

sydney.edu.au/business

The University of Sydney Business School

ISBN: 978-1-74210-454-6



THE UNIVERSITY OF
SYDNEY
Business School

Dr Sarah Oxenbridge,
Professor Rae Cooper and
Professor Marian Baird

April 2019

'One of the boys'?

The work and career experiences
of Australian women working in
automotive trades occupations





Contact for further information:

The Women, Work & Leadership Research Group

Dr Sarah Oxenbridge

sarah.oxenbridge@sydney.edu.au

+61 2 8627 4460

The University of Sydney Business School

sydney.edu.au/business/research/wwlrgr

Acknowledgements:

The research team would like to thank the following individuals and organisations for their support and assistance during the study. We are grateful to Women in Automotive (special interest group of the Victorian Automobile Chamber of Commerce); Pistons and Pearls (special interest group of the Institute of Automotive Mechanical Engineers); Galmatic; Women in Mining WA; Supporting and Linking Tradeswomen; The LadyTradies Australia; Peter Gostelow, formerly of NSW TAFE; Andrew David of TAFE NSW; Male Champions of Change; the Australian Manufacturing Workers Union; WesTrac; Komatsu Australia; Women of Australian Motorsport; Tradeswomen Australia; East Coast Apprenticeships; Daimler Truck and Bus Australia Pacific; Toyota Australia; Driveco; Natalie Galea of UNSW; Raman Badekar of Cummins South Pacific; Radmila Desic; Automotive Training Board NSW; and WPC Group Apprenticeships and Traineeships. Thanks are due to a number of industry stakeholders who participated in key informant interviews and helped us develop data coding categories. We would also like to thank the women working in automotive trades who gave of their time to participate in the survey and research interviews, as well as Glenn Howell for design and layout of this report and Tanya Bretherton for editing this report. We acknowledge the University of Sydney Business School for assistance in the funding of this research.

‘One of the boys?’

The work and career experiences of Australian women working in automotive trades occupations

Dr Sarah Oxenbridge, Professor Rae Cooper and Professor Marian Baird

Contents

Executive Summary	1
Key quantitative data findings	1
Key qualitative themes	1
Background and methodology	4
Survey findings	5
Women in automotive occupations: how and where do they work?	7
National data on automotive occupations	8
What women think about working in automotive occupations	9
Interview and survey findings: women’s workplace experiences	16
Why work in automotive trades: what do women say?	16
Seeking and gaining apprenticeships	17
Career pathways for qualified tradeswomen	18
An undesirable job?	20
Workplace culture and women’s treatment	21
Perceptions of women in automotive work	23
Perception of women, by men	23
Perceptions of women, by women	24
The impact of gendered perceptions	24
Changing workplace culture	26
The management role in changing workplace culture	26
Getting more women into automotive trades	29
Conclusions	36
Author biographies	38

Executive Summary

This report forms part of a larger study of women working in three highly male-dominated sectors and occupations: investment management, automotive trades, and pilots. In Australia, women comprise 10-14 per cent of employees in investment management occupations, 2.5 per cent of automotive tradespeople, and 6 per cent of commercial pilots.

In this report we profile the work and career experiences of women in automotive trades occupations and automotive industry occupations, using data collected between July and September 2018. We analysed data drawn from three sources: 12 face-to-face and telephone interviews with industry stakeholders; an online survey of 119 female employees in automotive trades occupations; and 20 telephone interviews with female apprentices or qualified automotive tradeswomen.

Key quantitative data findings

Participants in this study were drawn from across Australia, representing a cross section of subsectors employing automotive occupations. In the pool of women participants for this study, younger workers were slightly over-represented with 68 per cent of all respondents aged between 16 and 34 years old, and 35 per cent being apprentices. Consistent with the job profile of the automotive field, mechanics were strongly represented, with more than half of all respondents (57 per cent) employed under this job title. Using a range of attitudinal measures, the survey data provides some important context-setting information about female experiences in automotive trades. Key data findings are as follows:

- Only half of all respondents (50 per cent) described their workplaces as environments where 'men and women were treated equally'.
- Almost one in four women in automotive occupations (24 per cent) said they had directly experienced sexual harassment at work, and 43 per cent stated they had been subjected to some form of offensive language or offensive behaviour at work because of their gender.
- Less than one in five workers (19 per cent) can work part time if they wish and just over half (51 per cent) indicated that they believed part time work compromises career opportunities.
- A majority would recommend their employer to their female friends (70 per cent), are treated with respect in their workplace (78 per cent) or agree that they feel optimistic about their career in the sector (71 per cent).

Key qualitative themes

The qualitative data collected in interviews and survey open response questions deepens understanding of women's experiences in automotive occupations. Primary themes to emerge from this analysis are as follows:

- Women interviewees describe a deep level of commitment to their automotive work, despite having experienced significant barriers to entry and during their progression up the career pathway.
- Many women felt marginalised, both overtly and covertly, at their workplaces. This marginalising behaviour assumed many forms, including:
 - Sexist remarks and behaviour by customers, male colleagues, and male managers;
 - Being isolated and excluded by peers and/or managers;
 - Patterns of work allocation occurring in a manner which consistently favoured the skills development of male apprentices; and

- being overlooked for promotion despite the skill and experience profile of women being equal to their male counterparts.

The impact of negative workplace culture for women engaged in automotive work

Analysis of qualitative commentaries highlights that a range of factors serve to create workplace cultures that are either hostile or hospitable to female labour in automotive occupations. Hostile workplace cultures create skill development challenges for women seeking to get career traction in the sector. Analysis of qualitative commentaries revealed the following:

- Many women described having to work harder than men in the hope that managers and peers might look beyond their gender, in their assessment of their work.
- The overwhelming majority of women interviewed for this study had experienced significant career stasis during the course of their working life, and the workplace experiences outlined above had been key drivers in this process.
- Women are less likely to be given exposure to work units or projects known to build and strengthen skill proficiency.
- Many women described having to leave jobs they felt were no longer safe nor tenable.

Responses to negative workplace culture: what works?

The study found that women were more likely to get apprenticeships in workplaces where active gender diversity policies were present, and where women were known to the employers (through informal networks and/or work experience placements).

Women's trades networking groups were seen by study participants as critical to improving women's experience. These organisations played a key role in mentoring women in trades, raising their visibility in the community, easing the isolation of women working in these occupations, providing support and enabling platforms for airing problems and sharing experiences.

A sizeable minority of women in the study expressed opposition to gender diversity quotas in mining in particular. There was a perception among some of these women that quotas are leading to the recruitment of women on the basis of their gender alone, rather than their capability or drive, and that this was leading to backlash from men towards women in the study on this basis.

Initiatives to bolster the representation of women in trades at an early age were considered more favourably by a greater number of women. Many advocated a need for initiatives that demonstrate to boys and girls from the youngest age that it is normal for women to work as tradeswomen and provide young women at high school with information on trades careers and the option to do trades work experience.

While only a minority of women in the study had dependent children, both they and women without children highlighted, as a problem for women in their trades, the difficulties faced juggling family and work commitments with long hours and a lack of access to both flexible work arrangements and paid parental leave, which led to women leaving the trade. However, the study also found many examples of ways in which employers facilitated access to flexible arrangements for women with care responsibilities.

Strategies to improve women's participation and experience in automotive trades might include societal level, federal and state government initiatives, including: the funding of initiatives to increase opportunities for women to enter trades (such as subsidies for employers who take on female trades apprentices); and publicity campaigns to raise the visibility of female tradeswomen to give aspirant tradeswomen role models to aspire to. Consideration might also

be given to industry-wide initiatives aimed at raising the visibility of women in trades by allocating ongoing government funding to experiential 'women in trades' programs, which provide women with early exposure to technical skills, and funding Group Training Organisations (GTOs) for the placement and support of women in automotive trades apprenticeships.

At the level of the organisation or workplace the study found positive examples of initiatives to recruit groups of female apprentices to both increase gender representation quickly and provide women with support networks, and boost numbers of women in senior positions. There was also a strongly felt need for strong messaging from leaders that women are accepted and supported in their organisation.

The lack of women in senior management positions was highlighted as a further problem for women working in automotive trades, and study participants advocated a need for more women at these levels to act as role models, to give women something to strive for, advocate for women at lower levels, to provide daily support, and to promote women.

Women workers in automotive roles need managers who:

- Fairly assess the capability of workers and allocate work accordingly.
- Recognise that women workers can complete work to a high standard.
- Acknowledge the obstacles women face in the sector.
- Are willing to offer flexibility so women can juggle work and family.
- Communicate well, show empathy and provide a level of pastoral care towards employees.
- Minimize and address sexist behavior or ill-treatment by women's male co-workers.
- Support and advocate for the career development for women.

There was some evidence of the nature and impact of gender diversity programs in a minority of mining and Original Equipment Manufacturer (OEM) companies and dealerships. Women in these organisations described mixed experiences: some felt that their employers were paying lip service to gender diversity while others were the beneficiaries of committed, wide-ranging and effective gender diversity programs. There was some evidence of women who had experienced ill-treatment throughout their careers now targeting jobs in OEM, mining and dealership workplaces with reputations as positive working environments for women, or landing in these organisations as a result of these employers' strategies of proactively recruiting women.

Background and methodology

The research questions guiding this study are:

- What is the lived experience of women working in male-dominated occupations and sectors?
- How do women's experiences coalesce, or vary, across occupations and sectors?
- What can be done to improve women's representation and working experience in male-dominated occupations and sectors?

A multi-methodology data collection strategy was used, comprising: 12 key informant interviews with automotive industry stakeholders; a survey of women working in automotive trades (n=119); and 20 qualitative interviews with women working in automotive trades occupations (15 of whom were employees and survey respondents, plus 5 who were screened out of the survey and owned workshops or other automotive businesses). Interviewees were chosen to represent a mix of age, life stage, career experiences, and a range of automotive occupations and industry subsectors.

The survey and the interviews collected data on women's current work experience. The interviews also provided insights into women's career decision-making and their pathways into and within automotive trades and industries.

The online survey link was distributed to women members between July and September 2018 by the automotive industry, training organisations, and women's trades organisations listed in the Acknowledgements. Qualified and apprentice automotive tradeswomen were invited to complete the survey, including those who had moved into non-trades "off the tools" roles but had remained in automotive-related industries. The responses of women who were not trades qualified but who worked in the automotive sector were included in the final dataset to shed light on workplace cultures and environments experienced by women in the automotive sector more broadly. All interviews were conducted by telephone with the exception of one, which was conducted by email.

Survey findings

Table 1: Demographic profile of survey respondents

Demographic characteristic	Categories	% respondents
Age	16-24 years	34
	25-34 years	34
	35-44 years	21
	45-54 years	10
	55-64 years	2
Aboriginal/Torres Strait Islander origin	Yes	4
	No	93
	Don't know	3
Language other than English spoken at home	Yes	13
	No	87
Work-impairing health problem/disability	Yes	4
	No	96
	Prefer not to say	1
Dependent children	Yes	26
	No	74
Age of dependent children ¹	0-4 years	13
	5-16 years	14
	17 years and older	7
Who provides majority of unpaid care of child/ren ²	I do	55
	Partner/other person	7
	Share with partner/other person	36
Provide care to others (non-children)	Yes	9
	No	89
	Don't know	2
Trade union member	Yes	8
	No	87
	Don't know	6
Annual income (before tax)	\$1 - \$40,000	22 (+23)
	\$40,001 - \$60,000	24 (+25)
	\$60,001 - \$100,000	22 (+23)
	\$100,001 - \$150,000	19 (+20)
	\$150,001 - \$250,000	8 (+8)
	Over \$250,000	1 (+1)
	Prefer not to say	4
Earnings contribution to household income	Main source of income	51
	Significant source	31
	Small source	17
	Don't know/n/a	2

Base: 113-119 respondents. Cells may not total to 100% due to rounding.

¹ Base for calculation is all survey respondents (n=119). Multiple response answer (some respondents had multiple children), so responses do not sum to 100.

² Calculated from base of n=31 respondents who have children and who selected one of the three responses listed in the table.

+ Calculated from base of 109 respondents who selected an income category: excluding non-respondents and those responding 'prefer not to say'.

The age profile of respondents was weighted towards younger age categories, with 68 per cent aged between 16 and 34 years old. This may be partially explained by the 35 per cent of respondents who are apprentices (shown in Table 2), 90 per cent of whom were aged between 16 and 34 years old. Only 26 per cent of survey respondents had dependent children and this too is attributable to the younger age profile of the respondent pool. Of these, over half (55 per cent) provided the majority of care for children and 36 per cent shared care.

Most of the women in the survey were the main or significant household earner. Just under half of all respondents (48 per cent) earned \$60,000 or less per year, again reflecting the high number of apprentices in the sample, and the majority (71 per cent) earned under \$100,000 per year. Most of those women earning over \$100,000 worked in the mining sector and worked long weekly hours.

Table 2: Job and career characteristics of survey respondents

Job characteristics	Categories	% respondents
Category of employment	Full-time employee	55
	Full-time apprentice	35
	Part-time employee	6
	Casual employee	3
	On leave (returning)	1
Weekly paid work hours	1-34 hours	10
	35-40 hours	34
	41-49 hours	29
	50-59 hours	12
	60+ hours	15
	Don't know	1
Size of employing organisation (number of employees)	1-19	22
	20-199	27
	200-999	13
	1,000-9,999	19
	10,000+	10
	Don't know	10
Workplace location	State capital city	40
	Regional town/city	26
	Rural/remote WA	20
	Rural/remote other states	15
Years worked in automotive trades/sector	Less than 1 year	11
	1-2 years	18
	3-5 years	24
	6-10 years	19
	11-20 years	20
	21-30 years	3
	30+ years	4
Work with other women in same occupation ³	Yes	28
	No	72
Level of seniority compared with others in organisation/workgroup ⁴	Junior	24
	Middle ranking	53
	Very senior	14
	Most senior	3
	Don't know	5

Base: 119 respondents. Cells may not total to 100% due to rounding.

³ Question wording: Do you regularly work with or alongside (other) women in in the same job or occupation as you?

⁴ Question wording: Please indicate your level of seniority compared with others in your organisation or workgroup.

Most respondents were full-time employees or apprentices. A minority worked part-time hours of up to 34 hours (10 per cent) or long hours of 50 or more hours (27 per cent). Possibly reflecting standard apprenticeship working arrangements, the largest proportion (34 per cent) worked 35-40 hours per week. Almost half of all respondents (49 per cent) worked in smaller to medium-sized enterprises of 1-199 employees spanning workplace sites such as workshops, dealerships and servicing and repair organisations. Two thirds (66 per cent) worked in capital cities or regional towns, while the remainder worked in rural and remote areas (primarily mining sites or original equipment manufacturer (OEM) workplaces).

A significant proportion of all respondents were apprentices, so unsurprisingly just over half indicated they had tenure of up five years (53 per cent). Those with 6 years or more experience in the automotive trades or industry comprised just under half (47 per cent) of all respondents.

Women in automotive occupations: how and where do they work?

The survey asked women respondents about their occupational role, and about the type and location of their work (Tables 3 and 4).

Mechanics (light and heavy vehicles, diesel) and fitters (mechanical, fixed and mobile plant) comprised almost half of all respondents (Table 3). However, 32 of the 119 respondents had moved 'off the tools'. These women worked in roles spanning: sales (whole car and parts); teaching TAFE (Technical and Further Education institutions); management/advisory roles in service/workshop floors; fleet maintenance control; administration (general office, warranty); senior corporate roles in dealerships; or management in organisations trading in automotive parts or in automotive-related businesses (eg insurance, tyre manufacture, and paint/panel equipment supply). All respondents working in mining supervisory and 'other' roles were also qualified automotive tradeswomen who had moved into new roles.

Table 4 profiles the industry subsector classifications in which survey respondents' jobs were located. The largest proportions of respondents were employed by mining or dealership companies (almost two-thirds in total), followed by automotive workshops or servicing and repair companies. A minority worked for OEM companies, or other companies providing parts to the mining industry.

Table 3: Occupation of survey respondents

Occupational category	Number of respondents
Mechanic/fitter	57
Automotive roles 'off the tools'	17
Parts interpreter/sales	13
Automotive electrician	9
Mining supervisory	9
Mechanical technician/service advisor	6
Automotive paint and panel beating	3
Boilermaker	2
Other	3
Total participants	119

Base: 119 respondents.

Table 4: Industry subsector of survey respondents

Industry subsector	Number of respondents
Mining/resources (extraction, processing, transporting)	33
Dealership (car, truck)	30
Automotive workshop (car, truck)	20
Original equipment manufacturer (OEM)	8
Automotive miscellaneous	6
Sales/servicing of parts/equipment to mining industry	6
Servicing and repair (car, truck)	5
Servicing and repair (agricultural machinery)	3
Public sector organisation	3
Transport	3
Other	2
Total participants	119

Base: 119 respondents.

National data on automotive occupations

It is important to situate the occupational profile of the women survey respondents in the context of broader occupational patterns for women across the automotive sector. Occupational data at the national level, drawn from the 2016 Census, helps to do this: it shows that women comprise 2.5 per cent of employees across all automotive trades occupations.

Table 5: Women as proportion of all employees in automotive trades occupations

Occupational category	Male	Female	Persons	% Female
Automotive Electrician	4,450	75	4,521	1.7
Motor mechanic (general)	54,927	783	55,711	1.4
Diesel motor mechanic	6,779	55	6,830	0.8
Motorcycle mechanic	1,415	16	1,431	1.1
Small engine mechanic	1,106	20	1,128	1.8
Panel beater	7,930	64	7,996	0.8
Vehicle painter	7,524	190	7,710	2.5
Fitter (general)	13,163	79	13,242	0.6
Metal fabricator	33,689	213	33,899	0.6
Fitter and turner	8,790	68	8,863	0.8
Motor Vehicle Parts Interpreter	12,509	2,281	14,783	15
Total	152,282	3,844	156,114	2.5

Source: 2016 Census of Population and Housing, Customised Data Report. Employees only (excludes owner managers and contributing family workers). Reference Period: 9 August 2016. Count of Employed Persons aged 15 years and over by Selected Occupations by Sex by Status in Employment

What women think about working in automotive occupations

To understand the perceptions of women employed in the automotive sector, the survey asked respondents to rate their level of agreement or disagreement across a range of items, as shown in Table 6.

Table 6: Survey responses to attitudinal statements on current workplace experience

For each of the statements below, please think about your main job and workplace. Do you agree or disagree that...	Agree	Neither agree nor disagree	Disagree	Don't know/ Not applicable
I have the flexibility I need to balance work and non-work commitments	58	22	19	1
I can work part-time hours in my current job if I wish to	19	12	54	15
Working part-time or flexibly compromises career opportunities in my workplace	51	19	21	9
Women and men are treated equally here	50	23	28	
My employer is genuinely committed to recruiting and promoting women in my occupation	60	21	15	4
I would recommend my employer to my female friends	70	19	11	1
I am treated with respect in my workplace	78	13	9	
I feel optimistic about my career in this sector	71	14	13	2
The workplace culture here makes it difficult for women workers	26	22	48	4
I feel isolated at work	17	20	59	3
I have felt excluded from important workplace/ business events because of my gender	24	17	57	2
I have experienced sexual harassment at this workplace	24	4	68	3
I have experienced offensive remarks or behaviours relating to my gender at this workplace	43	10	45	2

Base: 119 respondents. Rows may not total to 100% due to rounding. 'Agree' is the total of Strongly Agree and Agree responses; 'Disagree' is the total of Strongly Disagree and Disagree responses.

Responses to attitudinal survey questions indicate that just over half of women (58 per cent) have sufficient flexibility, although less than in five (19 per cent) agreed that they can work part-time if they wish to and more than half (51 per cent) agreed that part-time (flexible) working arrangements may come at the expense of career opportunities in their workplace.

Half (50 per cent) of women agreed that women and men were treated equally in their workplace and over one-quarter (28 per cent) disagreed with the statement. Around three-fifths (60 per cent) felt that their employer was genuinely committed to recruiting and promoting women in their occupation.

A majority agreed that they would recommend their employer to their female friends (70 per cent), were treated with respect in their workplace (78 per cent), and felt optimistic about their career in the automotive sector (71 per cent). It should be noted that women in this sample are those who have stayed in the industry, and it may be that the workplace experiences of women who have left the sector were less positive.

A minority of respondents indicated less positive experiences: 24 per cent of respondents felt excluded from important workplace/business events at their workplace because of their gender or had experienced sexual harassment at their current workplace; and over two-fifths (43 per cent) have experienced offensive remarks and behaviours relating to their gender at their current workplace.

Presence and impact of structural supports

The following discussion looks more closely at the structural supports available to women working in the automotive trades by considering three different dimensions of this experience: attitude; access; and impact. The survey results capture: the attitude of women towards equality measures; perceptions regarding their access to these measures; and their attitude on their impact on their current job role. Table 7 profiles respondents' ranking of range of measures by their level of importance to them in their current job role: the presence of a supportive manager; the provision of career advancing opportunities; mentoring; visibility of women in senior roles; and support networks.

Table 7: Survey responses on importance of workplace supports

How important do you think each of the following are to you succeeding in your work?					
%	Supportive manager/s	Career-advancing job assignments/development opportunities	Mentoring or sponsorship	Female role models in senior positions	Support networks for women workers
Very important	89	75	54	45	46
Fairly important	9	22	36	37	36
Total important	98	97	90	82	82
Not very important	2	3	5	11	14
Not at all important	-	-	3	3	3
Don't know	1	1	3	3	3

Base: 119 respondents. Columns may not total to 100% due to rounding.

Participants were asked to consider the impact of these factors on their success in their work. Almost all (98 per cent of respondents) rated supportive managers as important (89 per cent very important; 9 per cent fairly important). A similar percentage (97 per cent) felt that access to job assignments or development opportunities that will advance their career was very important (74 per cent) or fairly important (22 per cent). Mentoring or sponsorship was also viewed as important by 90 per cent of women (54 per cent very important; 36 per cent fairly important). Over four-fifths of women (82 per cent) deemed female role models in senior positions important (44 per cent very important; 38 per cent fairly important) and felt that support networks for women workers were very important (45 per cent) or fairly important (36 per cent).

Almost three-quarters of respondents (73 per cent) had supportive managers, 38 per cent had access to support networks for women workers, and 36 per cent were in workplaces with female role models in senior positions.

However, for many, the appropriate ‘opportunity structures’ were absent. While almost three-fifths (57 per cent) of women had access to career-advancing job assignments or development opportunities, over one-quarter (28 per cent) did not, with 13 per cent unsure. Likewise, only half (50 per cent) had access to mentoring or sponsorship, one-third (33 per cent) did not, and another 14 per cent did not know whether they had access to them or not.

Over two-thirds (71 per cent) of women felt that having a spouse or partner who shares responsibility for childcare and household domestic work was important to them succeeding at work (51 per cent very important; 20 per cent fairly important). Reflecting the relatively young age profile of survey respondents, less than half (45 per cent) had a spouse or partner who shared responsibility. It is important to note that the survey instrument design did not permit a distinction to be drawn between women who did not have a partner willing to participate in the sharing of unpaid work, or if they did not have a partner at all.

Table 8: Survey responses on access to workplace supports

Thinking again about these factors in your current job/workplace, do you have...					
%	Supportive manager/s	Access to career-advancing job assignments or development opportunities	Access to mentoring or sponsorship	Access to support networks for women workers	Female role models in senior positions
Yes	73	57	50	38	36
No	20	28	33	42	56
Don't know	7	13	14	16	6
Not applicable	1	2	3	3	3

Base: 119 respondents. Columns may not total to 100% due to rounding.

Access to home support

In seeking to understand the working life for women in automotive trade occupations, it is also important to garner a broader picture of home and family life. While workplace structures are important in addressing issue of gender inequality, so too are household structures. A majority of survey respondents (71 per cent) believed that having a spouse or partner who shared care and household responsibilities was important to their success at work (51 per cent very important; 20 per cent fairly important). Of the 31 women in the study with dependent children, most (n=22) rated support from partners as very important. Less than half of the women in the study (45 per cent) currently had shared care arrangements (including 25 of the 31 women in the study with children).

Table 9: Survey responses on importance of/access to home support

How important do you think each of the following are to you succeeding in your work		Thinking again about these factors in your current job/workplace, do you have	
A spouse/partner who shares responsibility with me for childcare and household domestic work		A spouse/partner who shares responsibility with me for childcare and household domestic work	
	%		%
Very important	51	Yes	45
Fairly important	20	No	24
Not very important	9	Don't know	2
Not at all important	9	Not applicable	30
Don't know	11		

Base: n=117-118.

Attitudes to career and future intentions

Reflecting on career intention is an important part of understanding women's perceptions about the value of their job as an automotive worker, and their motivations to job change. The survey asked women about their career expectations over the next two years specifically.

Table 10: responses to question “In regards to your career, where do you expect to be in 24 months' time?”

%	In regards to your career, where do you expect to be in 24 months' time?
29	Working for the same employer, in the same role
27	Working for the same employer, but in a more senior role (a promotion)
14	Working for the same employer, but in a different role*
8	Working for another employer in the same industry, in a similar role
5	Working for another employer in the same industry, in a more senior role
4	Working for myself
4	Working in another industry or occupation
1	No longer working
3	Don't know
5	Other (please write in)

Base: 114 respondents.

* Includes 3 respondents who intended to complete their apprenticeships and continue working for their employer a qualified tradeswomen.

Overall, the majority of women surveyed showed a strong commitment to automotive trades work. Altogether 82 per cent of respondents expressed an intention to keep working in either the same organisation or the same industry. In terms of their future intentions, over two-thirds of women surveyed (69 per cent) expected that they would be working for the same employer in two years, while another 13 per cent expected to be working for another employer in the same industry.

Perceived problems

In three open-ended questions survey respondents were asked to provide their views on: the main problem for women in their occupation; the most important thing that should be done to improve women’s work and career experiences in their occupation; and any initiatives they had experienced or had knowledge of that had improved women workers’ participation and workplace experience. Respondents identified a diverse range of problems confronting women in automotive trades occupations. The greatest number, 40 participants, highlighted challenges relating to men’s attitudes and beliefs that women are not capable of doing automotive trades jobs. These respondents identified the lack of acceptance, and absence of equal treatment of women as the key problem for women in their occupation. These responses are itemised in more detail in Table 11.

Table 11: Ranked incidence of responses to question “What do you think is the main problem for women in your occupation?”

Number of responses	Response
40	Stereotyped, traditional beliefs that women are not equally capable (knowledgeable/ strong enough) of doing the job. Lack of acceptance or equal treatment of women
13	Mistreatment, sexual harassment, sexism by male co-workers
12	Male-dominated industry; not enough women
10	Poor treatment by customers
9	Women’s attitudes or behaviours
9	Balancing caring with work, lack of accommodation of working mothers’ needs
9	Women have insufficient physical strength; physically demanding job
8	Women have to prove themselves/work harder than men
7	Women not entering the automotive trades pipeline/not given apprenticeships
6	Quotas/“token” women
6	Lack of support and recognition at work
6	Women not considered for/given promotions (‘boys club’)
6	Working conditions are a deterrent to women entering trades
4	Women not given opportunities/critical tasks to build skills

Base: 109 respondents who provided answers. Multiple responses given.

Perceived solutions

When asked to suggest initiatives to improve women’s experience of working in automotive trades occupations, the vast majority of respondents (87 per cent) volunteered suggestions. The greatest number of respondents focused on the need for equal treatment of women by employers, including equal opportunities to gain apprenticeships and jobs. Around one in five respondents also highlighted a need for strategies to increase the amount of women in the sector, identifying a range of initiatives to promote, encourage and recruit women in trades. These responses are itemised in more detail in Table 12.

Table 12: Ranked incidence of responses to question “What do you think is the most important thing that should be done to improve women’s work and career experiences in your occupation?”

Number of responses	Response
23	Equal treatment/equality with men in the industry (“Give women a go”)
21	Get women into the pipeline/ increase women in trades (promote, encourage and recruit women into trades)
13	Increase numbers of female role models in management/senior roles
11	Managers/employers supporting and encouraging tradeswomen
11	Accommodate women’s care responsibilities
10	Give women career-advancing development opportunities
6	Educate male workers and managers/culture change
5	Amenities/equipment (eg lifting/hydraulics) for female use
5	Provide women with mentoring
5	Nothing – women need to develop a thick skin

Base: 103 respondents who provided answers. Multiple responses given.

Interview and survey findings: women's workplace experiences

Verbatim responses to the survey's open-ended questions were analysed along with 20 interviews conducted with women in the sector. A summary of the key findings to emerge from this analysis is provided below.

Why work in automotive trades: what do women say?

The findings of this study provide an opportunity for us to understand not just why women choose to work in an atypical job, but also why women select an occupational field that is currently facing some unique workload and skill development challenges. All interviewees described having loved cars, motorbikes, or engines since childhood, and reported knowing that they had wanted to work in trades, or specifically automotive trades, from an early age. Most talked about having always been fascinated by how things (particularly) engines worked, spending their childhood years pulling apart, breaking, fixing and reassembling things. The majority described how their interest in automotive trades started from a young age as a result of being around male family members who loved cars. Most recounted helping male family members (usually fathers or grandfathers), or boyfriends, male neighbours or godfathers, to fix car engines, restore cars, or build billy carts.

Daily exposure to trades-based industries also influenced many women in their formative years. Some women reported growing up in rural/remote areas where mining trades jobs were common. Others mentioned growing up repairing generators and other machines that were essential to daily life. Several felt that their choice of career had been influenced by growing up in households with parents or family members who were 'open minded', and who defied traditional gender roles themselves.

There was considerable consistency in interviewees' answers to questions about the most important reason they worked in automotive trades and the best thing about their job. Most stated that they loved and were passionate about their job because it was interesting and they enjoyed the challenge and variety of the work. Almost all described the satisfaction of taking an engine apart, diagnosing a problem, and knowing they could fix it.

I like fixing things I think, and I still remember my first engine rebuild.

I love going home knowing I have repaired a huge vehicle.

Some women respondents also noted that technical curiosity sustained their commitment to remain working in their jobs. Many described a love for learning new things every day, and a fascination for engines and cars. A large number noted that the hands-on nature of automotive work gave them practical skills they could use in everyday life including: transferable skills that increased their employability across a range of roles; skills to fix their own vehicles (or those of family and friends); and the ability to extrapolate from these skills to fix other household goods.

Earnings as a factor in career decision-making

Most interviewees did not identify earnings as part of their motivation to enter the automotive trades (although a few mentioned that mining's reputation for higher earnings piqued their interest). As one interviewee described it: "You can't go into it for the money, you've just got to do it because it's your passion". While earnings may not have always featured in decision-making around job choice, the cost of undertaking automotive training did. Some women noted

that they had initially been motivated to undertake an apprenticeship because it made training affordable: it did not incur a HECS debt, and they could be paid to study.

Deterrents

Several interviewees described how, at high school level, people had attempted to talk them out of doing apprenticeships in automotive trades. Some women were told by male teachers, careers advisers and principals that they were too bright to do a trade apprenticeship and would be better off going to university. Others were told that they were not physically strong enough to undertake a trade job.

Seven interviewees had completed mature age apprenticeships⁵ which they had started aged between 21 and 35 years old. Prior to undertaking an automotive trade, these women had followed a diverse range of career paths. Most had been 'talked out' of pursuing a trades career at an early age. For these mature-age apprentices at least, they were returning to a career ambition that they felt had been repressed, but had never gone away.

Seeking and gaining apprenticeships

The findings of this study permit qualitative analysis of the pathways into automotive occupations for women. For the most part, these pathways were highly diverse and far from linear. While many interviewees had started their automotive trade journey in high school (with a pre-apprenticeship), many had also tried work experience in several other fields before resting on automotive work. Six interviewees were apprentices. Seven interviewees had completed their apprenticeships, but only relatively recently. All remaining interviewees were qualified tradeswomen with longer tenure in the industry (spanning 10 to 30+ years' experience).

Difficulties gaining apprenticeships

Many of the interviewees in this study stated they had faced barriers to obtaining an apprenticeship. Having to submit anywhere in the order of 80 to 150 applications, over a 6-8 month search period, was reported as a common experience. While the barriers each woman faces may be different, it is noteworthy that many interviewees believed they had experienced challenges in landing an apprenticeship entirely because of their gender. Interviewees reported a wide range of comments from automotive employers about their gender including: "it's not a suitable trade for a girl"; "I am taking a big risk"; "when are you likely to get pregnant?"; "you wouldn't have the sufficient strength"; and "what would you do if your children got sick?". A survey respondent described how difficulties gaining an apprenticeship led many women to give up on the idea of pursuing a trades career:

I found it hard finding an employer to take on a woman apprentice at the beginning, which nearly put me off searching altogether.

It is worth noting that the women interviewees in this study who were older (21+) at the time of apprenticeship commencement faced even greater hurdles. For many employers, taking on an older apprentice already felt like a risk (because the hourly rate is higher), and employing a mature-age woman apprentice was perceived to be an even greater risk.

These barriers led to women taking diverse pathways into automotive apprenticeships including: word of mouth/personal contacts; networking; through Registered Training Organisations; or

⁵ In Australia, any person who is aged 21 years or older at the commencement of their Australian Apprenticeship is considered a mature aged apprentice, or adult apprentice.

Group Training Organisations.⁶ In some cases, women had even relocated to a remote labour market (for example, working as cleaners at mining sites) in order to bolster their chances of obtaining an automotive apprenticeship in their sector of choice. As one interviewee noted:

When I found out that I passed my medical, that I passed the interview... I cried in my car for about an hour and a half... There are times when I am in the middle of a job in the middle of the mine site working on a job on my own and I cry, because I'm so proud of myself that I made it here. I scrubbed toilets and I lost any form of pride that I had in the hopes of getting here.

Career pathways for qualified tradeswomen

An overarching finding of this study is that automotive apprenticeships for women do not produce direct, linear career pathways. Just as women reported varied pathways into the sector, diversity also characterised career experiences for women once they obtained a foothold in the sector. The survey included interviews with women who had subsequently left automotive occupations as well, and the reflections of these women will also be considered in the following discussions.

Some women automotive workers had stayed on the tools, but rarely did they stay in their original field of automotive work. Many women reported a career of 'hands-on' work, but having made horizontal career movements across a wide range of industry subsectors to sustain this. For others, their careers had followed more of a vertical trajectory (upward into senior management), but it was far from a straightforward path. Some had maintained a mix of on the tool tasks, but also management or ownership roles as well. Other vertical movements included transfers to: sales and service advisor roles; management roles in dealerships; fleet maintenance controllers; warranty administrators; technical support advisors; or TAFE teaching. Women reported a diverse range of reasons for these career movements including: a desire to do less physically strenuous work; wanting to move up the management hierarchy; or to accommodate family responsibilities. Others reported career shifts motivated by the desire to use their skills to attract better pay. Movements into mining roles (particularly management) were identified as a desirable career movement by many interviewees.

Intentions for further study were also flagged by several interviewees. This additional study could include university qualifications (to enhance their ability to attain a mining management role). Alternatively, the type of apprenticeship and the workplace in which it was completed also shaped future career options, with some configurations of trade qualification and experience being particularly desirable in career terms. A number of interviewees planned to complete a second automotive trade and become dual-trade qualified (most commonly mechanics, planning to complete automotive electrician qualifications).

A number of participants flagged, as a benefit of being trades-qualified, the variety of career paths open to them. As one interviewee notes:

Because I'm a heavy diesel fitter, I'm not restricted to just light vehicle machines, so I can go to marine, I can work on boats, and I can even go to aircraft and I can work on planes.

In contrast to this, some fields of automotive training offered more constrained career opportunities in the long term. Some light vehicle mechanics and panel beaters, for example, described experiences in which they had felt compelled to establish their own workshops because

⁶ Registered training organisations (RTOs) are providers and assessors of nationally recognised vocational educational training. Group Training Organisations (GTOs) employ apprentices and trainees and place them with host employers.

prior employers had made them redundant, gone into receivership, and/or withheld pay already earned. The four interviewees who owned workshops described many challenges including irregular cash flow and low revenue.

Once in the industry, and qualified, women reported a range of challenges in achieving traction in their career. When asked what might improve the work experience of women in their occupation, the greatest number of responses (23/103) focused on the need for acceptance, and equal treatment, as women. A prevailing theme was that women wanted male employers, managers and workmates to judge them on their skills and ability to do the job, rather than their gender:

If everyone was able to look at their colleague and see them as a hard worker, or a good negotiator or someone that is good at troubleshooting, instead of looking at them first and going "That's a woman, who also does this" – which I think is the problem still.

Unequal access to learning opportunities

Participants in this study were asked to comment on the quality and quantity of training experiences they received during the course of their apprenticeship. In the context of automotive training, this spans both on-the-job and hands-on work tasks (assigned by a direct report manager) and module-based learning tasks (assigned by an RTO – which could be a TAFE, an external provider, or the employing organisation if it also has status as an RTO). The discussion below summarises the key findings of the qualitative analysis of commentaries surrounding these issues:

- The formal training experiences women automotive apprentices have exposure to can vary greatly depending on the training provider.

While attending TAFE, some apprentices had encountered teachers who treated them equally, were supportive, answered all of their questions and gave them opportunities to learn. Others had encountered TAFE teachers who made it clear that women should not work in automotive trades.

- At the workplace, women reported feeling a sense of intimidation around the allocation of work tasks and some women believed that they were being held to a different standard than their male counterparts:

If you have two apprentices ... The boy makes a mistake and it's, "Oh, typical teenager, apprentice, a young guy, they're like that". The girl makes a mistake and it's, "See, that's why you shouldn't employ girls."

- While they attempted to assert themselves to gain exposure to new skills, they were wary of being seen to be overly assertive:

... It's like trying to make sure that you get as much exposure on something as everyone else, but not being too pushy, otherwise you're pushy. ... You're always on edge, it's like you're always walking on eggshells making sure that you're that perfect female apprentice.

- In other cases, women reported feeling uncertain about their capabilities, but were unsure how to address these issues:

Having no background experience in my field has been a struggle in comparison to the other male apprentices. It sometimes feels as if I am expected to know equivalent and/or sufficient amounts in order for me "to keep my job"- Manager.

- It is important to note that for those women with additional learning needs, there were many additional barriers to attaining automotive trade training. A neurodiverse woman (who was autistic, with Asperger’s syndrome) recounted her experience in the following way:

I learn differently and require different accommodations because I have not had the same exposure to the industry as the young male apprentices.

- Male managers can unevenly distribute work between male and female apprentices. The operational practices governing the distribution of work tasks varied across worksites and were found to compromise the ability of women to gain exposure to the tasks they need to complete their apprenticeship. It was the experience of many women in the study that male apprentices were typically given more complex work while female apprentices were assigned administrative tasks, with one interviewee noting that time and efficiency requirements intensified pressure on managers in the mining sector to make decisions quickly:

Those supervisors have to deal with massive crews, they’ve got their hands full, and they don’t have time to think about people’s personal progress. So that’s why ... favouritism comes into play.

An undesirable job?

Analysis of the qualitative commentaries provided by the participants of this study highlight that there were some inherently negative aspects to automotive work. These issues are summarized below to demonstrate the breadth of challenges that shape working life for those in automotive occupations, and to set the context for the discussion to follow. Automotive jobs typically have:

- Low pay;
- Day to day working environments which can be grueling (e.g. mining work can require living in isolated and remote locations);
- Low social status, relative to the risk and complexity of the job;
- Low margins for error: there are high expectations for those ‘on the tools’ to diagnose accurately at a very early point in the automotive repair assessment process;
- High levels of work intensification: there are a high volume of jobs assigned in one day, and quick turnaround is expected (common in dealerships and workshops);
- Intense rostering (long hours, night shifts);
- Dangers and risks (fatigue, body stressing injuries, physical safety);
- Physically demanding aspects to some roles (although it was noted that health and safety legislation requires workers to use tooling and lifting devices).

Workplace culture and women's treatment

Survey respondents and interviewees described a mix of positive and negative workplace experiences in jobs “on the tools”. Equal proportions of interviewees described having largely positive or predominantly negative experiences.

When asked to identify the main problem for women in their occupation, the greatest number of respondents to the question (40 of 109 respondents) highlighted stereotyped, traditional beliefs of men in workplaces that women are not able to do the job. They described how men in the industry believed that women cannot do the job because they are female, and that it was unacceptable for a woman to work in a male trade.

I encountered many (problems) as an apprentice when it came to working with men. I could be the best mechanic (regardless of gender) in the workplace and there would still be men who resented that a female was in the workplace. It's a culture piece around women wanting to do a male dominated task and it still being seen as unacceptable.

These attitudes were reflected in men's treatment of women in the trades. Women described how they were resented or not accepted by men, not taken seriously, and not treated equally or fairly because of their gender. Most research participants who offered commentary in the survey and interviews had experienced some degree of gender discrimination at work in the automotive field. A key finding of this study is that workplace cultures within and between organisations can vary greatly. The local workplace culture can be vastly different in the workshop compared to the service desk and between different teams and sites of the same organization, and women have to navigate complex interpersonal terrain in order to survive the industry.

Survey respondents and interviewees, particularly those who had worked in workshops and dealerships, provided vivid accounts of poor working environments, and in some cases they had endured these consecutively, throughout the course of their careers. While any broader statements must be made with caution, it is important to note that women themselves highlighted that light vehicle mechanic roles in dealerships presented women with some very unique pressures. Women described poor working conditions in dealerships which were related to lean operational business models, tight margins, unfair or ineffective people management processes and harmful workplace cultures.

When women were asked what they perceived to be the ‘main problem’ for them at work, many noted hostile workplace culture was a standout issue. Interviewees referred to the automotive-related industries as a “boys’ club” or an elite, closed group (a “purple circle”):

The draconian, sexist culture of males in management positions within the company and the purple circle that goes with it.

Lack of respect, whether toward the female themselves or just in general was a big one.

Some participants in this study described workplaces that can only be described as toxic for women workers. At these worksites, women experienced bullying and harassment for being female. Women argued that their skills were undervalued, their contributions often dismissed, and they frequently found themselves confined to very narrow areas of work (“administrative tasks”) because they were rarely offered opportunities to expand their skills.

Automotive is definitely the last male bastion of the trades ... it's still the sexist, misogynist, 'objectifying women' place to work.

The women in the study described a range of behaviours that amounted to ill-treatment by male workmates. They were subject to bullying, harassment and constant victimisation based on their gender. A number described being routinely singled out for criticism by supervisors and ostracised and isolated by male apprentices and tradesmen. Several had been the subject of rumours that their success in the job was due to having provided sexual favours to managers (leading to ostracism by other team members), or frequently had their sexuality questioned:

I had experiences of being dominated and bullied by management. Eventually the bullying became so detrimental to my mental health that I needed to look for employment elsewhere.

Women in the study attributed this ill-treatment by male colleagues to a range of factors. Some believed that the men they worked with simply did not know how to treat women, because they were not used to working with women. Others thought it was due to men not wanting women to be working there at all:

Male supervisors don't know how to treat women. The girls expect to be treated the same, but the supervisors are like, 'I should treat her differently, but, don't know how to treat her differently'. Then they try, and it doesn't work, and it just makes it worse, because then you're being singled out.

Many women commented that young men, in the early stages of apprenticeship, were particularly challenging at work:

The young tradies are still in their toxic masculinity phase and seem to feel threatened by women tradies, so can be pretty confronting in the way they talk and behave. It is very rarely directed at me but more women in general and how stupid they think women are.

Others ascribed the ill-treatment meted out to women to jealousy where female counterparts achieved better results than men, or proved that they were more knowledgeable than their male workmates:

There was a few guys that I – with maturity – can see that it was jealousy, because I would get promotions, or I would get rewards. They're going 'You only got that because you're a female, because you've done sexual favours', you know, things written on the toilet walls.

Perceptions of women in automotive work

The following discussion highlights how complex social relationships govern the way in which men relate with women in automotive work settings, and also the way in which women relate with other women.

Perception of women, by men

The qualitative open-ended responses provided by women give insight into the wide range of negative behaviours and attitudes which women in automotive roles can be exposed to. Some important findings include: there are a variety of covert and overt ways in which a negative and hostile workplace environment can be created; the way in which women respond to these behaviours can vary; and customer behaviour can serve to compound sexist behaviour. When asked broadly about the 'main problem' women faced at work, women volunteered responses which exhibit some strong primary themes.

- The use of sexist and offensive language by men is common

I've experienced sexual harassment, misogyny and countless sexist remarks in many workplaces over the years.

- It is not unusual for men to engage in sexist and offensive actions at work

... for men to realise: we are fellow employees. Not slabs of meat to wolf whistle at when they're in the mood.

- Formal anti-discrimination protocols are largely ineffective when there is management inaction on the issue

Sexist comments are ignored when you make a complaint and the men gang together and refuse to talk to you because they feel they have done nothing wrong and you should just deal with it - it was a joke. HR are all men. It is basically Sam Newman and the rest of the Footy Show, for a woman working at a car dealership. ... I resigned on Monday because I was exhausted from the constant bullying and anxiety.

- Women are less likely to take action against sexual harassment at work, because they perceive that management will be either unreceptive or directly hostile to any discussion of the issue

I have not reported it because I know the fallout would likely cost me my job. It is a very small world. It took over 150 applications to secure an apprenticeship. I DO NOT wish to undertake that again.

- Women are also subjected to sexist behaviour by customers

A lot of men can't deal with the fact that a woman can do a physically demanding job and I've had men get very nasty towards me for it. Also had a lot of issues with sexual harassment from customers and workmates (mainly experienced when working fly in fly out to a remote site).

Many women in the study had encountered assumptions from men inside and outside their workplaces that women lacked sufficient physical strength to do the job, but noted that equipment was available that compensated for bodily strength (with use of such equipment required by Health and Safety regulations). Supervisors' and co-workers' assumptions that

women lacked bodily strength prevented them from assigning physical tasks to women, and co-workers “taking over” jobs these jobs on women’s behalf, in many cases impeding women’s on-the-job learning and skill development.

Perceptions of women, by women

A distinct thread of commentaries in the qualitative data highlighted that some women automotive workers raised concerns about the challenges of hiring women in the industry. Nine survey respondents and several interviewees argued that they had observed women who showed a lack of commitment to the job, had shown reluctance to do the more intense physical work, behaved like ‘princesses’, exhibited poor work ethic, were in it for ‘the novelty factor’, or had ‘slept with the boss’. There are a number of interpretations that might be brought to bear on this finding. On one hand it might be argued that these sentiments echo and reinforce the negative stereotypes about women in automotive work that women described encountering from male employers, managers and co-workers.

On the other hand, it might be argued that these women recognise the fragility of their own position in the workplace, and their views suggest a more generalised fear that the foothold they maintain in the sector is a precarious one. There was a perception that women who were not sufficiently dedicated to the job, or who behaved badly, or made mistakes, did all women in the sector a disservice and gave them ‘a bad name’. The double standard inherent in this – that tradesmen often made similar mistakes, but were not subject to others ‘universalising’ from these instances – was not lost on one interviewee:

There was a female second year apprentice mechanic when I was first year, and she didn't set things up all that great for me starting, because she wasn't interested in getting her hands dirty. So her work ethic, I don't think it had anything to do with her being female. But the dots got joined that because I was female, I'd have the same work ethic as her. It's got nothing to do with gender, there were guys that had the same work ethic as her.

The impact of gendered perceptions

Women in automotive occupations are undoubtedly impacted when co-workers, managers and customers see their gender first, and skill second. Understanding the impacts of these perceptions on women automotive workers however is not straightforward. Interviewees identified a wide range of impacts arising from the perceptions of them at work.

In some cases, women observed that men in the industry tended to universalise from their experience of having worked with individual women. They related how, if a woman made a mistake on the job, men then tended to assume that all women were inept and that failure was a function of gender rather than aptitude or other factors:

They're (tradesmen) doing the bare minimum, and no one bothers them, when a woman is not allowed to fail.

Coping with perceptions

Women interviewees also reflected on ‘what it takes’ to survive in what is a very atypical field for women. Women used a wide range of survival strategies including: changing jobs when they believe the sexism is simply no longer tolerable; working harder than men to ‘prove’ they are capable of doing the job; using bravado and engaging in banter to ‘fit in’; and tolerance/compliance. The following excerpts are included to demonstrate the wide spectrum of

coping strategies which are used by women to navigate as automotive workers in a male dominated working terrain:

Job change

For three days, he was harassing me... But nobody would say anything, and they knew what he was like. I threw a block at him and made him bleed and I thought, 'No, time to go...'

Bravado

They're (female mechanics) outspoken and boisterous and obnoxious, smart-alecks, and the language... They're trying to keep up with the boys ... and think by being tough and using inappropriate language is going to win them over.

Work hard

...you've got to work twice as hard to be taken half as seriously.

Tolerance

Just to feel like one of the boys I guess, that's what I'd want.

Thick skin

Women need to understand that they are the minority and men are men, up to a certain point you need to put your big girl panties on and get over that.

Changing workplace culture

Analysis of the qualitative commentaries permit us to make some nuanced observations about the types of remedies implemented to counteract the impacts of gender discrimination.

Women with the longest tenure in their automotive roles argued that the automotive occupations and the cultures surrounding them can change, because they have changed, albeit slowly. One, an automotive electrician working in a dealership, stated:

In my last job I was asked in the interview if I 'planned on getting pregnant anytime soon.' Now, 14 years later in an interview for a new job I was encouraged to add to my family and was made to feel supported in doing so.

An interviewee who worked in the mining industry also felt that the workplace culture for women had improved in the mining sector in the last five years. She described less casual tolerance for sexist behaviour than there had been, fewer pornographic images openly displayed in the workplace, and noted in particular that employers had officially banned mining company staff from visiting topless bars.

Initiatives designed to assist them represent a double-edged sword for some women working in the industry currently, because they further highlight their 'difference'. As the following quote, emblematic of a number of commentaries made by women respondents, explains:

If people...started treating us the same as the men, it would normalise it quicker. The sooner we stop drawing attention to the fact that a female is in a non-traditional role the better.

The management role in changing workplace culture

Women described how their daily workplace experience was determined by how they were treated by the (almost wholly male) apprentices, tradesmen, and managers they worked alongside. Where women workers had tried to raise issues of concern at the workplace level, the responses by management varied greatly. At one end of the spectrum, women argued, managers had dealt with the issues responsibly and effectively. In other cases, managers had not dealt with the issues at all. In some of the most alarming cases, women reported that they were penalized for having identified that male behaviour was a problem in the workplace. Across the qualitative commentaries gathered during this study, a central theme emerged as a common belief amongst women: that managers and leaders play a key role in reshaping the terrain of workplace culture. While companies may have paper-based policies on gender discrimination, and are certainly required to conform to anti-discrimination legislation, without management conviction and commitment to carry out the policies, women argue it will be ineffective.

One case, related by a plant mechanic working in mining sites, demonstrates how critical management support is for both the initiation and continuation of equality programs at a workplace. She described how a mining workplace had been transformed from a hostile culture to a more hospitable one for women workers. This organisation had employed a large number of female managers to 'change the culture in the division'. However, once the tier of senior

female leaders had eventually moved on and were replaced with a team of young male managers, the culture 'changed back'.

They brought in all these 35 year old white males, who surrounded themselves with 30 year old males that tell them what they want to hear. They had done so much for diversity up there and it was all undone in six weeks. There was hardly a female in the meeting room or anything...

Managers can play a key role in reshaping the workplace terrain for women seeking to develop a career in the automotive trade field because just having a supportive manager can have an impact. Reflecting on the supportive tradesmen on which she relied during the course of her apprenticeship, one interviewee stated: "I think I stayed in my apprenticeship because of that support I had." Another interviewee concurred, stating that "having the support of my employer has been the best and most important experience".

For other interviewees however, management had played a caustic role, by reinforcing and compounding negative workplace culture for the women who worked there. These women workers reported managers that were openly dismissive of women's complaints of repeated bullying and harassment by male workmates. Women reported being told to "get over it". In other cases, women were blamed for lacking resilience – demonstrated by their willingness to raise the issue at all, managers said. As this interviewee noted:

You don't get help from supervisors, because it's all about the male bonding. They don't dare call each other out, because even if they (supervisors) think differently, and it's quite often, they don't dare, because then they'll be the one mocked by the other men. And when you're in small crews it's fine, but if you're in a crew of 30 people, that's quite a lot of men against you suddenly.

Several interviewees had reported incidents of bullying and harassment to their immediate managers or HR. Management response, to these women at least, was to reprimand and penalize them for reporting the ill-treatment. Others noted that reporting ill-treatment resulted in increased bullying by workmates. In all of these cases, the women had left the organisations soon after reporting the incident.

Participants in this study reflected on specific factors that they believed would be effective in redressing the discrimination and obstacles they faced to career progression in the automotive field. Each of these factors will be discussed in turn below.

Better managers

Managers were identified to be important because their roles were perceived to be vital to re-shaping workplace culture. Around one in ten respondents advocated a need for greater support from managers (both direct and senior management). Where women participants had indicated that they had received this support, their commentaries were particularly illuminating.

Women workers in automotive roles need managers who:

- Fairly assess the capability of workers and allocate work accordingly.
- Recognise that women workers can complete work to a high standard.
- Acknowledge the obstacles women face in the sector.
- Are willing to offer flexibility so women can juggle work and family.
- Communicate well, show empathy and provide a level of pastoral care towards employees.
- Support and advocate for career development for women.

Many expressed a desire for foremen, supervisors, apprentices and tradesmen who assisted their skill development: who showed patience and the correct ways of doing things, answered their questions, explained things to them without laughing at their lack of knowledge, who bolstered their confidence, and who provided help to each other where needed.

Isolation and networking

Around one in ten survey respondents felt that the male dominated nature of automotive trades was a key problem for women in their occupation. Some noted that women find this ‘intimidating’ and that this ‘scares them away’ from the industry. Others observed that the lack of women (including at senior leadership level), was isolating for women working in the industry and meant that they had no workplace support networks or role models. One interviewee, who worked in mining, described the extent of male dominance in her workplace, how this led to ‘spotlighting’, and her wish for female role models:

I'm in a massive workshop with over a hundred males ... I'm the only (woman) that shuffles around, so I'm kind of hard to miss. ... I want to know that I can finish this trade. And it's hard to believe in yourself like that when there's no women around that have proven that yet.

The findings of this study identify that only 28 per cent of survey respondents worked alongside other women in the same job or occupation as them, and most of the twenty interviewees reported having been, or being, the sole female apprentice or qualified tradeswoman in their workplace, company and TAFE class. Many are, or were, the first female trades apprentice their company had taken on. As such, most of the interviewees described having always been ‘the only woman’ in their workplace, and having never worked with other women ‘on the tools’. Some women had worked with one or two other tradeswomen throughout their careers, but in most cases these tradeswomen had now left the trade. Interviewees highlighted other characteristics that led to them being treated as outsiders, or facing exclusion. These included their age, sexuality, Indigenous cultural background, and being neurodiverse. A number of interviewees noted that because they were older, female, and in one case gay, they were unable to, or did not wish to, “relate” to the young men they worked with.

Survey respondents and interviewees described how they were excluded from social events (camping trips, going to the pub). An interviewee stated:

I will never be one of the boys. No matter how hard I try, no matter how many jokes I make, no matter how comfortable I try to make everyone feel...

Some employers adopted active strategies designed to reduce isolation and improve support of women workers. Several interviewees were recruited as one of a group of apprentices that included other females, but in many cases did not work alongside them as the apprentices were spread throughout sites across Australia.

A range of trade-based networking groups were identified to be a positive support for women working in automotive trade roles including: Supporting and Linking Tradeswomen (SALT), TradeUP, Women in Mining WA (WIMWA), Women in Automotive (WinA), Women in Collision (paint and panel-beating) and Women in Trades Geelong.⁷ These organisations provided support in a range of ways including (but not restricted to):

- Support, information linkages to existing members via active social media pages.
- Greater exposure to the automotive (and other) trades as a viable field of work for women.

⁷ It should be noted that the networking groups also participated in the distribution of surveys for this study, so survey respondents may have been members of the organisations.

- Mentor and mentee opportunities.
- Support to women in refining technical proficiency with equipment (including power tools).
- A source of advice on career development.

Balancing care and work

Women also offered a range of observations about their experiences in balancing work and unpaid work, while engaged in automotive occupations. A summary of the key issues arising from the analysis of these commentaries is provided below:

- It was common for female apprentices or tradeswomen to be ‘shown the door’ on becoming pregnant, or to leave their jobs in the absence of the employer providing ‘light duties’ roles suitable to women in the later stages of pregnancy.
- Rostering patterns and the long hours arrangements associated with some automotive job roles made it difficult to accommodate flexible working hours.
- The cost of paid child care was prohibitive, because women had to pay a premium for care outside of normal working hours. In low wage automotive jobs, this situation was untenable, and led to many women leaving the sector.
- Women with young children in particular face stigma in the sector because they are perceived to be unreliable.
- Some interviewees even reported moving into different roles (off the tools, into teaching or management) because they found the environment so family un-friendly.
- The lack of employer-paid maternity leave beyond minimum entitlements (18 weeks’ leave paid at the minimum wage) led to financial stress for women in the study.

There were examples of employer willingness to provide more favourable working arrangements for their women employees balancing care and work. They included:

- Flexibility to work the employee’s preferred hours, so long as these could be accommodated within the scheduling of jobs.
- Flexibility to work the employee’s preferred days.
- Offering employees a degree of autonomy (within reason) around the scheduling of tasks, so that tasks like breastfeeding could occur.
- Overtime work as optional for parents.
- Altering the jobs assigned in the very late stages of pregnancy to avoid tasks involving heavy lifting.

Four interviewees described how owning workshops provided them with flexibility to care for family, or in one case, manage ongoing medical treatment. One workshop owner, for example, provided rooms adjacent to the workshop to accommodate the children of their male and female tradespeople during school holidays if needed, gave trades staff time off during school holidays, and allowed them to vary their daily start and finish times to care for children.

Getting more women into automotive trades

The qualitative data gathered in this study provides insight not just into the types of barriers faced by women doing automotive work, but also on the complex array of factors which women believe are contributing to these challenges. At interview, women reflected on gender socialisation and the lifelong nature of this process from early childhood through school and to adulthood. The women participants in this study observed that the marginalising attitudes and behaviour they face at work reflect values with which society still has at least tacit acceptance. For this reason, they argue, improving the workplace culture of automotive workplaces involves more than organisational change. Women highlighted a range of measures which might best be described as first steps in this process. A summary of these reflections are outlined below:

- Raise the visibility of women in automotive trades and tradeswomen. This is especially important in educating young women and men, particularly those of high school age, that women are capable of doing these jobs.
- Educating employers to be more open-minded in their hiring decisions.
- Setting up structures so that well informed career advice can be delivered, and young women are given opportunities to undertake work experience in the field early.

Interviewees described how jobs in the industry were becoming increasingly “technical” due to the growing complexity of electronic componentry used in vehicles and suggested that this provided an opportunity to reposition the image of the industry to attract more women:

Mechanics is not dirty, greasy, rebuilding gearboxes and transmissions anymore, it's a lot more electrical and focused. We won't employ an apprentice that hasn't gone to Year 12, because you need those comprehension skills to be able to read and understand workshop manuals and wiring diagrams, so it is quite technical ... So maybe changing the perception of what a mechanic is...

Some interviewees, and the organisations that they were members of (WIMWA, SALT, Tradeswomen Australia) visited schools in a voluntary capacity to talk to female students about careers in trades. Several interviewees had become ambassadors for women working in trades, and spent much of their time meeting young women and encouraging them to work in automotive trades. This included training women in basic trade skills, judging skills competitions, and mentoring young women in trades both informally in their workplace, and through formal schemes.

Case study 1: Tradeswomen Australia

Tradeswomen Australia⁸ is a Victoria-based not for profit organization that was founded in 2013 by a tradeswoman after she had completed a light vehicle mechanic apprenticeship. It receives funding under the Federal Government's Real Skills for Real Careers program, which promotes VET pathways to men and women, and from The Department of Education and Training Victoria. Its website contains podcast interviews with women in trades and encourages women interested in trades to contact interviewees for advice and mentoring. Many women have contacted the founder for further information, as have employers in automotive trades who have expressed a strong desire to “give women a go”. Tradeswomen Australia is running a pilot program where female tradeswomen volunteer their time to promote VET and university as equal career pathways to classes of girls in high schools. They profile women in trades, their earnings, and the career pathway they have taken. Pending evaluation of the pilot program's impact, Tradeswomen Australia is hoping to extend the program across schools with funding from The Department of Education and Training Victoria.

One interviewee observed that relying solely on careers advisors to promote automotive trades careers to school-aged females may not be productive because female students are at an age where they are likely to reject any advice given.

I think there's a good and bad thing with careers advisors pushing girls into non-traditional areas. Mainly because sometimes it's like the girls have already made their (career) decision by the time they're going to see careers advisors.

She noted that SALT's work with female high school students (described below) provided a way to address the obstacle outlined above. Through engagement with SALT, young women were

⁸ <https://www.tradeswomenaustralia.com.au/>

given hands-on experience of using tools, which showed them that they were capable of working in a trade if they wanted to.

Case study 2: Supporting and Linking Tradeswomen (SALT)

SALT⁹ is an NSW-based not for profit organization established in 2009 by a qualified painter and decorator working as a TAFE teacher. It is run by female volunteers who work across a range of male-dominated trades, including automotive trades. It receives funding from the NSW Government and the Real Skills for Real Careers program. It also works with the Girls in Trade Ambassadors, a careers advisor initiative started by Women NSW. SALT runs Skills Women Workshops in NSW public high schools. These experiential workshops encourage girls to learn new, practical skills and to consider entering a trade if that is what they are interested in. As well as being a support network for women in trades, SALT provides mentoring for women who wish to enter the trades and information on current job vacancies via its Facebook page. It also works with companies to help them diversify their workforces.

Opposition to targets and quotas

Across the qualitative commentaries, participants expressed a degree of opposition towards the notion of targets or quotas as a strategy for increasing the representation of women in automotive roles. Targets and quotas were perceived to be ineffective for a range of reasons (outlined below):

- Employers should hire and promote according to a merit-based principle.
- Targets led to the recruitment of women who lacked the skill or commitment required.
- Women should be recruited into jobs because they have a genuine desire to work in trades.
- Women identified that one of the biggest obstacles at work was the negative attitudes that men had towards women workers. Quotas, women argued, would not remove this obstacle but may even serve to entrench resentment towards women.
- Some women already reported a ‘backlash’ from male peers who voiced views that these women had been recruited for their gender, to make up a diversity quota. According to these women, the notion of a quota would simply confirm that women were not being treated the same as their male peers.
- Some respondents expressed cynicism about employer motives to target women recruits, arguing that companies seemed more interested in improving their public image, rather than being driven by a genuine commitment to provide a more equitable workplace environment. Similar sentiments were expressed by those women who had been told that the only reason they had been hired was due to a ‘diversity quota’.

However, several interviewees who supported the use of targets and quotas observed that even where quotas were absent, men still accused women of getting the job on the basis of gender. One interview noted targets might facilitate faster cultural change:

Quotas or no quotas, they're still going to think that you're here just because you're a woman.

⁹ <https://saltaustralia.org.au/>

In (company) you're more likely to be considered (for management positions) if you're female. ... Which is not necessarily what you want. But I think sometimes people of a certain generation won't consider someone unless they're made to. ...you have to make someone consider the possibility.

Promoting and recruiting women into leadership positions

Women interviewees presented a range of commentaries on the issue of women in leadership roles in the automotive field. They described encountering male views which stereotyped their roles as automotive workers including: assumptions that women were not 'promotable'; that women were "the workers" and men were "the managers"; and female tradeswomen were less committed to career. Several women described how the industry 'boys club' acted as a barrier to career progression, with long-tenured men filling critical positions at all levels (from leading hand up to senior management). A number of women in the study were pessimistic about the pace of cultural change in the sector, with one stating that it "will take another generation" to "decrease the stigma for women in leadership or women knowledgeable of automotive technology".

However, many women expressed a belief that greater female representation in management positions, particularly at senior levels, would improve their work and career experience overall by providing visible evidence that women can be successful ("I want to know at the end of the day that I can do it"). Other commentaries highlighted that women in senior roles would present women in more junior roles with an approachable contact to discuss workplace matters, particularly discrimination:

Employ females for senior roles, to create some initiative for women in lower ranks to have something to strive for and to find comfort in being able to discuss workplace issues more freely with a woman.

Designate at least one woman in a position of power as an advocate for other women in the organisation. Make sure women know they can come to this person for advice and to report misconduct.

Employer initiatives to improve gender equality

The mixed-method approach of this study allows observations to be made about the incidence of equality measures but also about the degree of impact they have had. Many survey respondents reported that they had not had direct exposure to any initiatives to improve the position of women in the sector. Others were either currently employed, or had worked for dealerships, OEM and mining companies which had relatively positive policy platforms in the field of gender equality and non-traditional work. However, a key finding of this study is that there is sometimes a disconnect between on-paper gender equality policies and the lived experience of women working in the automotive sector. Several interviewees expressed concerns that while a minority of employers were increasingly open to "giving women a go" and employing them, they had not tackled the difficult task of changing workplace cultures and management practices to provide support to women. There was also evidence of women in poor working environments (typically light vehicle dealerships) actively seeking employment in OEM, mining or other dealership employers that were known to provide positive working environments for women (with active diversity programs and access to flexible work arrangements).

One of the largest employers of automotive workers in Australia, Toyota, provides an example of an organisation in the early stage of implementing gender equality initiatives. A case study of their efforts is provided below.

Case study 3: Toyota Australia

Since late 2016, Toyota Australia has implemented a diversity strategy in franchised dealerships across the country. Responsible for approximately 12,500 employees, and with 23 per cent being women, Toyota's approach to diversity is significant because it has the potential to set the bar across the automotive sector.

Toyota's approach aims to build awareness among Toyota dealer principals that their workforce profile is currently not representative of societal diversity (including gender diversity) and to encourage them to broaden their recruitment pool to employ more women, across a greater span of roles. Toyota Australia's program has leveraged off the gender diversity program instituted at Toyota USA and has been assisted by a female Chief Financial Officer of a large Toyota dealership, who has encouraged Toyota senior management to implement the program and who actively profiles the benefits of gender diversity in her dealership to Toyota principal dealers throughout Australia.

Toyota's approach highlights the way in which businesses can gain market leverage by creating a positive workplace culture for women at work. Toyota's data identifies that 80 per cent of car purchasing decisions are made by women buyers, and yet, only 17 per cent of Toyota's "front-end" (sales) workforce are women. The company has collected data showing the superior performance of Toyota dealerships with more gender-balanced workforces, using a number of measures including: profit; staff turnover; return on sales; and customer loyalty. According to Toyota's own dashboard indicators, gender equality makes good business sense.

Currently, Toyota's approach focuses on encouraging more women into management and leadership roles across the dealership network. This has involved the creation of new (non-trades qualified) management roles that have greater appeal to women, such as "guest-focused managers" (client liaison roles), of whom 89 per cent are now women. Other initiatives involve the setting of a KPI of 60 per cent women in their graduate intake program, and building gender diversity into succession planning. So far, the company's efforts have been successful in increasing the proportion of women in sales roles, but have had little impact on the representation of women in automotive trade roles.

A consolidated summary of a range of workplace-based initiatives that participants in this study have identified to be effective in improving the representation and experience of women in trades roles is provided below. These initiatives are examples drawn from a range of employers.

Table 13: Initiatives to support women in automotive roles by organisational profile

Sector/characteristics	Key elements of approach	Gender equality strategies identified by research participants
<p>Original Equipment Manufacturers</p>	<p>Recruitment</p> <p>Retention</p> <p>Transitioning to workplace culture which is more equality aware and non-discriminatory</p>	<ul style="list-style-type: none"> – Inclusion of women in promotional material for recruitment – Managers initiate career conversations and discuss promotional opportunities with female trade staff – Recruit cohorts of female apprentices and qualified tradeswomen so there is a peer support network available – Use of apprentice coordinators to oversee and provide daily support – Comprehensive induction for all employees which ensures all staff are aware of appropriate behaviour in workplace – Active recruitment of women to bring gender balance to trades teams – High proportion of women in senior leadership roles, women’s affinity groups, anonymous reporting of ill-treatment, supportive HR team
<p>Mining</p>	<p>Focus on recruitment and retention of women in leadership roles</p> <p>Ensuring women located in multiple fields, across cross section of trade roles</p>	<ul style="list-style-type: none"> – Upskilling program to re-train truck operators to assume roles as mechanics, boilermakers, electricians – Strong sanctions for employees who behave in a discriminatory way (dismissal) – Mentoring for female trade workers (regardless of employment contract – so inclusive of contractors & employees) – Women’s network groups and events – Leadership and mentoring programs for women – High representation of women in trades and leadership roles
<p>Family- and female-owned workshops</p>	<p>Recruitment</p> <p>Long term retention</p> <p>Capability focused</p>	<ul style="list-style-type: none"> – Employing women in automotive trade positions (where possible) – Build confidence among and foster peer supports between individual female apprentices – Provide female and male mechanics with flexible work arrangements

<p>Automotive dealership 1</p>	<p>Transitioning to workplace culture which is more equality aware and non-discriminatory</p>	<ul style="list-style-type: none"> - Engage GTO with specific remit to recruit female apprentices and provide ongoing pastoral support - Women in senior leadership roles - Networking lunches for women trades people
<p>Automotive dealership 2</p>	<p>Gender equitable workforce profile</p>	<ul style="list-style-type: none"> - Increased female representation in applicant pool and workforce - Use of a blind online interview process to screen candidates on merit - Use of a gender decoder to purge job ads and official material of 'masculine' language - Shorter work days and weeks and flexible start and finish times to fit with family commitments - Women in senior leadership roles - Women now comprise 32 per cent of workforce (target is 40), primarily in non-trades areas

Conclusions

This study examines the experiences of women working in a vocational vanguard. Many of the participants in this study were the first and only woman employed in their respective workplace, and when training, were the only woman in their TAFE class. Women working in contexts such as these are presented with a conflicted situation. On one hand, women expressed intense pride in their vocation, and in their achievements in the face of significant challenges. A number described feeling like “pioneers” in their trade. However, the women participants in this study also described working lives with some very real and enduring challenges. The findings of this study suggested that while women in the automotive world gained deep satisfaction from their work, they also struggled with ill-treatment from workmates, employers and customers. This was a source of deep discontent for women in the study.

Most women participants in this study had encountered male workmates, managers and customers who did not want or accept women in the workplace due to beliefs that an automotive trade job was “a man’s job”. Such attitudes present a foundational socio-cultural barrier for women seeking to work in these occupations and, combined with extreme male dominance in the sector, the industry faces a profound challenge moving forward. As this report notes, only 1-2 per cent of all automotive trade workers are women and it is one of the most highly gender segregated occupations in the labour market.

This report also documents how women are impacted by working in such a highly gender segmented occupational role. A number of interviewees shared inspiring accounts of ways that they were seeking to increase the representation of women in trades and improve the experience of women in automotive-related industries. However, a handful of women in the study believed that the working experience of women in automotive trades was improving, others were pessimistic that cultural change would be a slow and difficult task.

A dominant desire among the women in the study was for equal treatment and acceptance. Many stated that they “want to be treated the same” as men in the workplace. Some expressed pride or relief at having reached the point where they were “one of the boys”, while others wished that they were. A key element of the equality they sought was a desire to blend in, in the workplace and not be singled out and judged on their gender, rather than their skill. The strategies that they and other women had employed to blend in included acting as one of the boys (joining in with men’s banter); earning respect by working twice as hard men; and not drawing attention to yourself (keep your head down, don’t be pushy). They worked hard not to do anything that highlighted or reinforced their status as ‘different’. Interviewees also opposed ‘special treatment’: for example in the form of gender-based quotas, which drew attention to their gender and undermined their legitimacy, leading to accusations from male co-workers assumed that they had gained jobs on the basis of their gender alone.

What might be done to improve the representation and experience of women in automotive trades?

The problems and barriers identified by women were located at the societal, industry and workplace level. As such, strategies to improve women’s participation and experience in automotive trades might be focused across and at each of these levels. It is evident that multi-pronged strategies are needed to both increase the critical mass of women employed, while also improving the retention of women in the sector through additional support measures. At the **societal level**, federal and state governments might fund campaigns to increase the opportunities for women to enter trades, raise the visibility of female tradeswomen to give

aspirant tradeswomen role models to aspire to, and fund and publicise subsidies for employers who take on female trades apprentices.

At the **industry level**, strategies for change might also centre on raising the visibility of women in trades. Currently, several not for profit, volunteer-based “women in trades” organisations conduct workshops for female high school students and older women where they teach them practical skills and profile trades jobs and the diverse career pathways open to qualified tradeswomen. Ongoing government funding might be allocated to these programs, which provide women with the early exposure to technical skills that female apprentices often lack, compared with male apprentices. Additionally, registered GTOs are eligible to apply for Australian Government or State or Territory Government group training program funding. Making government funding of GTOs contingent on them ensuring the placement and support of women in automotive trades apprenticeships might present a policy-level lever to assist women to enter apprenticeships in greater numbers. In addition, employing greater numbers of female field officers in apprenticeship support organisations (such as group training organisations) would provide support, advocacy and mentoring for female apprentices that would assist their retention and completion of trades qualifications.

Study participants also advocated for **changes at the level of the organisation or workplace**. One strategy adopted by larger dealerships, mining, and OEM employers is to recruit groups of female apprentices to both increase gender representation quickly and provide women with support networks, while also reducing the isolation experienced by lone women in workplaces. Participants also advocated a need for zero-tolerance policies pertaining to sexist behaviours from customers and male co-workers, as well as sensitive handling and redress for women who report sexist behaviours and sexual harassment.

Strong messaging from leaders that women are accepted and supported in their organisation would further reinforce the setting of new cultural norms. A number of women in the study observed that many male managers had never managed female staff before. Organisations employing women for the first time might benefit from advice – for example in the form of a handbook or guide, or training for managers – on good practice in hiring and managing women in automotive trades. Educational training or publications of this nature could be produced by industry-level peak organisations or government training organisations, and might canvass practices that study participants suggested would improve women’s workplace experience. These include means by which supervisors and managers might support women (including provision of flexible work arrangements), and strategies for preventing and managing ill-treatment of women by male co-workers. Organisations might also consider recruiting and promoting leading hands, supervisors and other direct managers who are supportive of gender equality, and there was consensus among participants that bolstering the number of female supervisors and managers at all levels of organisations would, and did, increase recruitment of women and provide them with more support at work.

Reflecting on their difficulties in securing apprenticeships and gaining exposure to tasks needed to learn the trade, women in the study expressed a need to be given the same opportunities as men. Processes to ensure that exposure to learning critical skills and career development opportunities are allocated to women to the same degree as their male counterparts are therefore critical. Finally, there were many examples of employing organisations in the study providing flexibility for workers while meeting operational demands. Provision of flexible work arrangements by employers across the industry will encourage the retention and longevity of women care responsibilities in automotive trades jobs.

We look forward to engaging with industry stakeholders about our research findings.

Author biographies

Dr Sarah Oxenbridge

Dr Sarah Oxenbridge is a Research Fellow in the Women, Work and Leadership Research Group at the University of Sydney Business School. Since completing her PhD, Sarah has worked as a senior researcher in the UK, New Zealand and Australia in universities, the UK civil service, and as an independent research consultant. Between 2012 and 2017, Sarah was co-director of a research consultancy with specialist research expertise in psychosocial risk factors (job stress, bullying), improving effectiveness in employment institutions, and workplace gender equality. Most recently, Sarah has worked with Australian and NZ public and defence sector organisations to improve the recruitment and retention of female workers by reducing gender bias in people management processes, improving flexible work arrangements, and providing support structures for women throughout their careers. She is currently engaged in a three-year University of Sydney study examining the work and career experiences of women working in highly male-dominated occupations (investment management, automotive trades, and pilots).

Professor Rae Cooper

Professor Rae Cooper (PhD) is Associate Dean (Programs) at the University of Sydney Business School. Rae is Co-Director of the Women, Work and Leadership Research Group and Associate Editor of the Journal of Industrial Relations. Rae is a leading researcher in gender and work, women's careers and flexible employment. She has received grants from the Australian Research Council, from state and federal governments and has worked in collaboration with leading organisations including the Australian Human Rights Commission, the Australian Institute of Company Directors and the Australian Council of Trade Unions. Rae uses her research expertise to contribute to public debates about work and careers and is a key Australian commentator on workplace matters in television, radio and print media. She is regularly approached to speak to business and policy audiences on her research. In addition to her academic roles, Rae has been a non-Executive Director on several boards of public sector businesses and NGOs and has played a leadership role in organisations in the women's policy area.

Professor Marian Baird AO

Professor Marian Baird is Professor of Gender and Employment Relations, Head of the Discipline of Work and Organisational Studies, Co-Director of the Women, Work and Leadership Research Group and a Fellow of the Academy of Social Sciences of Australia. She is Co-Editor-in-Chief of the Journal of Industrial Relations. Marian's research focuses on gender, equality and leadership, challenges and policy responses in Australia and the Asia Pacific. Marian is very active in the policy arena, and she is frequently invited to speak to business groups, unions, women's groups and other universities, business and the press about employment relations generally and women and work specifically. She has received numerous Australian government and ARC grants to study gender equitable organisational change and work and family and is widely published. Marian has contributed to a number of government advisory boards and reference groups relating to parental leave, discrimination and gender equality in the workplace.

The Women, Work & Leadership Research Group (WW&LRG) at the University of Sydney Business School provides a focal point for collaboration between leading scholars, business practitioners and policy makers with an interest in women and work, in building more equitable workplaces and more sustainable careers for women. The WW&LRG engages closely with debates about the megatrends impacting the workforce, including the feminisation of the workforce, population ageing, flexibility and technological change and emerging issues which lead to changing expectations of employers, employees and of the organisation of work. The Co-Directors of the WW&LRG Professor Rae Cooper and Professor Marian Baird have considerable expertise in undertaking engaged research and in public speaking and translating research results in the media.

The Women, Work & Leadership Research Group

Dr Sarah Oxenbridge
sarah.oxenbridge@sydney.edu.au
+61 2 8627 4460

The University of Sydney Business School
sydney.edu.au/business/research/wwlrg