

Women in Trades

**Part 2: How women
have succeeded in
trades where they
are traditionally
under-represented**

Authors

Kylie Taffard, Mark Williams and Loretta Garrow

Research Consortia Partners



Research Co-Funding Partners



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Ako Aotearoa – The National Centre for Tertiary Teaching Excellence

PO Box 756

Wellington 6140

www.ako.ac.nz

0800 MYAKONZ

info@ako.ac.nz

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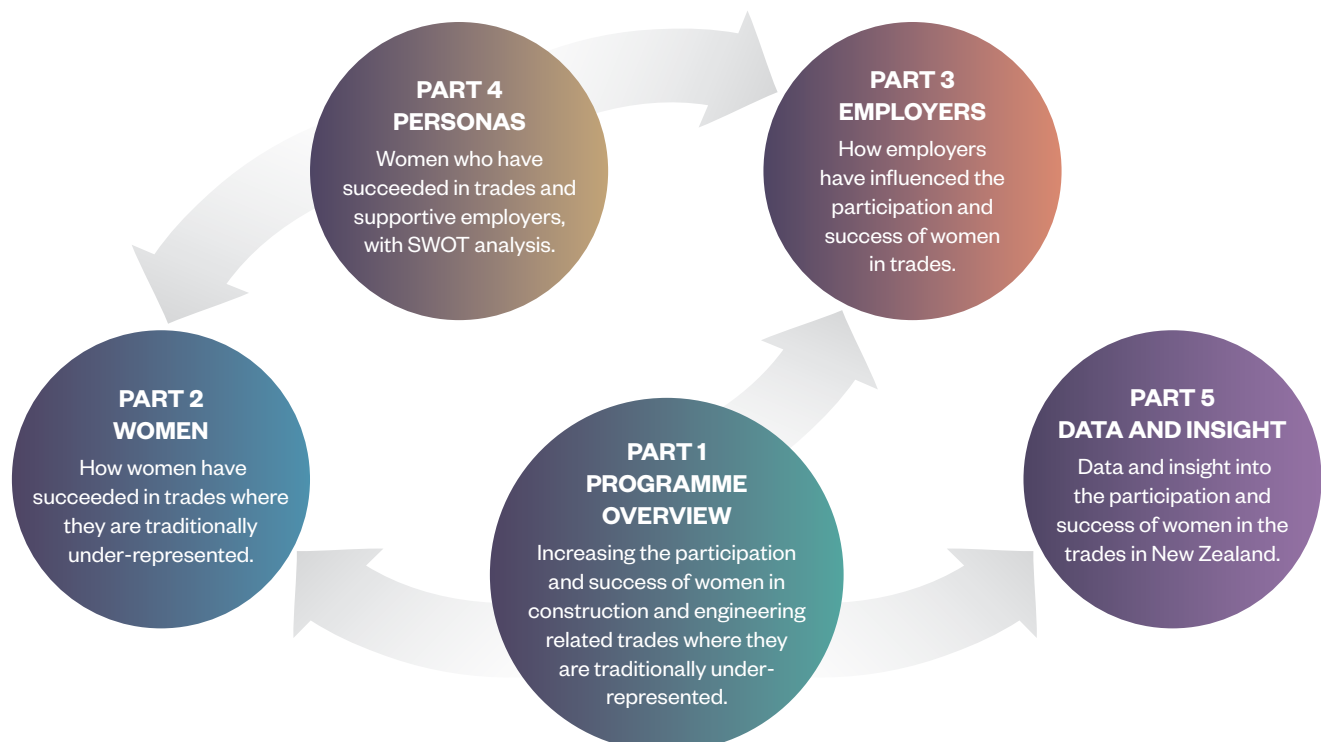
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Programme of Work

The programme of work includes the following interrelated components. All documents are available via the Ako Aotearoa project page: www.ako.ac.nz/knowledge-centre/what-are-the-characteristics-of-an-effective-learning-journey-for-women-entering-trades



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Executive Summary

This report outlines the findings of research conducted on the learning and career journey of 35 successful tradeswomen. This project is part of a wider programme of work with the goal of increasing the participation and success of women in the trades, where they have historically been under-represented.

Two drivers support the need for this project:

1. On the demand (employer) side, the driver is the current shortage of labour in many trades (PwC, 2016, p36; BCITO, 2018).
2. On the supply (women) side, the driver is participation in trades (with significant income earning potential, the ability to participate in customer-focused, creative and hands on occupations and the potential to be self-employed).

The overall aim of the research is to go beyond solving the short-term human resource problems to creating social change across industry, for women and in society so all can see the trades as a viable career option.

Findings

The interviewees were successful and enjoyed their work. They were also able to maintain motivation despite the negative comments and challenges they met with on-site. The women described five main barriers to entering and working in the trades:

1. Lack of knowledge about the opportunities within the trades
2. Lack of work experience
3. Finding employers willing to employ women
4. Male-dominated culture of the trades
5. Lack of support for women in the trades.

Initial Reactions

The five findings have generally elicited two responses:

- These barriers are generally common to every apprentice, not just women.
- There is nothing new in this report, but it is good to have the evidence.

There is an element of truth to both of these responses; so as you read this report please consider the findings in light of the following:

- Women often experience all five barriers, many at the same time, and are impacted significantly by the cumulative effect.
- Confirmation bias, also called myside bias, is the tendency to search for, interpret, favour, and recall information in a way that confirms one's pre-existing beliefs. People display this bias when they gather or remember information selectively, or when they interpret it in a biased way.

Consider the quotes, barriers, benefits, influencers, personas and SWOT analysis with a view to what you can change, affect and improve.

www.ako.ac.nz/knowledge-centre/what-are-the-characteristics-of-an-effective-learning-journey-for-women-entering-trades

Future focus

Nothing we did can affect the participation and success of women in trades last year, but the choices we make now can affect the participation and success of women in trades this year, next year and into the future. Let us all learn from the past so we can build towards the future.

Influencers, Enablers and Barriers

The following list highlights the influencers, enablers and barriers identified by the tradeswomen interviewed for this project.

Many of the influencing factors and barriers listed below are not specific to women; however, it is the compound effect of these influencers and barriers, which the tradeswomen experienced, that created a more significant obstacle to their entry into and employment journey within the trades.

Influencing factors to enter the trades:

- Personal reasons: stable income, passion for the product, resilience
- Family: exposure to the trade, encouragement, role model
- Friends: providing job information, providing information on trade qualification
- School staff: providing information on trades, providing work experience, taught skills.

Barriers faced by women wishing to enter the trades:

- Difficulty finding employment
- Personal concerns such as: lack of skills, lack of confidence
- The culture of many construction workplaces.

Barriers faced by women when in the workplace:

- Male-dominated industry, sexist comments made on-site, physical expectations, customers bias
- Balancing apprenticeship requirements, full-time work and other commitments
- Lack of structured training programmes in the workplace.

Many of the influencing factors and enablers listed below are not specific to women; however, their presence is far more critical to the positive entry into the workplace and a successful learning and employment journey within the trades.

Factors that enabled the tradeswomen to enter the trade:

- Exposure to trades
- Skills development within family, school, pre-trade programme and work experience
- Network of significant people: work experience employer or pre-trade tutor, mentor or peer support
- Employers open to employing a gender diverse workforce.

Factors that influenced workplace success:

- Workplace environment: positive, supportive, focus on learning and progression
- Work tasks: customer focus, working with a product they enjoyed
- Nature of the job: physical opportunities, problem-solving, collaboration
- Personality: ability to manage negativity, lifelong learning, attitude towards working in a male-dominated environment.

Summary Recommendations and Timeline

Promote

- 2019-2020**
1. Trade careers to women at school and those returning to or retraining for work
 2. Pre-trade programmes that are:
 - a. fees free;
 - b. do not interfere with the opportunity to use fees-free for apprenticeship; and
 - c. provide an opportunity to:
 - i. gain trade-related skills
 - ii. experience authentic trade environments
 - iii. develop the confidence to seek employment and an apprenticeship

Develop

- 2019-2020**
3. A brand or logo to identify an employer who is committed to providing work experience or employment for women interested in entering or progressing the trades
 4. An effective way to help interested women find work experience or employers committed to supporting women
 5. Communication - define and clearly communicate the roles and responsibilities of all involved in the apprenticeship training process, to ensure buy-in and enable benefits to be maximised
 6. Connections for women to more experienced female apprentices/tradeswomen within a trade for support
 7. Training for experienced tradeswomen to provide support and/or mentoring for women
 8. Peer group networks and networking events for all women in non-traditional trades
- 2021-2023**
9. Work experience opportunities that:
 - a. Facilitate connections with industry
 - b. Provide opportunities to experience an authentic workplace and exposure to the trades
- 2024-2025**
10. Equal opportunity - review school programmes, such as the Trades Academy and Gateway, to ensure an equal opportunity to participate in trades programmes

Investigate	
2019-2020	<ul style="list-style-type: none"> 11. A platform providing access to information regarding most effective teaching and support practice 12. Personal Protective Equipment (PPE) suppliers¹ that make equipment specifically for women
2021-2023	<ul style="list-style-type: none"> 13. Appropriate methods for reviewing and communicating the outcomes of projects aimed at increasing the participation and success of women in the trades 14. A consistent method for reviewing projects aimed at increasing the participation and success of women in the trades 15. Successful programmes internationally that support women into the trades, including government initiatives that support tradeswomen²
Support	
2019-2020	<ul style="list-style-type: none"> 16. A monitoring programme to assess if employers provide appropriate support for women, including training processes, diversity policies and strategies
2021-2023	<ul style="list-style-type: none"> 17. An ongoing review of successful programmes that support women into the trades, including domestic and international government initiatives that support tradeswomen. This would provide innovative ways to ensure the trades become more visible to women

¹ Although there are some PPE for women stocked in major New Zealand safety retail outlets, these are often men's products made smaller which are at times uncomfortable for women.

² For example, programmes such as the trailer used in schools by Supporting and Linking Tradeswomen (SALT) in Australia, which has seen an increase in the number of women apply for apprenticeships with Sydney Trains www.singletonargus.com.au/story/5286689/changing-perceptions-one-workshop-at-a-time

Introduction

Purpose of study

The purpose of the study is to investigate how women succeed in the construction, automotive and engineering related trades where they are traditionally under-represented. 35 tradeswomen were interviewed from a range of trades represented in the research consortia. Among the women were those who identified as Māori, Pasifika and Asian, but most were New Zealand Pākehā. The cohort came from across New Zealand. Their ages ranged significantly, as some women chose to enter the trades later in life.

We hoped to gain a deeper understanding of the characteristics of the learning and career journey of successful tradeswomen. This would indicate ways that influencers, employers and stakeholders can support women into a trade career, the benefits which can be promoted and developed, and identify the barriers which need to be broken down.

This report is a part of a three-year project conducted through three interrelated focus areas:

1. Working with women in the trades and those involved in pre-trade training
2. Engaging with trade employers
3. Working with data to establish benchmarks and measure change.

The goals of the programme are as follows:

Goal 1

Identify the significant characteristics of learning journeys where women qualify at level two to five in construction and engineering related trades.

Objectives for this goal include:

- Taking a thematic analysis of the significant characteristics (barriers and enablers) in learners' and influencers' engagement and learning journeys by distilling conversations with a diverse range of individuals. This will build on and enhance the existing body of knowledge and focus on actionable outcomes.
- Developing humanised descriptions (personas) of women, influencers, employers, trainers and workplace learning facilitators based on the significant characteristics of individual learning journeys and discussions with role holders.

Goal 2

In light of the findings from goal 1, to identify what changes can be made to educational and industry practice, programmes and processes to enhance the enablers and diminish the barriers women face in their engagement and learning journeys with trades.

Objectives for this goal include:

- Developing projects³ based on gathered evidence that enhance enablers and diminish barriers and pilot solutions to meet the objectives within the consortia.
- Undertaking change projects. Projects include women of all ethnic backgrounds but with a bias towards Māori and Pasifika through the association with MPTT Consortia. Careers New Zealand's publications associated with Project Lumana'i and Project Kāmehameha will inform this and personas developed within these projects can be used in conjunction with the personas developed for this project.
- Disseminating evidence across the consortia and monitoring the improvement in the participation and success of women in trades through the consortia.
- Disseminating evidence outside of the consortia.

³ Projects will be detailed on the Ako Aotearoa programme page: What are the characteristics of an effective learning journey for women entering trades? www.ako.ac.nz/knowledge-centre/what-are-the-characteristics-of-an-effective-learning-journey-for-women-entering-trades

Introduction

Background

More women are gradually taking up trade roles, but they are still under-represented in the workforce. According to a 2016 report by PricewaterhouseCoopers (PwC), New Zealand, the proportion of women in New Zealand's construction industry has increased over the past decade, but in an industry that desperately needs labour, men still dominate the workforce.

The plight of women in trades has always been a difficult one – both in New Zealand and overseas. The common theme within studies and research reports, policy and briefing papers, and journal entries over the last 50 years, is that the trades are a man's world and women enter at their peril.

It is not within the scope of this study to conduct a full literature review, although a brief overview of studies from the last 15 years has been included in the reference section. The sources cited in this section provide a springboard for this project and a basis for future studies.

While women in trades tend to be slightly older and more ethnically diverse than their male counterpart, the relative lack of younger women in the trades is due to community perceptions and the difficulty in attracting young women to the trades (Sweet Analytics, n.d.).

In New Zealand, there is a need to increase the representation of women at all levels of the industry, with appropriate development opportunities to create a pipeline of talent (Devillard, Hunt & Yee, 2018; ESITO, 2014; Stats NZ, 2015). Providing opportunities for women in male-dominated fields, such as the trades, can also go some way to improving the gender pay gap, which was 9.4 percent (median hourly earnings) in 2017 (Statistics NZ, 2017). The need for change is multifaceted. For industry, the driver for change will be commercial benefit, but there is the need to gain buy-in from employers, which requires a social shift within their organisations (Australian Human Rights Commission, 2013).

Finding out about a trade

Despite the opportunities for women in the trades, women are still not seeing the trades as a viable career pathway (Galea, 2017). While a report to the Human Rights Commission (McGregor & Gray, 2003) related that a number of historical issues led to low participation rates by young women, it also asserted that broad societal changes in gender desegregation in New Zealand have barely impacted on the vocational trades sector. Over a decade later, the participating industries still show strongly entrenched gender barriers, which make them particularly unattractive to young women (Struthers, 2016). This is partly due to the negative perception of many male-dominated industries, leaving women unaware of the potential pathways (Australian Human Rights Commission, 2013).

Young people's experiences are an important influence on their perceptions and career choices. Schools do play an important role; however, other factors such as family and friends can also influence the major decisions of young people (Fuller & Unwin, 2014). A lack of childhood experiences, such as not having the opportunity to learn skills for the trades can lead young women to disregard the trades as a career pathway (Australian Human Rights Commission, 2013; Roberts, et al., 2008).

It is also important to focus on older age groups. Research conducted by the Ministry for Women in 2015 identified that women had not seriously considered jobs in the Canterbury rebuild, were unsure how to access them and saw construction jobs as 'jobs for men'.

Gaining training and employment

Another reason that women tend to disregard the trades is due to recruitment practices. These have come under scrutiny in recent years because of a tendency to employ through informal networks or job advertisements that appear to favour men (Galea, 2017; Ministry of Women's Affairs, 2013). Women who seek employment in the trades often face further barriers. There is a propensity for employers to recruit employees from a similar background; while women may also lack practical skills due to not gaining exposure to trades-related occupations in childhood, which can further impede their efforts to secure employment.

The Ministry of Women's Affairs (2014) has developed a handbook for employers, which gives practical advice on how to find and attract women for their trade jobs. The Australian Human Rights Commission (2013) has also developed a toolkit for employers to attract, retain and progress women in non-traditional industries. The development of both these resources point to a need to provide employers with the required support if the numbers of women in non-traditional roles are to increase.

In the workplace

In *Women in Construction - The Untapped resource?* (Hodgkinson, 2006), commissioned by the BCITO over a decade ago, six main barriers to engagement within industry for females were identified. These are:

- lack of knowledge of the opportunities available within the industry;
- lack of leadership over the promotion of diversity;
- poor overall public image of the industry;
- lack of knowledge among employers and other industry members about the benefits of diversity and equal opportunities business practice;
- stifled opportunities for women already working and training in the industry; and finally,
- lack of support for those women already working and training in the industry.

These barriers are still inherent in the trades. Although the call is to look to women to address the shortage of skilled labour, rather than look for talent offshore, entrenched views still lead to reluctance to employ women.

The focus is on social change within organisations, rather than satisfying a short-term human resource need. Through the publication of this report and the thematic analysis and development of personas, we can identify what changes can be made to educational and industry practice for women, which will, in turn, help to enhance the enablers and diminish the barriers they face in their engagement and learning journeys within the trades.

Methods

In order to answer the question “What are the characteristics of an effective learning journey for women entering trades?” the research needed to focus on successful tradeswomen and the barriers, influencers and enablers they have experienced. All data was collected through semi-structured interviews with tradeswomen (N=35) who were identified as successful by the relevant consortia partner. A summary of the participants from the consortia is set out in the table below. Interviews (which were recorded and transcribed), were conducted face-to-face and ranged from 20-120 minutes in length.

The thirty-five women interviewed as part of this project represent a range of ages, ethnicities, trades, stages in training and career journeys, and regions throughout New Zealand. Interviews were analysed thematically and the findings and recommendations presented in this report. The tradeswomen told their stories with honesty and without filters. Their stories provide great insight into what supported and enabled them to succeed and what, potentially, could have pushed them to leave their trade.

Data collection

The consent of the participants was obtained and their privacy was diligently maintained. Once they consented to participate, the researcher provided information on the research project, an understanding of the measures taken to ensure confidentiality, plus the opportunity to ask further questions and permission to withdraw, without giving a reason, at any stage of the research.

Data collection took place between April and December 2017. A purposive sampling method was used (Cohen et al., 2000), with all participants initially contacted by their relevant consortia partner.

Participants

Consortia partner	Number of participants
Building and Construction ITO	15
Competenz	1
Connexis	5
Manukau Institute of Technology	3
Motor Industry Training Organisation	7
Skills Organisation	3
The Southern Initiative and Auckland Māori & Pasifika Trades Training	1

Interviews

A semi-structured interview was used, so the conversation could be guided by open-ended questions, but allowed for more probing questions when required (Braun & Clarke, 2013). The conversations that took place during the interviews allowed the participants to freely discuss their views, feelings, doubts and experiences within the trades. All interviews were audio recorded. This allowed the interviewer to focus on the conversation rather than note taking, with the advantage of avoiding loss of meaning and unavoidable interpretation bias, which is inherent in transcription.

Analysis

Once all the interviews were completed, transcription and analysis of the data was carried out using thematic analysis – which is a method used to identify and analyse themes in qualitative data (Braun & Clarke, 2013). Coding of participants' experiences and perceptions of barriers, influencers and enablers was undertaken. Within each category it was determined at what point in their career the experience occurred; pre-trade, apprenticeship, post-apprenticeship, and whether it was specific to women, or experienced by all tradespeople. Subsequently, the findings and recommendations have been presented in this report.

Strengths and Limitations of Qualitative Research

A qualitative research methodology was considered appropriate for this project as it has significant strengths including promoting the voice and perspective of respondents.

Strengths of Qualitative Research

- Issues can be examined in detail and in depth.
- Interviews are not restricted to specific questions and can be guided/redirected by the researcher in real time.

- The research framework and direction can be quickly revised as new information emerges.
- The data based on human experience that is obtained is powerful and sometimes more compelling than quantitative data.
- Subtleties and complexities about the research subject and/or topic are discovered that are often missed by more positivistic enquiry.
- Data are usually collected from a few cases or individuals, so findings cannot be generalised to a larger population. Findings can however be transferable to another setting.

Limitations of Qualitative Research

- Qualitative researchers' use of interviews and focus groups can be considered a limitation by quantitative researchers because of the subjective coding approach and narrative findings.
- Research quality is heavily dependent on the individual skills of the researcher and is more easily influenced by the researcher's personal biases and idiosyncrasies.
- Rigor is more difficult to maintain, assess, and demonstrate.
- The volume of data makes analysis and interpretation time-consuming.
- The researcher's presence during data gathering, which is often unavoidable in qualitative research, can affect the subjects' responses.
- Issues of anonymity and confidentiality can present problems when presenting findings.
- Findings can be more difficult and time-consuming to characterise in a visual way.

Findings

For women who want a physical job and have the right attitude, the trades are a positive career option. Although the trades have traditionally been considered as a job more suited to males, women who have chosen to work in the trades, regardless of the fact they are in a male-dominated industry, have found the trades to be a positive career path (Dabke, Salem, Genaidy & Daraiseh, 2008; Smith, 2013). Despite the barriers, tradeswomen enjoy a career that allows them to be active, solve problems and create something that can potentially make an impact on the lives of others.

Why the trades?

It was often either their attitude or their experiences that empowered the tradeswomen to take up a trade.

The job itself

A number of the tradeswomen, who had made a career change into the trades, came from employment that was traditionally female, such as caring work, hospitality, or retail. The tradeswomen found they struggled to manage financially as their job in a female-dominated industry offered lower pay and less stable or 'casual' employment conditions. The trades offered them the opportunity to embark on a career that provided both job stability and improved remuneration.

However, creativity and diversity were also major sources of motivation. One woman left a highly paid job for the opportunity to start her trade qualification. She saw the trades as an opportunity to be creative and work with a diverse range of people, as she felt "*there was no soul food*" in her previous employment. For many of the tradeswomen the trades allowed them to find what they "*loved doing, which was making things*". The opportunities to work in a hands-on job appealed to the self-described "doers", as the thought of sitting in an office did not appeal. Other women, who had careers prior to entering their trade, felt their previous jobs lacked mental stimulation. These women believed that trades offered the chance to not only be hands-on, but also to have the opportunity to "*be mentally challenged*" in their role.

Mental and physical nature of the job

Most women enjoyed the combination of the mental challenge combined with the physical nature of the job. Although physicality is often cited as a reason for women to disregard the trades as a career (Chan, 2013), the physical nature of the job was often noted by the participants as a key influence on their decision to enter a trade. The women found that this provided them with the opportunity to remain fit and active and when they

felt there were limits to their strength, this provided a challenge to find ways to complete a task within their capabilities. It was always an added bonus when they found their male colleagues adopting their methods.

Family: influencer or barrier?

For some of the tradeswomen, a family member provided insight into the opportunities within a trade. Treasured memories of working with their father or grandfather, of being “*thrown up into the roof cavities to help pull wires*” or being taught how to weld, meant their chosen trade was familiar and gave them the drive to pursue it. There were times when family members did not intend to be influencers, but by leaving trade magazines in the bathroom or allowing the young woman to be on-site, these women also gained insight and familiarity with their trade.

A few mothers, not in the trades, were also inspirational role models. Examples such as a mother proving she could gain her truck licence or being “hands-on” during house renovations, allowed the women to witness their mother’s practical capability. This encouraged them to find a career where they could do things for themselves and “*not be fully reliant on someone else*”.

Although, more often, influencers’ families could also act as potential barriers. One barrier discussed by the women was the encouragement to follow a university pathway, rather than a trade apprenticeship. Although the discussion of trades versus university is not a gender specific barrier, it was felt that some women could easily reverse their decision if they did not have their families’ support. One tradeswoman realised “*her parents had high hopes for me to go onto University*” and expressed concerns about her decision. This woman had to prove her desire to follow that career path; once her parents saw their daughter was serious about the trades, they offered their full support.

A more specific concern was that some parents questioned their daughter’s choice to work in a

male-dominated industry. On the one hand, some parents encouraged their daughter to “*do something else, something like a girl would*”. On the other hand, other parents suggested the trade as a possible career for their daughter, including showing her a job advertisement and encouraging her to apply.

School: influencer or barrier?

School is often an influencer for students as they transition to the next phase of their education. For the tradeswomen who entered the trades directly from school, the level of support they received from their school regarding their chosen career path was at times influential in their decision to enter a trade.

Some women felt their school provided them with experiences that opened up opportunities within the trades. For instance, building a coffee table or completing a science project (about their trade), which gave them an insight into a trade career they may not have previously considered. Of equal value, were the subject-teachers who took extra time to build confidence, were encouraging, and taught valuable trades skills.

Not all classroom experiences were positive, as some tradeswomen believed that school acted as a barrier to their transition to a trade. One woman took a woodwork class and enjoyed the work, but as one of only two female students, felt she was actively discouraged from attending and was always asked “*what are you doing here?*”

Career Advisors were instrumental in recognising a student’s interest. Alongside the provision of information, the school career staff supported them to transition seamlessly into their pre-trade course. Gateway⁴ Coordinators managed learning experiences

4. Gateway is a funded programme that provides senior students (years 11-13+) with opportunities to participate in structured workplace learning. It is a formalised learning arrangement that allows students to attain specified knowledge and skills.

Findings

out of school, which further developed an interest in the trade. The women felt that the work experience component was a valuable tool for them to investigate if the trades were a viable career choice and for them to experience a male-dominated workplace. One tradeswoman saw work experience at school as *“how I got an understanding of what it was, what the job was and that anyone could do it, it wasn’t just for the guys”*.

However, some of the young women who participated in work experience lacked the confidence to give tasks a go or lacked the experience to manage tricky situations. Although this also applied to some male students, this often meant that the workplace was less likely to accept a female for work experience in the future. Work experience also provided them with the opportunity to try out the different careers within the trades. One woman felt that *“Gateway more or less just showed me the options”*.

In some schools, work experience in the trades was neither promoted, nor offered and other schools only provided work experience placements in more female appropriate workplaces. There was often an expectation that a university pathway was a more successful pathway, with trades being *“perceived to be a drop out thing”*, although this is not a gender-specific barrier. The lack of encouragement, and comments such as *“don’t leave high school, stay here and go to uni”* from key school staff members, was challenging for young women embarking on a career in a male-dominated industry.

Other influencers

Friends could also influence the women’s decision to enter their trade. Telling the woman they should *“go to tech with them,”* or informing them of trade jobs, as well as hearing friends’ stories about their trade job or knowing female family members who worked in the trade, provided motivation to consider a career in the trades. One woman commented; *“I had a lot of friends who were builders and the stories and the lifestyle sounded better than being in an office or behind a till”*.

Other women’s chance encounters with tradespeople, either at a young age, or when a builder was renovating their house, allowed them to see the opportunities in a trade career.

Conclusion

There was a united feeling amongst those interviewed that the trades were invisible to women as a potential career pathway, but no clear idea about who or what was responsible. Many of the tradeswomen wished there was a way they could give women an opportunity to see the possibilities within the trades.

As one woman remarked; *“To get girls there, first they have to know that it (trades) exists and these are the options open”*. The tradeswomen also expressed confusion about *“where should the kids learn about these big opportunities out there in the trades?”*

There was also a belief that gaining information or support is difficult *“so they go and take the next best thing”*. Often the next best thing is a job in an industry dominated by women. Alongside lack of the support is the need for the right attitude, *“attitude is a huge thing, if you go in thinking it is going to be hard, you are going to suck”*. Having opportunities and the confidence to give things a go, is key to encouraging more women into the trades.

The tradeswomen discussed an immense sense of pride from the finished product, the love of learning, the changing nature of their work and the challenges that stimulated the body and mind. Not being “strong enough” to tackle a job in the same way as the guys was a challenge, but when the guys started adopting the woman’s way because it was more productive – that was a “real buzz”. One tradeswoman stated “*young women need the chance to see things are a lot easier than they think*”.

Recommendations

- Develop, support and promote a consistent method for reviewing projects aimed at increasing the number of women in the trades, including access to information regarding the most effective practice.
- Review success programmes internationally that support women into the trades, including government initiatives that support tradeswomen and promote programmes, such as the trailer used in schools by Supporting and Linking Tradeswomen (SALT) in Australia, which has seen an increase in the number of women apply for apprenticeships with Sydney Trains.

Influencers

This research confirmed that the limited access to the required knowledge about opportunities for women in the trades was a significant barrier to them entering the trades. The women in this research were often responsible for navigating the different options for entering the trades or happened across their trade purely by chance. When they discovered opportunities within the trades, the potential for stable employment or the opportunity to turn their passion into a career gave the women the motivation to succeed in that career.

Aside from personal reasons, there was no one significant influencer identified in this research. Rather a combination of family (either by directly influencing

or childhood experience), school staff, or friends introduced the women to the opportunities available.

A lack of knowledge of the trades as a career path is noted in this study as a barrier to women discovering the economic and personal benefits of pursuing a career in the trades. This was also emphasised in research conducted during the Canterbury rebuild (Ministry of Women’s Affairs, 2013). As one tradeswoman stated: “*for me we are underrepresented, so they (other women) really don’t see us there*”. Many of the tradeswomen were not aware of their trade as a career, let alone one to which they aspired, and a number of tradeswomen interviewed felt they “*fell into the trades*”. However, for about 10% of the tradeswomen interviewed, the trades were something they knew about and aspired to from school. Each of the tradeswomen interviewed discussed an influence that exposed the opportunities available in their trades as well as the barriers that could have hindered them from following a trade career.

The tradeswomen who entered the trades at a more mature age felt they would not have had the same confidence to handle the male-dominated nature of the workplace when they were younger. Tradeswomen, just a few years out of school, also felt confident, especially when they were among the older students in a pre-trade class. However, others lamented the fact that they did not enter the trades earlier. This research highlighted there is no right age to enter the trades – what is important is to provide opportunities to all demographics.

Findings

Gaining trade skills and employment

For some of the tradeswomen, one of the perceived barriers to entering the trades was the feeling that they lacked knowledge about the tools and the skills to use them. This lack of knowledge was due, in part, to their different childhood experiences. Often boys would be *“tinkering with their fathers in the shed or playing with their mates building a boat”*. One woman, when comparing her experiences to another apprentice stated, *“nobody ever taught me how to use a drill, it just wasn’t part of what I learnt, and yet at the age of seven (the other apprentice) was in his shed with his father building something, using tools. So, there is some catching up to do”*.

Pre-trade programmes

Pre-trade programmes help to develop skills women have missed out on (Ericksen & Palladino Schultheiss, 2009). While the use of dedicated programmes for women in underrepresented industries has been detailed in research (Hughes, Nzekwe & Molyneaux, 2013), the participants in this project were wary of such a programme. They felt that the male-dominated environment of a pre-trade course would be a safe introduction to the industry, although none of the women had actually participated in ‘women only’ programmes. This finding is supported by previous research that suggests completing a mixed gendered pre-trade programme, which allows women to gain experience and coping skills for working in a male-dominated workplace (Ericksen & Palladino Schlitheiss, 2009). The women who had the opportunity to complete the course for a reduced cost or no cost, felt more secure in *“giving the trade a go”* as there was no financial risk involved.

For the majority of women who completed a pre-trade programme, gaining an apprenticeship was not always an easy task. They expressed concern about the employers who would look at the perceived barriers

of women in a trade role, instead of their strengths and the opportunities. This left the women feeling that employers needed to be more open to providing work experience and apprenticeships to women.

Some of the women overcame their lack of trade readiness by entering a pre-trade training programme. One tradeswoman believed she would be unable to just ‘walk off’ the street to ask for a job, so *“thought do a pre-trade, get a few skills, a bit of knowledge and it is going to be easier to pick up a job”*. The pre-trade programme offered the opportunity to learn basic skills that would take time to pick up on-site and more advanced skills, such as learning to use power tools with confidence. It enabled women who felt *“pretty green”* prior to the pre-trade, to pursue the trade and gain the skills they felt they needed to secure employment.

More specifically, a lack of practical knowledge was recognised by the tradeswomen who were completing the tasks in the pre-trade programme. One tradeswoman compared her knowledge with the others in her course, *“I think some of them (male students) might have come from jobs or they studied it at school, whereas I had nothing”*. The tutors, who noted the lack of practical application, provided extra time in class, or the opportunity to return outside of scheduled class, so that the women could succeed.

The tradeswomen also appreciated that there should be *“no special treatment”* from the tutors or fellow students as they felt it could be a barrier to their learning. The women felt they needed to do everything the male students were doing because *“if the guys try and take over your job because they think it is too heavy or something like that, it is like “leave it, it’s my job”, I need to know how to do this, I need to know how to lift it”*. Also, if the female students did receive special treatment from their tutors there could be repercussions from other students. In one incident, a piece of course work was destroyed by a fellow classmate, and although she was annoyed at the damage, the tradeswoman stated,

“you do get a bit of jealousy when you are getting all this extra attention; I was getting extra attention and I made something that was really nice and this kid had none”.

However, extra support was appreciated when the tradeswomen were focusing on the next phase in their career; trying to gain an apprenticeship. Some women felt their tutors significantly supported them by providing the connections with appropriate employers. One woman commented, *“I thought I was just going to be another drop kick and go to tech and do nothing with it. But I was lucky enough my tutor got me a job”.*

There were tutors who organised field trips to allow their class to see the opportunities within their industry or to use the skills developed on *“fun projects”*, such as building a pool table. Nevertheless, not all women who entered a pre-trade programme went on to complete their qualification or enter the industry. Although men also dropped out, it was not in the same numbers as the women. Some of the women interviewed recalled personal reasons for the women leaving, there were others that *“just disappeared”*. Due to the impact of pre-trade programmes on the confidence of women considering the trades, this dropout rate needs further investigation.

Work experience

Work experience is a significant influence for women wishing to get into the trades and the women would gain valuable experience, knowledge, and could even gain employment. The women interviewed recommended that employers needed to be open to offering work experience, with the proviso that it does not necessarily have to lead to employment. The employers should also not pre-judge the women, but allow them the opportunity to learn trade-specific tasks, not just putting them *“on the end of a broom”*. At times, the skills learnt on work experience supported the learning in pre-trade programmes and allowed the women to *“be on a par”* with their male colleagues. As with pre-trade programmes, work experience

provided a further opportunity to work in a male-dominated environment, which prepared the women for the next phase in their career.

Barriers to gaining an apprenticeship.

For some of the women interviewed, gaining a job was the reason for them entering their trade. For others, the path to employment was not always simple. Whether it was finding their first job or a subsequent job, the time taken to get a job was a barrier. This often led some women to question their choice to remain in the industry. For one tradeswoman, the job search took nearly a year, it was only her passion for the industry that lead her to continue the search whereas others may have given up.

Gender discrimination

While searching for employment, some women encountered overt discrimination. There were descriptions of women being asked questions, such as, *“are you strong?”*, *“you know it is in the workshop?”* or *“you realise there is dirt involved in this job?”*, or the outright statement *“we are looking for a male!”*, when enquiring about a job or even in an interview. These comments made the women feel they weren't taken seriously. One tradeswoman described an interview where, although the employer was prepared to employ her, he made a judgement based on her appearance. *“They just looked at me and said because of your size and not being physically strong, we will need to put you in this area (a more desk-based role).”* These experiences left the women frustrated and questioning their resolve; however, they persevered and found a role that allowed them to succeed, often with the support of a significant person in the industry. All of these women were grateful for their employment, but felt more employers needed to look at all candidates based on their merit and not exclude them based solely on gender.

Findings

Conclusion

Both work experience and pre-trade programmes provided an opportunity to overcome skill gaps, and the opportunity to experience working in a male-dominated environment outside of the safety of the pre-trade environment. More importantly, a number of the women who completed work experience gained a mentor who would advocate for them. If the mentor was unable to provide a job, they often used their networks to support the tradeswomen in finding their first job. Often the mentorship, advice and guidance continued even after the women were in other employment.

When looking for a job, some of the tradeswomen interviewed felt they “*fell into the trade*” and an offer of employment was often the reason they are now on that career path. Others who chose to pursue their trade, usually via a pre-trade course, often struggled to gain employment, which was a significant barrier to entering the trade.

Recommendations

- Further investigate the reasons women do not complete their pre-trade programme.
- Provide scholarships for women to attend pre-trade programmes to gain the skills and confidence to look for jobs.
- Create and promote a job seeker site such as DCC Jobs⁵, where women and influencers can find employers who are willing to employ women and provide the necessary training.
- Develop, support and promote employers who are committed to providing work experience or employment for women interested in the trades.⁶ (Note: the icon on the right can be used by employers who support and/or employ women in the construction trades).

5. www.dccjobs.com/clients An Australian site created to provide interested women with an effective way to find work experience or employers committed to supporting women needs and development.

6. On International Women's Day 2018 the BCITO came up with a simple way for people to show their support for women who have successfully taken a bold step into a career which in days-gone-by has been viewed as a 'man's job'. **Supporting women in the trades.**

Apprenticeship: Learning on the job

Once in employment, most of the women began their apprenticeship within six months of securing their first job. They knew the two main sources of support were their employer and the Industry Training Organisation. Some felt well supported, whereas others felt their apprenticeship was fraught with challenges.

Often the barriers were not gender-specific, but rather those experienced by all apprentices. One barrier was the lack of understanding about the roles of the different parties involved in apprenticeships. While the women knew they had a responsibility for their learning, they were unsure of what level of support their employer and Industry Training Organisation (ITO) would provide. Women who had this clearly explained, were confident in what could be expected from all parties, while others were left feeling unsure and at times unsupported by their employer, ITO or both.

Industry Training Organisation

Industry Training Organisations (ITOs) are the major providers of educational support for apprentices. There was mention of other organisations, such as labour hire organisations or managed apprenticeships at a Polytechnic. However, these organisations always acted in conjunction with an ITO.

The provision of scholarships for apprentices, such as an Outward Bound course or a specialist course not covered by the ITO, made the women feel their ITO had noticed their work and was prepared to support it.

Some ITOs also put on awards celebrations where the women not only received recognition, but also had the chance to meet other women in their industry. The scholarships and networking opportunities were empowering and ultimately beneficial for their career in the trades.

These networking opportunities were especially important for the fledgling tradeswomen, as they could

talk with women who shared similar experiences. Unfortunately, there are not many networking opportunities specifically for tradeswomen. Many women felt they wanted to “know what was coming up” as well as the opportunity to contact other female apprentices in their trade. Sometimes ITOs provided the opportunity to speak to more advanced apprentices, although the apprentice was often male. While the women felt they could ask questions about the apprenticeship programme, they would not want to say to a guy “*hey I’m feeling...*” or “*this guy said this to me on-site ...*”

Training Advisors

Ongoing support for the women during their apprenticeship was inconsistent (according to those interviewed). Some women found that at their regular meetings with their Training Advisor, care was taken to listen to the jobs the tradeswomen had been assigned to and clear advice was offered on standards the apprentice could complete which matched their current workload. This advice would reduce the pressure on the apprentices as “*there was room to manoeuvre and flexibility*”. Training Advisors would also provide apprentices with the required support to continue, when they were losing focus. When the Training Advisors focused on on-job learning and motivation, the women found this enabled them to maintain their motivation. However, when the support was not as focused on the learning and the Training Advisor “*turned up, marked the books and left*”, the women felt unsupported in their learning.

Also, the high turnover of Training Advisors was a barrier. While those interviewed understood this was often unavoidable and due to staff leaving or the apprentice, herself, moving regions, they were concerned about the inconsistent advice and level of commitment. Whereas some Training Advisors were as regular as clockwork, others were “*pretty fly by night*”. Irregular meetings, that often did not happen for months left the apprentice feeling they needed to “*nag the Training Advisor to get things done*”.

Findings

The women suggested the ITOs needed to ensure their Training Advisors were providing similar support to all apprentices.

Training programme

Trade qualifications required different delivery methods. Block courses and night courses allowed access to specialist tutors, who were very experienced and knowledgeable, according to the women. However, block courses that were out of town became a potential barrier, especially to mothers, as it required them to find alternative care for their families. The same barrier applied to night courses, as they took them away from family time. However, this often made them more determined to succeed.

Completing booklets as they were doing the tasks on-site was the most common learning method. They also completed them at night, though it was hard to stay motivated, especially after a long day. However, the women expressed concern that they could not access their assessors or Training Advisors during work hours, while those with family commitments often did not get to their bookwork until late in the evening when they may not have been able to make contact for support. For those who were able to access support, most found it invaluable.

On job training

As financial independence was important, the women valued the opportunity to be able to earn while they learnt their trade. For women who had recently left school or the benefit, their first pay was a great motivator. However, working for a training wage meant that some women struggled financially due to the significant drop in wages.

Neither financial independence, nor the financial struggle of being on a training wage, is gender specific. Both men and women entering the trades struggled with this, along with the awareness that their on-job learning

was dependant on their employer. Some employers took the time to ensure they knew what their apprentices needed to learn and experience and ensured they allocated them appropriate jobs. Other employers focused on the job itself and it was up to the apprentice to make it work for their qualification. One woman described the experience as a challenge *“because I had to seek out the learning opportunities myself”*. This was a challenge for women who already felt out of place in the male-dominated work environment.

Tradeswomen also felt that they were not included in informal learning activities because of their gender. They described situations where they *“had to learn with their eyes”*, standing back and watching as someone else had the task explained. One tradeswoman requested that she needed the “big jobs” that were required to complete her qualification, but was told she wasn't ready. She finally got the opportunity to take on bigger roles (when other staff members took over the allocation of daily jobs), but this experience affected her learning and confidence for a long time.

Mentors

Mentoring was important to the success of the apprentice. When the mentor (who could be the employer, foreperson or a more experienced tradesperson) took an interest in their learning and took the time to impart their knowledge, the tradeswomen felt less vulnerable and more confident about their career choice. Other women did not have such a positive experience. Some tradeswomen cited experiences where their mentor refused to speak to them, often due to the mentor's belief that women should not be in the trades. In one example, the tradeswoman had to seek out a suitable mentor and request a change. Although the employer had believed he had put her with the best person, he granted her request.

Often the employer or mentor believed women were capable of being in the trades and had their best interests at heart, although at times they inadvertently hindered the tradeswoman's learning journey. One tradeswoman described a situation where *"my manager wasn't giving me jobs that I could learn off and I think he didn't want to give me jobs I couldn't handle perhaps"*. This was not an isolated situation, with a few women having to speak to their employer or mentor about needing to get jobs that would support their progression in the trade. Gaining the confidence to have that conversation was not always easy for women who felt both respect and gratitude to the employers who had given them the opportunity to enter the trades.

These women were aware that they were very visible, even though some tried to *"blend in with the guys"*. Being visible often meant that they felt that they needed to *"work twice as hard, to be twice as good"* as the males on their team. Being visible also meant that the tradeswomen felt they could not make many mistakes because, if they did, they were *"letting down women in trades"*. As some employers were aware that the women's gender made them vulnerable in the predominantly male work environment, they often sheltered them from potential sources of harassment.

Conclusion

Although it was not all plain sailing, in most cases women received the required support to be successful. Most employers ensured the women had signed up for an apprenticeship with the relevant ITO. When the three parties – ITO, employer and apprentice – knew their roles and responsibilities, the apprenticeship process was a positive experience (see Roles and Responsibilities). Lack of clarity about those roles and responsibilities, however, created discontent. Barriers such as not being given the relevant jobs to learn the task, due to concerns regarding strength and working for a training wage, created challenges for some female apprentices.

The employer or direct manager in the workplace was often a motivator, as well as a facilitator of learning. These women were very grateful for their first job and were extremely loyal. In turn, the women felt trusted, supported, and a valued member of the team. They often received further training and promotion.

Recommendations

- Train and monitor Training Advisors across all ITOs to ensure consistent and reliable support for apprentices. This includes: timely meetings, clear guidance and knowledge.
- Communicate the roles and responsibilities of all involved in the apprenticeship training process, to ensure buy-in and enable benefits to be maximised.
- Develop, support and promote connections to more experienced female apprentices within a trade for support. This includes: training for experienced tradeswomen to provide the appropriate support.
- Develop, support and promote employer support programmes to ensure employers are able to provide a positive training experience for their apprentices.

Roles and Responsibilities

Training Advisors:

Although the roles and responsibilities of Training Advisors vary between industry training organisations, the following list is indicative of the tasks they perform:

- regularly meet with you on-site
- ensure you're getting quality training
- keep track of what you're learning (and inform you of any potential gaps)
- assess your competency
- record your assessment results with NZQA.

Findings

Employers:

Employing an apprentice comes with responsibilities and it is up to employers to ensure their apprentice gains the knowledge and skills necessary to complete their qualification. In practical terms, the following list is indicative of the employer's responsibilities:

- provide adequate training and supervision
- provide suitable scope of work
- provide access to a range of tools and equipment
- provide a safe working environment
- give ITO representatives access to their apprentices
- meet with Training Advisors to discuss their apprentice's progress
- respond to the ITO communication and participate in surveys at times.

Apprentices:

Being an apprentice comes with responsibilities too. Apprentices need to:

- be keen to learn
- practically apply the skills they learn
- engage with their ITO representatives
- assist in gathering evidence for assessment
- make a commitment to learning and progress
- achieve agreed goals
- let the ITO know about changes in employment status
- respond to ITO communication and participate in surveys at times.

A woman in the trades

The tradeswomen often felt like lone rangers, the only women. Often being a lone ranger was described as intimidating, especially in a new situation. However, there was also a sense of pride when the tradeswomen *"would look for miles and it was just men"*.

Some of their success was due to the males in their team who encouraged the tradeswomen to participate in the problem-solving process and valued their ideas. The tradeswomen knew that feeling like part of a team is not a gender specific enabler, but for them to be seen for their ability and not their gender became a very powerful motivator.

Gender, not ability

There were times when the tradeswomen felt their abilities were in doubt because of their gender. There were many incidents discussed where the tradeswomen felt they were constantly watched while doing their job. Tradeswomen felt they had to work harder than the males. Some tradeswomen felt they were unable to make mistakes when trying to meet the expectations of their employers. As one woman described it, *"no matter what you do, do something wrong it will always come back to 'female', that is the first thing people identify with"*. They were aware that mistakes could impact future employment prospects of other women.

What was frustrating for many of the women was when customers or others in the industry would see (or hear) their gender and assume their level of ability. The tradeswomen would often find customers who would ask a male counterpart to explain or (even worse) perform the task, or a technician would request to speak to the 'tradesman' doing the job. In each case, the tradeswomen would need to insist they had the correct qualifications and knowledge to carry out the job; something their male counterparts did not have to do.

Barriers experienced in a male-dominated workplace

Although there is a need to increase the number of women in the trades, it remains a male-dominated environment. Male-dominated workplaces are a barrier to some women as perceptions of masculine behaviours, such as swearing, inappropriate comments and even sexual harassment (Chan, 2013), can prevent some women from applying for a job.

In conversation with the women interviewed, they recognised that the language often used in the workplace and some pre-trade classrooms could be uncomfortable for both women and men. In contrast, other tradeswomen found having a woman on-site also meant some male colleagues changed their behaviour “to accommodate the lady”. There were also tradeswomen who were comfortable with the language of the work environment and were confident blending in. As women are often more visible on-site, the tradeswomen’s use of certain language did cause offence. In one case, there was a complaint against a woman regarding her language, even though her language was similar to her male colleagues on-site.

A significant finding from this report was the lack of sexual harassment in the workplace, as discussed by the women interviewed. In fact, one woman who came to New Zealand recently, commented how good it was to go on-site and not experience the ‘catcalling’ and other inappropriate behaviour seen in her home country. Nevertheless, there were a small number of sexual harassment incidents reported in this current study. These were a barrier, even when dealt with appropriately, as they created a work environment of uncertainty.

Other people in the workplace

Although the women enjoyed working in a male-dominated industry, most agreed it was refreshing to have other tradeswomen working with them. At times, even meeting another tradeswoman provided the

feeling of “oh, look, I am not a freak” as it could be quite isolating at times. However, having another woman on-site did not mean the women would get on. One woman described a sense of competition, since she was used to being the only tradeswomen.

As the tradeswomen are working in a male-dominated industry, the majority of people that the women worked with as co-workers, employees, other tradespeople and even customers, were male. One tradeswoman had it described to her as:

“there are three types of guys, there is a man on-site who goes on-site to be away from the women in his life, he wants peace. That is the whole point of them being at work, so they are generally anti-...and I’ve seen them, they have been there and I can identify them and you just steer clear of them. Then there are the people who want to help you, want to carry things for you and that is sort of patronising and annoying. Then there are the people who are fine with it.”

Other tradeswomen described very similar situations. A small number found people, usually males, who did not believe that women should work in their trade, although tradeswomen believed “it was their problem and not mine”. Often the tradeswomen found that once they had proven they were capable of doing the job, attitudes changed. There was also the realisation that it is not possible to ‘please everyone’, so they focused on doing the job well and treating everyone with respect.

Although the women weren’t exposed to a lot of overt discrimination, they did encounter belittling comments and behaviour. What the tradeswomen struggled with were the passive approaches to undermine them, such as not inviting them to Friday drinks or sabotaging their work in some way. An example of more overt discrimination, that of refusing to talk to a tradeswoman, even though she was the foreman, did lead to more assertive action from their employer.

Findings

Behaviour, such as trying to take over when they were doing 'heavy' or 'dirty' work, was felt to be misplaced support, rather than a conscious effort to harass the tradeswomen. Also comments such as "*what's a little lady like you doing pushing a wheelbarrow*". Rather than getting offended by such comments, the tradeswomen felt it was better not to react negatively, as they often felt the men were doing their best to show some support.

For the most part, the women found they had a lot of support from the men they worked with, with many of them feeling they were working with people they considered friends, and at times family. This camaraderie made the more challenging jobs and situations bearable. What the women appreciated most was being valued as a colleague, and it not being about gender. However, the women considered that the development of a network of tradeswomen was important – to be able to pass on their knowledge, experience and provide support to tradeswomen entering the industry.

PPE and on-site facilities

As with other professions, the tradeswomen did discuss the need to dress appropriately for the job in order to be taken seriously in the job. Although equipment such as Personal Protective Equipment (PPE) or specialist clothing were usually provided for protection against the potential hazards in the job, many of those interviewed were frustrated at the lack of options suitable for women. This sometimes resulted in them purchasing clothing that was not as durable as the options available to their male colleagues. The lack of options also left women needing to choose PPE that was too big; another health and safety concern.

Most of the tradeswomen were happy with the toilets provided, feeling "if it is good enough for the guys, it's good enough for me". Where there was a concern was at job sites that were remote or undeveloped, and the women would have to use a work vehicle to go and find an appropriate toilet.

Other enablers to remain in a trade

Some of the tradeswomen interviewed were ambitious and wished to progress "off the tools". These tradeswomen often felt there was no glass ceiling and aimed for more senior positions. When they believed a 'glass ceiling' existed, tradeswomen were prepared to start their own business. These women became role models for the apprentices who wished to emulate them. Other women wanted to become more specialised in an area of their trade, while yet others were rewarded for their efforts by increased remuneration. Although all the women agreed there was no pay disparity with their male colleagues, some felt that although they had progressed within the same company their pay did not represent the level they had attained within the company. Yet others felt their trade did not offer the level of remuneration afforded to others and believed this was a barrier to enticing people into their trade.

Conclusion

These women chose to work in a male-dominated industry. However, they enjoyed the connection to other tradeswomen, often requesting the development of a networking organisation to enable them to connect more.

Recommendations

- Investigate Personal Protective Equipment (PPE) suppliers to identify those that make equipment specifically designed for women. Although there are some PPE for women stocked in major New Zealand safety retail outlets, these are often men's products made smaller, which are at times uncomfortable for women.
- Support the development of networking events for women working in the trades.

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Additional Resources

Show your support for women in trades

On International Women's Day 2018, BCITO came up with a simple way for people to show their support for women who have successfully taken a bold step into a career, which in days-gone-by has been viewed as a 'man's job'.

This symbol is available to download and use, whether you are a 'tradie', a partner, friend, co-worker or an employer of women in construction.

www.bcito.org.nz/employers-industry/women-in-construction/support-women

Girls with Hi-Vis®

The Girls with Hi-Vis® initiative, led by Ultimit – Women in Infrastructure; objectives are to raise awareness and increase the number of women working in trade and technical roles in the Infrastructure Industries

www.connexis.org.nz/careers/girls-high-vis

A showcase of women who chose an extraordinary career path

Need inspiration? Read some real stories of real women making waves in the trades.

www.skills.org.nz/assets/Uploads/Women-in-trades-Case-Study-Mag.pdf

Facebook Pages and Web Links



Connexis

The Girls with Hi-Vis® initiative, led by Ultimit – Women in Infrastructure. The objective is to raise awareness and increase the number of women working in trade and technical roles in the Infrastructure Industries.

www.connexis.org.nz/ultimit-women-infrastructure



Skills

The Skills Organisation group for New Zealand-based Women in Trades.

Female tradies are out there, breaking stereotypes and working hard; connecting with each other in this group is a great way to get the support, conversation and laughs you need from other chicks doing the same as you.

www.skills.org.nz

www.facebook.com/groups/SkillsWomenInTrades



Manukau Institute of Technology

Supporting the demand for skilled tradespeople qualified in building, carpentry, plumbing and gasfitting, drainlaying, electrical services, and refrigeration and air conditioning with pre-trade, in-trade and Women in Trades Training Scholarships.

www.manukau.ac.nz

www.facebook.com/manukau.institute



MITO

MITO is an industry training organisation. They design qualifications and training programmes that meet the needs of the automotive, transport, logistics, industrial textile fabrication and extractive industries.

www.mito.org.nz

www.facebook.com/MITONewZealand/



Building & Construction Industry Training Organisation (BCITO)

A group for female BCITO apprentices to connect, share stories plus experiences and more importantly have peer to peer support with others going through the same journey as they are.

www.bcito.org.nz

www.facebook.com/groups/BCITOBuidingWomen

The 2018 *My Boss: Legend* campaign presents a short video that celebrates two 'Pioneering Legends'.

www.bcito.org.nz/employers-industry/women-in-construction/

The pages also include the construction sector goals for 2025 and 2040 and a comprehensive list of other organisations that have useful info about diversity and other employment-related topics. 'Trade up' links to information about construction apprenticeships at www.bcito.org.nz/getstarted

The she'll be right campaign video is at www.youtube.com/watch?time_continue=4&v=8fxGkXSgeT8



Competenz

Competenz works with 36 industries including engineering, manufacturing, baking, print and more.

www.competenz.org.nz

www.facebook.com/competenzskills



MPTT Auckland

MPTT Auckland is helping Māori and Pasifika become leaders in the trades. As demand for skilled tradespeople grows, trainees are supporting Auckland's economic growth while creating social change. The practical skills learned are life changing for individuals, their whānau and Kiwi communities.

www.yousegotchoices.nz

Trades skills give you choices – both in your career and your life. You'll learn practical skills that earn you cash, build your mana, and give you the know-how to help your whānau and community.

www.facebook.com/maoripasifikatrades



National Association of Women in Construction (NAWIC)

A voluntary, non-profit association of women who work either in the construction industry or for business organisations who provide services to the construction industry.

www.nawic.org.nz

www.facebook.com/NAWICNewZealand

Research Funding Partners



The Ministry for Women, Minitanga mō ngā Wāhine, is the Government's principal advisor on achieving better results for women, and wider New Zealand.

Women in trades: interviews with employers and tradeswomen (2011)
www.women.govt.nz/documents/women-trades-interviews-employers-and-tradeswomen-2011

Trading choices: Young people's career decisions and gender segregation in the trades (2008)
www.women.govt.nz/sites/public_files/trading-choices-young-peoples-decisions-and-gender-segregation-in-the-trades.pdf

Growing your trades workforce: how to attract women to your jobs (2014)
www.women.govt.nz/sites/public_files/2070-MWA_employers%20handbook%20web.pdf

Māori and Pasifika women in trades
www.women.govt.nz/documents/m%20C4%81ori-and-pasifika-women-trades



This publication is part of a three-year programme, jointly commissioned by the Ministry for Women and Ako Aotearoa, to increase the participation and success of women in construction and engineering-related trades where they are traditionally under-represented.

www.ako.ac.nz/knowledge-centre/what-are-the-characteristics-of-an-effective-learning-journey-for-women-entering-trades

Project Outputs

The research findings, summary recommendations and timeline are available in this project report; additional documents are available online via the Ako Aotearoa project page.

Part 1: Women in Trades Research Programme Overview

This document includes the executive summaries from the first two projects and a snapshot of learnings from the third. It highlights findings and lists the major influencers, enablers and barriers for women working in trades.

The perceptions, barriers and influence of employers who have or have not employed women, (Part 2) and the initial findings from the NZ Government's Integrated Data Infrastructure (IDI) (Part 5) are also presented.

www.ako.ac.nz/knowledge-centre/what-are-the-characteristics-of-an-effective-learning-journey-for-women-entering-trades

Part 3: Employer Perspectives

This part of the research look at the differences between employers with and without women tradespeople, employers views on the main strengths of and barriers to women tradespeople, employer identified ways to attract more women tradespeople and what employers can do to attract more women tradespeople.

www.ako.ac.nz/knowledge-centre/what-are-the-characteristics-of-an-effective-learning-journey-for-women-entering-trades

Part 4: Personas

These personas are fictional characters created to represent different groups of women on their learning and employment journey into the trades and trade employers. They are based on the responses from focus groups, individual interviews and survey responses. Personas help to guide the design and development of resources, engagement and products by creating an understanding of user needs.

www.ako.ac.nz/knowledge-centre/what-are-the-characteristics-of-an-effective-learning-journey-for-women-entering-trades

Part 5: Programme Data

Initial data is available on the Sweet Analytics website.

Proportion of women over time, Recently trained workers, Snapshot of women in trades, Gender breakdown of women's participation in different trades, Origins and Destinations of ITO trainees, Secondary to tertiary programmes and Income outcomes.

www.sweetanalytics.co.nz/2-general/47-women-in-trades-over-time

2018 Detailed Sector Profile Document

This document provides detailed (61 pages) information on the Industry, occupations, skills and demographics of industries included in the Women in Trades Research Consortia.

www.ako.ac.nz/knowledge-centre/what-are-the-characteristics-of-an-effective-learning-journey-for-women-entering-trades

