

# **Women on track: addressing skills shortages in the transport/logistics and construction industries.**

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## **1. Abstract**

It is a well known fact that Australia has one of the most gender segregated labour forces in OECD countries. At times of national skills shortages, the under-representation of women in ‘non-traditional’ industries re-emerges as highly problematic. The overall project seeks to enhance the inclusion of women and girls in the current skills shortage strategies of two industries: transport/logistics and construction. Enhancing the participation of women and girls in these industries has the potential to increase the likelihood of long term economic sustainability, as well as assisting to address current and projected skills shortages. By analysing women's participation patterns, their perceptions of these two industries for potential training and career choices, and selected case studies of best practice, and reporting these to employers and government, steps can be taken to enhance participation of women in growth areas in transport/logistics and construction in Australia.

## **2. Introduction**

This small scale project is funded by the 2008- 09 Women’s Leadership and Development Program Grants. The project runs for the financial year and is thus not in a completed state at the time of writing this paper. The findings and recommendations are however extremely current, relevant and important at this time for Women, Industry and the Australian Economy.

## **3. Literature review (short version)**

### ***Skills Shortages and the Australian Economy***

A ‘skills shortage’ is described as ‘a situation in which there are unfilled vacancies in positions where salaries are the same as those currently being paid to others of the same type and quality’ Arrow and Capron (1959:307).

The Australian Government has included the skills shortage as a key priority for their term 2007-2010. The National Skills Policy Collaboration (NSPC), a group of concerned Australian business groups, unions and think-tanks, suggest the reason for the skills shortage is 'structural and occupational shifts' that require post school qualifications (NSPC 2008:1).

### ***Transport and Logistics***

'Transport is a fundamental element of developed economies, connecting businesses to markets and to supplies of inputs'. Transport and storage industry production in Australia (in volume terms) more than doubled between 1987-88 and 2005-06 (ABS 2008 6291.0.55.003). The National Transport Commission (NTC), agrees with predictions that the land transport freight industry will increase significantly in size in the very near future (NTC 2006:2). Road transport, is predicted to have the highest employment growth in the period leading up to 2011/12 with an overall increase of 8.3% from 2003/04 (ANTA 2005:15).

Much pressure is placed on this industry as customers want services 'provided just in time, by exceptional service staff, at competitive prices and they want to know where their products are at anytime of the day or night'. Also, 'extreme profit margin pressures and global effects such as terrorist attacks, war and the price of oil' adds to this pressure on the industry (ANTA 2005:5). In the near future, local freight industry will be required to align themselves with international providers. Skills and knowledge are becoming increasingly important across the entire industry and must be uniformly recognised to enhance business and employee career paths.

The Australian National Training Authority (ANTA 2005:19-21) suggests reasons for the skills shortage in this industry include; industry consolidation, difficulty in attracting and retaining young workers, an ageing workforce, security, fatigue management, gender imbalance and public perception. Specifically for road transport they also include; chain of responsibility implementation, meeting customer requirements, and increasing levels of owner/driver and casual employment.

### ***Construction***

In 2005-06, Construction was the fifth biggest employer in Australia with 8.7% of total employment. In 2006-07 the construction industry employed 917,600 people on average.

The construction industry includes residential, non-residential building, engineering, off-site and on-site assembly, and erection of prefabricated buildings. The construction sector is 'strongly influenced by economic cycles and therefore corresponding shortages or oversupplies in industry skills and qualified workers' (DEST 2006:6). Pressure on the construction industry comes from consumer and customer service demands, market expansion, competition and productivity, and globalisation (DEST 2007: 8-9).

Building and construction exists in a globally competitive industry, and includes state of the art technology and innovative design. The challenge for the industry lies in adapting to this environment. There is a trend towards specialisation within the industry which creates a mood of meeting immediate skills need instead of long term sustainability for workers.

### ***What's Behind the Skills Shortage in Transport & Logistics and Construction in Australia? Ageing Workforce***

Karmel and Ong (2007: 20) propose the ageing of the Australian population will affect the number of employees in trades as it relies on young male entrants to such a large extent. '...substantial workforce attrition through retirement can be expected in the next five to ten years' (Parliament Senate (PS) 2007:9). This will cause not only a loss in skills but a loss in 'corporate memory' (ANTA 2005: 5). Accordingly, there is an ageing population in the trucking workforce. It is estimated that during the period 2003-2013, 10% of the trucking workforce will retire (ATA 2003:7). 32% of workers in the construction industry are aged 45 or over (DETYA 2001:18). Employers and industry associations need to contribute to building a sustainable workforce and to facilitate flexibility in long term careers (DEST 2006:3).

### ***Recruitment Problems and Promoting the Industry: Recruitment and Attraction***

Recruitment, historically, in the transport industry has not been successful. It has been ad hoc and focused on short term need. Unprecedented low unemployment levels in Australia contribute to the difficulty in attracting workers to the trades as there is so much competition between industries. Small and medium operators are unable to meet larger competitors offer conditions (PS 2007:1). During 2006-2007, 89% of employers in the transport industry looked for staff and 60.5% expressed some difficulty in filling positions, the most common reason for this was a lack of skilled workers (53.4%) (NCVER 2008:2).

Labour hire companies are often used in times of shortage, however, industry and employees would benefit from 'longer term attraction and retention strategies' (PS 2007:23). The long hours traditionally worked by heavy truck drivers is not conducive to an adequate work/life balance (ATA 2003:10), (PS 2007:9). Solutions suggested by the Australian Trucking Association (ATA) include job sharing, more localised work, reduced or part time workloads, and recruitment of more employees to share the work load, as well as career progression, multi skills training, recruitment of younger workers, employment of women, lifestyle considerations and improving public perceptions of the industry, and a commitment to training, including higher quality and delivery.

'Market perception of trades is a factor in worker attraction to the building industry'. Information about industries should be presented realistically and competitively to attract and retain good employees' (DEST 2007). According to DETYA (2001:20) the general community views the construction industry as 'dangerous, characterised by poor working conditions, low rates of pay, limited career options, and generally unattractive'.

### ***Women in the Trades***

The construction industry has the lowest representation of women in any industry sector with 12.7% of total employees being female: significantly lower than the industry average of 44.9% (ABS 2006 6105.0). Female recruitment and skilling is an option to address labour. Comprehensive marketing campaigns and best practice role models need to be used to encourage further participation of women (DEST 2006:25). In transport, females make up 25.7% of the workforce as compared with 44.9% of all other industries (NCVER 2008:1). Although there has been an increase in the level of women in the transport industry, this is largely in the office or white collar environment.

In 2004, the 'Women in Professions' survey (Association of Professional Engineers, Scientists and Managers, Australia 2004:10) listed five workplace conditions that would contribute to keeping women in non traditional fields. These were; training (60.3%), flexible hours (57.1%), and parental leave (48.8%), extended leave at half pay (31.9%) and job sharing (16.1%). The Standing Committee on Employment, Workplace Relations and Education also recommended that employers improve working conditions such as rate of pay and paid waiting time, and provide more flexible shifts to encourage training (PS2007:15). Other barriers include family commitments, long hours and to some extent, physical job

requirements. The Committee found that there was no concerted effort to engage women, and when efforts were made, few women took up the offer (PS2007:9).

### ***Young Workers***

For young women of school age, the primary message required from promotion is that non-traditional jobs are interesting. They are looking for work they see as ‘glamorous’. This promotion has occurred with jobs such as pilot, doctor and lawyer, and these areas have more success in obtaining women’s interest. The younger women are also less intimidated by a male dominated area. Younger women, even at 11 or 12 years old were found to be more positive in their attitudes to non-traditional work making them a prime target for advertising for career and job opportunities (PS 2007:18). Careers Advisors are reportedly not encouraging students into the transport and construction industries, due to a lack of information and awareness of the industry. Parents and friends play a large role in encouraging young people into these industries (PS 2007:18).

### ***Promotion of the Trades***

‘Some sectors of the transport and logistics industry have significant image problems, with community perceptions of the industry including poor safety records, unpleasant working environments, unhealthy image, low wages, long hours, few opportunities for women, few advancement opportunities and demanding physical work’. ANTA suggests ways of improving the image of the industry; encouraging workers to stay longer in the industry with flexible work arrangements, increasing pay and using older workers for mentoring younger workers. Also, encouraging medical assessment to help manage fatigue, nutrition and other industry health hazards, up skilling workers, encouraging young people, attracting more females ‘by targeting marketing and recruitment campaigns at female school leavers, providing for networking opportunities among females in the industry and presenting case studies of females that have achieved successes in the industry’ (ANTA 2005:22).

The importance of the Transport industry to the economy and the population’s well being must be promoted, as well as its ‘community-minded’ project links. There are several bodies that ensure the safety of the industry and compliance should be advertised for recruitment and community good will. It is difficult for the transport industry to induce young workers, due to licensing age restrictions and the long wait after recruitment for hands-on application (ATA 2007:13).

### ***Training in Transport/ Logistics and Construction***

A lack of reliable data about employment and training across all providers increases problems of analysis and prediction for Government and Industry bodies. More attention should be given to recording and reporting data concerning course completion and relevance. Transport industry workers have one of the highest levels of VET participation and qualifications; however, these are not related to the transport industry transport, the proportion of employers providing training has increased. The amount spent on training per employee is along the lines of all other industries. People in this industry are less likely to have post – school qualifications.

Workplace safety and efficiency weighs on the industry. It is increasingly important to train staff in these areas, as well as more sophisticated technology use; essential for career progression. ‘Poaching’ of newly trained employees from one organisation to another is a prevalent problem (PS 2007:10) and (ATA 2003). Drivers are becoming more aware that they need to be multi-skilled. They must adhere to ‘Chain of Responsibility’ and ‘Duty of Care’ considerations.

Employers feel there is access to worthwhile training in general but find it unaffordable and have little time to use it. There seems to be no industry-wide practice of training incentives for employees. Other impediments include motivation and self confidence and an inability to cope with change. Geographic location and flexibility of courses can also inhibit training. Employers see VET as irrelevant for employees and seldom use it. Employees however, reportedly find VET very important for improving job skills, developing career and job prospects, achieving recognised formal qualifications and gaining promotions (ATA 2003:12).

### ***Apprenticeships & Traineeships***

Completion of a New Apprenticeship (at Certificate III level or higher) is the main entry point for building, construction and other related trades. Between 2001 and 2004, completions rose to 48.8%. The construction trades report the highest rates of intake and training (a rise of 26.9% over 2001- 2004) (DEST 2006:7). There is low uptake of New Apprenticeships, particularly for smaller companies. For larger companies uptake has been reasonably strong but retention and completion rates are quite low (ATA 2003:12). Improved

allowances for trainees may be of assistance (DEST 2007:8). School Based Apprenticeships should be promoted, including career expos, and Apprenticeships should be held near major transport hubs (PS 2007:13). 44.7% of employers using Apprentices/Trainees in 2006-07 did so to get skilled staff. Those who used nationally recognised training did so to: 'meet legislative, regulatory or licensing requirements (45.3%)' and 'equip employees with the skills required for the job (24.1%)' (NCVER 2008:3).

### ***Women and Training***

Women's participation rates in all levels of education have increased over the past thirty years. Equal numbers of men and women study in the VET sector. However, women graduates of both VET and university still earn less than men and experience higher unemployment (DEST 2007:1). Interestingly women seem to benefit more from training in the transport & logistics industry than men. One in three female road freight transport workers are likely to change jobs or get a job after doing further training, but only 22% of males find this. Women are also likely to have a slightly higher increase in earnings than men, and are more likely to get a promotion (ATA 2003:33).

### ***Other Groups***

The Government has committed to providing \$2.5 billion over 10 years for secondary schools to fund Trade Training Centres. The Trade schools have the aim of increasing the number of students' finishing school in year 12 as well as meeting skills shortage needs (DEEWR 2008). The current Government's policy on skills shortages also includes a package to increase temporary and permanent skilled migration. 108,500 permanent visas have been granted in 2007-08 as part of the 'Skill stream'. Employer sponsored visas are the highest priority for Government, and Working Holiday visa issue has increased dramatically (PS 2007:14).

### ***Conclusion***

The Transport & Logistics and Construction industries are most certainly experiencing long term skills shortages. In particular, the growth areas of road transport and trade based construction, are experiencing nationwide shortages. Promotion of these ever changing industries to women and young people is highly recommended. Working conditions including pay, hours, safety, training, career opportunities and work/life balance, must continue to improve and be promoted if women are to enter these industries with confidence. The

specific requirements of women who may be interested in entering these industries should be sought so that employers, industry bodies, and Government can begin to tailor and encourage recruitment and promotion packages for women in a more efficient and effective manner. VET must also be tailored to meet industry requirements so that employee eagerness for training is supported by employers, and must promote the involvement, retention and employment success of women students.

#### **4. Research method**

The research methodology for this project included:

- Conduct literature search to identify issues, trends and possible best practice.
- Invite opportunities for involvement in the Project to raise awareness
- Undertake surveys across a cross-section of women (still in process).
- Review and write up of data and report (still in process).

The literature search provided the current environment in which women are engaging or not engaging with the Transport/Logistics and Construction industries as well as policy direction and economic environment. It also identified key issues and trends in relation to attracting and retaining women into these industries.

NSW, VIC and WA were chosen as the focus for this research due to their acute skills shortages in most trade areas of the Transport/Logistics and Construction Industries. A Steering Committee was created including a Project Manager, Project Officer and two State Co-ordinators and representatives from the National Association of Women in Construction (NAWIC); Transport Women and a Consultant from the University of Melbourne. The Steering Committee chose the following groups of women to give a cross section of women's opinions: women working in these industries; women in training; women who have left; women from the general public; TVET girls and Careers Advisors.

Small samples were chosen due to time, staffing and financial restrictions. The lack of women participating in these industries made some sourcing difficult. Women were mostly sourced utilising TAFE and VET networks. Organisations had to be sourced via cold calling. The surveys were disseminated electronically or conducted over the phone by the State Co-ordinators and collated centrally by the Project Officer. The questionnaire was divided into a

series of sections which enabled skips, circle responses and written responses. The layout of the questionnaire covered 6 sections; Background data; Education and qualifications and present training; Employment; Working conditions; Industry promotion and Lifestyle.

## **5. Findings and discussion**

**Women in Training** 3 women were interviewed; 2 from WA (construction) and 1 from NSW (Transport/Logistics). All the women were currently employed and 2 were employed in jobs related to their study. All the women have support from their employers for their training. 2 women had family that had worked in their industries. No women had been recommended their industry by a Careers Advisor. All were studying at TAFE. The woman in Transport/Logistics was completing an Apprenticeship. None of the women had access to child care facilities through their training provider. Their reasons for choosing their field of study included: *'I have always been interested in building and it is related to my job'*, *'I was working in the industry and wanted to learn more'*, *'My ultimate goal is to become a mechanical engineer and I love engines'*. Only one woman (construction) had another woman in her course and none of the women were concerned that there were fewer women than men in these industries with one woman suggesting *'it's only a matter of time'*.

One woman felt her training would increase her rate of pay and one was aware of the rate of pay in the industry. All respondents felt women could obtain promotions in their industries and that women could progress to top levels of management. All believed they would have to work overtime. None of the women belonged to industry or other women's groups, but two said they would like to: *'I don't know which ones are available to me'*.

Two women felt that the public viewed their industry as 'acceptable', *'we are seen as economy builders I feel. Environment groups hate us though'* and one suggested 'positively' *'as it is a growing industry here in Australia and internationally'*. Suggestions as to how this image could be improved included: *'The image could be improved in the industry if women were made more aware of the opportunities that exist in the building industry. If women knew about the variety of roles that exist in the industry then they would be more encouraged to enter'*, *'perhaps wearing a uniform could improve the image. Perhaps advertising the industry as well paid, challenging profession could encourage more women to enter'*.

All the women would recommend and encourage other women into their industry; *'I wish someone had to come to my school and told me about the industry'*. All felt they would have an adequate work/life balance in these industries; *'I love that I can be girly on weekends then come to work and get down and dirty'*. One woman felt there was flexibility in hours worked. None of the women had a female mentor. 2 of the women suggested they would like to be a mentor for other women entering the industry.

**Focus Groups** 30 women participated in 2 focus groups held in TAFE Colleges in WA and NSW. Just over half, (57%) of the women were currently employed, 59% were Full time and 41% Part Time or Casual. 87% are currently training, all studying at TAFE. 75% had done other post-school training. 3 women had done an Apprenticeship or Traineeship. 43% of the women intended future training. When questioned what types of positions or jobs were in the construction industry, responses in order of popularity included: Builders, Administration, Tiler, Manual Labour, Manager, Roofer, Painting, Tradesperson General, architect, bricklayer, Carpenter, Concreter, Plasterer and sales.

2/3 of the respondents thought that women were employed in these jobs. 83% felt women were capable of these jobs – although some qualified their response: *'carpenters, tilers'* and *'18-35 yrs otherwise in secretarial'*. 27% would be interested in these jobs, *'as something different'*, *'they would be a challenge'*, *'pays very well'*. Of those that were not interested reasons were: *'too many men'*, *'too hard and heavy'*, *'do not like outdoors or is hands on'*, *'I would rather do something that interests me'* and *'due to family commitments'*.

When questioned what types of positions or jobs were in the Transport/Logistics industry, responses included: Drivers, Administration, Managers, Packers, Road works and Sales. 80% felt women were capable of these jobs, whilst 27% were interested in these jobs.

57% felt women could get promotions in this industry, but most qualified this as white collared work. 27% did not feel women could get promotions in these industries because of the male domination of the area (16% did not answer this question). 43% felt women could move across areas within these industries, and 70% felt women could progress to top levels of management, with some qualifiers: *'perhaps in mining industry where there are more job vacancies'*. 17% did not feel women could progress: *'men are holding us back'*, *'not enough field experience available - so therefore not well enough informed'*.

Only 2 women knew the rate of pay in these industries. When asked to indicate what level of pay would encourage them to enter these industries, 6% at \$21-25 an hour, 25% at \$26-30 an hour, 25% at \$31-40 an hour, 44% at over \$41 an hour.

73% felt overtime would be required in these industries. 2 women felt that child care facilities would be available to them. 1/3 of the women said they would consider this industry if there were child care facilities, and a further 7% 'possibly'.

1/3 were concerned that there were fewer women than men in these industries and some gave reasons: '*having female company*', '*not suitable or desirable work for women*'. 53% were not concerned and some gave reasons: '*if you get the job it would be on your ability not your gender*', '*can work with men*' (4 women did not answer). 60% of women felt these industries would be safe to work in.

Respondents described the lifestyle and look of a person that would work in each industry: for 'lifestyle' they generally described a person that works overtime, early starts, long hours, outdoors, labour intensive, hard working, family/normal/young man, financially supportive, stressful, pub after work, hot and dirty work. Respondents described the 'look' of a typical person in these industries as blue bonds t-shirts, stubbies, unkempt looking, overweight.

46% felt there would be an adequate work/life balance in these industries, 43% did not. 1% felt it 'would depend on the person'. 46% felt there would be flexibility of hours, 23% did not, other replies included 12% 'unsure', 'very little', 'possibly', 'up to the employer'.

Suggestions for how to encourage women into these industries included: Better and more flexible hours, job sharing, child care, same pay as men, employers declaring they are Equal Opportunity employers, healthier lifestyle promotion, education about the types of jobs, safety and teamwork, cleaner image, getting the industry 'known' more. They suggested showing women doing the jobs (in advertisements), advertising the benefits - money, not in an office, advertising and promotion in high schools using 'eye catching' promotional material targeted at the right age group. Family friendly ads, posters and billboards could be used. 2 women felt the industries already had good images.

Of those that responded, 62% of women had a female mentor, 38% had not. The following benefits from female mentoring were suggested: *'could encourage more women if they are concerned about working with men only'*, *'It is easier to learn because communication is clearer'*, *'motivates and encourages her'*, *'would improve management'*, *'It was very beneficial'*, *'having a positive role model that is passionate about what they are doing'*.

**TVET** A young woman completing a TVET course in the Construction Industry was interviewed from NSW. She was currently at school and was not employed. She had a history of someone in her family working in the Industry. A Career Advisor had not recommended the industry to her. Her reason for attending the TVET course is: *'I'm interested in having a construction management career and enjoy woodwork'*. There are no other women in her course and she finds the fact there are fewer women than men in the industry concerning: *'Yes, It's a little intimidating but it's alright'*. The young woman is aware of the rate of pay for the industry and feels the training she is doing will increase her pay when she starts work. She does not feel she would have to do over time. She does not belong to any women's groups. She feels the public view the industry *'Positively although some people don't accept a woman wanting to work in a trade such as this one'*. She is *'not sure'* how the image of the industry could be improved. She would recommend this industry to other women *'only if they were interested'*. She *'doesn't know'* how women could be encouraged into the industry. She feels she would have an adequate work/life balance in the industry but would not have flexibility of hours worked. She does not have a female mentor and would not like to be a mentor for other women.

**Organisations** 6 Organisations from the Transport/Logistics Industry were surveyed. The No. of employees in each business ranged from 4 to 160. The percentage of females quoted as working in each organisation ranged from 18% to 50%. The positions the women filled in these organisations included: Office Assistant (4 organisations), Directors (3 organisations), Trainee Recruitment, Consultants, Facility Manager, Team Managers, Yard Duties, Client Liaison, Operations and Accounting.

Two-thirds of the organisations have been affected by skills shortages, from general recruitment shortages to *'no-one available with specific knowledge of the industry'*. Processes to combat this include: *'education, skills training, selecting the right people for the position'*, *'offering training to new employees'* (2 organisations used this), *'use multiple employment agencies'*.

Policies in place in these organisations to encourage women into their workplaces included having an EEO policy (4 organisations mentioned this), and one organisation reported *'Target return to work mums as they are the most reliable, consistent, eager to learn and secure a job in tough times.* None of the organisations used government produced or industry body guidelines for advertising positions to women.

4 of the organisations reported advertising 'jointly' to men and women, *'not 'discriminating' by advertising to women separately or intently'*. Other avenues for advertising included *'Internet, local newspapers, networking - the most successful'* and *'Use verbal techniques to encourage women to apply for positions'* and *'Employment agency'*. Half the organisations advertised positions or publicized their industry to school leavers: *'I have employed under 'traineeship' program in the past for school leavers, or advertised through TAFE, those being work ready with OH&S etc or Return to work program'*.

Respondents felt mainly the 'male dominated' image of the industry discouraged women from entering it; *'Public view the industry mainly as uneducated, rough and sometimes aggressive'*. Other explanations included *'security not prestige with such a position'*, *'Women don't see it as glamorous, even though their business is one of the cleanest in the industry'* and *'also many employers use employment hire companies, who are probably less likely to accept a woman, or put them up for a job'*. 5 out of the 6 organisations had promotion opportunities. Half the organisations had training opportunities and half have community ties.

**Left Industry** One woman was interviewed who worked in the Construction Industry in the past. The woman has been working in the Education Sector for 15 years. She is currently employed as a Course Co-ordinator and Outreach Teacher.

The respondent worked in the Construction Industry for 14 years. No-one in her family has worked in this industry, and a Careers Advisor or Counsellor did not recommend the industry to her. She has done post-school training at University. She has completed an Apprenticeship or Traineeship. She does not feel her training led to a pay increase or promotion. She is not considering training in the future.

She was 'Satisfied' with her work tasks in the Construction Industry but did not have an opportunity for promotion as she was 'self-employed'. She believes women can progress to top levels of management in the Industry: *'Yes - only if they worked for a company, still very difficult to progress in this area due to the macho environment on the building sites'*. The respondent knew the level of pay in the industry before entering. She worked paid overtime.

When asked how she thought the public viewed the Construction industry: *'Most people view the industry with scepticism. I was treated well as self-employed as women especially appreciated a female carpenter in their home, knowing that care was taken with the work and cleaning up afterwards'*. She feels the industry could improve this image: *'By being prompt, courteous, efficient and honest'*. She would recommend the industry to women and feels the *'autonomy by running their own business'* would encourage them into the industry. The respondent had an acceptable work/life balance and flexibility.

The respondent has had a female mentor. When questioned why she left the industry: *'Bad back and enough of the hard work and dealing with difficult clients at times'*. She belongs to women's groups outside the industry.

**Careers Advisors** 4 Careers Advisors were surveyed. Length of time in the industry ranged from 1.5 years to 33 years. None of the Advisors started their career in that industry. 3 had done post-school training, each at University.

All the Careers Advisors had recommended the Transport/Logistics and Construction industries to clients, to both sexes, except one had only recommended males for the construction industry. All had experienced students asking about both these industries. 3 of the 4 Advisors felt they had sufficient knowledge of the industries to recommend them to students. One felt their transport/logistics information was lacking. The types of further information they would like to obtain included: *'Transport - job opportunities, diversity, range of occupations'*, *'Lists of regular employers, contacts to give advice and/or provide work experience on site visits'*, *'Information from companies in the industry'*, *'Would like to see specific roles in demand in the industries'*. All thought students would benefit from industry contact such as talks, excursions and career expo days relevant to these industries.

All the Advisors felt women could obtain promotions in these industries, and that they could progress to top levels of management. Only half the Advisors knew the pay rates for these industries. 3 of the 4 Advisors felt the industry was safe: *'I imagine OH&S is of the utmost importance though'*. All felt the public viewed the industry as 'acceptable'; *'although truck drivers are generally viewed negatively'*, *'I think there is a wide range of views, and a lot of ignorance, misinformation'*, *'there is an awareness of the industry that associates itself with mad/dangerous truck drivers, men and no brains, then there is the international industry which associates with glamour of international trade and travel'*.

When asked how this image could be improved, various answers were given: *'Positive promotion on TV. We only hear of the truckies breaking rules and having accidents.'* *'Case studies of success stories, clear examples of career progression.'* *'Education and training, reducing aggression on the road through training'*, *'by getting out there in the schools, giving tester days by opening up the organisation for visits, encouraging work experience in the industries, connecting with a government employment agency and having information sessions.'*

The Advisors had the following suggestions for encouraging more women into these industries: *'family conditions such as maternity leave, improvement, part time work opportunities'*, *'Role models, training incentives'*, *'My organisation takes part in the Convoy for Kids WA, participate in Red Nose Day and have trucks to schools and industry shows.* 3 of the Advisors felt a female mentor would be beneficial to girls entering these fields.

**Women Working in the Industries** 4 women were interviewed, (2 Construction industry and 2 Transport/Logistics Industry). The ages of the women ranged from 26-39 Years (2) to 40-55 Years (2).

The women had been in the industry from 1 to 17 years. The women had been employed by their place of work for 6 months up to 2.5 years and were in the following positions; Contract Administrator; State Manager; Health & Safety Manager and a Recruitment Consultant. Only one woman had started her career in her current industry. Only one had family involved in the industry. They heard about the vacancy for their jobs at Employment agencies (2), Newspaper (1) and word of mouth (1). None had been recommended their industry by a Careers Advisor or Counsellor.

All except one woman had done post school training. None of the women had completed an Apprenticeship or Traineeship. Place of training included; TAFE; University, In-house and other. None of the women felt their post school training had led to a pay increase or promotion in their current employment. All except one woman were considering future training. Half the women's employers support training.

Two of the women were 'satisfied' and two were 'very satisfied' with their work tasks. All except one woman felt there were promotion opportunities in their workplace. All felt they would have an opportunity to work across different areas. None of the women were aware of the pay rate before they entered their Industry and all except one woman were satisfied with their current rate of pay. All the women worked overtime, (only one woman was paid). Two of the women worked 15 hours/week overtime and another 1 hour. None of the women had child care facilities at their workplaces.

None of the women were concerned that there were more men than women in their industry. Opinions included; *'Men are a whole lot easier to work with, less complicated and not bitchy'* and *'Women are starting to make a real mark on this industry'*. All the women had 'good' or 'very good' relationships with their co-workers. All felt safe at their workplace. None of the women belonged to any type of women's group.

The women in Transport/Logistics said that people viewed their industry 'negatively' and 'acceptable', from Construction one woman reported 'positively'. The second Construction worker did not answer this question. When asked what could improve the image of their industry; *'showing people behind the scenes and actively promoting successful women in the industry'*, *'Education'*, and *'training sales people on 'realistic' sales approaches'*.

Of the 3 women who responded, all would recommend their industry to other women and encourage them to enter the industry. Only 2 women felt they had an adequate work/life balance and ability to work flexibility. None of the women had a female mentor. 2 women felt they would benefit from a female mentor.

***Themes, issues and integrating literature with data (to-date)***

*Education and Background* Overall, most of the women had completed post-school training and many were still training or expecting to train in the future. Interestingly most women did not feel their pay rate had or would increase from this training in general, in line with literature which showed the high number of women completing training, and the little gain in employment and pay. Only 13% of all the women interviewed had completed a Traineeship or Apprenticeship, again in line with the literature. Reasons for choosing their course and employment were about personal interest rather than a thorough knowledge of the benefits of the industry before commencement. Of those who had been directly involved with the industries, 44% had someone in their family who worked in their industry as is common in the general industry population.

No woman interviewed had been recommended the Transport/Logistics or Construction industries by a Careers Advisor or Counsellor. This meets predictions from the literature that Career Advisor and Counsellors are not recommending these industries to women. Interestingly, the Careers Advisors we interviewed said they did recommend to students and students had enquired about these industries. More research on a larger scale would identify strengths and weaknesses between the relationships of Advisors, the public and Industry.

About half the women have at some time had a female mentor and nearly all thought it would have positive benefits. Most were willing to be involved in a mentoring situation, another recommendation of the literature.

*Working Conditions* Only 11% had access to or felt they would have access to child care facilities during training or work in these industries. There was significant increase in the number of women who would be interested in working in these jobs if they gave access to child care, which was also suggested in the literature as a means for encouraging women.

Three-quarters of the women were not concerned that there were fewer women than men in these industries. This seemed to be due to either lack of interest in the industries or because they were already involved with the industries.

Only 18% of women reported they knew about the rate of pay in these industries. This would indicate either a lack of promotion by the industries; else an ineffective promotion campaign

if one has been attempted. This would also consolidate the lack of information being passed on by Career Advisors as suggested in the literature, however, the Advisors requested more information on a regular basis to better service their clients. Interestingly, women were willing to consider working in these industries at pay rates over \$41 per hour. Employers may need to consider this when encouraging women into the workforce.

72% felt women could obtain a promotion in these industries, 75% thought women could move across areas within the industry, but only 31% felt women could progress to top management. Certainly the theme for not obtaining promotion, moving across or management positions was the male domination of the industry and those women who do try for such positions must be strong of mind and body.

*Lifestyle* 81% felt workers would need to do overtime in these industries. This is in line with the statistics which show the industries are the two highest overtime working industries in Australia. 66% thought a worker in this industry would have an adequate work/life balance, and 56% thought there would be flexibility of hours due to family commitments. The descriptions of the look of a 'typical' person from these industries were generally negative as was the general lifestyle of a person working in these industries. It is important that the industries take into account these, often well based, public perceptions of the working conditions in these industries.

*Industry promotion* The respondents generally felt the public viewed the industries as 'acceptable'. The women were certainly aware of the many different employment areas of the industries. Suggestions for improving this view and encouraging women to enter include advertising the opportunities, positives and correct information about the industry to all, but especially to new target groups such as women and young people at the school level. Also, improving flexibility of hours, child care and safety would encourage more women entrants according to this survey and the literature to date. The types of advertising women recommended must be eye catching, family friendly and include women in the pictures, also a recommendation of Government and Industry Body literature. This survey has shown the willingness of women to gain information about the industries and often reconsider their opinions and interest when the facts are presented to them.

## **6. Conclusions**

This research project has reinforced the predicted existing negative views of women and only 'acceptable' public image of these industries, as well as highlighting the restrictions women feel the male domination of these jobs create on women's advancement and employment. Misinformation and lack of information about the working conditions and lifestyle that a person would lead working in these industries discourages women's already underdeveloped interest. Suggestions for greater flexibility of hours worked, job sharing, child care facility availability, and advertising of high pay rates and Equal Employment Opportunities were given by the respondents. At least one third of the women interviewed would be more interested in these industries if these conditions were introduced, a lot higher than current participation rates.

Advertising using Government and Industry Body guidelines for encouraging women's employment would be most beneficial for employers and potential female employees, as these use the same ideas as recommended by the women.

Conclusions have been made about this research based on partial data.

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