

Gender segregation in the trades:

Insights from Census data

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Women's Policy
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Preface

This report has been commissioned by the Office for Women's Policy within the NSW Department of Department of Family and Community Services to provide background information on women employed in the trades occupations. It is intended to assist the Council for Women's Economic Opportunity in its collection of evidence on the situation of women in the labour market.

The data in this report come from the 2006 Census. Unfortunately, the availability of 2012 Census data is still some 4 to 5 months away, so this restriction to 2006 is inevitable. An interesting exercise might be to compare 2012 data—when it becomes available—with the data contained in this report to assess whether any changes have taken place over the last 5 years. In the final section of this report I also discuss other possible data sources. As this report will show, apart from a few occupations (notably hairdressers and cooks) the presence of women in the trades occupations is negligible. This means that their presence in surveys of the workforce is also negligible, making analysis of many of the standard labour market survey datasets quite limited. It is these kinds of datasets which provide longitudinal information on what happens to workers over time, whether they stay in their jobs, whether they build careers, whether they move into self-employment and so forth.

Despite these various difficulties with the available data, the Census has provided a detailed snapshot of the situation of women in the trades. Moreover, because it is a complete enumeration of the population, these small numbers are still quite reliable at providing insights into this topic.

The presentation in this report makes use of dot plots and graphs which help illuminate the patterns in the data and make the findings more accessible. Every plot or graph is accompanied by a table (found in the appendix) which contains detailed notes on the population under consideration.

Key findings

Women's presence in the trades is negligible. Apart from hairdressers (who number about 41,000) and cooks (who number about 24,000) most of the trades occupations have women numbered in the low thousands. In the case of the non-traditional trades (such as in construction and engineering) women are numbered only in the hundreds. The occupational patterns within the trades area show strong gender stereo-typing.

This report looked at several characteristics of trades workers: income, age, hours of employment and location. The core findings were:

- **Income:**
 - women in the trades were concentrated in the lowest income brackets, with nearly three quarters earning below \$800 per week. The comparable figure for male trades was 46 per cent.
 - looking just at tradespersons holding VET qualifications, the income situation between men and women widens even further. One now finds 81 per cent of female tradespersons earning below \$800 per week. The comparable figure for male tradespersons was just 39 per cent.
 - if we exclude the two dominant occupations of hairdresser and cook, the income situation improves, but a strong gender difference is still evident, suggesting that even in the smaller trades occupations women are earnings considerably less than men.
- **Age:**
 - men and women working the trades have remarkably similar age profiles.
- **Hours of employment:**
 - the age pattern does change when one looks at the split between part-time and full-time employment.
 - women are much more likely to be working part-time across the life-cycle, but with a much larger fall in full-time employment during the typical parenting years (late 20s to mid 40s).
- **Location:**
 - tradespersons are concentrated in Sydney, the Hunter and the Illawarra, but this is something common to the workforce more generally, and in fact, tradespersons are less concentrated in the Sydney region than other occupations.
 - tradespersons in New South Wales are less concentrated in the capital city than is the case in Victoria.

1. Who works in the trades?

1.1 Trades occupations

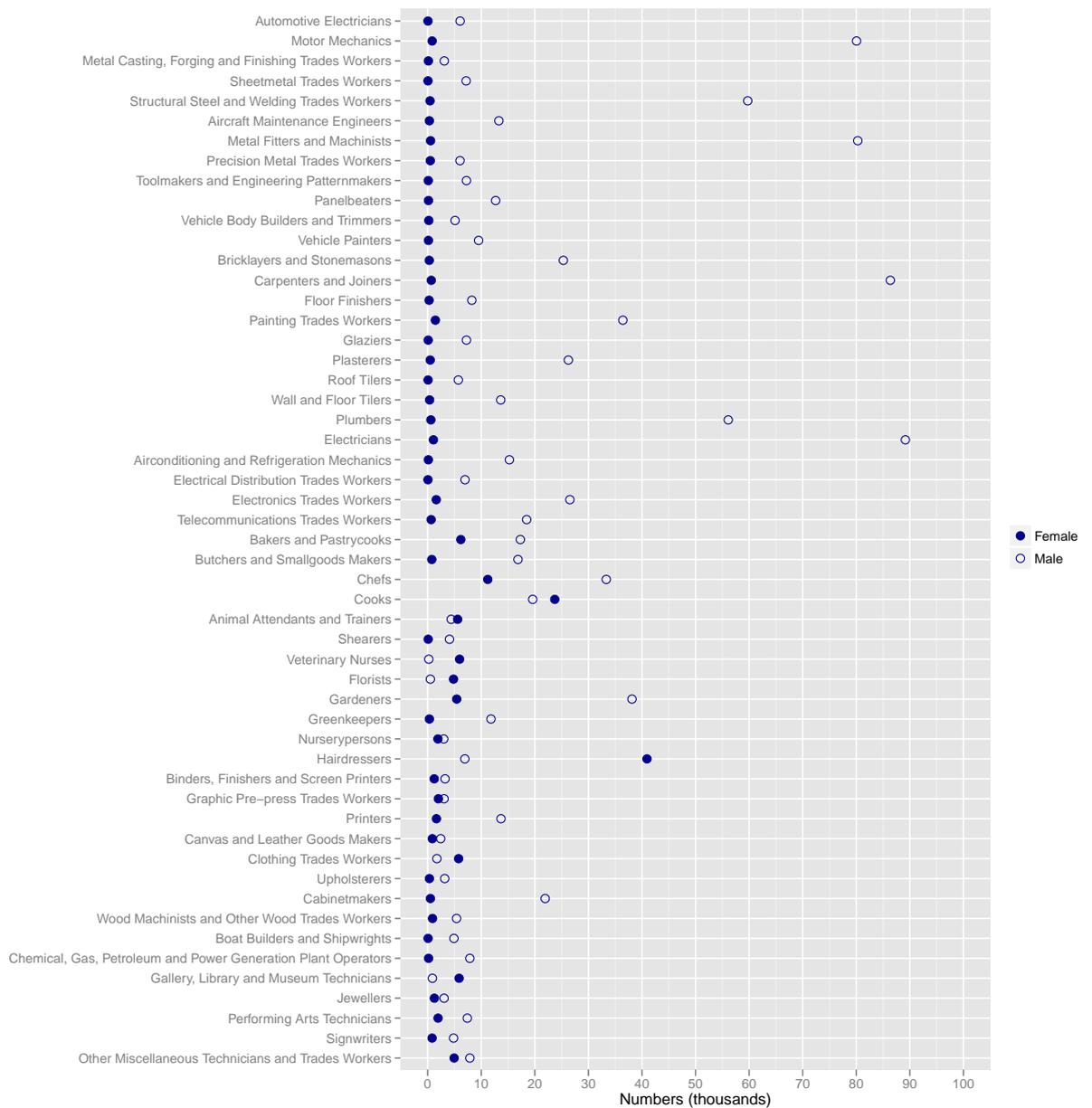
Who works in the trades? In a word, men. Figure 1.1 shows the overwhelming dominance of men across most of the trades occupations (shown as ANZSCO Unit Groups (that is, 4 digit level)).¹ In only two of the more common trades did women outnumber men, hairdressers and cooks, both of which are strongly gender stereotyped. Interestingly, among chefs, men outnumbered women. In a number of smaller occupations women outnumbered men, but these were smaller trades. These included: animal attendants and trainers, veterinary nurses, florists, clothing trades workers and gallery, library and museum technicians. Figure 1.2, which truncates the x-axis to 10,000, shows those smaller trades occupations in more detail.²

In many of the core stereotypically-male trades—the various construction trades and motor vehicle trades—men outnumbered women by a factor of more than 100 to 1.

¹ ANZSCO is the Australian and New Zealand Standard Classification of Occupations and replaced ASCO Second Edition from 2006 onward. ASCO was the Australian Standard Classification of Occupations and had been used since 1986 (when the First Edition was introduced)

² The wording in the previous Key Findings section was in the present tense, to make it more accessible. In this main part of the report, the wording is in the past tense, because the data come from 2006.

Figure 1.1 Trades occupations by gender



Source: Table 3.3

Figure 1.2 Trades occupations by gender, truncated scale



Source: Table 3.3, Note: The x-axis is truncated to 10,000 to illustrate the patterns in the smaller occupations. Any dots missing are off the scale (that is, to the far right).

1.2 VET qualifications

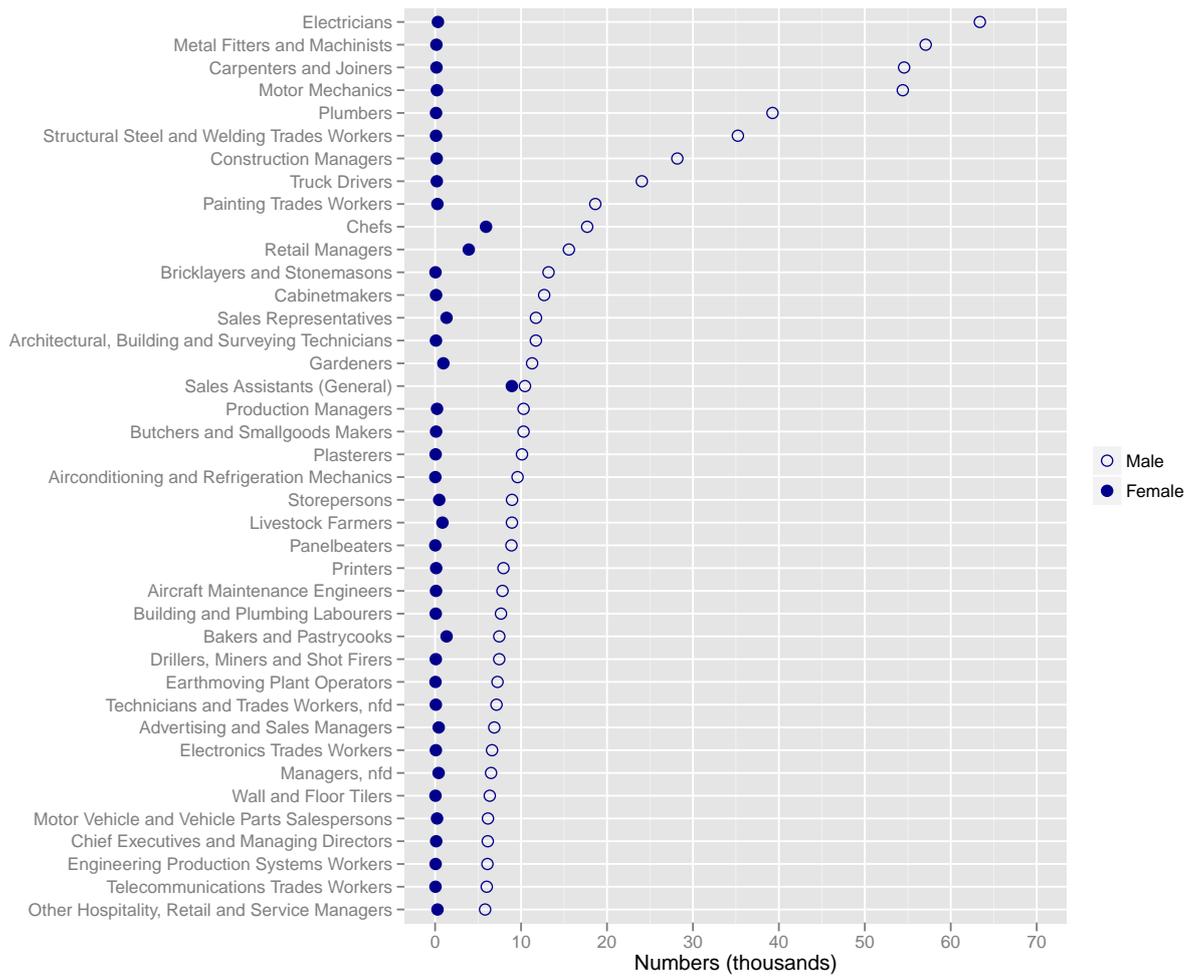
How does the picture unfold if we look at the occupations held by those with Vocational Education and Training (VET) qualifications?³ To answer this question I broaden the range to include non-trades occupations (in ANZSCO terms) and re-arrange the data in descending order of importance. What these next two graphs show, in essence, is where most men with VET qualifications work (and how this compares with women's presence) and where most women with VET qualifications work (and how this compares with men's presence). Figure 1.3 shows the former, Figure 1.4 shows the latter, with the number of occupations restricted to the 'Top 40'.

Looking first at the dominant male occupations, we see that the classic trades occupations are at the top of the list, though they are joined by some specialist managers (in construction and retail). The only occupations where women register a presence are sales assistants—where they match the number of men—chefs and retail managers, chefs. Only one of these occupations—chefs—fits into the pattern of a trade occupation, the others being sales jobs. In none of the male 'Top 40' are found any occupations where women outnumber men, with the closest match being sales assistants.

Turning to the dominant female occupations, we find that many of the most common jobs are drawn from the classic 'feminised industry' stereotypes: hairdressing, beauty therapists, waiters, receptionists, cooks. A few occupations break from this mould: sales assistants, chefs and retail managers, for example. A notable difference in Figure 1.4 are the considerable number of occupations in this female 'Top 40' where men outnumber women. These include: sales assistants, chefs, retail managers, chefs, sales representatives, bakers and pastry cooks, gardeners and livestock farmers.

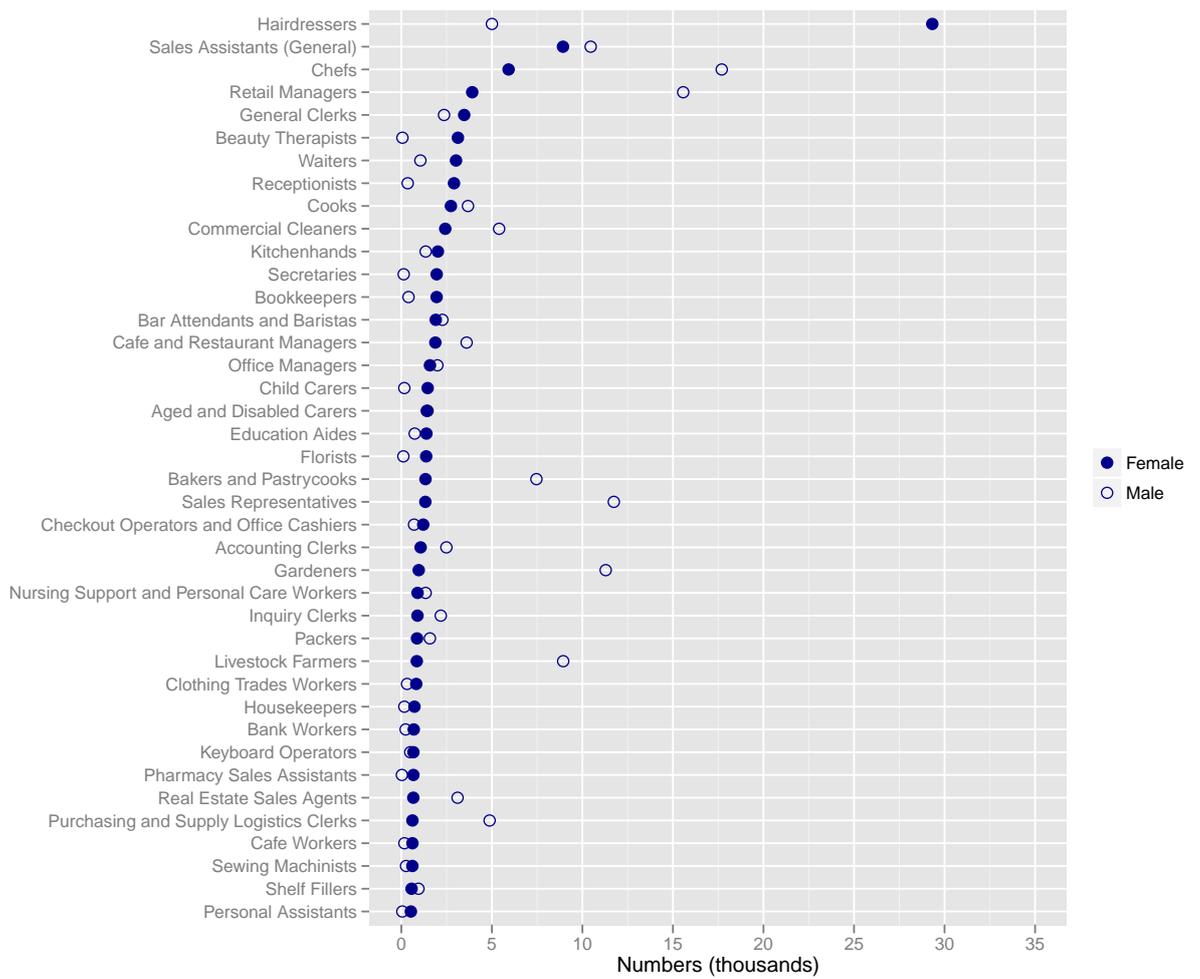
³ VET qualifications are defined as holding Certificates III or IV or a Diploma as the highest post-school qualification and with the field of qualification restricted to the following: Agriculture, Process and Resources Engineering, Food and Hospitality, Manufacturing Engineering and Technology, Food, Hospitality and Personal Services, nfd, Agriculture, Environmental and Related Studies, nfd, Building, Visual Arts and Crafts, Geomatic Engineering, Other Engineering and Related Technologies, Mechanical and Industrial Engineering and Technology, Civil Engineering, Engineering and Related Technologies, nfd, Automotive Engineering and Technology, Maritime Engineering and Technology, Horticulture and Viticulture, Aerospace Engineering and Technology, Electrical and Electronic Engineering and Technology and Personal Services. These represent the 'classic' trades areas within VET.

Figure 1.3 Dominant male occupations: those with VET qualifications



Source: Table 3.1

Figure 1.4 Dominant female occupations: those with VET qualifications



Source: Table 3.1

2. Characteristics of trades workers

2.1 Income

Do male and female tradespersons earn similar incomes, and does this vary according to other factors? This section explores these questions, using data from Census information on *weekly income*. While not directly comparable to wage and salary earnings, for most people in the trades occupations the two measures are likely to be very close. For more accurate comparability across gender only full-time workers are considered here.¹

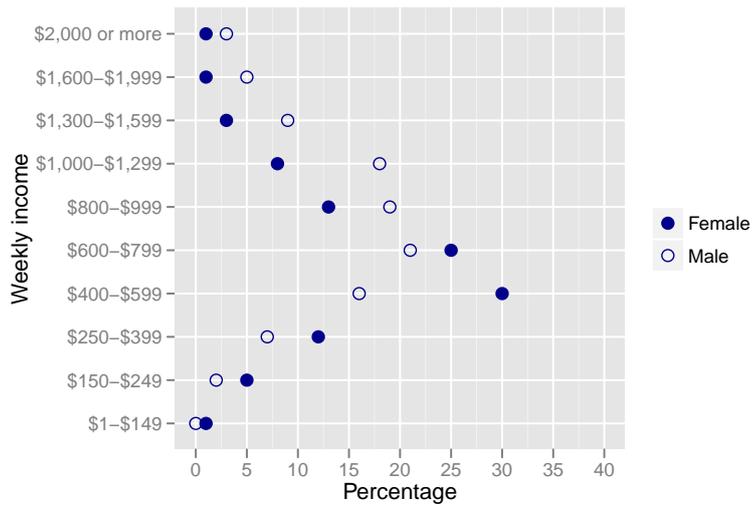
Figure 2.1 shows the distribution of weekly income in 2006 for this population of tradespersons, broken down by gender. Women dominated in the lower income bands, particularly below \$800 per week while men dominated above this level. The largest gap was towards the bottom of the distribution, in the \$400 to \$599 bracket, where 30 per cent of female tradespersons were found. The comparable figure for male tradespersons was just 16 per cent. The second largest gap was higher in the income distribution, at the \$1000 to \$1299 bracket. Some 18 per cent of male tradespersons earned this level of income, whereas the equivalent percentage for their female counterparts was just 8 per cent.

A particularly useful way of looking at income bands like these is the cumulative distribution. This allows us to see what proportion of people earn below a certain level of income. Figure 2.2 shows this for the same population we have just been looking at. The gender difference is pronounced. Nearly half (48 per cent) of all female tradespersons earned less than \$600 per week. The comparable figure for male tradespersons was just 25 per cent. Some 73 per cent of female tradespersons earned below \$800 per week, whereas the comparable male figure was just 46 per cent.

Does holding a formal VET qualification make any difference to these patterns? This question is explored in Figures 2.3 and 2.4. The data for these graphs differs from those just discussed by restricting the population to those tradespersons holding a Certificate III or IV, or a Diploma, in the various fields outlined earlier (see footnote on page 6.) One of the first things to notice about this restriction is that it more than halves the male population and reduces the female population by about three quarters (see Table 3.5). This doesn't mean that these tradespersons are working without VET qualifications; rather they may be holding such qualifications in other fields of study. Among women, for example, many hold VET retail qualifications (based on traineeships) and work in various retail industry trades occupations.

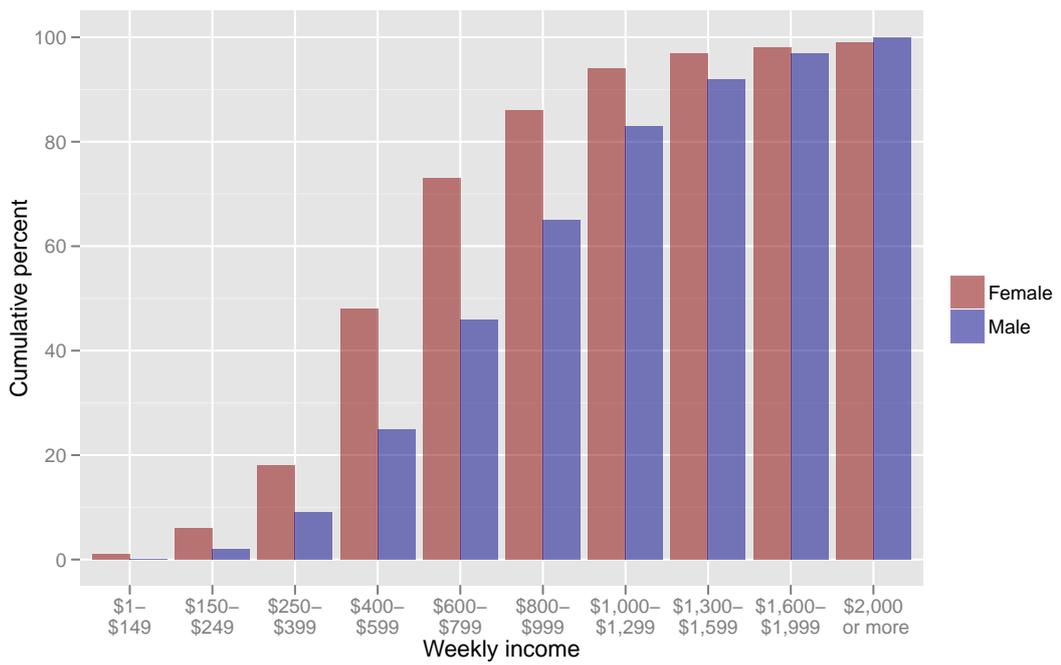
¹ It is not practical to calculate hourly rates of pay because this would involve constructing mid-points from all of the income brackets, as well as mid-points from all of the bracketed hours worked. The measurement error in such an exercise would be considerable.

Figure 2.1 Income distribution: tradespersons



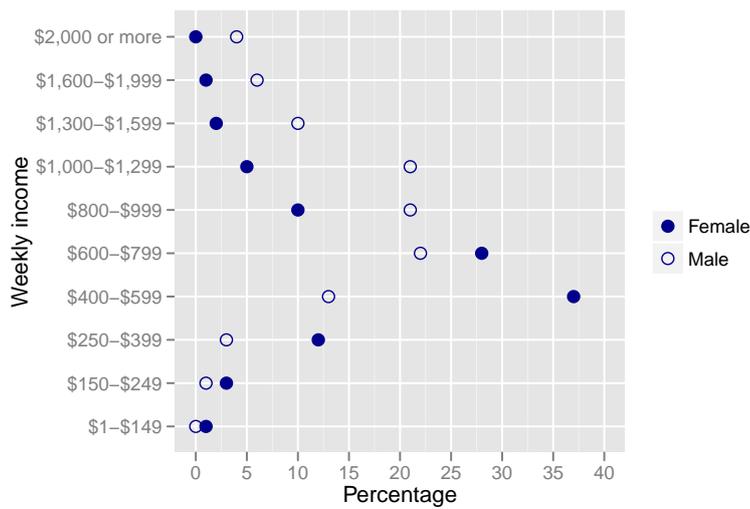
Source: Table 3.4

Figure 2.2 Cumulative distribution: tradespersons



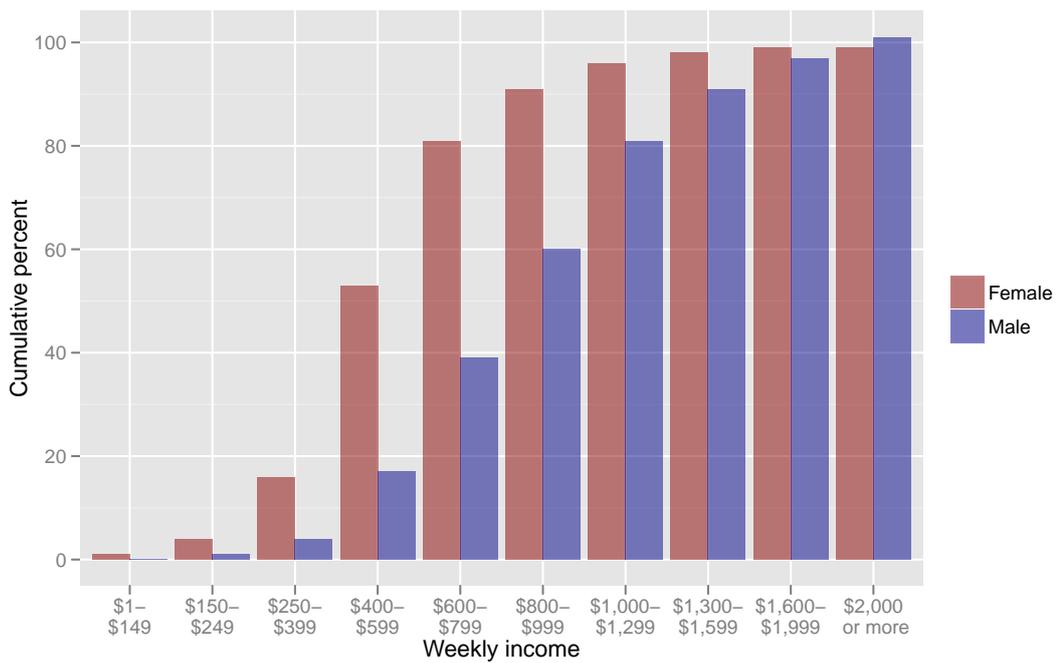
Source: Table 3.4

Figure 2.3 Income distribution: tradespersons with VET quals



Source: Table 3.5

Figure 2.4 Cumulative distribution: tradespersons with VET quals



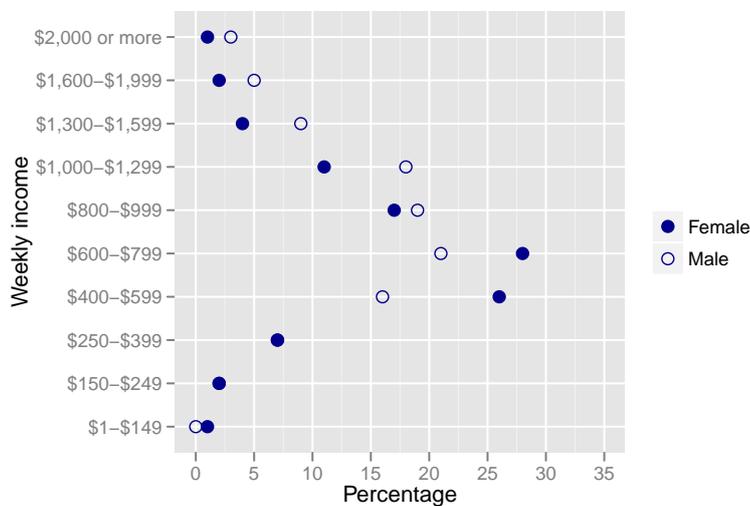
Source: Table 3.5

The gender differences were more pronounced in this sub-population. Among tradespersons with VET qualifications the gaps between men and women were greater. Not only were a greater proportion of women found in the \$400 to \$599 bracket (37 per cent) but a smaller proportion of men were found there (13 per cent). Similarly, the gap among the higher paid tradespersons was also much greater: some 21 of men earned in the \$1000 to \$1299 bracket,

whereas only 5 per cent of women were found there. In terms of the cumulative distribution, some 81 per cent of women earned less than \$800 per week, whereas the comparable figure for men was just 39 per cent.

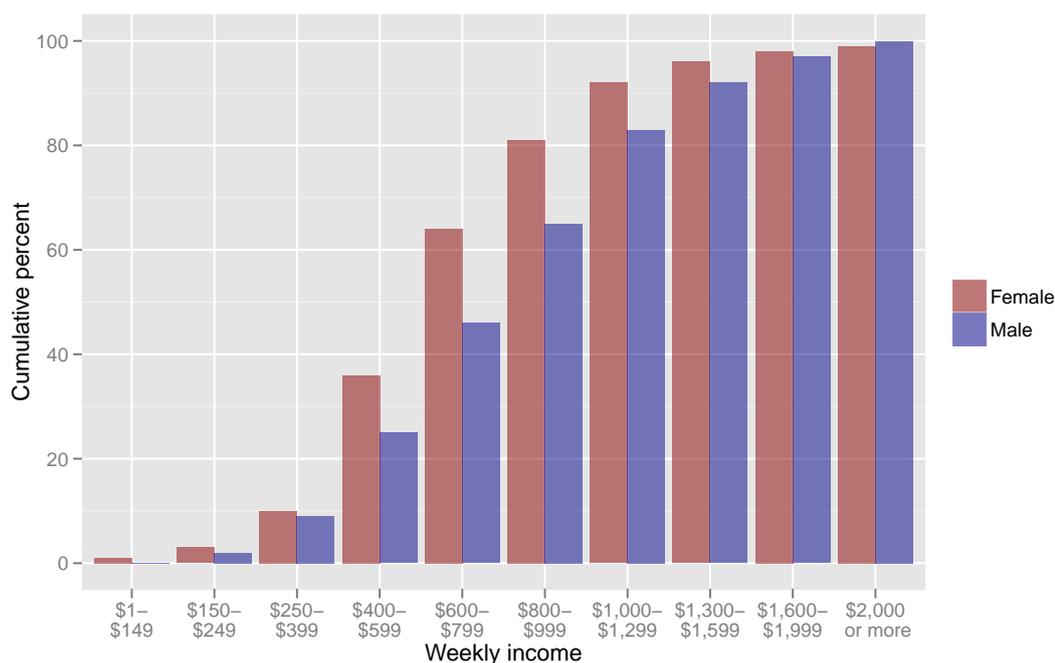
One reason for the large gender differences, both for tradespersons and for this sub-population holding VET qualifications, was the large presence of low paid hairdressers among the women. If we exclude this group (as well as cooks, the other most common group of female tradespersons) we have a sub-population who come closest to the non-traditional trades. Did women who work in this area, that is those who more closely resembled the occupational profile of their male counterparts, fare any better? Figures 2.5 and 2.6 suggest that the gender gap was smaller in this sub-population, but it was still considerable. For example, 26 per cent of women were earning in the \$400 to \$599 bracket, compared with 30 per cent among the trades more generally. This means the gender gap had narrowed from 14 percentage points to 10. Among the higher income brackets, the proportion of women was slightly greater in the \$1000 to \$1299 bracket, at 11 per cent, and this reduced the gender gap from 10 percentage points to 7. In other words, the removal of this large group of low paid female tradespersons did improve the overall pattern, but only in a marginal fashion. Clearly, across many of the smaller trades occupations women were earning considerably less than their male counterparts.

Figure 2.5 Income distribution: tradespersons with exclusions



Source: Table 3.6

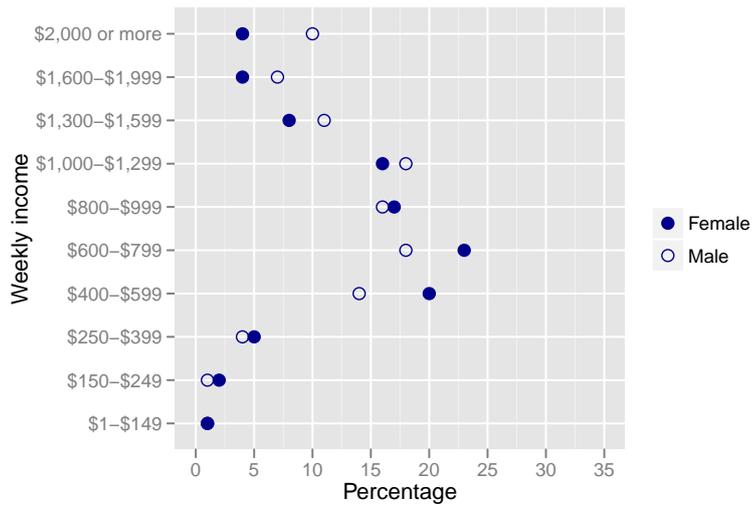
Figure 2.6 Cumulative distribution: tradespersons with exclusions



Source: Table 3.6

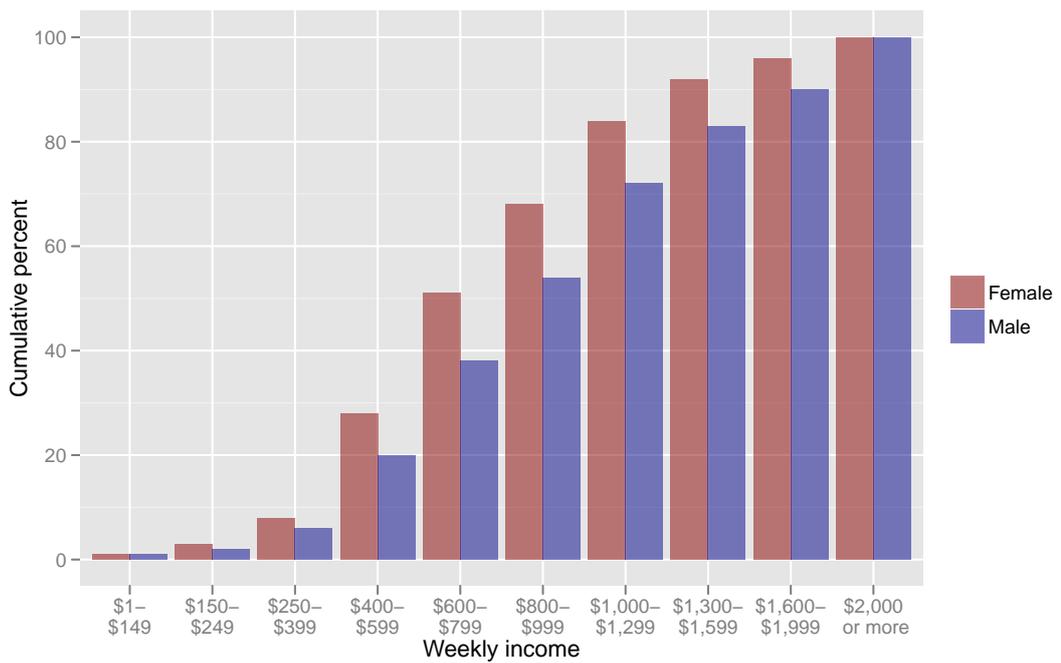
By way of concluding this section on income, it is worth comparing the trades to the full-time employed population more generally? Figures 2.7 and 2.8 help answer this question. They show that the gender gap in income was indeed much more compressed among the employed population more generally. The largest gap was about 6 percentage points, in the income bracket of \$400 to \$599. The largest gap among tradespersons varied from 14 percentage points through to 24 percentage points (the latter being those with VET qualifications). Similarly, with the cumulative distribution about half of all employed women earned below \$800 per week. Among female tradespersons this varied from 73 per cent to 81 per cent. In other words, when it comes to income, not only do female tradespersons fall behind the overall female working population, but the gap with their male counterparts is considerably greater.

Figure 2.7 Income distribution: all employed persons



Source: Table 3.7

Figure 2.8 Cumulative distribution: all employed persons



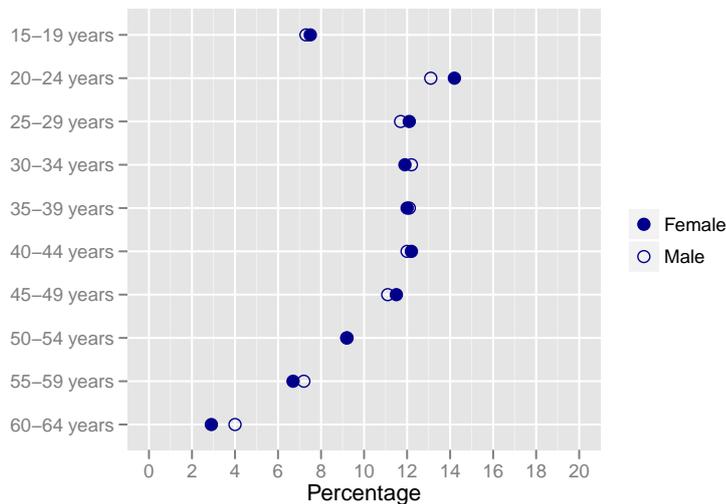
Source: Table 3.7

2.2 Age profile

Perhaps one of the reasons women earn less in the trades is that their age profile differs from men? To fully pursue questions like these requires a multivariate analysis where a number of other confounding factors could also be taken account of. This is a much larger project than what is being considered here. Nevertheless, examining the age profile of the trades is a worthwhile exercise in itself, and it may throw some light on the income patterns.

As Figure 2.9 shows, the results are quite striking. The age profile for male and female tradespersons was almost identical. Among men—compared with women—there was a slight dip in the early twenties and a slight rise in the early sixties. What is particularly interesting is the similar fall-off in the age profile from the 50s onwards. This fall-off is to be expected among workers in an occupation which is heavily manual in its activities and where an aging body can become a liability.

Figure 2.9 Age distribution: tradespersons



Source: Table 3.8

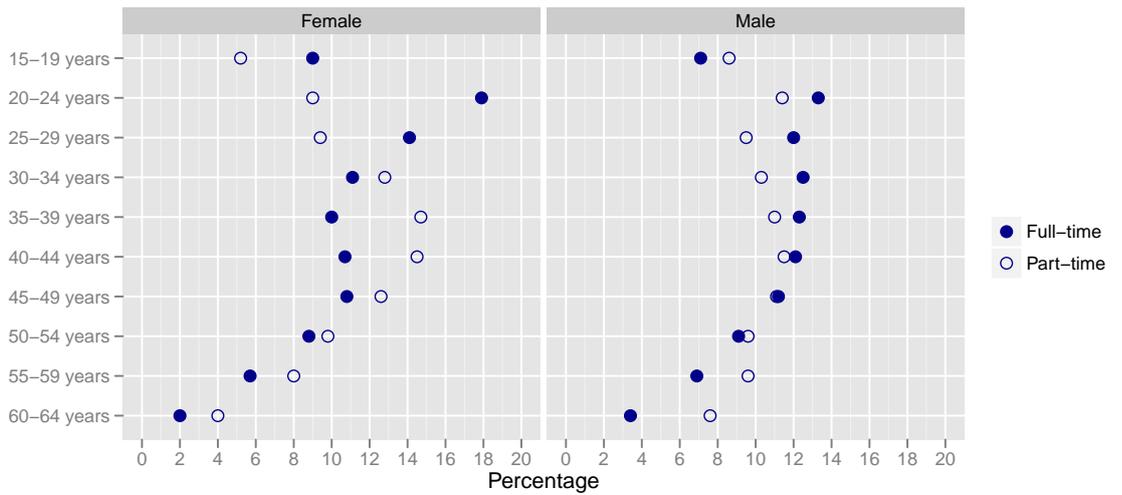
2.3 Part-time and full-time employment

Do women's different family patterns, particularly parenting activities in the middle years, show up in these age profile? Given that Figure 2.9 has shown no notable differences in the middle years, one might be inclined to conclude that parenting was not having an effect. However, this assumes a complete withdrawal from the labour force, rather than the increasingly common pattern of reducing hours of work. One way of examining this is to break the data down by full-time and part-time employment. Figure 2.10 shows the age distribution within each of these subpopulations.

Among men, the part-time workforce differed from the full-time workforce in being more consistently spread across the lifecycle. That is, the proportion in the younger years was somewhat less than that found among the full-timers, and in the older years the proportion was somewhat greater. Among women, not only was the pattern quite different to this, but the pattern in the middle years suggests that parenting aspects of the lifecycle are evident in the data. For example, the female full-time workforce is strongly S-shaped, with nearly one fifth of all workers in their early twenties. Indeed nearly one third of all female full-timers are in their twenties. While the proportions stabilise in the 30s and 40s, they drop off sharply in from the 50s onwards, following the classic trades pattern discussed earlier. Among the female part-time workforce, the distribution is much more horse-shoe shaped, with very low proportions in the 20s and a peak reached in the late 30s and early 40s. This suggests that like their counterparts in other occupations, female tradespersons increasingly took up part-time work during their parenting years.

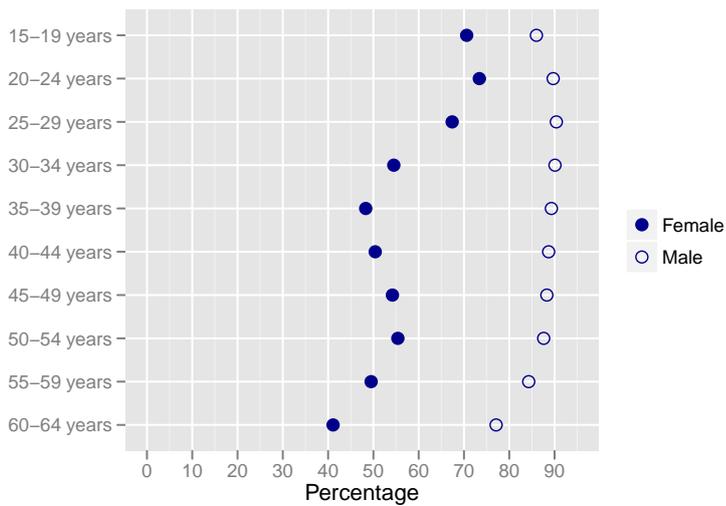
This pattern is even more pronounced if we look at the data slightly differently. Instead of looking at the age distribution within each full-time and part-time workforce, we can also look at the proportion within each age group who worked full-time. This breakdown is shown in Figure 2.11. The S-shape is visible suggesting a movement to part-time work during the parenting years, but the gap between male and female full-time participation is evident across all age groups, even the early 20s and the 50s, periods outside the usual parenting time frame. This suggests that the type of work female tradespersons undertook was more likely to be structured around part-time work (for example service sector jobs) than was the case for their male counterparts. In other words, parenting might explain much of this pattern, but not all of it.

Figure 2.10 Age distribution: tradespersons by full-time / part-time



Source: Tables 3.9 and 3.10

Figure 2.11 FT employment within each age group: tradespersons



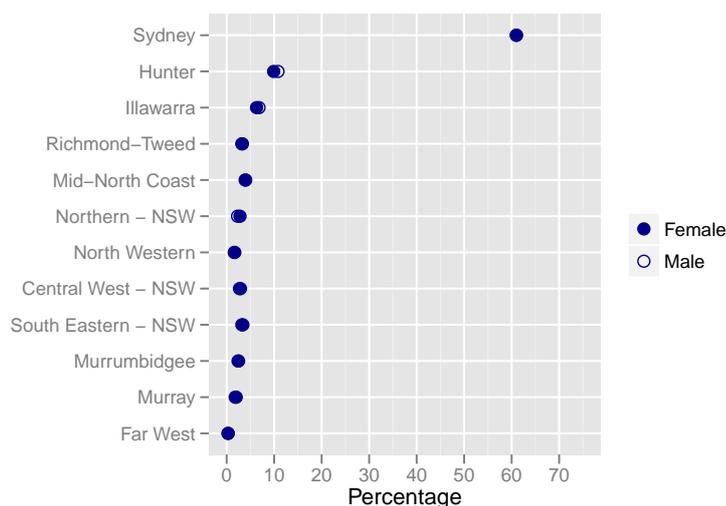
Source: Table 3.11

Note: All persons working in the ANZSCO group, technicians and tradesworkers.

2.4 Location

Where do most tradespersons live? Is there a gender component to this, and do tradespersons differ from other occupations? Finally, is the NSW pattern shared by other states? In this section I look at each of these questions. Figure 2.12 shows that tradespersons are overwhelmingly concentrated in Sydney (61 per cent), with smaller concentrations in the Hunter and the Illawarra. It is notable that the gender difference is negligible, with the dots overlapping in almost every regional category on the graph. By way of comparison, the capital city concentration is considerably higher in Victoria (at 72 per cent), and there is nothing comparable to the Hunter in Victoria (see Table 3.13). Finally, the pattern for all occupations in New South Wales is more concentration than for the trades, with 66 per cent of all employed persons located in Sydney (see Table 3.14). While the Hunter and the Illawarra come second and third, their proportions are lower than for the trades, something consistent with the industrial background of these two regions.

Figure 2.12 Regional distribution in NSW: tradespersons



Source: Table 3.12

3. Further research

As outlined in the Preface, data limitations in this area are quite severe. The Census remains the most reliable source of information for obtaining broad demographic information on women in the trades occupations. The impending release of the 2012 Census data suggests an important avenue for further research would be to assess any changes in the 5 year period since 2006.

When it comes to richer data items, particularly those related to earnings, career paths and other workforce characteristics, other data sources are available which could shed light on this topic. These includes National Centre for Vocational Education and Research (NCVER) datasets, the Household, Income and Labour Dynamics in Australia (HILDA) Survey and various Australian Bureau of Statistics training and education household surveys.

The NCVER collects administrative data on apprenticeships and traineeships, and also conducts surveys on the destinations of VET graduates. Some of these data sets are quite large, so the possibility of capturing reasonable numbers for women in the trades is higher than in a conventional household survey. The longitudinal dimension of these datasets is limited, with the notable exception of the *Down the Track* survey, which followed up VET graduates two years after their graduation. The numbers of female tradespersons in this dataset is quite limited, so the possibility of using it in a more qualitative fashion is the most likely research strategy. I'll say more on this below. The NCVER also now administers the Longitudinal Survey of Australian Youth (LSAY) which tracks various cohorts over a large number of years. While it begins with large numbers, it is subject to high attrition in the earlier waves, making the prospect of collecting reliable information on young women in the trades who may be aged in their mid-20s somewhat problematic. Further inspection of this dataset is worthwhile to assess if the sample size is likely to be a problem.

The ABS training and education surveys are useful cross-sectional snapshots of the trades occupations, since they have been conducted regularly since the late 1980s. Various changes in definitions over time make the construction of a time series dataset difficult, but in the trades area there is reasonable continuity. The range of training and workforce data items is quite extensive in these datasets, but there is no longitudinal component.

HILDA has become the de facto standard dataset for labour market analysis in Australia. It now contains 10 years of longitudinal data, making it possible to track the careers of workers as they move through various life cycle changes, as well as over the course of the business cycle (including the Global Financial Crisis). Unfortunately, despite its great strengths, the HILDA sample is also quite small when it comes to women in the trades. The most promising strategy

is a qualitative one, as mentioned above. This approach would entail tracking the subjects in the sample as if they were a population in their own right, seeing how their working lives unfolded as the years progressed. This would provide numerous insights into the forces which shaped their careers in the workforce. The patterns discerned would not be generalised to the Australian population (as one normally does with survey samples) and the emphasis would be on depth analysis, rather than breadth. This is the traditional strength of qualitative studies, which essentially complement (rather than compete) with quantitative studies.

Appendix

Table 3.1 Dominant male occupations for those with VET qualifications

Occupation	Male	Female
Electricians	63,385	327
Metal Fitters and Machinists	57,081	152
Carpenters and Joiners	54,572	160
Motor Mechanics	54,419	214
Plumbers	39,261	111
Structural Steel and Welding Trades Workers	35,229	109
Construction Managers	28,184	184
Truck Drivers	24,053	196
Painting Trades Workers	18,639	265
Chefs	17,695	5,923
Retail Managers	15,567	3,914
Bricklayers and Stonemasons	13,195	45
Cabinetmakers	12,691	112
Sales Representatives	11,735	1,327
Architectural, Building and Surveying Technicians	11,725	100
Gardeners	11,287	962
Sales Assistants (General)	10,457	8,929
Production Managers	10,294	224
Butchers and Smallgoods Makers	10,291	115
Plasterers	10,108	62
Airconditioning and Refrigeration Mechanics	9,592	27
Storepersons	8,950	478
Livestock Farmers	8,939	854
Panelbeaters	8,881	22
Printers	7,951	122
Aircraft Maintenance Engineers	7,839	105
Building and Plumbing Labourers	7,663	75
Bakers and Pastrycooks	7,462	1,334
Drillers, Miners and Shot Firers	7,458	82
Earthmoving Plant Operators	7,259	45
Technicians and Trades Workers, nfd	7,141	85
Advertising and Sales Managers	6,884	420
Electronics Trades Workers	6,624	89
Managers, nfd	6,511	407
Wall and Floor Tilers	6,358	42
Motor Vehicle and Vehicle Parts Salespersons	6,148	227
Chief Executives and Managing Directors	6,124	125
Engineering Production Systems Workers	6,086	61
Telecommunications Trades Workers	6,009	45
Other Hospitality, Retail and Service Managers	5,816	277

Source: Census 2006, produced using TableBuilder Pro.

Population: All employed persons with VET qualifications. VET qualifications defined as highest post-school qualification at level Certificate III or IV or Diploma, and in the fields outlined in the footnote on page 6.

Table 3.2 Dominant female occupations for those with VET qualifications

Occupation	Female	Male
Hairdressers	29,323	5,004
Sales Assistants (General)	8,929	10,457
Chefs	5,923	17,695
Retail Managers	3,914	15,567
General Clerks	3,471	2,360
Beauty Therapists	3,124	61
Waiters	3,020	1,053
Receptionists	2,909	352
Cooks	2,739	3,680
Commercial Cleaners	2,425	5,401
Kitchenhands	2,018	1,345
Secretaries	1,952	130
Bookkeepers	1,949	398
Bar Attendants and Baristas	1,902	2,269
Cafe and Restaurant Managers	1,878	3,606
Office Managers	1,581	1,990
Child Carers	1,455	165
Aged and Disabled Carers	1,445	1,405
Education Aides	1,386	738
Florists	1,373	113
Bakers and Pastrycooks	1,334	7,462
Sales Representatives	1,327	11,735
Checkout Operators and Office Cashiers	1,208	702
Accounting Clerks	1,066	2,488
Gardeners	962	11,287
Nursing Support and Personal Care Workers	897	1,342
Inquiry Clerks	893	2,179
Packers	866	1,577
Livestock Farmers	854	8,939
Clothing Trades Workers	824	318
Housekeepers	725	167
Bank Workers	687	239
Keyboard Operators	666	493
Pharmacy Sales Assistants	665	31
Real Estate Sales Agents	662	3,106
Purchasing and Supply Logistics Clerks	613	4,875
Cafe Workers	613	170
Sewing Machinists	609	262
Shelf Fillers	566	946
Personal Assistants	528	56

Source: Census 2006, produced using TableBuilder Pro.

Population: All employed persons with VET qualifications. VET qualifications defined as highest post-school qualification at level Certificate III or IV or Diploma, and in the fields outlined in the footnote on page 6.

Table 3.3 Trades occupations by gender

Occupation	Female	Male
Automotive Electricians	56	6,058
Motor Mechanics	834	80,050
Metal Casting, Forging and Finishing Trades Workers	133	3,103
Sheetmetal Trades Workers	63	7,180
Structural Steel and Welding Trades Workers	441	59,737
Aircraft Maintenance Engineers	321	13,290
Metal Fitters and Machinists	543	80,283
Precision Metal Trades Workers	493	6,039
Toolmakers and Engineering Patternmakers	111	7,237
Panelbeaters	150	12,691
Vehicle Body Builders and Trimmers	209	5,113
Vehicle Painters	146	9,510
Bricklayers and Stonemasons	296	25,324
Carpenters and Joiners	675	86,357
Floor Finishers	263	8,239
Painting Trades Workers	1,437	36,433
Glaziers	98	7,238
Plasterers	479	26,259
Roof Tilers	70	5,727
Wall and Floor Tilers	366	13,636
Plumbers	601	56,104
Electricians	1,073	89,169
Airconditioning and Refrigeration Mechanics	124	15,256
Electrical Distribution Trades Workers	55	6,969
Electronics Trades Workers	1,603	26,542
Telecommunications Trades Workers	648	18,478
Bakers and Pastrycooks	6,185	17,299
Butchers and Smallgoods Makers	772	16,859
Chefs	11,220	33,333
Cooks	23,725	19,606
Animal Attendants and Trainers	5,595	4,390
Shearers	97	4,076
Veterinary Nurses	5,958	209
Florists	4,824	502
Gardeners	5,421	38,135
Greenkeepers	322	11,815
Nurserypersons	1,911	2,996
Hairdressers	40,936	6,940
Binders, Finishers and Screen Printers	1,221	3,247
Graphic Pre-press Trades Workers	1,994	3,058
Printers	1,630	13,685
Canvas and Leather Goods Makers	871	2,433
Clothing Trades Workers	5,781	1,721
Upholsterers	326	3,177
Cabinetmakers	512	21,935
Wood Machinists and Other Wood Trades Workers	904	5,392
Boat Builders and Shipwrights	76	4,898
Chemical, Gas, Petroleum and Power Generation Plant Operators	170	7,871
Gallery, Library and Museum Technicians	5,871	889
Jewellers	1,248	3,060
Performing Arts Technicians	1,938	7,402
Signwriters	827	4,830
Other Miscellaneous Technicians and Trades Workers	4,939	7,874

Source: Census 2006, produced using TableBuilder Pro.

Population: Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Table 3.4 Income distribution: tradespersons

Weekly income	Percentages			Cumulative percentages		
	Female	Male	Total	Female	Male	Total
\$1-\$149	1	0	1	1	0	1
\$150-\$249	5	2	2	6	2	3
\$250-\$399	12	7	8	18	9	11
\$400-\$599	30	16	18	48	25	29
\$600-\$799	25	21	21	73	46	50
\$800-\$999	13	19	18	86	65	68
\$1,000-\$1,299	8	18	17	94	83	85
\$1,300-\$1,599	3	9	8	97	92	93
\$1,600-\$1,999	1	5	4	98	97	97
\$2,000 or more	1	3	3	99	100	100

Source: Census 2006, produced using TableBuilder Pro.

Population: Restricted to the full-time workforce. Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Population counts: Male 897,794; Female 101,711; Total 999,505.

Table 3.5 Income distribution: tradespersons with VET qualifications

Weekly income	Percentages			Cumulative percentages		
	Female	Male	Total	Female	Male	Total
\$1-\$149	1	0	0	1	0	0
\$150-\$249	3	1	1	4	1	1
\$250-\$399	12	3	3	16	4	4
\$400-\$599	37	13	14	53	17	18
\$600-\$799	28	22	22	81	39	40
\$800-\$999	10	21	21	91	60	61
\$1,000-\$1,299	5	21	20	96	81	81
\$1,300-\$1,599	2	10	10	98	91	91
\$1,600-\$1,999	1	6	5	99	97	96
\$2,000 or more	0	4	4	99	101	100

Source: Census 2006, produced using TableBuilder Pro.

Population: Restricted to the full-time workforce. Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

VET qualifications defined as highest post-school qualification at level Certificate III or IV or Diploma, and in the fields outlined in the footnote on page 6.

Population counts: Male 482,000; Female 25,442; Total 507,442.

Table 3.6 Income distribution: tradespersons with exclusions

Weekly income	Percentages			Cumulative percentages		
	Female	Male	Total	Female	Male	Total
\$1-\$149	1	0	0	1	0	0
\$150-\$249	2	2	2	3	2	2
\$250-\$399	7	7	7	10	9	9
\$400-\$599	26	16	17	36	25	26
\$600-\$799	28	21	21	64	46	47
\$800-\$999	17	19	19	81	65	66
\$1,000-\$1,299	11	18	18	92	83	84
\$1,300-\$1,599	4	9	8	96	92	92
\$1,600-\$1,999	2	5	4	98	97	96
\$2,000 or more	1	3	3	99	100	99

Source: Census 2006, produced using TableBuilder Pro.

Population: Restricted to the full-time workforce. Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Exclusions are persons working as hairdressers and cooks. Population counts: Male 881,144; Female 70,658; Total 951,802. .

Table 3.7 Income distribution: all employed persons

Weekly income	Percentages			Cumulative percentages		
	Female	Male	Total	Female	Male	Total
\$1-\$149	1	1	1	1	1	1
\$150-\$249	2	1	1	3	2	2
\$250-\$399	5	4	4	8	6	6
\$400-\$599	20	14	16	28	20	22
\$600-\$799	23	18	20	51	38	42
\$800-\$999	17	16	17	68	54	59
\$1,000-\$1,299	16	18	17	84	72	76
\$1,300-\$1,599	8	11	10	92	83	86
\$1,600-\$1,999	4	7	6	96	90	92
\$2,000 or more	4	10	8	100	100	100

Source: Census 2006, produced using TableBuilder Pro.

Population: All employed persons working full-time. Population counts: Male 3,668,281; Female 2,020,856; Total 5,689,137. .

Table 3.8 Age distribution: tradespersons

Age group	Counts			Percentages		
	Female	Male	Total	Female	Male	Total
15-19 years	14,278	80,658	94,936	7.5	7.3	7.4
20-24 years	27,052	143,887	170,939	14.2	13.1	13.3
25-29 years	23,064	128,515	151,579	12.1	11.7	11.8
30-34 years	22,660	134,193	156,853	11.9	12.2	12.2
35-39 years	22,844	132,914	155,758	12.0	12.1	12.1
40-44 years	23,176	131,483	154,659	12.2	12.0	12.0
45-49 years	21,854	122,290	144,144	11.5	11.1	11.2
50-54 years	17,593	100,717	118,310	9.2	9.2	9.2
55-59 years	12,701	79,428	92,129	6.7	7.2	7.2
60-64 years	5,454	43,452	48,906	2.9	4.0	3.8
Total	190,676	1,097,537	1,288,213	100.0	100.0	100.0

Source: Census 2006, produced using TableBuilder Pro.

Population: Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Table 3.9 Age distribution for full-timers: tradespersons

Age group	Counts			Percentages		
	Female	Male	Total	Female	Male	Total
15-19 years	9,394	64,828	74,222	9.0	7.1	7.3
20-24 years	18,609	121,025	139,634	17.9	13.3	13.8
25-29 years	14,606	109,448	124,054	14.1	12.0	12.2
30-34 years	11,503	113,918	125,421	11.1	12.5	12.4
35-39 years	10,362	112,075	122,437	10.0	12.3	12.1
40-44 years	11,093	110,292	121,385	10.7	12.1	12.0
45-49 years	11,182	102,023	113,205	10.8	11.2	11.2
50-54 years	9,190	83,226	92,416	8.8	9.1	9.1
55-59 years	5,894	62,686	68,580	5.7	6.9	6.8
60-64 years	2,087	31,176	33,263	2.0	3.4	3.3
Total	103,920	910,697	1,014,617	100.0	100.0	100.0

Source: Census 2006, produced using TableBuilder Pro.

Population: Restricted to the full-time workforce. Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Table 3.10 Age distribution for part-timers: tradespersons

Age group	Counts			Percentages		
	Female	Male	Total	Female	Male	Total
15-19 years	3,908	10,539	14,447	5.2	8.6	7.3
20-24 years	6,754	13,948	20,702	9.0	11.4	10.5
25-29 years	7,079	11,609	18,688	9.4	9.5	9.5
30-34 years	9,596	12,560	22,156	12.8	10.3	11.2
35-39 years	11,090	13,402	24,492	14.7	11.0	12.4
40-44 years	10,935	14,038	24,973	14.5	11.5	12.6
45-49 years	9,456	13,533	22,989	12.6	11.1	11.6
50-54 years	7,408	11,745	19,153	9.8	9.6	9.7
55-59 years	6,006	11,687	17,693	8.0	9.6	9.0
60-64 years	2,993	9,265	12,258	4.0	7.6	6.2
Total	75,225	122,326	197,551	100.0	100.0	100.0

Source: Census 2006, produced using TableBuilder Pro.

Population: Restricted to the part-time workforce. Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Table 3.11 Proportion of PT and FT within each age group : tradespersons

Age group	Female			Male		
	Part-time	Full-time	Total	Part-time	Full-time	Total
15-19 years	29.4	70.6	100.0	14.0	86.0	100.0
20-24 years	26.6	73.4	100.0	10.3	89.7	100.0
25-29 years	32.6	67.4	100.0	9.6	90.4	100.0
30-34 years	45.5	54.5	100.0	9.9	90.1	100.0
35-39 years	51.7	48.3	100.0	10.7	89.3	100.0
40-44 years	49.6	50.4	100.0	11.3	88.7	100.0
45-49 years	45.8	54.2	100.0	11.7	88.3	100.0
50-54 years	44.6	55.4	100.0	12.4	87.6	100.0
55-59 years	50.5	49.5	100.0	15.7	84.3	100.0
60-64 years	58.9	41.1	100.0	22.9	77.1	100.0
Total	42.0	58.0	100.0	11.8	88.2	100.0

Source: Census 2006, produced using TableBuilder Pro.

Population: Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Table 3.12 Regional distribution: tradespersons New South Wales

Region	Counts			Percentages		
	Female	Male	Total	Female	Male	Total
Sydney	35,493	206,225	241,718	61.0	61.0	61.0
Hunter	5,738	36,462	42,200	9.9	10.8	10.7
Illawarra	3,676	23,081	26,757	6.3	6.8	6.8
Richmond-Tweed	1,920	10,917	12,837	3.3	3.2	3.2
Mid-North Coast	2,320	13,093	15,413	4.0	3.9	3.9
Northern - NSW	1,601	7,859	9,460	2.8	2.3	2.4
North Western	984	5,381	6,365	1.7	1.6	1.6
Central West - NSW	1,677	9,023	10,700	2.9	2.7	2.7
South Eastern - NSW	1,975	10,776	12,751	3.4	3.2	3.2
Murrumbidgee	1,467	8,202	9,669	2.5	2.4	2.4
Murray	1,159	6,045	7,204	2.0	1.8	1.8
Far West	179	980	1,159	0.3	0.3	0.3
Total	58,189	338,044	396,233	100.0	100.0	100.0

Source: Census 2006, produced using TableBuilder Pro.

Population: New South Wales only. Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Table 3.13 Regional distribution: tradespersons Victoria

Region	Counts			Percentages		
	Female	Male	Total	Female	Male	Total
Melbourne	33,925	194,786	228,711	71.1	71.9	71.7
Barwon	2,825	15,997	18,822	5.9	5.9	5.9
Western District	1,062	5,386	6,448	2.2	2.0	2.0
Central Highlands	1,433	8,168	9,601	3.0	3.0	3.0
Wimmera	487	2,187	2,674	1.0	0.8	0.8
Mallee	820	4,119	4,939	1.7	1.5	1.5
Loddon	1,713	9,523	11,236	3.6	3.5	3.5
Goulburn	2,028	10,893	12,921	4.2	4.0	4.1
Ovens-Murray	1,058	5,665	6,723	2.2	2.1	2.1
East Gippsland	802	4,332	5,134	1.7	1.6	1.6
Gippsland	1,568	10,026	11,594	3.3	3.7	3.6
Total	47,721	271,082	318,803	100.0	100.0	100.0

Source: Census 2006, produced using TableBuilder Pro.

Population: Victoria only Tradespersons defined as ANZSCO Major Group, Technicians and Tradesworkers.

Table 3.14 Regional distribution: employed persons New South Wales

Region	Counts			Percentages		
	Female	Male	Total	Female	Male	Total
Sydney	819,743	964,548	1,784,291	65.7	65.6	65.6
Hunter	105,418	125,564	230,982	8.4	8.5	8.5
Illawarra	68,226	81,295	149,521	5.5	5.5	5.5
Richmond-Tweed	38,043	42,639	80,682	3.0	2.9	3.0
Mid-North Coast	45,412	50,298	95,710	3.6	3.4	3.5
Northern - NSW	30,811	36,962	67,773	2.5	2.5	2.5
North Western	19,886	23,727	43,613	1.6	1.6	1.6
Central West - NSW	30,859	37,527	68,386	2.5	2.6	2.5
South Eastern - NSW	37,844	43,886	81,730	3.0	3.0	3.0
Murrumbidgee	27,857	34,238	62,095	2.2	2.3	2.3
Murray	21,129	25,823	46,952	1.7	1.8	1.7
Far West	3,405	4,026	7,431	0.3	0.3	0.3
Total	1,248,633	1,470,533	2,719,166	100.0	100.0	100.0

Source: Census 2006, produced using TableBuilder Pro.

Population: All employed persons in New South Wales.