensity 2006	Segregation intensity 2021
Sales Assistants (General)	Highly female dominated	Moderately female dominated
Kitchenhands	Moderately female dominated	Gender balanced
Fast Food Cooks	Gender balanced	Moderately male dominated
Welfare Support Workers	Gender balanced	Moderately female dominated
Drillers, Miners, and Shot Firers	Almost completely male dominated	Highly male dominated
Welfare, Recreation and Community Arts Workers	Moderately female dominated	Highly female dominated
Other Information and Organisation Professionals	Gender balanced	Moderately female dominated
Other Miscellaneous Labourers	Highly male dominated	Moderately male dominated
Inspectors and Regulatory Officers	Gender balanced	Moderately female dominated
Gardeners	Highly male dominated	Almost completely male dominated

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

Occupational snapshots: First Nations workers

In this section we explore broader gendered growth and change in selected occupations for First Nations workers to identify important and promising changes that are at play in broader gender segregation changes over time.

For example, First Nations workers have increased their share of two large employing health care roles and male dominated trades—which are typically in national shortage. First Nations workers, particularly females, have also increased their share of several higher Skill Level roles across diverse industries such as advertising, welfare, teaching and environmental science.

Increasing First Nations worker shares in health care occupations

A high share of growth in jobs in the economy has been in the Health care and social assistance industry, within which there has been increasing employment of First Nations workers. Growth in employment of First Nations workers - both males and females - in Aged and Disabled Carers and Registered Nurses occupations has been particularly noteworthy, growing faster than the total workforce over the 15 years to 2021 (400% and 290% for First Nations males and females Aged and Disabled Carers, compared to 344% and 166% for the total Aged and Disabled Carers male and female workforce).

Increasing share of First Nations workers in male dominated trades

Between 2006 and 2021, there was strong employment growth in almost completely male dominated trade occupations among male First Nations workers. In 2006, only three trades, Carpenters and Joiners, Metal Fitters and Machinists and Structural Steel and Welding Trades Workers, were in the top 15 employing occupations of First Nations males. In 2021, this had expanded to also include Electricians, Plumbers, and Motor Mechanics indicating First Nations male take-up of high demand skill shortage jobs.

The number of First Nations males working in these occupations almost tripled between 2006 and 2021. Likewise labouring jobs such as Drillers, Miners and Shotfirers increased more than threefold as did Construction Managers (258%) which shows that males are progressing into Skill Level 1 occupations in this sector. Importantly, Electricians more than quadrupled in workforce size over the 15 years. This is a very important occupation in the Net Zero Transition and JSA has previously made recommendations on how to support First Nations workers into these roles. This study reiterates these recommendations (JSA 2024b).

These occupations are all almost completely male dominated and partly explains the higher intensification of gender segregation among First Nations workers and their higher representation particularly across Skill Level 3 jobs.

Increasing share of higher skill roles for First Nations workers

Key examples of growth in higher skilled occupations for First Nations workers between 2006 and 2021 include growth in Health, Education, Welfare, Policy and Environmental professional roles.

Table 16 provides an overview of all Skill Level 1 and 2 occupations that grew by over 800 workers, which in most cases equated to a doubling, tripling or a quadrupling of the number of First nations workers in these occupations over the 15 years (100% = doubling, 200% = tripling, 300% = quadrupling).

The changing segregation intensity between 2006 and 2021 shows the extent to which high growth in higher skilled occupations was more concentrated among First Nations females than males.

Table 16: Skill Level 1 and 2 occupations which experienced the largest First Nations growth over the 15 years to 2021

Occupation	Skill Level	Segregation intensity 2006	Segregation intensity 2021	Growth %
Welfare Support Workers	2	Gender balanced	Moderately female dominated	122%
Registered Nurses	1	Highly female dominated	Highly female dominated	207%
Welfare, Recreation and Community Arts Workers	1	Moderately female dominated	Highly female dominated	237%
Retail Managers	2	Gender balanced	Gender balanced	165%
Primary School Teachers	1	Highly female dominated	Highly female dominated	131%
Secondary School Teachers	1	Moderately female dominated	Moderately female dominated	189%
Contract, Program and Project Administrators	2	Moderately female dominated	Moderately female dominated	70%
Other Information and Organisation Professionals	1	Gender balanced	Moderately female dominated	222%
Human Resource Professionals	1	Moderately female dominated	Moderately female dominated	150%
Construction Managers	1	Almost completely male dominated	Almost completely male dominated	269%
Office Managers	2	Highly female dominated	Highly female dominated	149%
Policy and Planning Managers	1	Gender balanced	Moderately female dominated	468%
Environmental Scientists	1	Highly male dominated	Moderately male dominated	224%
Chief Executives and Managing Directors	1	Moderately male dominated	Gender balanced	288%
Enrolled and Mothercraft Nurses	2	Highly female dominated	Almost completely female dominated	400%
Police	2	Moderately male dominated	Moderately male dominated	131%
Advertising, Public Relations and Sales Managers	1	Gender balanced	Gender balanced	455%

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

Note: The occupations in this table are those that had a greater than 800 First Nations workforce growth increase over the 15 years.

Changes over time across First Nations workers: Key Findings

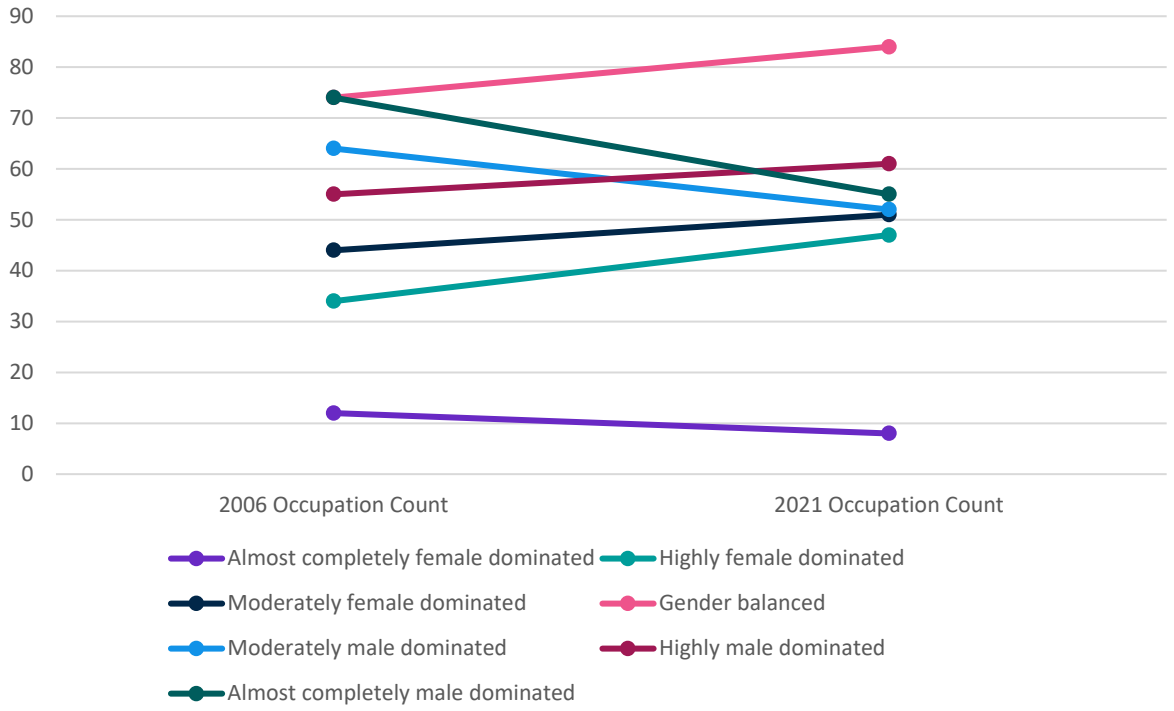
- Between 2006 and 2021, changes in gendered occupational segregation for First Nations workers differed from total workforce trends in four ways:
  - Less occupations remained at the same gender segregation intensity
  - More jobs became female dominated than gender balanced
  - Several occupations become more male dominated at various intensities across the scale
  - The top growing jobs were highly or almost completely gender segregated occupations. They were largely healthcare and community jobs on the female dominated side, and trades and labouring jobs on the male-dominated side. featured prominently among the male dominated occupations.
- Just over half (53%) of First Nations workers were in moderately, highly or almost completely female dominated occupations in 2021, compared to just under a third (31%) of the total workforce.
- First Nations males increased their share of various almost completely male dominated trades—which are typically in national shortage and key to Australia's Net Zero transition and Future Made in Australia reforms. This partly explains the intensification of gender segregation among First Nations workers.
- First Nations females drove growth in several high skilled professional roles across health, education and welfare, policy, advertising, and environmental science. The growth in Skill Level 1 Construction Manager roles is also notable for First Nations males.
- First Nations employment in two key national shortage health roles—Aged and Disabled Carers and Registered Nurses—grew faster than total workforce trends including among First Nations male workers over the 15 years to 2021.

Changes over time: CALD workers

Between 2006 and 2021, changes across the GSIS for CALD workers largely mirrored those seen for the total workforce. 67% of occupations remained at the same gender segregation intensity for CALD workers, compared to 69% across the total workforce and 64% across First Nations workers.

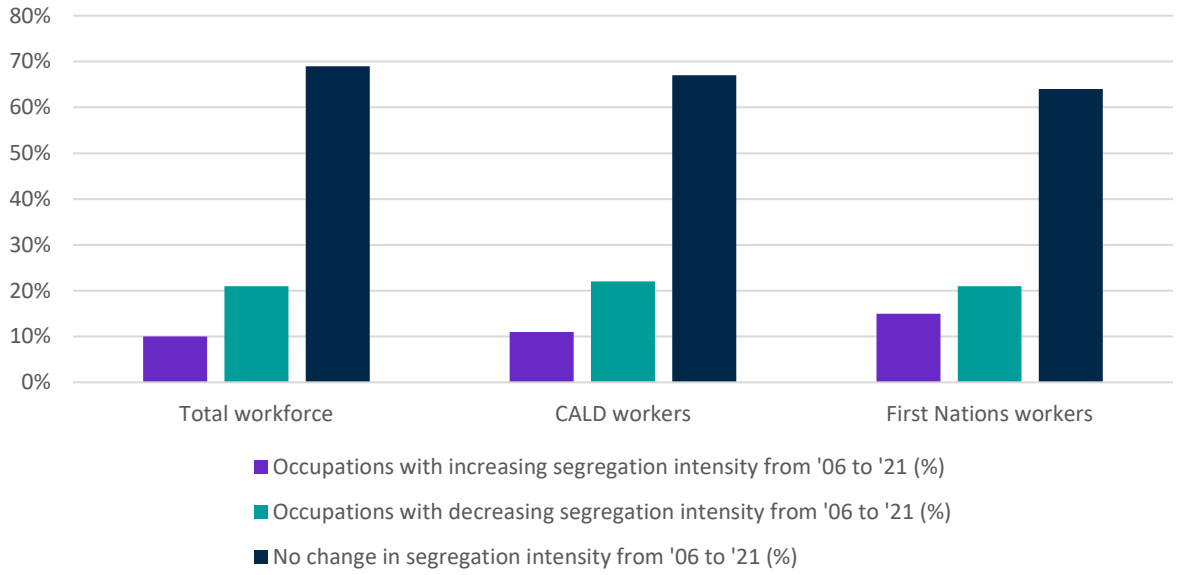
The gender balancing trends across the total workforce, were slightly stronger across CALD workers and slightly more male dominated occupations (of various intensity) became gender balanced in 2021 on the GSIS, compared to the total workforce (15% and 13%). This reflects the slightly more pronounced increase of CALD females in the workforce over this time, compared to females across the workforce, along with their different occupation distribution.

Figure 10: Count of ANZSCO 4-digit occupations by CALD gender segregation intensity, from 2006 to 2021



Source: ABS, Census of Population and Housing, 2006 and 2021.

Figure 11: Proportion of Total workforce, CALD, and First Nations ANZSCO 4-digit occupations gender segregation intensity shifts, from 2006 to 2021



Source: ABS Census of Population and Housing, 2006 and 2021.

Among the largest growing occupations for CALD workers, between 2006 and 2021, most shifted towards greater female shares with only Aged and Disabled Carers and Receptionists seeing a shift to towards more male employment. The changes across the GSIS among CALD workers very much reflect the increasing CALD female share of high-skill, high-growth occupations in business, health, and IT as Table 17 below shows.

Table 17: Shifts in gender segregation intensity across the top growing occupations for the CALD workers from 2006 to 2021

Occupation	CALD worker segregation intensity 2006	CALD worker segregation intensity 2021
Aged and Disabled Carers	Highly female dominated	Moderately female dominated
Software and Applications Programmers	Highly male dominated	Moderately male dominated
Accountants	Gender balanced	Moderately female dominated
Delivery Drivers	Almost completely male dominated	Highly male dominated
Storepersons	Highly male dominated	Moderately male dominated
General Practitioners and Resident Medical Officers	Moderately male dominated	Gender balanced
Advertising, Public Relations and Sales Managers	Moderately male dominated	Gender balanced
Bar Attendants and Baristas	Gender balanced	Moderately female dominated
Receptionists	Almost completely female dominated	Highly female dominated
Security Officers and Guards	Almost completely male dominated	Highly male dominated
Finance Managers	Moderately male dominated	Gender balanced
ICT Support Technicians	Highly male dominated	Moderately male dominated

Source: ABS, Census of Population and Housing, 2006 and 2021.

Occupational snapshots: CALD workers

As with First Nations workers, changes in selected occupations across CALD workers identify important and promising changes that are at play in broader gender segregation changes over time.

Increasing Female CALD worker share in high skill and high growth health occupations

- The increasing share of female CALD workers in high growth and high skill occupations in health over the 15 years from 2006 to 2021 has contributed to a range of important occupational segregation shifts.
- There has been strong growth in Skill Level 1 health roles like General Practitioners and Resident Medical Officers, Registered Nurses and Dental Practitioners for CALD females at a faster rate than for the total workforce.

- The number of CALD females working as Dental Practitioners tripled over the 15 years, further increasing the already high CALD representation in this occupation.
- Likewise, the CALD females increased their share of the Registered Nurses and Pharmacists workforces by over 10 percentage points between 2006 and 2021.

CALD males entering growing health and care occupations

CALD males significantly increased their share of two growing health and care occupations—Registered Nurses, and Aged and Disabled Carers.

- There was a five-fold increase in the number of male CALD Registered Nurses between 2006 and 2021, which significantly outpaced the growth for males working in the occupation across the total workforce, which almost doubled.
- The highest growing occupation in the health and care sector, Aged and Disabled Carers, also saw a significant shift in male CALD workers. Over the 15 years there was almost ten times as many CALD males in the occupation, as well as an almost five-fold increase for males working in the occupation in the total workforce.

A key finding of this analysis is that there has been a major shift in male CALD workers entering some moderately and highly female dominated health roles that are in shortage.

Increasing CALD representation in selected occupations by Skill Level

CALD representation has also intensified at both the highest and lowest skill levels and the gendered trends within these are influencing broader segregation trends in the workforce.

In the 15 years from 2006 to 2021, many of the top employing occupations in Australia have seen a marked shift towards employing CALD workers. In the top 30 CALD employing occupations, there are 10 Skill Level 1 occupations, 7 of which have increased their CALD share of employment by more than 10 percentage points between 2006 and 2021. These, ordered by the size of the occupations were:

- Registered Nurses (an increase of 18 percentage points in their share of the workforce, to around a third of people in this occupation)
- Accountants (their share increasing 16 percentage points to 43% of the workforce)
- Software and Applications Programmers (their share increasing 20 percentage points to 56% of the workforce)
- ICT Managers (their share increasing 16 percentage points to 35% of the workforce)
- Other Information and Organisation Professionals (their share increasing by 19 percentage points, to 35% of the workforce)
- Management and Organisation Analysts (their share increasing by 10 percentage points to 28% of the workforce)
- Civil Engineering Professionals (their share increasing by 14 percentage points to 37% of the workforce).

This highlights the growing importance of CALD employment in professional occupations, particularly in health and IT. In many cases CALD female growth has played a key role, driving the gender balancing of some of these occupations. In fact, some higher skill jobs like doctors are balancing out and increasing their female share while becoming increasingly

culturally diverse at the same time. Across other skill levels, increasing CALD representation has occurred:

- An example of two top employing Skill Level 2 occupations that have also grown substantially are Chefs, which grew from 35% to 60%, and Cafe and Restaurant Managers which grew from 26% to 42%.
- In terms of Skill Level 3, the most noteworthy increase was in Child Carers, rising from 14% to 31%. Following this shift into care work, there was also increases in Aged and Disabled Carers (from 15% to 32%), and Nursing Support and Personal Care Workers (from 23% to 45%) at Skill Level 4. CALD males play a larger role in this growth than their total workforce males overall.
- At Skill Level 4 and 5, aside from Aged and Disabled Carers and Nursing Support and Personal Care Workers, there are several high employing lower skilled occupations where CALD representation of the labour market has intensified in the 15 years from 2006-2021. Namely, in four occupations focused on vehicle transport, including Truck Drivers, Delivery Drivers, Automobile Drivers, and Couriers and Postal Deliverers. As well as jobs like Commercial Cleaners, Kitchenhands, Packers, Meat, Poultry and Seafood Process Workers, and Meat Boners and Slicers, and Slaughterers. The latter two have seen growth of CALD workers in these occupations of 134% and 240% respectively, meaning they now make up more than half of the total workers in these jobs across the country (55%).

Changes over time across CALD workers: Key Findings

- Between 2006 and 2021, changes in gendered occupational segregation across CALD workers largely mirrored those seen for the total workforce, but the gender balancing trends were slightly stronger.
  - The gender balancing trends across the total workforce, were slightly stronger across CALD workers and slightly more of these occupations shifted from male dominated (of various intensity) to gender balanced on the GSIS, compared to the total workforce (15% and 13%).
  - Across the top growing occupations, most shifts were to female dominated jobs in health and care, similar to the total workforce trends.
- The changes across the GSIS among CALD workers very much reflect the increasing CALD female share of high-skill, high-growth occupations in business, health, and IT. In health, this includes doctors, nurses, dentists and pharmacists.
- There has been a major shift in male CALD workers entering various female dominated health roles, that are also in national shortage, between 2006 and 2021.
  - There was a five-fold increase in the number of male CALD Registered Nurses, significantly outpacing the two-fold increase for males across the total workforce.
  - There was a ten-fold increase in the number of male CALD Aged and Disabled Carers, again well above the five-fold increase for males across the total workforce.
- CALD occupational segregation has intensified at both the highest and lowest skill levels and the gendered trends within these are influencing broader segregation trends in the workforce. For example:
  - Several higher skill jobs like doctors, accountants, software programmers and civil engineering professionals are balancing out from a gendered perspective and becoming increasingly culturally diverse at the same time.
  - Chefs at Skill Level 2 and various aged care, disability, nursing support and early learning roles at Skill Level 4. Among child carers, at Skill Level 3, almost a third of the workforce is now CALD.
  - Across Skill Level 4 and 5, driving and food processing occupations have become even more CALD segregated over the last 15 years pointing towards the over-representation of many of these workers in lower-paid, insecure jobs.

Gendered occupational segregation by age cohort and over the life course

In addition to looking at segregation changes over time, and through an intersectional lens, investigating how occupational segregation changes or deepens at different ages and stages of life offers another new perspective.

We know that workforce participation shifts across the life course, with people entering, exiting, or changing occupations at different ages due to education, caregiving, and career development. But these patterns are not experienced equally—males and females tend to be concentrated in different types of roles at different life stages. Understanding these gendered differences is key to designing effective policies to address occupational segregation.

> *"It can be very hard for single mothers. I've had job interviews tell me that they won't hire me because I'm a single mother and I've even been sacked because I had to leave work to take my kids out of school… there needs to be more understanding for single parents"*
>
> *—Female focus group participant aged 55+ years, Finance Manager*

It is also critical to look at longitudinal pathways across, into and out of jobs to make sense of the career decisions and transitions that males and females (and more broadly different types of workers) are more or less likely to make. Understanding this can assist in intervening in particular pain points or challenges workers face across the life course that effectively embed or worsen occupational gender segregation. In Paper 2 we explore these pain points and challenges across the skills system and leaky pipeline post training in more detail but first to an exploration of segregation changes over time across different age cohorts.

> *"Sandwiched caregivers spend an average of 31.7 hours per week doing unpaid care for both older and younger generations" (Australian Seniors 2025)*

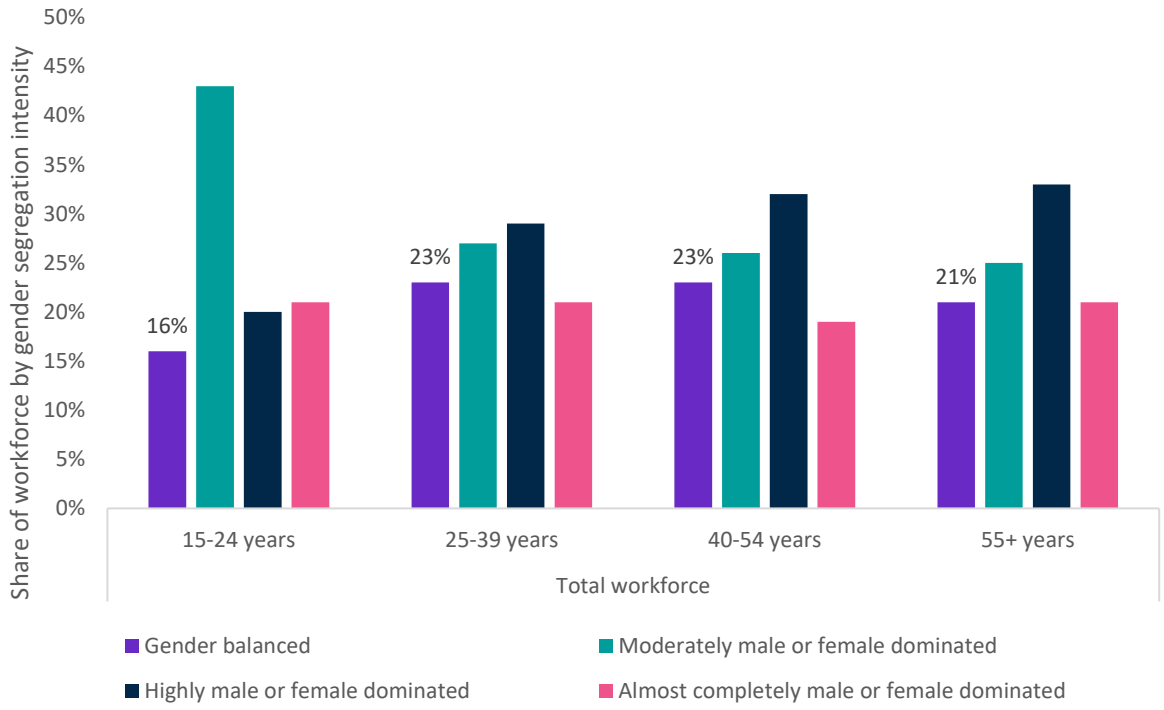
Gendered occupational segregation: differences by age

Gendered occupational segregation is clear across the total workforce but exploring how it changes across different age groups highlights how the different jobs females and males do at different ages contributes to the high-level picture.[11] When applying the GSIS to different age groups across the workforce we find that:

- Employment in gender balanced occupations is generally higher across prime working middle age of 25 to 54 years and lower for people early in their working life. It also falls slightly as they mature beyond 55 years.
- As with earlier analysis, moderately and highly male or female dominated occupations, account for the largest shares of workers across all age groups.

[11] Age groups used in this study are 15-24 to indicate youth, 25-39, 40-54 and 55+ and the age distributions of the male, female and total workforce in 2006 and 2021 are visualised in Technical Paper 1.

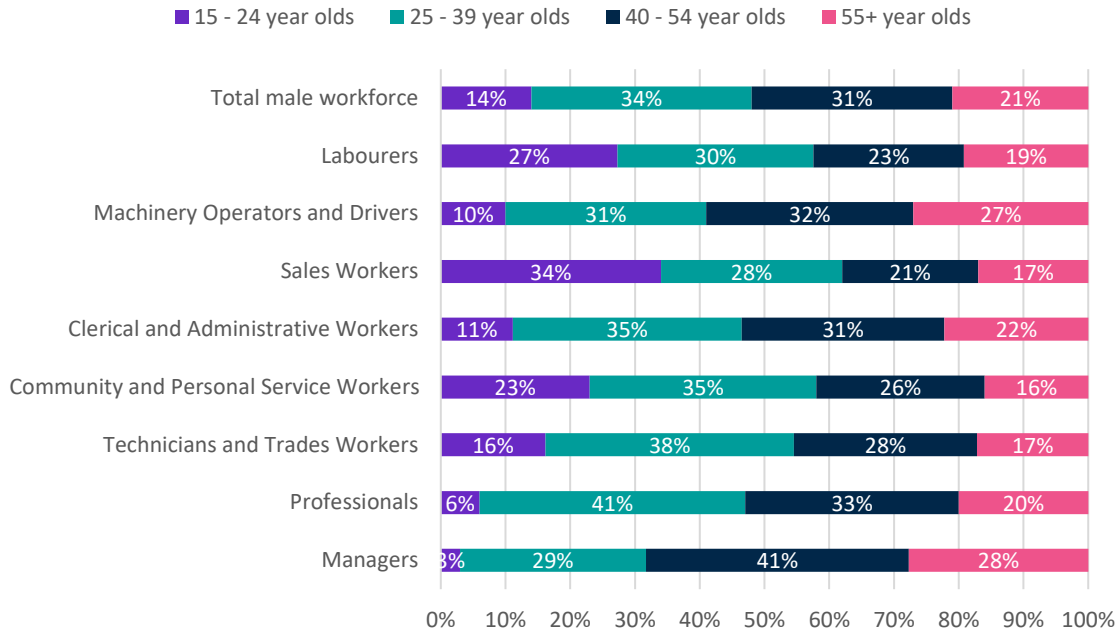
Figure 12: Share of age cohorts workforces by gender segregation intensity ANZSCO 4-digit occupations, 2021



Source: ABS Census of Population and Housing, 2021.

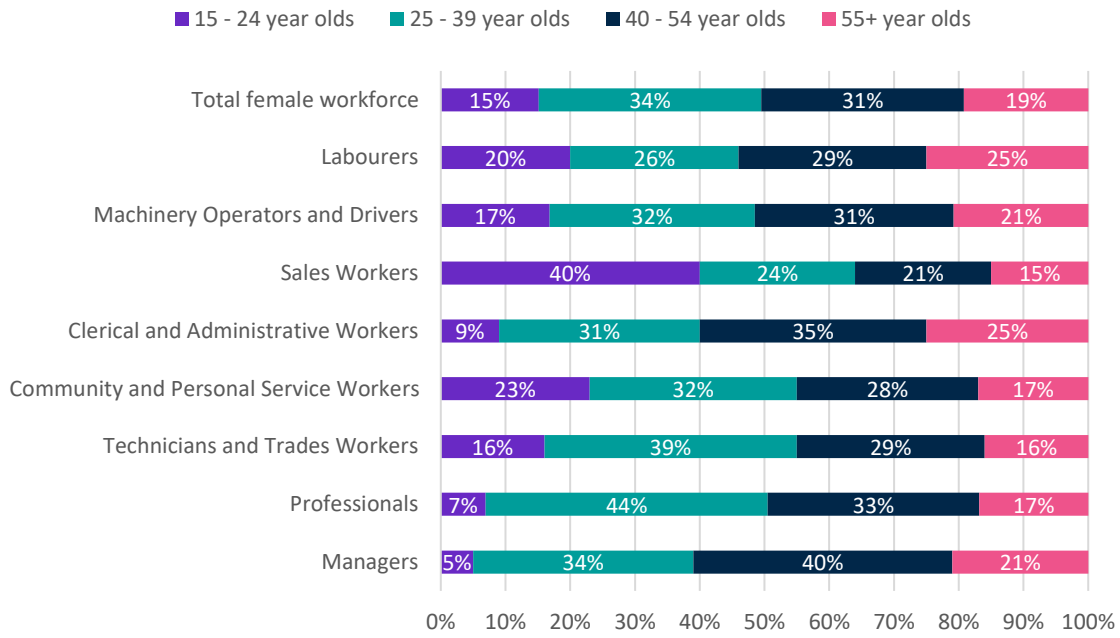
To unpack this gender segregation across the age groups, it's useful to consider the different occupations that are worked commonly at different ages, by females and males. Not surprisingly, when looking at the major occupational groups you can see that younger workers are concentrated in the major occupation group of Sales Workers, with 15–24 year olds comprising 34% (for males) and 40% (for females) of the total workforce in that occupation group. In contrast, older age groups are more concentrated in Managers, Professionals, and Clerical and Administrative Workers, for both females and males. Female 25-39 year olds do have a higher share of Managers than their male counterparts but this evens out as workers enter their 40s. After 55+ years, male share of Managers is higher.

Figure 13: Distribution of males by major occupation in 2021, by age group



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

Figure 14: Distribution of females by major occupation in 2021, by age group



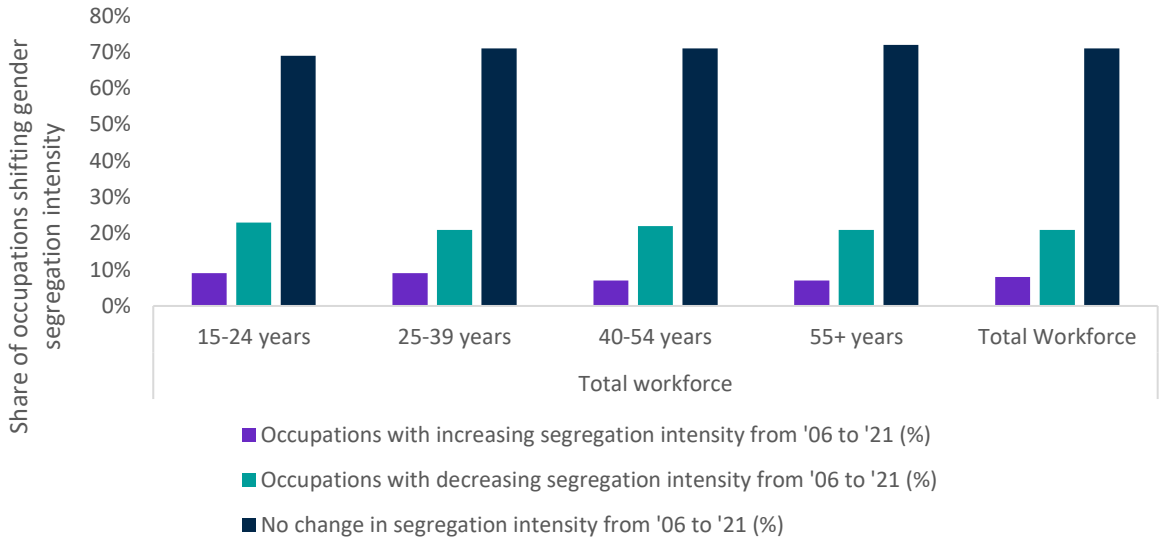
Source: ABS, Census of Population and Housing, 2021.

Changes over time for age groups

As with the earlier insights around the relatively small changes in occupational gender segregation between 2006 and 2021 for the total workforce, the same is also seen in the occupations worked by each age group. When looking at changes by age groups, we see similar changes to those at the total workforce level in the 15 years from 2006 to 2021.

Encouragingly, every age group saw an increase in the share of workers in gender balanced occupations. Also, there were significant decreases in the number of 'almost completely gendered' occupations across all age groups, suggesting encouraging broad-based change.

Figure 15: Proportion of age group workforce in 4-digit occupations that have shifted in gender segregation from 2006 to 2021



Source: ABS Census of Population and Housing, 2006 and 2021.

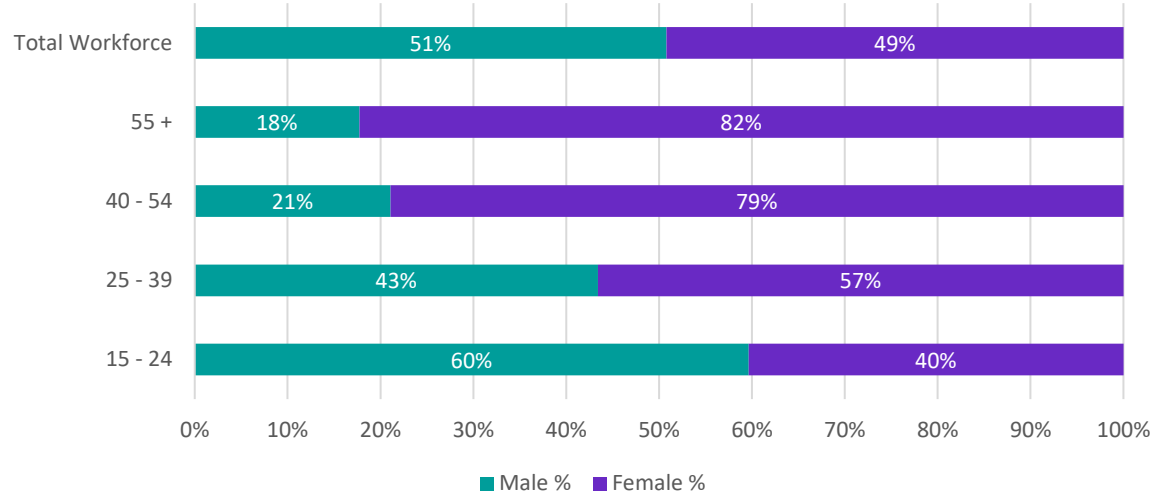
Occupational snapshots of segregation changes at different ages

Increasing female gender segregation in lower-skilled service roles as workers age

When looking at age cohort shifts across jobs, there is a trend for women being over-represented in lower-skilled service roles in older age groups. Two key examples of this come from the occupations of Kitchenhands and Commercial Cleaners. Within both occupations, there is a clear trend towards increasing female dominated segregation intensity with age. Both occupations demonstrate gender balance for younger age cohorts, but from 40 years old and above, the workforce becomes increasingly female dominated.

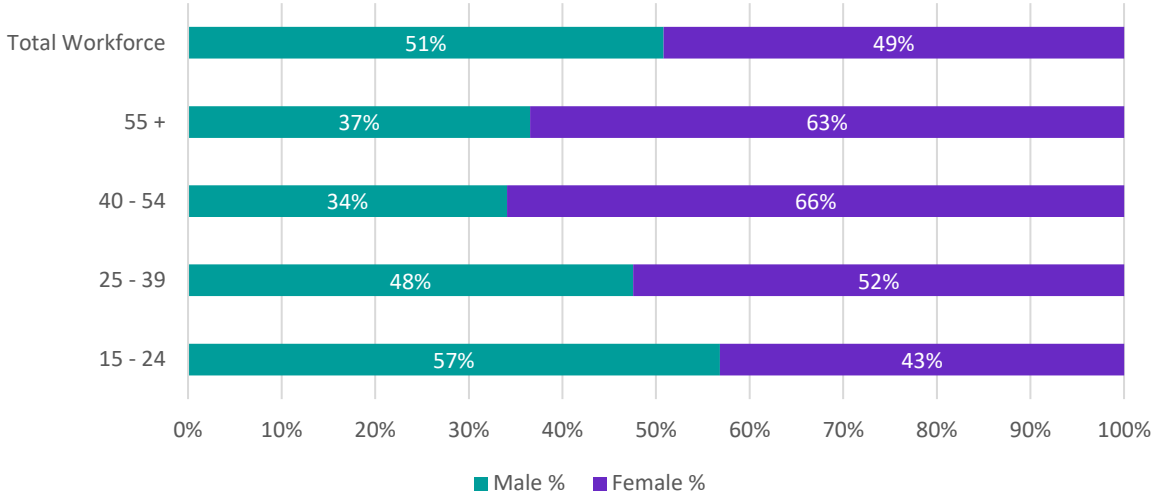
This pattern could suggest a range of issues around working patterns, preferences or structural disadvantage JSA recommends further research on this, to better understand longitudinal transitions through life and whether additional specific jobs and skills policy solutions are needed. For instance, using longitudinal Census and administrative data to explore the extent to which occupational segregation intensities at different age groups because males or females are disproportionately entering, exiting or remaining in an occupation.

Figure 16: Workforce of Kitchenhands by gender and age cohorts



Source: ABS Census of Population and Housing, 2021.

Figure 17: Workforce of Commercial Cleaners by gender and age cohorts



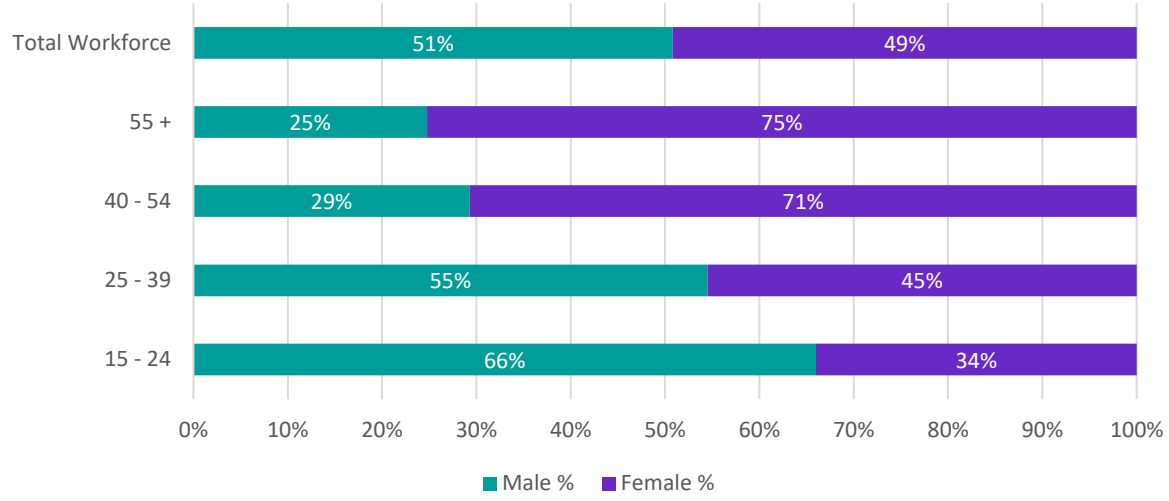
Source: ABS Census of Population and Housing, 2021.

Occupations that have multiple gender segregation shifts across the life course

Across certain occupations, the gender composition of the workforce shifts with age. For example, some may start male dominated among young entrants, move towards gender balance in mid-life, and then become more female dominated in later age. Again, this reflects factors such as shifting career paths and retention patterns.

Cooks, a very high CALD segregated job, illustrates an example of an age-based shift in occupational gender segregation. Younger cohorts are moderately male dominated (66% male, 34% female). In the 25-39 age bracket, the gender segregation balances out (55% male, 45% female), but as workers turn 40 the workforce becomes moderately female dominated and at 55+ years becomes highly female dominated. This follows the similar trend as the case studies above on women entering or more likely staying in lower skilled occupations later in life.

Figure 18: Workforce of Cooks by gender and age cohorts



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

Ambulance Officers and Paramedics show a contrasting pattern, with early female dominance that reverses with age. The workforce is moderately female dominated in younger age (35% male, 65% female) then becomes gender balanced, then increasingly male dominated in among 40-54 year olds (64% male, 36% female). Finally, among those aged 55 and over, the segregation intensifies to being highly male dominated (81% male, 19% female).

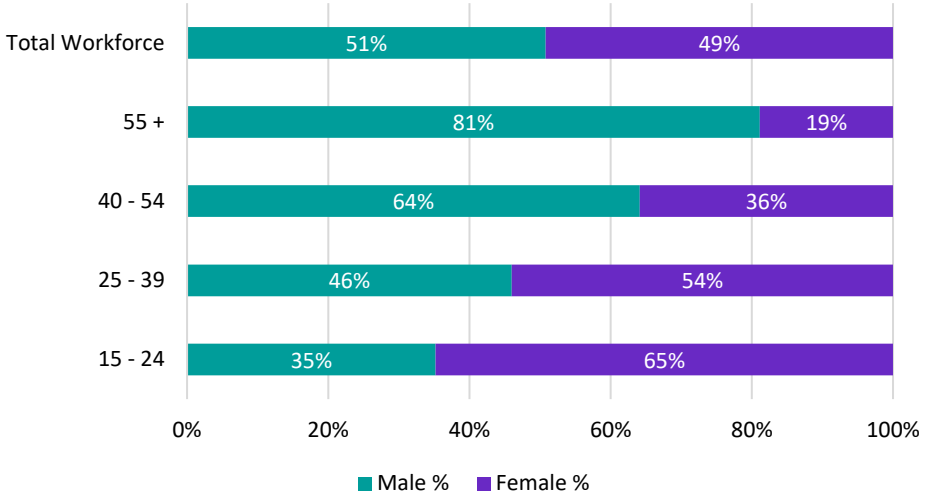
This partly reflects recent attraction of younger female workers into the occupation, but the pattern across age groups may also reflect higher female attrition, possibly tied to caring responsibilities, physical demands or safety concerns of front-line healthcare work. It is worth the attention of policymakers to ensure the gender balancing trend in this occupation can continue and be seen reflected across age groups.

As one focus group participant in the Study noted, even basic workplace supports like uniforms for pregnant women in this occupation are only a relatively recent development.

> *"The first female paramedic in my service started in 2004 but we had the first maternity uniform in 2020. So, women couldn't work when they were pregnant because they didn't have a uniform that would fit them."*
>
> *—Female focus group participant aged 30-44 years, Paramedic*

The dynamics of training pipelines, physical job demands, and career progression opportunities, can reshape gender balance over the course of a career, which future detailed occupation research should explore.

Figure 19: Workforce of Ambulance Officers and Paramedics by gender and age cohorts



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

Part 2: New perspectives on Gender Pay gaps

Gender pay gaps are important in any efforts to speed up progress towards gender economic equality because they offer a way to measure the impact various social and economic factors have on the earning capacity of males and females (ABS 2023).

This Study looks at gender pay gaps from three new perspectives to expand the evidence base and accelerate progress towards gender equality. Our Study complements and builds on Australia's existing measures, by using additional and unique approaches to fill key data gaps, particularly in relation to detailed occupational pay gaps and intersectional pay gaps.

> *"There are many approaches to measuring the gender pay gap, and many factors influences it, so no single measure can provide a complete picture." (ABS 2023).*

Detailed pay gap data is critical in gaining a more accurate and complete picture of gender pay gaps in Australia, given how important occupation-specific factors are and because of the compounding disadvantage different groups of women face. Detailed pay gap data and insights means support us in better targeting our efforts to addressing the contributing factors and make faster progress towards gender economic equality.

The three new perspectives reported in this Study are:

- **Occupational pay gaps:** pay gaps at the detailed ANZSCO 6-digit level are presented for the first time for Australia and fill a key evidence gap that will provide a more detailed insight into gender economic inequality in the Australian workforce.
- **Intersectional pay gaps:** the Study builds on existing work in Australia on intersectional pay gaps, particularly by the Victorian Government, but extends the evidence base to national insights, by occupation.
- **Longitudinal pay gaps:** while most pay gap data is presented as snapshots in time, this Study also presents longitudinal high-level, occupational and intersectional pay gaps over time. We provide a 10-year gender pay gap figure that has accumulated over time, to better capture economic inequality over the life course. The life course approach is important as it highlights the cumulative impact of how men and women's work, job and pay differs over time.

What is the gender pay gap measuring?

The gender pay gap is the difference between females' and males' income, expressed as a proportion of men's income. For example, if females in an occupation earn a median income of $800 a week, and males earn a median income of $1,000 a week, the median gender pay gap for this occupation would be 20%.

What are Australia's current gender pay gaps and who reports them?

There are two main sources of gender pay gap reporting in Australia - the **Australian Bureau of Statistics (ABS)** and the **Workplace Gender Equality Agency (WGEA).**

- The ***ABS produces six gender pay gap measures, which range between 8.4% to 26.5%.*** The higher 26.5% gender pay gap measure is the average weekly measure for all employees (both full-time and part-time workers) and the lowest is the median hourly measure.
- The headline WGEA gender pay gap measure is the average full-time yearly **gender pay gap of 21.8% for private sector employers**. The equivalent median measure is lower at 18.3%.

What are the drivers of the gender pay gap?

Gender pay gap drivers include discrimination and bias in hiring and pay decisions; women and men working in different industries and jobs with female dominated industries attracting lower wages; lack of workplace flexibility to accommodating caring responsibilities; time out of the workforce for caring responsibilities impacting career progression; and women's disproportionate share of unpaid caring and domestic work (WGEA n.d.).

Gendered occupational segregation itself is a major driver of the gender pay gap. In addition, recent research in Australia has shown that gender discrimination, gendered job structures and payment systems including the undervaluation of 'women's work' and pay differences within the same occupations are the biggest drivers (Austen and Preston 2024; Dwyer and Griselda 2024; KPMG 2022). This is also the case internationally, see Bridging the gap? An analysis of gender pay gap reporting in six countries (Cowper-Coles et al. 2021).

Given the existing work that has been done to analyse these drivers and their relative contributions, our Study instead focuses on filling evidence gaps in gender pay gap data to produce new detailed insights. The She's Price(d)less report is a useful reference for more analysis of gender pay differences and dynamics, with the 5th iteration soon to be released by KMPG, WGEA and DCA.[12]

[12] For older research in the Australian context read The impact of a sustained gender wage gap on the Australian economy report (Cassells et al. 2009) and Closing the Gender Pay Gap (Chifley Research Centre 2019).

A new approach to gender pay gaps to complement existing measures

A key difference in our gender pay gap analysis is that it uses different data—data that is well suited to detailed occupational and intersectional analysis—to generate new insights.

In this Study we use data that has been reported to the Australian Tax Office (ATO) and is maintained by the ABS. This data is known as the Person Level Integrated Data Asset (PLIDA) and is a world-leading example of linked administrative data. It combines detailed administrative information on health, education, government payments, income and taxation, employment, and population demographics (including the wide range of demographic information collected in the Census), and over time.

This approach differs from but complements WGEA gender pay gap data (which is based on annual reporting by larger employers), and ABS gender pay gap measures (which are based on employer surveys).

The gender pay gap data in our Study is based on a **large whole-of-population dataset** that captures workers across all employers and supports the most detailed levels of occupation and demographic analysis—enabling us to produce detailed occupation pay gap data (down to the ANZSCO 6-digit level) and **intersectional pay gap data (initially for First Nations workers and CALD workers).**

It is important to remember that our approach is designed to be complementary and expand our collective statistical picture of the gender pay gap, rather than seeking to calculate alternative versions of the established measures produced by WGEA and the ABS. It is for this reason that we haven't presented industry-level and other employer-related insights, which are readily available from the WGEA and ABS data.

These two government agencies both provide high-quality insights into the gender pay gap, underpinned by data collection that are specifically designed to collect this information from employers, to produce specific gender pay and other statistics. In addition to WGEA and ABS data being more timely and not relying on the accumulation of administrative data over time, they can also more precisely control for patterns of work in like-for-like comparisons and a range of other employer or workplace-level information.

Patterns of work are not collected in government administrative data, which means the gender pay gaps in our Study are somewhat limited in the extent to which we can account for the number of days, shifts or hours people worked for their pay. Instead, we account for patterns of work by providing insights into differences between the gaps in median annual earnings in administrative data and the corresponding gaps in median hours that people work from the Census.

Enhancements in employment information in administrative data will support more like-for-like comparisons in the future. While PLIDA supports world-leading research, additional of employment information from the ATO[13], including whether people work full-time, part-time, or as casuals, would support richer gender pay gap insights. Our Study will recommend that the ABS is funded to speed up incorporating this additional data into PLIDA and official statistics.

[13] The second phase of the ATO's Single Touch Payroll includes a range of additional job characteristics and payments information that employers are now reporting.

However, not all gender pay gap analysis *should* necessarily focus on like-for-like comparisons, given the differences are an important part of understanding gender economic inequality. This is something the ABS notes in presenting a range of gender pay gap measures, that range from more like-for-like comparisons of hourly earnings, through to measures for all employees, regardless of the different hours that females and males work, on average.

In addition to presenting gender pay gaps in median annual earnings, our Study goes further and also provides **a 10-year accumulated gender pay gap figure** to explicitly explore longer-term disadvantage and work towards life-time gender pay gap figures and approaches, to acknowledge the cumulative effects of all of these differences that contribute to differences in what females and males earn.

Like Austen and Preston's recent work on Victorian Gender Pay Gaps, we think that a lifetime gender pay gap figure is a particularly meaningful way of capturing the economic inequality females face due to unpaid caring responsibilities, and part-time work over the life course (Austen and Preston 2024). Creating these additional complementary measures, along with detailed intersectional pay gap data, moves us towards a more complete picture and a better understanding of what Australia needs to do to address gender economic inequality.

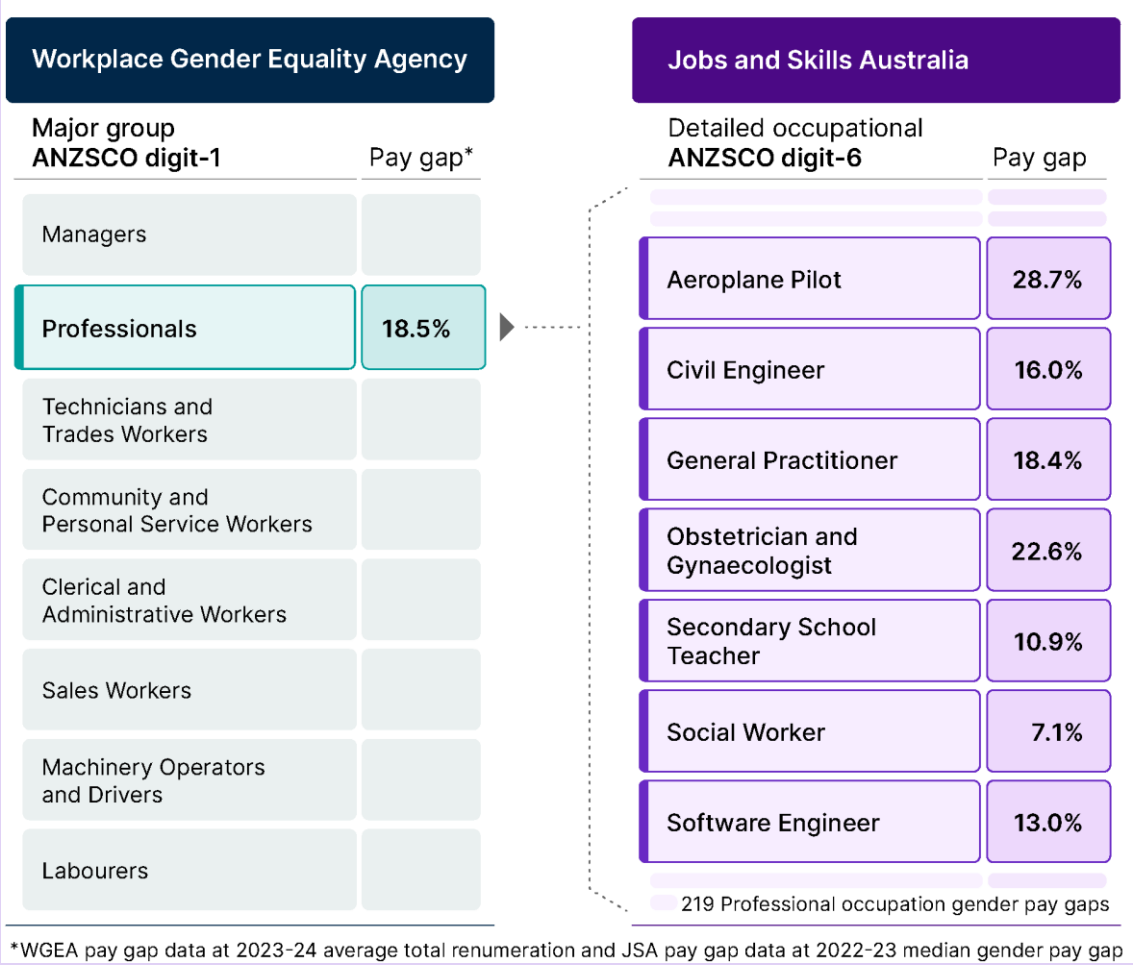
Our analysis also has an intentional focus on **occupational median annual pay gaps** because they give a more accurate picture of what a typical female or male earns. Occupational median annual gender pay gaps are not as impacted by extremely high or low paid workers which can sometimes skew average gender pay gap measurements.

More information on our methodology, and its relative strengths and limitations, can be found in the accompanying Technical Paper 1.

Key things to know about our occupational pay gap data

- Our data presents gender pay gaps at the most detailed occupational level available—ANZSCO 6-digit.
- This means for a major occupation group like Professionals, we can report on over 200 pay gaps for different types of professionals such as different types of doctors (General Practitioners compared to Surgeons) or different types of engineers (Civil compared to Environmental).
- Overall, we report on 688 occupational pay gaps. You can explore all 688 pay gaps in our JSA Gender Pay Gap Dashboard.

Figure 20: Illustrating how very detailed insights complement existing measures



High level gender pay gap findings

While this Study focuses on detailed occupation and intersectional gender pay gaps, it is useful to have an equivalent whole of workforce gender pay gap figure as a reference, to compare the individual occupations against.

Our two high level total workforce gender pay gap figures are:

- In 2022-23, the occupational median annual gender pay gap was **25.7% (down from 30.9% in 2010-11).**
- In 2020-21, the accumulated 10-year median gender pay gap — **from 2010-11 to 2020-21** — was **30.7%.**

Like the ABS and WGEA time series, the high-level occupational median gender pay gap in this Study also fell over the most recent decade. It fell from 30.9% in 2010-11 to 28.2% by 2016-17, and down to 25.7% by 2022-23.

Also, in line with the ABS and WGEA data, there is an occupational median annual gender pay gap in favour of men across most of the Australian labour market (in 671, or 98%, of the 688 6-digit level occupations).[14]

The new 10-year accumulated gender pay gap measure provides an indication of the longer-term and lifetime impacts of gender economic inequality. In addition to the difference between it (30.7%) the single year measure (25.7%), the intersectional pay gap analysis in this Study also shows how this worsens and compounds for different types of women—particularly First Nations females.

Looking across the wide range of gender pay gaps for the 688 occupations, around one in five (19% or 126 occupations) have a pay gap of 25% or more.

- Only 2% or 15 occupations have a relatively neutral gender pay gap (at or below 5%).
- There are 28 occupations have a very high pay gap where men earn *more* than a third more than females (35% and above).
- The 'typical' occupational median annual gender pay gap is 16.8% (that is the median of these median gender pay gaps). This means that half of the 688 occupations across the Australian workforce are above 16.8% and half are below.[15]

Like the total workforce gender pay gap, occupation-level gender pay gaps have also generally been decreasing over time. Over the 12 years from 2010-11 to 2022-23, almost two-third (63%) of occupations saw a decrease in their pay gap.

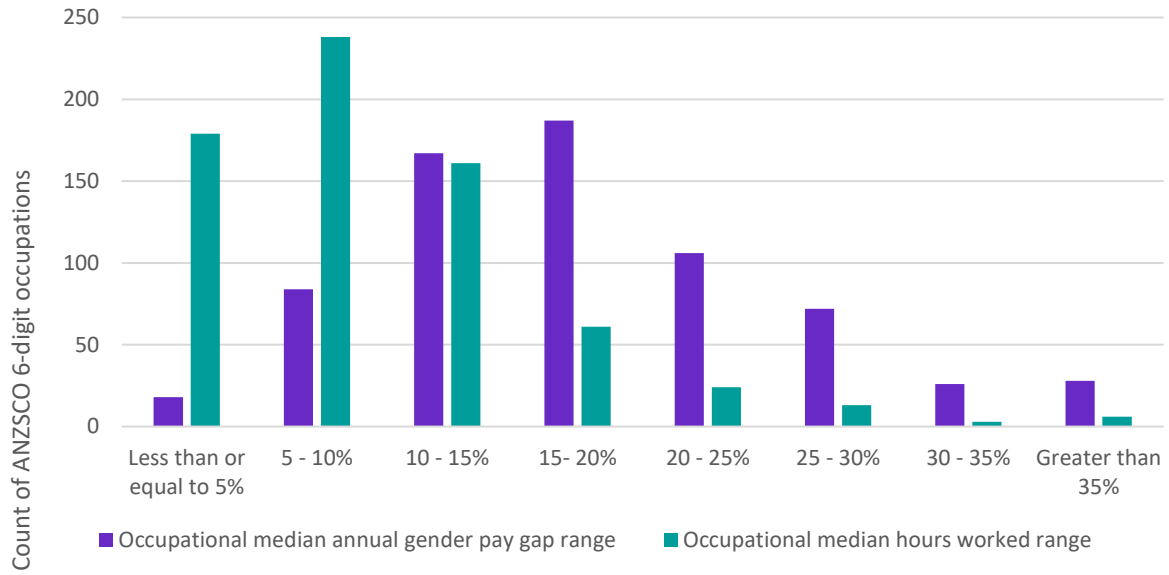
A further notable finding from our Study, is that there are wide-ranging and high gender pay gaps *even* when males and females are working similar hours in the same occupations. Again, this aligns with WGEA and ABS gender pay gap data and analysis, as well as other recent research into the drivers of gender pay gaps.

Figure 21 shows the broader range of occupational median annual pay gaps across the 688 occupations, compared with the narrower range of median hours worked gaps.

[14] As per WGEA's gender pay gap reporting, a pay gap is classified as being in favour of men if it is above 5%. The remaining 2% of occupations had a median gender pay gap less than 5% and were considered 'neutral' pay gaps with two occupations having pay gaps in favour of women: Project Builders (-12.0%) and Earthmoving Plant Operators (-6.2%). See Technical Paper 1 for more commentary

[15] This 'typical' figure is calculating using the median or middle value of all 688 occupational pay gaps

Figure 21: Distribution of ANZSCO 6-digit occupational median annual gender pay gaps



Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

High-level gender pay gaps: Key Findings

- In 2022-23, the total workforce gender pay gap was 25.7%.
- Males are outearning females in 98% of occupations, while only 2% of occupations have a relatively neutral pay gap.
- In 2020-21, the accumulated 10-year occupational median annual gender pay gap was 30.7%.
- Both total workforce and occupational gender pay gaps have been decreasing over time showing similar trends to the most recent WGEA and ABS analysis.
  - The total workforce gender pay gap decreased from 30.9% in 2010-11 to 25.7% in 2022-23.
  - Almost two-thirds of occupations (63%) have seen a decrease in their gender pay gap over this same time.
- There are over 100 occupations where the pay gap is over 25% and almost 30 occupations with a pay gap over 35%. This equates to huge gendered economic inequality with males earning more than a quarter, or more than a third more, every year than their female counterparts.
- The 'typical' occupational gender pay gap is 16.8%.
- Differences in patterns, hours and amount of work can explain some, but at times very little, of the variation in occupational pay gaps.

Explainer: Gender gap (%) in hours of work

WHAT? In our findings, we present occupational median annual gender pay gaps alongside the occupational median hours worked gap between males and females for occupations.

WHY? We do this so we can quickly understand whether there are pronounced differences in how much males and females work, and the extent to which this potentially contributes to the pay gap. Understanding how working hours patterns differ between males and females can add context to occupational pay gaps and their potential drivers.

HOW? We calculate the difference in hours worked using the same approach as gender pay gaps, with the difference between male and females occupational median hours worked in an occupation expressed as a percentage of males' median hours worked. For example, if males worked a median of 40 hours a week in an occupation, and for females this was 38 hours, this would be expressed a percentage difference in occupational median hours worked of 5%. As Table 18 below shows a 5% difference in occupational median hours worked time conversion is less than 2 hours over the whole working week, and so males and females (as represented by their 'typical' median male and female) are effectively working relatively similar hours and patterns of work are unlikely to be contributing to a large pay gap. The Table also shows other time conversions. It is helpful to remember that a one day working difference could roughly translate into a 20% pay gap because it is one day out of a five-day working week.

Table 18: Time conversions of occupational median hours difference

Gender difference in occupational median hours worked (%)	Occupational median hours difference between males and females	Time conversions (in working days)
0% to 5%	0 to 2 hours	Working relatively similar hours
5% to 10%	2 to 4 hours	Less than half a working day difference
10% to 20%	4 to 8 hours	More than half a day but still under a full working day difference
20% and above	Over 8 hours	More than a full working day difference

Note: Time conversions of occupational median hours worked gaps are most relevant to occupations where males and females are both working full-time hours. If an occupation has males and females working lower hours than full-time, then time conversions of hours worked gaps may vary.

EXAMPLES:

- Obstetrician and Gynaecologists is a high skilled, moderately female dominated occupation where males and females work similar hours, effectively 0% occupational median hours worked difference gap. Despite this, the occupational median annual gender pay gap is still very high at 22.6%. This suggests that the

difference in hours worked between males and females is not driving the pay gap in this occupation.

- Accountants is another highly skilled occupation, which is gender balanced, and where males and females work less than half a day difference over the working week (10% occupational median hours worked difference). The pay gap for this occupation is high, at 21.8%, so the difference in occupational median hours worked between males and females could explain some of the pay gap but there are likely other drivers.
- Miners is an occupation where females work longer than males (2.1 hours more per week than males). Even with females working more hours a week, this occupation still has median annual gender pay gap of 19.8%, indicating that work pattens of males and females are not a likely driver of this occupation's pay gap.

Detailed occupational gender pay gap findings

In this section, we provide analysis and findings on Australia's gender pay gaps across different types and groupings of the 688 occupations in our data. We spotlight the occupations with the highest and lowest pay gaps across the economy as well as pay gaps in selected large and fast-growing occupations. We also provide snapshots on pay gaps in nursing, technician, managerial and executive roles. We present gaps in median hours worked for these occupations alongside the pay gap data to quickly show how different patterns of work explain some but not all the gap and, in many cases, very little.

To explore all 688 occupational median annual pay gaps, including gaps in occupational median hours worked, see our dashboard.

The highest and lowest occupational gender pay gaps across Australia

- There are only 15 occupations where there is relatively neutral occupational median annual gender pay gap and these are listed in Table 19. In contrast, the 28 occupations where there is a pay gap at or above 35% is presented in Table 20.
- Some of the occupations with the highest gender pay gaps in the country are in health care—with Pathologists having the highest occupation median annual pay gap nationally at 74.0% and Diagnostic and Interventional Radiologists having the second highest at 68.7%. Occupations in male dominated trades and industries, such as finance, also dominate this list.

Table 19: The 15 ANZSCO 6-digit occupations with relatively neutral occupational median gender pay gaps, alongside occupational median hours worked gaps

Occupation	2022-23 Occupational median annual gender pay gap (%)	Occupational median hours worked gap (%)
Welfare Centre Manager	-0.5%	3%
ICT Systems Test Engineer	-0.5%	2%
Child Care Centre Manager	2.4%	1%
Radio Presenter	2.6%	3%
Water Inspector	2.8%	3%
Arborist	3.3%	10%
Interpreter	3.4%	4%
Personal Assistant	3.6%	-4%
Book or Script Editor	4.0%	8%
Building Insulation Installer	4.0%	16%
Hardware Technician	4.1%	3%
Train Driver	4.3%	3%
Railway Track Plant Operator	4.4%	N/A*
Electronic Equipment Trades Worker	4.5%	9%
Petroleum Engineer	4.5%	6%

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

Note: Railway Track Plant Operators did not have adequate female respondents to the ABS 2021 Census on female median hours worked.

Table 20: List of ANZSCO 6-digit occupations with occupational median annual gender pay gaps above 35%, alongside occupational median hours worked gaps

Occupation	2022-23 Occupational median annual gender pay gap (%)	Occupational median hours worked gap (%)
Pathologist	74.0%	12%
Diagnostic and Interventional Radiologist	66.4%	12%
Fibrous Plasterer	50.4%	11%
Electrical Linesworker	46.3%	5%
Helicopter Pilot	44.6%	9%
Mixed Crop and Livestock Farmer	43.2%	27%
Dog Handler or Trainer	43.2%	29%
Finance Manager	43.0%	11%
Mixed Crop Farmer	42.9%	29%
Electrical Engineering Technician	42.4%	12%
Scaffolder	41.4%	4%
Chauffeur	41.2%	23%
Deck Hand	41.0%	30%
Steel Fixer	41.0%	4%
Crane, Hoist or Lift Operator	40.9%	23%
Paper and Pulp Mill Worker	40.7%	28%
Wall and Floor Tiler	39.7%	15%
Bricklayer	39.6%	12%
Financial Dealers nec	39.3%	8%
Stock and Station Agent	38.7%	16%
Stockbroking Dealer	38.6%	10%
Dairy Cattle Farmer	37.5%	27%
Registered Nurse (Medical Practice)	36.8%	14%
Metal Fabricator	35.9%	12%
Aquaculture Farmer	35.6%	23%
Diver	35.6%	20%
Regional Education Manager	35.4%	5%
Panelbeater	35.1%	10%

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

Gender pay gaps across the top growing occupations

In relation to some of the top growing occupations in the economy we discussed in Part 1, gender pay gaps are mixed:

- Two of the largest employing occupations in the country in retail are Sales Assistants (General) and Retail Managers where there are pay gaps over 20% (22.1% and 21.6% respectively) but males do work longer hours (an occupational median hours worked gap of 16% and 13% respectively).
- The second largest occupation in the Australian economy is now Aged and Disabled Carer and it has a 20.8% gender pay gap despite males only working over half but less than a full day difference.
- Another large employing occupation is Receptionists where there is a 16.3% gender pay gap and females work longer hours than males in this occupation (-3% occupational median hours worked gap).

Jobs in education and hospitality offer two more industry-focused examples where many occupations are both growing and in national shortage. For example:

- Primary School Teachers have a higher gender pay gap of 16.8% compared to Secondary School Teachers at 10.9% but both males and females work very similar hours, in median terms, in these roles (8%, or less than half a day a week difference for Primary School Teachers, and even less for Secondary School Teachers at 4%).
- In fact, female dominated roles across education where males and females work similar hours but still have high gender pay gaps include Teachers' Aides at 19.1%, Education Advisors at 15.8%, University Tutors at 15.0%, Student Counsellors at 11.6%. Many of these occupations are award dependent.

In hospitality occupations, Kitchenhands' occupational median annual gender pay gap of 14.9% is noteworthy because females work longer hours than males in this job and it is a job that becomes increasingly female dominated as workers age. Likewise, Cooks, which is a highly CALD and gender segregated job, has a 17.3% pay gap despite males and females only working within 2 hours difference each week (5% occupational median hours worked gap). Other large and fast-growing occupations, especially for CALD workers, include Delivery Drivers and Chefs which have 18.8% and 14.9% pay gaps (19% and 7% occupational median hours worked gap respectively).

How does Australia's pay gaps compare internationally?

By international comparison, Australia's gender pay gaps are comparable to the OECD average. In 2024, the OECD noted that Australia ranked 18th highest out of 39 countries with an occupational median gender pay gap figure of 10.7% compared to the OECD average of 11.5%.

Countries like New Zealand, France, Norway, and Italy are doing better than Australia with pay gaps under 10% whereas the UK, Germany, Canada, USA and Japan range from above 13.1% to 20.7% (OECD n.d.). You can explore these international gender pay gaps at the OECD dashboard.

Occupational snapshots: Nurses, Technicians, Managers and Executives

Gender pay gaps for the nursing sector

Nursing is a large employing, high-skill, and highly female dominated workforce, where there has been strong employment growth for CALD and First Nations workers. Concerningly, several nursing occupations across different Skill Levels and in different settings show gender pay gaps despite less than half a day a week difference in males' and females' median hours worked.

Roles such as Nurse Practitioners, Nurse Managers, Nursing Support Workers, and various types of Registered Nurses (including in Aged Care, Disability and Rehabilitation, and Mental Health) all have an occupational median hours worked gap of less than 10%, yet gender pay gaps ranging from 14% to 27%.

Table 21: Occupational median annual gender pay gaps and occupational median hours worked gaps in nursing occupations

Occupation	2022-23 Occupational median annual gender pay gap (%)	Occupational median hours worked gap (%)
Registered Nurse (Medical Practice)	36.8%	14%
Nurse Practitioner	26.8%	8%
Registered Nurse (Child and Family Health)	25.5%	16%
Midwife	25.5%	11%
Registered Nurse (Aged Care)	23.7%	5%
Registered Nurse (Community Health)	23.7%	13%
Registered Nurse (Medical)	21.6%	10%
Registered Nurse (Surgical)	21.5%	12%
Aged or Disabled Carer	20.8%	11%
Registered Nurse (Critical Care and Emergency)	18.9%	10%
Registered Nurse (Paediatrics)	18.8%	13%
Registered Nurse (Perioperative)	18.7%	15%
Enrolled Nurse	17.4%	10%
Nursing Clinical Director	16.6%	2%
Registered Nurse (Disability and Rehabilitation)	15.9%	8%
Nurse Educator	15.9%	12%
Nurse Researcher	15.9%	18%
Nurse Manager	15.2%	6%
Nursing Support Worker	14.7%	7%
Registered Nurse (Mental Health)	14.0%	7%

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data. ABS, Census of Population and Housing, 2021.

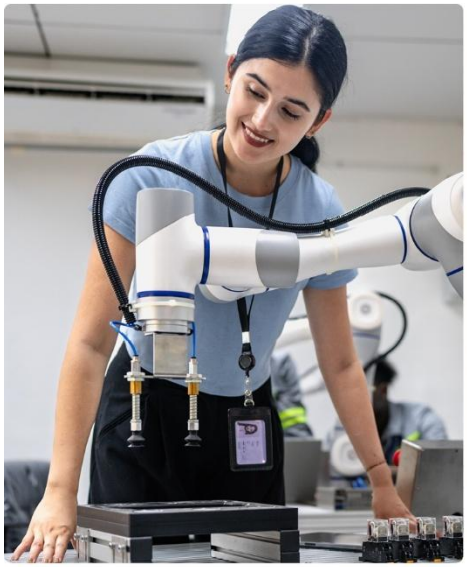
"Addressing potential undervaluation and work value issues where there are large concentrations of females are more likely to rapidly address the aggregate gender pay gap. As such, our focus on large occupations is intended to assist the Fair Work Commission to prioritise occupation and industry areas to consider" (Cortis et al. 2023)

Gender pay gaps for technicians across ICT, Health and Building and Engineering

The technician workforce across different industries also tells an important story. While highly CALD dominated ICT and more female dominated health jobs, have relatively low pay gaps in technician roles, other more male dominated industries are performing much worse.

ICT Support Technicians tend to have a lower gender pay gap than other technician occupations with four of the nine lowest gender pay gaps. Hardware Technicians, in the ICT field, is the only technician occupation with a relatively neutral gender pay gap (below 5%) and also limited difference in males' and females' median hours worked.

In contrast, some technicians in male dominated trades across electrical engineering, architectural, building and surveying, and other building and engineering fields tend to have high gender pay gaps, and often well above the median hours worked gap (though the latter does vary across different types of technicians). The Electrical Engineering Technicians' gender pay gap is significantly above all other technician occupations at 42.4%, ranking as the 10th highest gender pay gap across the 688 occupations. As Table 22 below shows, the median hours worked gap between males and females in this occupation is just over half a day (12%).



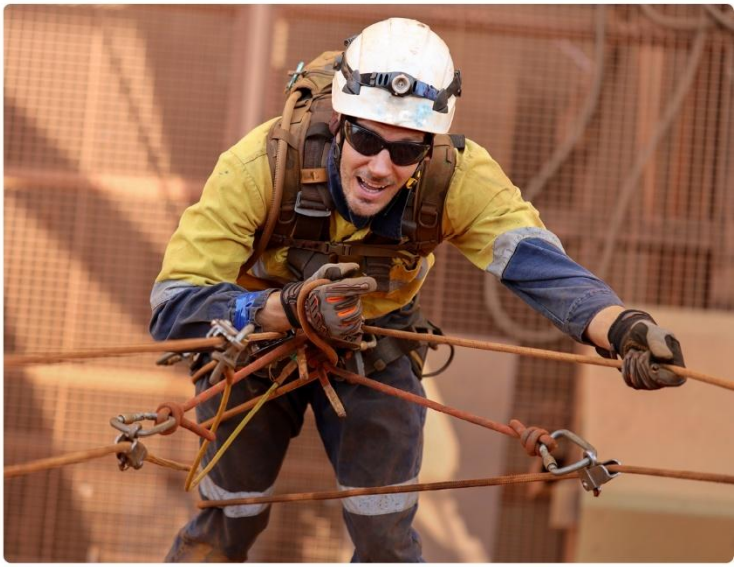


Table 22: Occupational median annual gender pay gaps and occupational median hours worked gap in technician occupations across ICT, Building and Engineering

Occupation	Gender segregation intensity	2022-23 Occupational median annual gender pay gap (%)	Occupational median hours worked gap (%)
Electrical Engineering Technician	Almost completely male dominated	42.4%	12%
Fire Protection Equipment Technician	Almost completely male dominated	31.8%	6%
Building Associate	Almost completely male dominated	24.6%	15%
Construction Estimator	Highly male dominated	22.8%	9%
Technicians and Trade Workers nec	Highly male dominated	22.3%	17%
Electrical Engineering Draftsperson	Highly male dominated	22.2%	13%
Electronic Engineering Technician	Almost completely male dominated	20.5%	9%
Mine Deputy	Almost completely male dominated	20.4%	6%
Metallurgical or Materials Technician	Moderately male dominated	20.2%	-1%
Telecommunications Technician	Almost completely male dominated	18.7%	12%
Architectural Draftsperson	Moderately male dominated	17.8%	13%
Civil Engineering Draftsperson	Highly male dominated	17.6%	10%
Building and Engineering Technicians nec	Almost completely male dominated	16.8%	14%
Mechanical Engineering Draftsperson	Almost completely male dominated	16.3%	10%
Mechanical Engineering Technician	Almost completely male dominated	15.8%	9%
ICT Customer Support Officer	Highly male dominated	15.7%	5%
Web Administrator	Gender balanced	13.1%	5%
Surveying or Spatial Science Technician	Highly male dominated	11.9%	16%
Building Inspector	Highly male dominated	10.8%	11%
ICT Support Technicians nec	Highly male dominated	10.8%	15%
Civil Engineering Technician	Highly male dominated	8.0%	11%
Maintenance Planner	Highly male dominated	5.2%	11%
Hardware Technician	Almost completely male dominated	4.1%	3%

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data. ABS, Census of Population and Housing, 2021

Similarly, female dominated technician roles in health, where males work just over half a day more, have lower gender pay gaps, more like those in ICT occupations. For example, Dental Technicians have a gap of 20.3% (14% occupational median hours worked gap) and Medical Technicians nec have a gap of 20.2% (16% occupational median hours worked gap). Cardiac Technicians have a higher pay gap of 28.4%, but also closer to around 1 day a week working difference between males and females. Pharmacy Technicians have a gender pay gap of 29.5% (with a 5% occupational median hours worked gap), which stands out among these different intensities of female dominated technician roles in health.

Table 23: Occupational median annual gender pay gaps and occupational median hours worked gaps in technician occupations across Health

Occupation	Gender segregation intensity	2022-23 Occupational median annual gender pay gap (%)	Occupational median hours worked gap (%)
Pharmacy Technician	Highly female dominated	29.5%	5%
Cardiac Technician	Moderately female dominated	28.4%	18%
Dental Technician	Gender balanced	20.3%	14%
Medical Technicians nec	Moderately female dominated	20.2%	16%
Pathology Collector/Phlebotomist	Almost completely female dominated	19.8%	7%
Medical Laboratory Technician	Moderately female dominated	16.1%	6%
Operating Theatre Technician	Highly male dominated	10.5%	11%

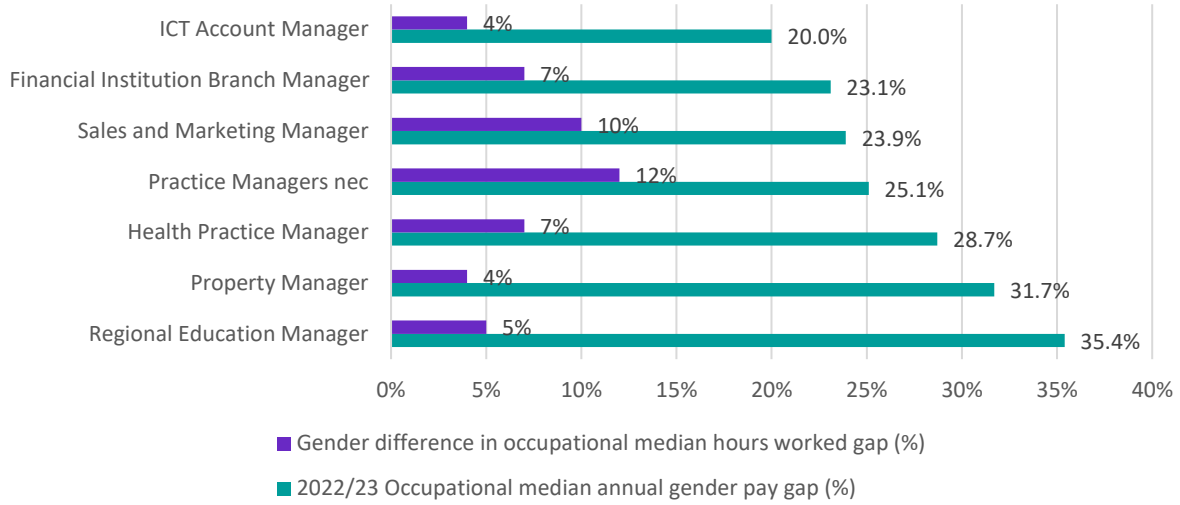
Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data. ABS, Census of Population and Housing, 2021.

Gender pay gaps for managers across industries

When looking at management roles across different industries a trend emerges where there are occupations with high pay gaps despite males and females working similar working hours. This includes management positions across diverse industries of varying gender segregation intensity including in finance, real estate, education, and health, pointing towards the enduring problem of both vertical and horizontal gender segregation in the Australian labour market.

The table below highlights only a few examples, such as Financial Institution Branch Managers and Health Practice Managers, where pay gaps are very high but occupational median hours worked gaps are less than half a working day.

Figure 22: A selection of ANZSCO 6-digit management occupations where occupational median annual gender pay gaps are high and occupational median hours worked gaps are minimal



Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data. ABS, Census of Population and Housing, 2021.

Likewise, jobs across the real estate industry are also worth noting, where both Managers, and lower level roles like Real Estate Representatives, and Real Estate Agents all have pay gaps above 25% despite females and males working the equivalent of less than half a day difference between them.[16] The real estate industry has been established as being an industry well above the national gender pay gap, and one of the key drivers is vertical segregation, where there is low representation of females in high-paying senior leadership and executive positions (BCEC 2017). Pay gaps in this sector are clearly driven by other factors beyond hours worked, with discretionary pay and bonuses in management roles likely playing a role.

In Paper 2, we identify that gendered income disparities are apparent even as little as one year after training has been completed in the training pathways into these occupations, via the Certificate IV in Real Estate Practice. Despite being a more gender balanced occupation and training pathway, clear gender pay gaps and income disparities are apparent at early career and are also reflected in pay gaps for all females and males in the occupation. OSCA will enable the disaggregation of Property Manager to two occupations, to include Strata Manager, which will provide more evidence for exploring gendered disparities, pay gaps and issues in this part of the labour market.

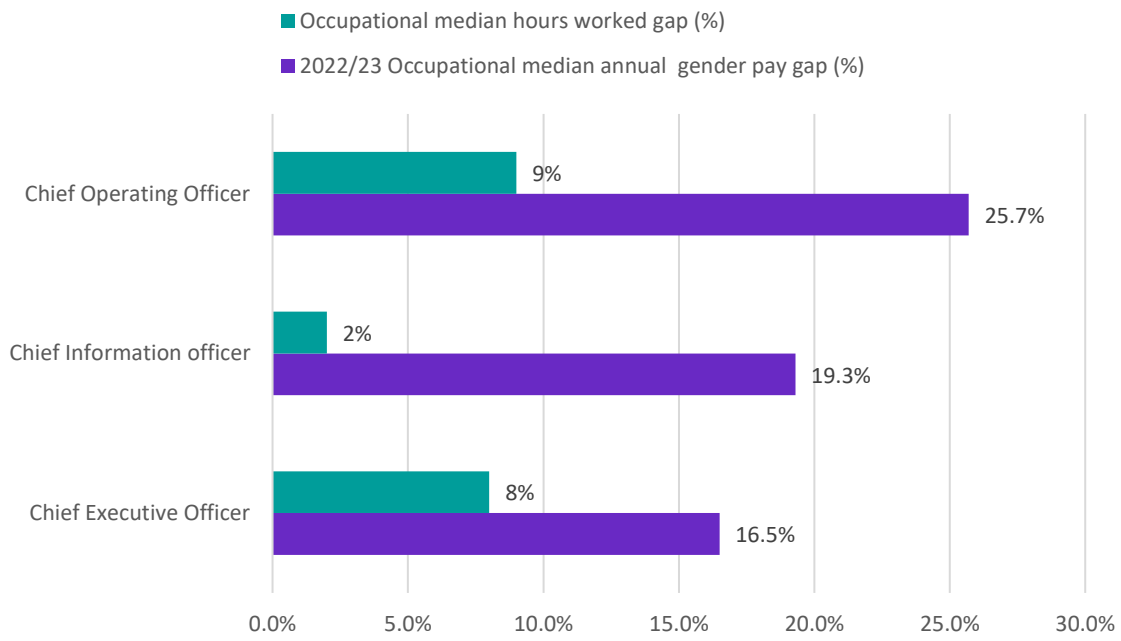
Gender pay gaps for executive positions

For the first time in 2023-24, employers were required to report CEO and Head of Business remuneration to WGEA. The inclusion of these executive roles increased the average total gender pay gap by 0.7 percentage points to 21.8% compared to 21.1% without in 2023-24. This reflects the role of bonuses and discretionary pay, and the underrepresentation of women at the senior executive level (Chief Executive Women 2024; WGEA 2024).

[16] Real Estate Representatives have a pay gap of 26.4% and median hours worked gap of 8%. Real Estate Agents have a 25.6% pay gap and median hours worked gap of 9%.

Our occupational median annual gender pay gaps for executive management positions add further evidence to this and reveal that pay gaps are worse for Corporate General Managers, also known as Chief Operating Officers, at over 25%, compared to Chief Information/Technology Officers at just under 20% and Chief Executive Officers at 16.5%. Importantly, the occupational median hours worked gap between males and females across all these executive management positions is less than half a working day (between 2% and 9%).

Figure 23: Occupational median gender pay gaps and occupational median hours worked gaps for chief executive positions



Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data. ABS, Census of Population and Housing, 2021.

Detailed occupational gender pay gaps: Key Findings

- Occupations with no differences in occupational median hours worked between males and females still have high occupational median annual gender pay gaps, particularly in the male dominated occupations.
- Some of the occupations with the highest gender pay gaps in the country are in the male dominated trades, health care and finance.
- When looking at occupational gender pay gaps across similar occupations but different industries—such as technician roles—some of these trends continue. For example, gender pay gaps in building and engineering and health technician roles are higher than in ICT.
- Notable gender pay gaps in large employing and fast-growing occupations include those in teaching and hospitality. Despite males and females only working within 2 hours difference each week (0-5% gap):
  - Secondary School Teachers have a 16.8% pay gap
  - Cooks, a highly CALD and increasingly female dominated job as the workforce ages has a 17.3% pay gap.
- When looking at management roles across different industries of varying gender segregation intensity, a clear trend of high occupational pay gaps emerges despite males and females working similar hours. This points towards the enduring problem of both vertical and horizontal gender segregation in the Australian labour market.
- There is high gender pay gaps in executive occupations, despite males and females working less than half a day difference, which add more evidence to WGEA's recent findings:
  - over 25% for Corporate General Managers, also known as Chief Operating Officers
  - just under 20% for Chief Information/Technology Officers
  - and sitting around the 'typical' occupational pay gap for Chief Executive Officers at 16.5%.

Moving towards intersectional gender pay gap data

Analysing labour market and skills systems through gendered and intersectional lenses has now been established at both the macroeconomic and microeconomic level as beneficial for developing effective evidence-based policy and making progress towards gender economic equality. As the OECD notes, intersectional data and insights can help close gender employment and pay gaps, and by closing these gaps and addressing gender inequalities, growth, productivity, competitiveness and the sustainability of economies can improve (Nicol and Kim 2023).

In 2021, an international report on *Bridging the gap? An analysis of gender pay gap reporting in six countries* (including in Australia) made intersectional pay gap reporting one if its key recommendations, noting that high-level gender pay gaps alone do not provide the

whole picture and can impede progress towards gender economic equality (Cowper-Coles et al. 2021).

Without intersectional pay gap data and analysis, "the true state of gender equality in the economy is not being reflected and therefore is not being fully leveraged to drive targeted action. Key gaps include intersectional perspectives from Aboriginal and Torres Strait Islander women, women living with disabilities, culturally and linguistically diverse women and non-binary people" (PM&C 2021). Our Study aims to start a process of filling these important data and insights gaps, using available data that is well suited to detailed intersectional analysis.

There have been some positive moves in Australia, drawing upon existing data, such as the Victorian Government and the Commission for Gender Equality in the Public Sector (CGEPS 2023) publishing the first baseline intersectional pay gaps for the Victorian public sector in 2023. They found the largest pay gaps were for First Nations female employees in the public sector, demonstrating the compounding effects of gender, racial, ethnic and cultural marginalisation.

> *"Marginalisation of your identity can stack up against you. At my previous workplace, many of us were immigrants and we were all paid badly, and did not know, nor were encouraged, about unionisation. As an immigrant on a working visa, I'm conscious of how much space I take up and how much I press for the accommodations I need to survive comfortably."*
>
> *—Male LGBTQIA+ focus group participant, Chef*

In 2024, the Victorian Government also commissioned researchers to explore intersectional pay gap data in Victoria using Census income data (Austen and Preston 2024). This work was important in both exploring how Census data could provide rich intersectional insights, notwithstanding some inherent limitations. A key contribution of this work was reporting on the importance of gender pay gaps over the life course and how economic inequality compounds, accumulates and sharpens at different ages and stages of life.

Other research shifting the focus to more intersectional insights includes CEDA's work on migrant pay gaps (CEDA 2024) and research in economic outcomes post-training or graduation (Zajac et al. 2023). We explore this research and offer our own intersectional insights on post-training VET outcomes for the top 100 courses in Australia in Paper 2 of our study, which will be released in early September.

Internationally, Canada has been a leader in intersectional pay gap reporting, demonstrating that, across different types of women, First Nations females and migrants arriving as adults have the worst pay gaps (Drolet and Amini 2023). Likewise, the New Zealand Work Research Institute found that the hourly earnings of Māori males, Pacific males and males of Asian descent were 19% less, 24% less and 14% less than European males respectively. The trend of ethnicity impacting hourly earnings continued for the analysis of the hourly earnings of Māori females, Pacific females and females of Asian descent compared to European females as there was respective hourly gender pay gaps of 12%, 15% and 9% (Cochrane and Pacheco 2022). Sadly, our intersectional pay gap data also shows that First Nations Australians, both females and males, have the worst gender pay gaps.

Like the Canadian and New Zealand approaches, our intersectional gender pay gap analysis compares gender pay gaps *within* demographic cohorts for and against national benchmarks such as total population and non-CALD males.

There is still more work to be done on statistically defining the most useful comparison group for intersectional analysis (which could be referred to as the 'white Australian male'), so that we can improve intersectional pay gap reporting, but in our Study we replicate some of these early international approaches. Our analysis focuses on CALD, First Nations and migrant gender pay gaps, as examples of early, priority groups (which can be complemented by insights for people with disability and other groups in the future).

The Study did consider a nuanced approach to VISA status and how gender pay gaps might differ for migrants on family, skilled (temporary and permanent) and humanitarian visas. JSA suggests this should be explored, together with socio-economic disadvantage, disability and geographic factors in future gender pay gaps analysis. Exploring pay gaps for a broader range of population groups would position Australia as a leader in intersectional pay gap data reporting.

First Nations gender pay gap findings

To provide intersectional pay gap insights and show how diverse groups of individuals fair economically, a consistent benchmark needs to be used. This is to ensure that gaps do not just focus on within cohort comparisons (for example, First Nations females and First Nations males) and can highlight the important compounding factors in intersectional analysis.

In this Study, we use two consistent benchmarks—a 'whole of population' benchmark and a 'non-CALD male' benchmark. A major finding of our Study's intersectional pay gap day investigation is that, regardless of which benchmark or time period is used (snapshot in time or accumulated 10-year figure), the highest gender pay gaps in Australia are for First Nations females. Our headline findings are:

- The First Nations females gender pay gap is almost 10 percentage points higher than the national 25.7% gender pay gap figure, at **35.3%.**
- First Nations males also have the highest pay gap compared to all other males at **19.3%.**
- When looking at accumulated 10-year gender pay gaps
  - The First Nations female **10-year gender pay gap is 38.1%,** compared to the total workforce 10-year gender pay gap of 30.7%**.**
  - **The First Nations male 10-year pay gap is 16.7%,** lower than the 19.3% gap in the 2022-23 point-in-time measure.
  - When comparing 10-year gender pay gaps to a non-CALD male benchmark, pay gaps for First Nations females were again highest at 40.5%.
- First Nations females and males have the narrowest pay gap between them at 19.8% (compared to all males and females pay gap of 25.7%).
- Over time, both First Nations female and male gender pay gaps have decreased.
  - The First Nations female gender pay gap decreased dramatically by almost 10% from 44.8% in 2010-11 to 35.3% in 2022-23.

  - The First Nations male gender pay gap decreased from 25.8% in 2010-11 to 19.3% in 2022-23, like other male and total workforce pay gaps dropping over 5 percentage points from 25.8% in 2010/11.

- All these findings point very clearly to the significant and compounding gendered and racial disadvantage, inequities and discrimination First Nations Australians face in the world of work, education and training in this country. We need to urgently address these unique disadvantages, inequities and discrimination with equally unique policy interventions and solutions.

CALD and migrant gender pay gap findings

The next set of intersectional headline findings are that culturally and linguistically diverse and migrant female gender pay gaps are on par with the national gender pay gap—all sit just above or below 25%. See Table 24.

Table 24: 2022-23 median annual pay gaps for CALD and migrant females compared to male benchmarks

Demographic cohort	2022-23 median annual gender pay gap to whole of population male (%)	2022-23 median annual gender pay gap to non-CALD males (%)
CALD females	25.2%	23.8%
Migrant females who arrived as adults (18 years or older)	24.9%	23.4%
Migrant females who arrived as children (<18 years old)	25.3%	23.9%
ALL females	**25.7%**	**24.3%**

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

As noted above, JSA suggests further work on gender pay gaps by visa status and ancestry (and any data that could more specifically represent race-related factors) is needed to reflect the range of workers across CALD and migrant cohorts. This would add further nuance to our findings and further test the impact of compounding and intersecting forms of disadvantage on pay gaps in Australia.

It is also useful to consider the intersectional gender pay gaps for culturally and linguistically diverse and migrant males which are all significantly lower than total female gender pay gap of 25.7% and the First Nations male gender pay gap of 19.3%. CALD males and migrant males who arrived as children sit at around 4% whereas migrants who arrived as an adult effectively have no pay gap at 0.5%. This means pay gaps are still very high between CALD and migrant males and females and are roughly on par with all male and female pay gaps. Moreover, this almost non-existent pay gap for migrant males who arrived as adults is interesting, as recent research highlighted the significant pay gaps that migrant females who arrive as adults face (CEDA 2024). The data from this Study suggests it may not be the same effect for migrant males who arrive as adults. Migration settings which encourage high skilled professional migration for both females and males could also be a factor.

Table 25: 2022-23 median annual pay gaps for CALD and migrant males compared to two different male benchmarks

Demographic cohort	2022-23 median annual pay gap to whole of population male (%)	2022-23 median annual pay gap to non-CALD male (%)
CALD males	4.2%	2.4%
Migrant males who arrived as adults (18 years or older)	0.5%	-1.4%
Migrant males who arrived as children (<18 years old)	4.4%	2.6%

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

These lower gender pay gaps for CALD and migrant males continue when you look at accumulated 10-year pay gaps for across these cohorts. However, like for all female cohorts, their gender pay gap do increase.

The most notable finding is that CALD male pay gaps are twice their point-in-time gap (8.5%, compared with 4.2%). This begins to provide insight into the extent of differences in accumulated earnings of males in these groups; to gauge how racial, ethnic and culture factors can compound over time.

Table 26: 10-year cumulative median income pay gaps for male demographic cohorts compared to male benchmarks

Demographic cohort	10-year cumulative pay gap to ALL males (%)	10-year cumulative pay gap to non-CALD males (%)
CALD males	8.5%	12.0%
Male migrants who arrived as adults (18 years or older)	2.5%	6.3%
Male migrants who arrived as children (<18 years old)	-1.3%	2.6%

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

An intersectional comparative snapshot of Australia's gender pay gaps

Our intersectional pay gap data also allows for comparison of pay gaps within cohorts, over time and as they accumulate over 10-years as per the above total workforce and occupational gender pay gap findings.

When looking at intersectional pay gaps over time, the broad finding is encouraging. Over the 12 years the Study has pay gaps for, there has been a significant improvement in pay gaps for First Nations, CALD, and migrant cohorts (both female and male)—demonstrating progress, while noting that there is still a long way to go to reach gender economic equality for all Australians, especially those facing and experiencing compounding and intersecting disadvantage. The largest decrease was for migrant males and females who arrived as children (6.3 percentage point decrease). However, males still outearn females in all groups, including across total population all males and females.

Table 27: Median pay gaps across demographic cohorts over time

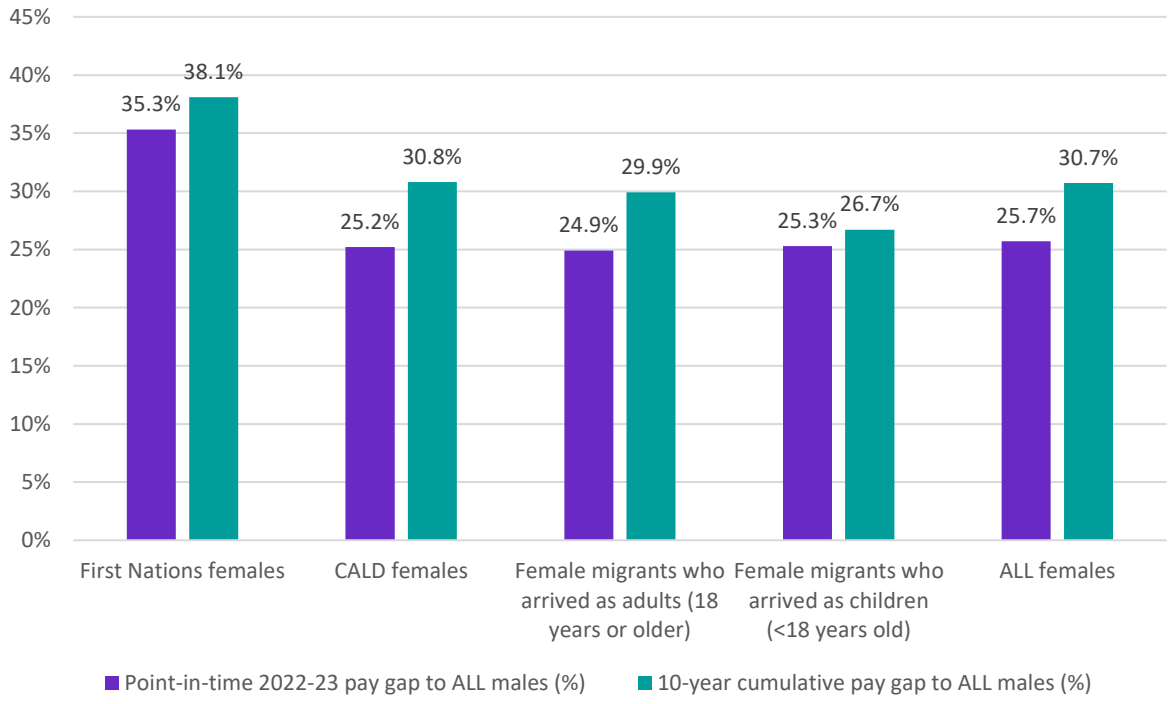
Demographic cohort	2010-11 median gender pay gap (%)	2022-23 median gender pay gap (%)
CALD males and females	24.4%	21.9%
First Nations males and females	25.6%	19.8%
Migrant males and females who arrived as adults (18 years or older)	28.3%	24.5%
Migrant males and females who arrived as children (<18 years old)	28.2%	21.9%
Total workforce	**30.9%**	**25.7%**

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

If we look at intersectional pay gaps as they accumulate over 10 years, the pay gaps are wider than they are in the single point-in-time measures. These accumulated 10-year pay gaps are wider for all groups of females but are again widest for First Nations females.

The First Nations female 10-year **accumulated** gender pay gap is 38.1%, compared to the whole of economy 10-year gender pay gap of 30.7%. Mirroring the total workforce 2022-23 point-in-time figures, CALD and migrant females are again on par with their total population female counterparts in 10-year accumulated gender pay gap figures.

Figure 24: Point-in-time and 10-year accumulated median income gender pay gaps for female demographic cohorts compared to ALL males



Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

When comparing the accumulated 10-year gender pay gaps to a non-CALD male benchmark, pay gaps for all females were again highest for First Nations females, at 40.5%. For all others, except female migrants who arrived as a child, the 10-year gender pay gap widens to around a third of non-CALD male earnings.

Table 28: Point-in-time and accumulated 10-year median income pay gaps for female demographic cohorts compared to male benchmarks

Demographic cohort	Point-in-time 2022-23 median annual pay gap to ALL males (%)	10-year cumulative median income pay gap to ALL males (%)	Point in time 2022-23 median annual pay gap to non-CALD males (%)	10-year cumulative median income pay gap to non-CALD males (%)
First Nations females	35.3%	38.1%	34.1%	40.5%
CALD females	25.2%	30.8%	23.8%	33.5%
Female migrants who arrived as adults (18 years or older)	24.9%	29.9%	23.4%	32.6%
Female migrants who arrived as children (<18 years old)	25.3%	26.7%	23.9%	29.5%
ALL females	**25.7%**	**30.7%**	**24.3%**	**33.4%**

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

When looking at the intersectional pay gaps for males that accumulate over 10-years, First Nations males pay gaps remain the worst and high at 16.7%, but lower than the 19.3% gap in the 2022-23 point-in-time measure. In contrast, the accumulated 10-year pay gap for CALD males are twice their point-in-time gap (8.5%, compared with 4.2%). This provides useful insights into the extent of differences in accumulated earnings of males in these groups, to gauge how racial, ethnic and cultural factors can compound over time.

Table 29: 10-year cumulative median income pay gaps for CALD and migrant males compared to male benchmarks

Demographic cohort	10-year cumulative pay gap to ALL males (%)	10-year cumulative pay gap to non-CALD males (%)
CALD males	8.5%	12.0%
Male migrants who arrived as adults (18 years or older)	2.5%	6.3%
Male migrants who arrived as children (<18 years old)	-1.3%	2.6%

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

It is worth noting that our data also allows an analysis of intersectional and occupational pay gap data. That is, CALD, First Nations and migrant pay gaps across ANZSCO 4-digit occupations. This provides another opportunity to fill evidence gaps. To fill the intersectional data gaps, JSA plans to publish an additional intersectional gender pay gap dashboard in the coming months, to support an intersectional analysis of detailed occupational data, in line with the approach we have taken in this Study.

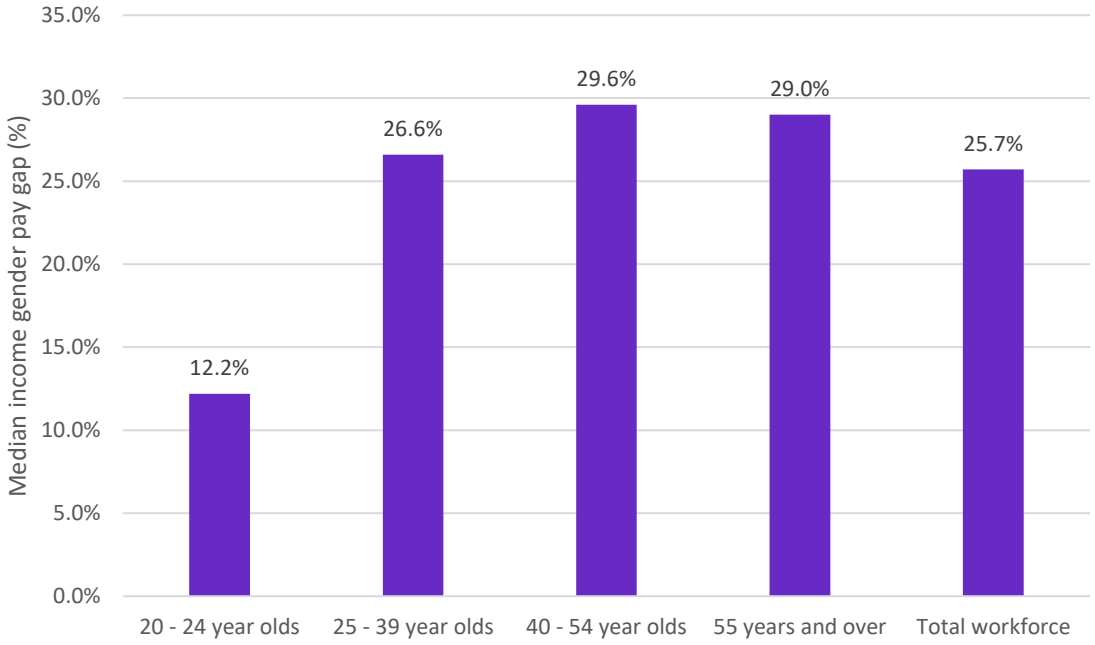
Intersectional gender pay gaps: Key findings

- Regardless of what pay gap measure or benchmark is used, First Nations females have the highest gender pay gaps in Australia. Their 2022/23 pay gap to all males was 35.3%, almost 10 percentage points higher than the whole of economy 25.7% gender pay gap.
- Similar to First Nations females, First Nations males also have the highest gender pay gaps among male demographic cohorts at 19.3%. In contrast, gender pay gaps for migrant and CALD males are far lower at under 5%.
- CALD and migrant female gender pay gaps are on par with the whole of economy gender pay gap. All sit just above or below 25%. CALD and migrant female gender pay gaps are therefore more than 20 percentage points higher than their male cohort CALD counterparts.
- When looking within cohorts and providing like-for-like comparisons the pay gap between migrant males and females who arrived as adults (over 18 years old) is the highest at 24.5%. The narrowest is between First Nations males and females but remains high at 19.8%.
- Over the last 12 years there has been a decrease in pay gaps for First Nations, CALD, and migrant cohorts, both within cohorts and when compared against total population males and females. Despite this progress, the pay gaps remain persistently high, particularly for females, which points to persistent structural disadvantage in the labour market.
- When looking at how gender inequality and pay gaps accumulate over 10 years, all pay gaps widen but First Nations females again fare the worst. The First Nations female 10-year gender pay gap increases to 38.1% compared to the national 10-year gender pay gap of 30.7%. Again, CALD and migrant females are on par with the national figure.
- When comparing the 10-year gender pay gaps to a non-CALD male benchmark, pay gaps for all females increase even further widening to 40.5% for First Nations females.
- In contrast, gender pay gaps for First Nations males drop slightly over a 10-year period from 19.3% to 16.7%.
- Over a 10-year period, the CALD male gender pay gap figure also doubles from 4.2% to 8.5%, highlighting how racial, ethnic and cultural factors may be impacting the earning potential of this cohort over time.
- Future intersectional pay gap insights using the JSA approach could and should explore pay gaps across disability, geography, ancestry, socio-economic status and visa status to continue to fill evidence gaps and develop the most effective policy solutions.

Gender pay gaps across the life course

Investigating pay gaps across age groups can identify how gender economic inequality changes, deepens or improves over the life course. In 2022-23 data, gender pay gaps increased with age, and peaked in the 40-54 year old age group at 29.6%. This means that in that age group for every $1 men earn, women earn 70 cents.

Figure 25: 2022-23 median annual gender pay gaps by age group



Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

When looking at ANZSCO 6-digit occupation gender pay gaps within each age group, economic outcomes are worst for 25-39 year olds, with 99% of occupations having a gender pay gap in favour of males. While gender pay gaps in occupations are less pronounced for 20-24 year olds, it is still important to note that there was a pay gap in favour of males in almost 3 out of 4 occupations for people in this age group.

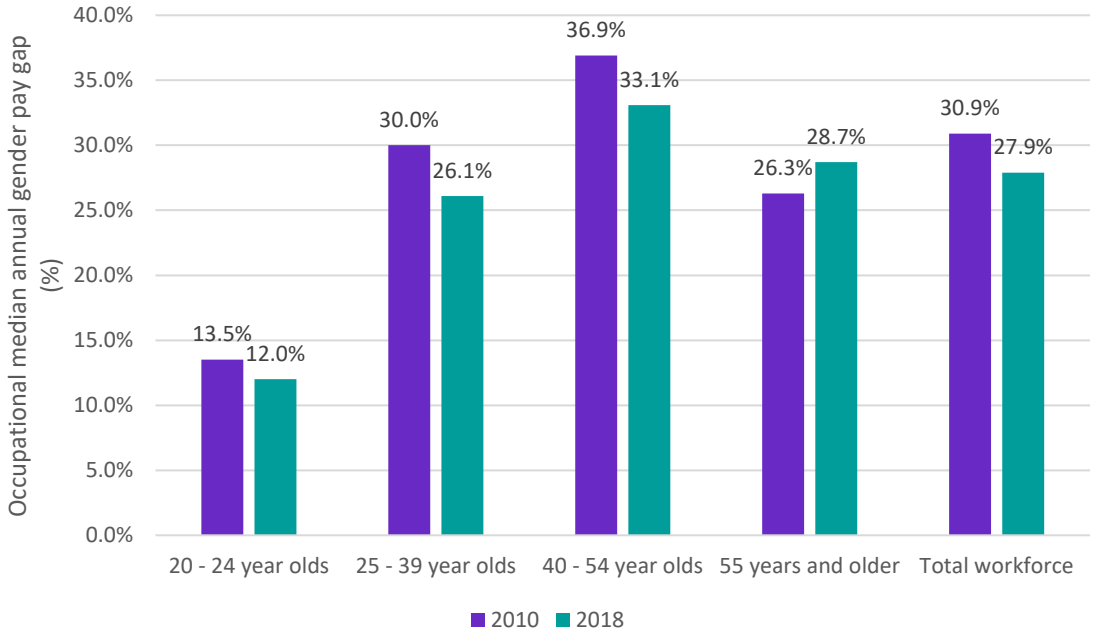
Table 30: Categorisation of occupational median annual gender pay gaps with occupational median hours worked gaps by age grouping

Age Group	Occupational median annual gender pay gap in favour of males (>5%)	Occupational median annual gender pay gap neither in favour of males or females (between -5% and 5%)	Occupational median annual gender pay gap in favour of females (-<5%)	Occupational median hours paid (Males)	Occupational median hours paid (Females)	Occupational median hours worked gap (%)
20 - 24	74%	24%	2%	37.0	25.0	32%
25 - 39	99%	1%	0%	38.0	35.0	8%
40 - 54	94%	6%	0%	38.0	35.0	8%
55+	90%	6%	4%	38.0	32.0	16%
Total workforce	**98%**	**2%**	**0.3%**	**38.0**	**32.0**	**16%**

Source: ABS, Employee Earnings and Hours, 2023. Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

To determine how pay gaps have changed for each age group, we analysed the pay gaps at 2010-11 and 2018-19, comparing the earliest available year and the year before the COVID pandemic. We can see that over time the pay gap decreased across almost all age groups, except for those aged 55 years and older. For those older females, the gender pay gap with males of that age has increased from what it was in 2010-11, from 26.3% to 28.7%.

Figure 26: Median annual gender pay gaps at 2010-11 and 2018-19



Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

An intersectional snapshot of 10-year gender pay gaps across age groups

As noted in our previous section, another way of measuring gender economic equality over the life course is to look at how much females earn over longer time periods and the cumulative impact of factors (including but not limited to part-time work and caring responsibilities) on incomes over time.

When looking at accumulated 10-year gender pay gaps across age cohorts, we can see the 'motherhood penalty' clearly in our data: females aged 25-39 years old have the worst accumulated 10-year pay gaps and economic outcomes. This finding highlights the importance of measuring the gap in accumulated earnings. It also highlights the value of extending this further in the future, to full 'life course' gender pay gaps.

Similar patterns have been identified in other work focused on the Victorian working population. At age 64, Victorian men who work full-time are predicted to have earned $4.2 million over their lifetime compared to Victorian women who work full-time earning $1.96 million over their lifetime. These estimates produce a Victorian gender gap of $2.2 million in lifetime earnings (or a gap of 53%) (Austen and Preston 2024).

Similar trends in the accumulated 10-year gender pay gaps across age groups are seen across First Nations, CALD and migrant females, which will also be able to be explored through a forthcoming intersectional pay gap dashboard.

Gender pay gaps over the life course: Key findings

- Our pay gap findings illustrate the merit of a life course approach to measuring gender economic inequality both from an age cohort and accumulated 10-year gender pay gap perspective.
- Gender pay gaps increase with age and peak among 40-54 year olds at 29.6%.
- When looking at changes over time, gender pay gaps decreased across every age group except women 55 years and older.
- The 'motherhood penalty' is clear in our data: females aged 25-39 years old have the worst accumulated 10-year pay gaps and economic outcomes.
- JSA recommends this more longitudinal approach to pay gaps be adopted more widely and once datasets mature, Australia works towards capturing a full 'lifetime' gender pay gap.

New perspectives on gender pay gaps using the Gender Segregation Intensity Scale

This section brings together the analysis from Part 1 of the paper, on occupational segregation, with Part 2 on gender pay gaps. We apply the GSIS to female and male median income across occupations and it reveals that pay gaps become more pronounced as an occupation becomes more gender segregated. There are still high and low gender pay gaps across all segregation intensities and the below four graphs highlight some consistent relationships.

The key finding is that **males and females are more likely to get paid similar median incomes in gender balanced occupations and occupational median annual pay gaps widen and worsen at the highest almost completely male or female dominated intensity on the scale.**

The dots in the four 'scatterplot' graphs represent male and female earnings, and their clustering around the diagonal line represents a stronger relationship or correlation between those median incomes within the segregation intensity. As the dots become more dispersed and further from the line, this means this relationship or correlation becomes weaker.[17]

Though there is a strong positive relationship or correlation between male and female median annual income at all four levels of gender segregation intensity, it is strongest for gender balanced occupations (that is, a correlation of 0.992, with a score of 1.0 being completely correlated). For example, in Figure 27 gender balanced occupations are mainly clustered around the correlation line, except for some occupations where males' median annual income is substantially higher, such as finance managers, and emergency medicine specialists.

As we progress up the levels of segregation intensity in the GSIS, the clustering around the line weakens, widens and varies more.

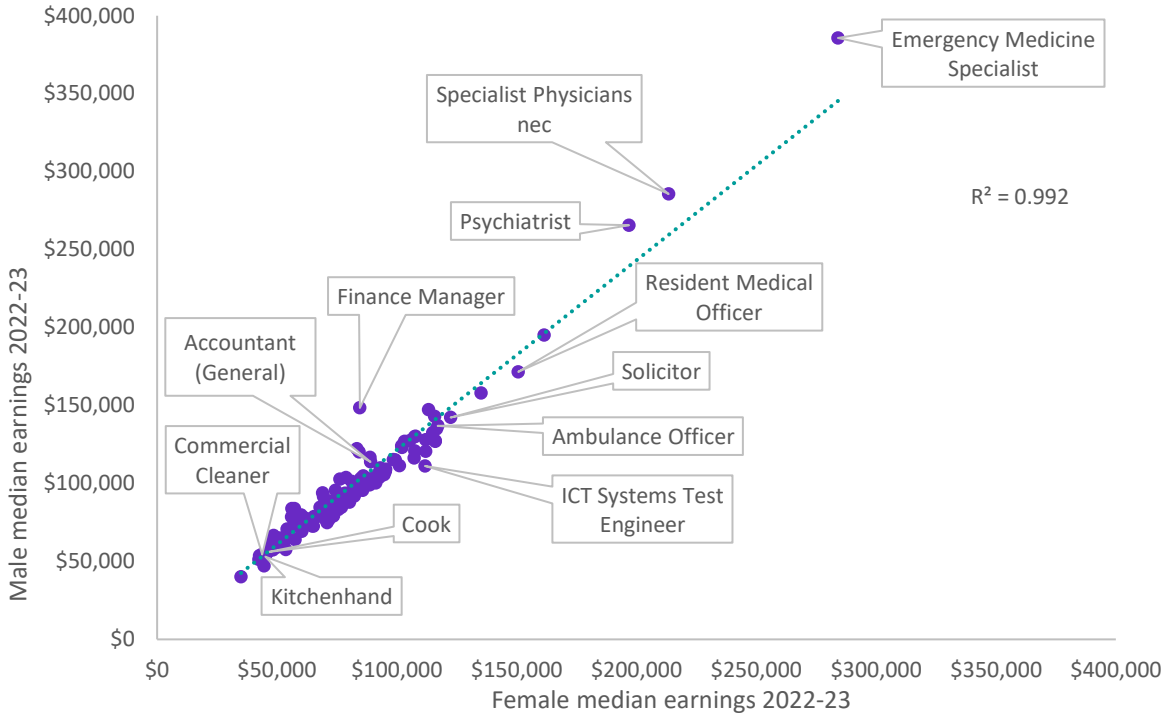
At the moderately male or female dominated segregation intensity, Pathologists and Diagnostic and Interventional Radiologists are extreme examples of occupations where male's median annual income is significantly higher than female's median annual income leading to some of the highest occupational gender pay gaps in the country. Other large employing occupations at this level like Financial Investment Managers and Paediatrician also have notably higher gender pay gaps.

At highly female or male dominated segregation intensity, there are various large employing and professional occupations where the largest gender pay gaps start to appear in highly male dominated occupations like Air Traffic Controllers and Engineering Managers.

At the highest segregation intensity, we see pay gaps among almost completely male or female dominated VET-qualified occupations that are in national shortage.

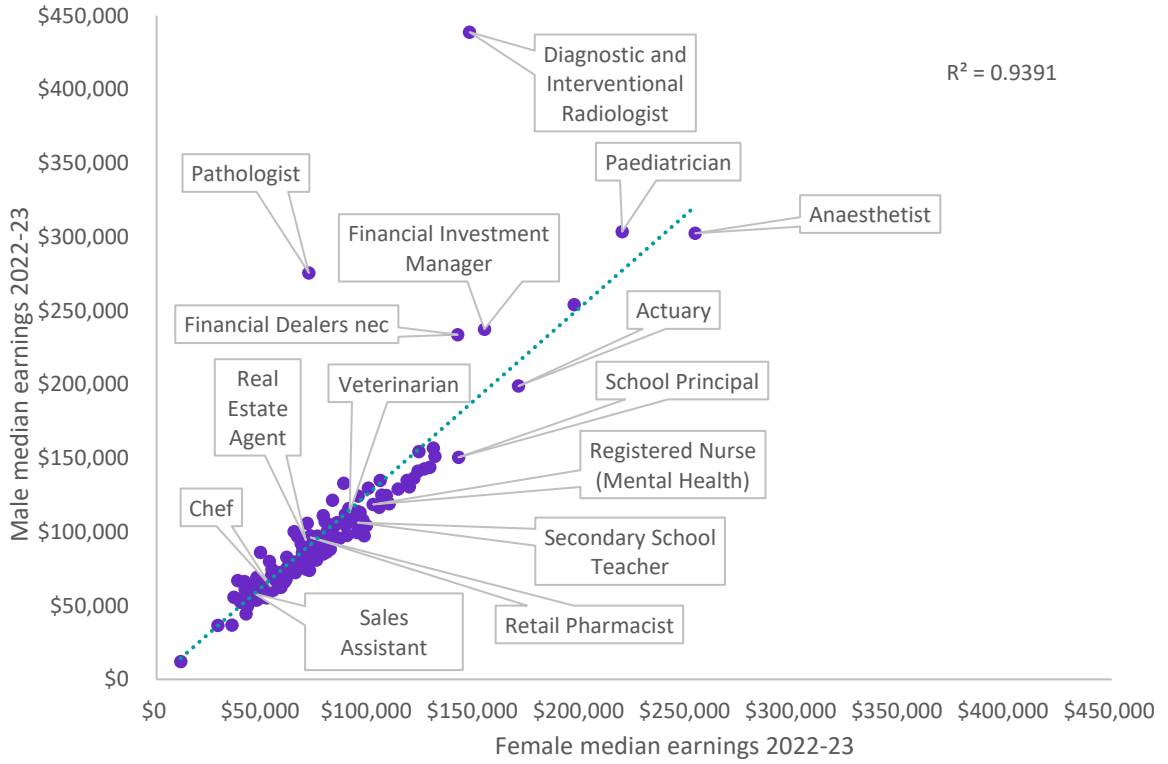
[17] A positive correlation means that there is a relationship between male and female earnings, with higher paying occupations paying higher for both men and women, and the same for lower paying jobs. A gap in earnings is seen across most occupations, which is why the measure for the correlation is less than 1.

Figure 27: Male and female median annual incomes in gender balanced ANZSCO 6-digit occupations



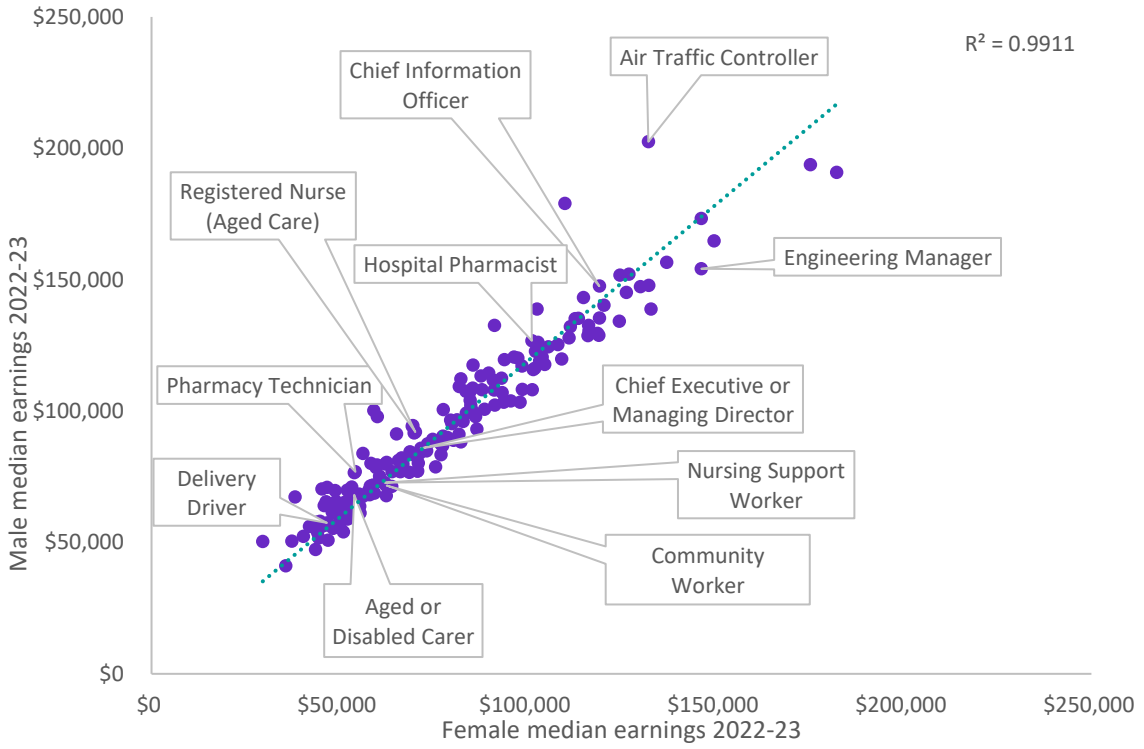
Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

Figure 28: Male and female median annual incomes in moderately female or male dominated ANZSCO 6-digit occupations



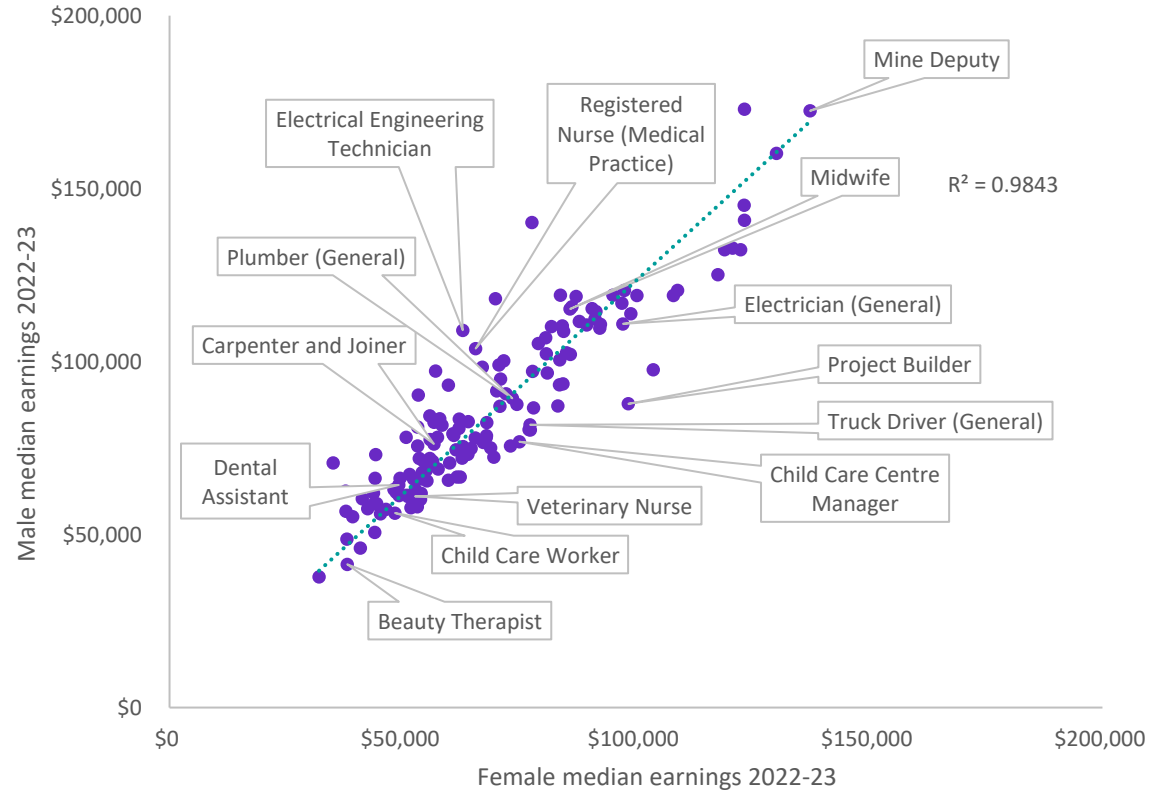
Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

Figure 29: Female and male median annual incomes in highly male or female dominated ANZSCO 6-digit occupations



Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

Figure 30: Female and male median annual incomes in almost completely male or female dominated ANZSCO 6-digit occupations



Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data.

High gender pay gaps in selected gender balanced occupations

Even though, the correlation points to greater consistency in male and female earnings in gender balanced occupations, this does not mean there aren't gender pay gaps. When applying the Study's Gender Segregation Intensity Scale at the ANZSCO 6-digit level, we can identify occupations that are categorised as gender balanced yet still have high pay gaps. This is particularly prominent in the finance sector, with very high pay gaps for Finance Managers and Insurance brokers, far greater than the differences in occupational median hours worked.

The allied health field is also prominent in this group of gender balanced occupations. Emergency Medicine Specialists and Specialists Physicians nec (not elsewhere classified) are just some of the occupations highlighted in the table below where pay gaps are still high at this segregation intensity.

Table 31: Gender balanced ANZSCO 6-digit occupations with high occupational median annual gender pay gaps and minimal occupational median hours worked gaps

Occupation	2022-23 Occupational median annual gender pay gap (%)	Occupational median hours worked gap (%)
Finance Manager	43.0%	11%
Insurance Broker	31.9%	10%
Information and Organisation Professionals nec	31.7%	5%
Emergency Medicine Specialist	26.4%	8%
Specialist Physicians nec	25.3%	11%
Laboratory Manager	24.1%	8%

Source: Person Level Integrated Data Asset (PLIDA), ABS DataLab. Findings based on use of PLIDA data. ABS, Census of Population and Housing, 2021.

Gender pay gaps in occupations that have seen shifts in gender segregation

JSA's new GSIS can be used to monitor shifts in occupations gender balance alongside our detailed ANZSCO 6-digit occupational pay gap data. When combined with changes over time on both, we can start to examine whether pay gaps are influenced by occupations becoming more gender balanced or more female or male dominated. There is existing research that points to pay in occupations being negatively impacted as they become more female dominated (Cortis et al 2023), in addition to the Fair Work Commission's evidence of gender-based undervaluation in five female dominated awards (Hatcher et al 2025). The data in our Study is useful for exploring this further and can be found in the dashboards.

In considering changes in segregation intensity and changes in pay gaps, we can revisit three earlier examples from this study—Veterinarians, Pharmacists, and Ambulance Officers and Paramedics.

- Veterinarians are an example of an occupation that became more female dominated, but their median annual gender pay gap decreased. In 2006, Veterinarians was a gender balanced occupation, but this became moderately female dominated by 2021. In 2022-23, the gender pay gap for Veterinarians was 19.8%, down from 29.7% in 2010-11.

- Ambulance Officers and Paramedics was a moderately male dominated occupation in 2006, becoming gender balanced in 2021. The gender pay gap of Ambulance Officers has decreased as the occupation has become more balanced, from 17.8% in 2010-11 to 14.5% in 2022-23.
- Pharmacists shifted from gender balanced to moderately female dominated over the 15 years from 2006 to 2021 and their median annual gender pay gap from the 10 years from 2010-11 to 2022-23, increased 5 percentage points, from 19.6% to 24.6%. There are a range of factors that could partly explain this, including a shift from small business ownership of pharmacies to large franchises over this time (and recognising research that suggests women have less access to capital to start/own businesses, which is also a related gender factor that would be useful to explore in the future).

High gender pay gaps in almost completely male dominated trades

A very identifiable trend in our gender pay gap findings that has clear policy implications is the high gender pay gaps in almost completely male dominated trades despite females only working between 2-4 hours less across the five-day working week (that is a 5% to 10% occupational median hours worked gap). This equates to less than half a day difference, but gender pay gaps are high in several of these trade occupations including some in shortage. For example:

- The gender pay gap is above 25% for Electronics Instrument Trades Worker (28.5%) Sheetmetal Trades Workers (26.6%), Carpenter and Joiners (25.7%) and Carpenters (25.6%).
- Glaziers and Air Conditioning and Refrigeration Mechanics are only slightly below this, at 23.4%.
- Construction Estimators and Construction Riggers sit at 22.8% and 20.3% respectively.

> *"Highly masculinised occupations and industries may similarly constrain opportunities, reduce productivity, and reinforce the pay gap, and these inequalities and impacts require focused analysis" (Cortis et al. 2023).*

These high gender pay gaps in almost completely male dominated jobs (and technician roles in the building and engineering trades as discussed above) are concerning considering the significant policy and industry activity aimed at encouraging women into them. There is a persistent shortage across these trade-based occupations and the inability to effectively draw on half of the Australia population to fill these roles is an ongoing challenge.

Many of these jobs are also critical to key labour market initiatives, such as the Future Made in Australia and Net Zero Transition, which we will touch on in Paper 3.

Female dominated occupations that have increasing gender pay gaps

Some occupational gender pay gaps, including in highly female dominated occupations, have increased over time.

Several have been flagged throughout the analysis above, but it is worth noting that all of the 20 nursing occupations mentioned in earlier sections have seen increases in their median annual gender pay gap over time. For example, the gender pay gap for Registered Nurses (Surgical) has increased over 6 percentage points between 2010-11 and 2022-23, increasing the occupational median annual gender pay gap from 15.1% to 21.5%.

This trend is also prominent in other areas of the health care sector, such as the pharmaceutical and dental industries. Dental Hygienists, Dental Therapists and Dental Assistants are all almost completely female dominated occupations that saw increases in their median gender pay gaps over the past decade. Pharmacy Technicians is an example of an already high pay gap for an occupation (29.5%) further increasing over time, with the pay gap climbing 2 percentage points from 2010-11 to 2022-23.

Gender pays across the Gender Segregation Intensity Scale: Key Findings

- Males and females are more likely to get paid similar median incomes in gender balanced occupations and the median pay gaps widen and worsen at the highest almost completely male or female dominated intensity on the scale.
- Despite this, there are still high pay gaps in gender balanced occupations. These are particularly prominent in the finance sector and allied health fields.
- There are consistently high gender pay gaps in almost completely male dominated trade occupations. This has implications for existing policy and interventions trying to get more women into trade-based roles.
- JSA's GSIS can be used to monitor shifts in occupational gender segregation over time alongside occupation gender pay gaps. For example, Ambulance and Paramedic Officers are an occupation that shifted in gender segregation intensity from moderately male dominated in 2006 to gender balanced in 2021. This coincided with a decrease in their occupational gender pay gap from 19.8% to 14.5%.
- The trend of occupations increasing their gender pay gap over time still occurs in female dominated occupations. For example, Health care occupations, such as Registered Nurses, and occupations in the pharmaceutical and dental industries have seen increases in their median gender pay gaps despite being moderately female dominated.

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