Perceptions of safety leadership skills: From a Supervisor’s perspective

Final Report
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Report contents

EXECUTIVE SUMMARY ........................................................................................................ 1

1.0 BACKGROUND ......................................................................................................... 2

2.0 ORGANISATIONAL SAFETY CULTURE ..................................................................... 2
   2.1 Managerial leadership in safety ............................................................................. 3
   2.3 Industries that received priority attention 2002-2012 .............................................. 4

3.0 VOCATIONAL TRAINING IN SUPERVISION IN AUSTRALIA .................................... 4

4.0 METHODOLOGY ....................................................................................................... 5
   4.1 Research plan ......................................................................................................... 5
   4.2 Sample .................................................................................................................... 6

5.0 RESULTS .................................................................................................................... 7
   5.1 Company profiles ................................................................................................... 7
   5.2 Demographic data .................................................................................................. 7
   5.3 Interview results ..................................................................................................... 8
      5.3.1 The move to a supervisory role ......................................................................... 8
      5.3.2 Training completed prior to promotion to supervisor role ................................. 9
      5.3.4 Training completed after promotion to supervisor role ..................................... 9
      5.3.4 Methods of supervision ................................................................................... 10
      5.3.5 Effective management of safety by Supervisor ................................................. 11
      5.3.6 Respected as a Supervisor .............................................................................. 12
      5.3.7 Disciplinary actions by Supervisor .................................................................. 13
      5.3.8 Communication to improve safety on site ....................................................... 14
      5.3.9 Additional support needed to improve Supervision role ................................. 14

6.0 DISCUSSION AND SUMMARY ............................................................................... 15
   6.1 Limitations of the study ........................................................................................ 16

7.0 REFERENCES ............................................................................................................ 17
Executive Summary

There is pressure in the Western Australian civil construction sector to provide quality supervision of their work crews due to the unemployment rate of 3.6% and the draw on labour to develop and expand major-resources infrastructure projects. This has led to a large number of young, inexperienced workers entering the sector and a rapid, informal promotion to that of supervisory roles. This study interviewed 20 supervisors across three medium-sized, civil construction companies in September 2012. Forty per cent of the sample had been supervising for less than 4 years. Fifteen per cent of the supervisors had only worked in the industry for less than 4 years and were under 30 years of age. At the other end of the workforce spectrum, 25% of the study sample had over 25 years experience working in civil construction, had held supervisory roles for more than 15 years and were aged 50 years and over (15% were in their early 60s). In short, the sample showed that the supervisors were either young and new to their role or older with extensive experience in the industry.

The move to supervisory roles was particularly informal for 80% of the supervisors interviewed who were approached by their managers to move from work crews directly into these positions. Many of the supervisors interviewed reported that there was very little transition between their previous general working roles to that of a supervisory position with only 35% reporting that they had received any training during at this time. Furthermore, since moving to a supervisory role only half of the participants are undertaking training in a Certificate IV in Civil Construction and participation in training that is specific to the supervision role is extremely limited with only one participant currently in training. Even the older, experienced supervisors agreed that they are continually learning in their roles, some found that training in safety leadership was beneficial and others supported training in civil construction. However, some supervisors identified a lack of specialised-training in supervision specifically for construction and complained that the training available in Western Australia was difficult to find and often too generic.

This study questioned the ability of supervisors in the Civil Construction Industry to lead safety successfully on their worksites; however they were concerned about the level of safety on their sites and the danger to their people in the work they conducted. Many were somewhat critical of the work practices in the construction sector in terms of safety and suggested that there could be further improvement. The supervisors reported that they were generally respected by their work crews in their supervisory roles; however this respect had to be earned. The newer, younger supervisors indicated that their role was challenging when managing older, experienced work crews, particularly when they had previously held a general working role in the same work crew prior to promotion to a supervisory role.

The supervisors’ perceptions of their management style were analysed against the Hersey & Blanchard (1969) Situational Leadership continuum. A significant gap in the supervisor’s leadership abilities emerged in that 60% of those interviewed are only practicing/applying some of the required skills in their supervisory capacity. Twenty per cent of the sample indicated that they ‘direct’ their work crews, 15% stated they ‘coach’, 15% said they ‘support’ their people and 10% ‘delegate’ the work to be done. Only, 40% (8) of the supervisors interviewed were using all four leadership behaviours. The differences in development of the supervisors’ management capabilities also emerged when asked how they discipline their work crews. The supervisors with extended management skills used persuasive negotiation strategies. Even when confronted by workers who refused work, these supervisors had the skills to negotiate with the workers to encourage them to complete the work in the manner that they required. Ideally, this is how those in supervisory roles should be managing and is particularly important for the younger less-experienced supervisor.

The study sought to determine strategies that could be used to increase the supervisors’ safety leadership skills. Additional training for supervisors and their work crews was called for repeatedly including: supervision training, first aid courses and safety training as frontline managers. On a positive note, communication between the supervisors and their work crews and senior management appeared to be well developed for all three companies. All the supervisors interviewed reported that they were happy to listen to the ideas of those they supervised and were listened to by their senior managers. Therefore, if increased training in supervision and leadership was to occur for those in supervisory positions there is the likelihood that the learning would flow through to the whole organisation and the level of safety could increase.
1.0 Background

The work-related injury rate in Australia remains high. In Australia in 2010/11, 138 people died from injuries sustained in the workplace which is an overall workplace fatality rate of 1.0 per 100,000 workers (Safe Work Australia, March 2011). As reported by the Australian Bureau of Statistics (June 2011), of the 12 million people who were employed at some time during the 2009-10 financial year, 5.3% (640,700 people) experienced at least one work-related injury or illness. Preliminary workers’ compensation 2009/10 data shows that for 2009/10 there were 127,620 claims accepted for workers’ compensation which involved a serious injury or disease (Safe Work Australia, February 2011). Workplace fatalities, injuries and disease cost industry, employees & the Australian community in a number of ways. First, there is the economic cost for medical treatment, rehabilitation and compensation that was estimated for 2008-09 by Safe Work Australia (2012) at $60.6 billion, which represented 4.8 per cent of GDP for the 2008-09 financial year. They estimated that 3 per cent of the total cost is borne by employers, 49 per cent by workers and 47 per cent by the community. Second, there is the emotional cost of losing a loved one, living with a serious injury or disease, and time off work for rehabilitation and recovery. So, in both human and economic terms Australian society cannot afford to allow this to continue.

Leadership skills drive performance improvement generally (Peters & Waterman, 1982; Collins, 2001; Covey, 1989; Drucker, 1995) and specifically in terms of safety performance (Bryden, Flin, Hudson, Vuijk & Van Der Graf, 2006; Clarke & Ward, 2006; Flin & Yule, 2004; Petersen, 2004). Managers and supervisors are in the driving seat to influence the level of safety in the workplace. This is problematic as Herbst and Conradie (2011) and Moshav, Brown and Dodd (2003) have found that managers and supervisors tend to overrate their leadership skills. The purpose of this study was to explore how supervisors perceive their safety leadership skills and to determine what support they require to better manage this aspect of their role.

By understanding the needs of supervisor staff in relation to safety leadership skills strategies can be developed and contribute to improving the safety of the industry in question (Bahn, forthcoming a;b). Previous research supports training that influences individual behaviour and improves work organisational practices as a mechanism to reduce fatalities, work-related injury and disease and improve work safety culture (Gillen, Baltz, Gassel, Kirsch & Vaccaro, 2002). The findings of this study could be generalised to other industries such as mining and oil and gas as these sectors are also high risk and rely on quality supervision to ensure worker safety.

2.0 Organisational safety culture

Work-related injury is often blamed on the actions of employees. However, safety actions are influenced by the safety culture in which employees operate. In the literature the terms ‘safety culture’ and ‘safety climate’ are often interchangeable. Safety culture is described as the values, attitudes, and beliefs towards safety that are held by an organisation (Williamson, Feyer, Cairns & Biancotti, 1997; Cox, Tomas, Cheyne & Oliver, 1998; Glendon & Stanton, 2000; Reiman & Oedewald, 2002). Whereas, safety climate is described as an indicator or ‘snap shot’ of the organisation’s members’ perceptions of safety at a particular point in time (Cavazza & Serpe, 2009; Clarke, 2000; Flin, Mearns, O’Connor & Bryden, 2000; Griffin & Neal, 2000; Guldenmund, 2000). Considerable research has investigated safety culture and its influence on work-related injury in organisations (Reason, Parker & Lawton, 1998; Gherardi & Nicolini 2000; Reiman & Oedewald, 2002). Safety culture is determined not only by commitment, but ability, leadership skills and the communication styles of management that is supported by the participation, competency, training, behaviour and attitudes of the individual employee (Farrington-Darby, Pickup, & Wilson, 2005; Glendon & Stanton, 2000; Guldenmund, 2000; Fung, Tam, Lo & Lu, 2010). Even with a good safety culture incidents will occur, but these will be responded to openly and considered a learning opportunity (Reiman & Oedewald, 2002). Prussia, Brown and
Willis (2003) study of workers in a high-hazard industry found convergence of supervisor and worker attitudes towards safety created an improved safety culture. Bahn’s study (Bahn & Baratt-Pugh, 2009) in the Civil Construction Industry investigated the manager’s value of safety over production pressures and the effect on the level of safety culture. The conclusion drawn was that managers and supervisors should lead by example and their leadership skills are important in improving safety culture and thus reducing work-related injury. Recent work by Bentley, Tappin and Jackson (2012) investigating the perceptions of safety culture by 100 practicing health and safety professionals in New Zealand revealed that the respondents had high levels of perceived understanding and sought continued improvements in their organisations. However, they reported that the concept of safety culture was less understood by others in their organisations.

2.1 Managerial leadership in safety

Thinking about accident causes is largely informed by Heinrich (1936) who held that employees caused accidents. Focussing on the worker is what behaviour-based safety programmes do and these have achieved considerable popularity in organisations (Smith, 1999). However, well documented and reported management and organisational research by Peters and Waterman (1982), Collins (2001), Covey (1989), and Drucker (1995) indicate that the root cause of poor performance and poor culture is directly related to management behaviour, leadership and commitment. In other words, the symptoms which flow from the deficiencies of management show and result in poor worker behaviour and performance. Similar conclusions and the importance of leadership are also reported from the safety field (Bryden, et al, 2006; Clarke & Ward, 2006; Flin & Yule, 2004; Petersen, 2004). The work of Flin, Mearns, O’Connor and Bryden (2000) found that management and supervision were one of five factors influencing safety climate, and Guldenmund (2000) investigated 15 safety climate measures to find that management’s safety activity was a significant factor. Mearns, Whitaker and Flin (2003) go on to argue that it is not only managerial action that affects safety culture in the workplace but also managers’ commitment to safety. Zohar (2002) also found in his study with 411 production workers in a metal processing plant in Israel that improvement in injury rates and increased safety climate was the result of focussed monitoring by supervisors and their rewarding workers for better safety behaviours. Supervisors are the first line of management and have direct influence on employee behaviour (Bahn, forthcoming a;b). It is important that they have the appropriate skills and knowledge to effectively manage safety in their work role. Several research studies have shown that the leadership style and team management skills of supervisors are important influences on safety (Mearns, Flin, Fleming & Gordon, 1997; Niskanen, 1994; Parker, Axtell & Turner, 2001).

A survey of almost 90,000 employees across 18 different countries (Towers Perrin, 2009) found 80% of workers were not working to their full potential; they were disengaged from their work and their organisation. Effective and engaged leadership was identified as a solution. The work of Towers Perrin is supported by Goleman, Boyatzis and McKee (2002:22) who state that, “Roughly 50% to 70% of how employees perceive their organisations can be traced to the actions of one person: the leader. More than anything else, the boss creates the conditions that directly determine people’s ability to work well,” and Petersen (2004:30) who argued, “leadership and culture are the two most important subjects to consider with what must be present to achieve safety excellence.” Other researchers (Bryden, 2002; Flin & Yule, 2004; Barling & Weber, 1996) have recommended one-to-one feedback, training and workshops based on survey results to effect leadership behaviour change. In Bahn’s research on hazard identification skills of employees working in the mining industry in Western Australia there was evidence that supervisors who were surveyed did not have strong abilities to identify workplace hazards from pictures of their work areas (Bahn, 2012).
2.3 Industries that received priority attention 2002-2012

In Australia, five industry sectors received priority attention for improvement under the National Occupational Health and Safety Strategy 2002-2012 (Safe Work Australia, 2002): Agriculture, Forestry & Fishing; Manufacturing; Construction; Transport & Storage; and Health & Community Services. These industries were selected based on a combination of high incidence rates and high employment (Safe Work Australia, 2011). In Australia, 34% of all employees in 2009-10 worked in one of these five industry sectors, and these sectors accounted for 52% of all serious injury claims. Although all sectors have improved since the beginning of this Strategy, Australian industry as a whole has not reached the target of at least 40% reduction by June 2012. The Construction Industry has a history of high incidence rates, but had consistent improvement in incidence rates in the first seven years of the Strategy, decreasing from 27.3 serious claims per 1,000 employees to 19.5 in 2006–07 as shown in Figure 1. Further, in 2009-10 the industry recorded an 11% improvement, down to 17.4 claims per 1,000 employees.

![Figure 1: Construction: Incidence rate of serious injury](https://www.safeworkaustralia.gov.au)

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3.0 Vocational training in supervision in Australia

Leadership training in Australia is predominantly provided by the Vocational Education and Training (VET) sector in Australia. However, training for supervisors is somewhat restricted and particularly training that has a focus on the construction sector and is aligned with the Australian Quality Framework of accredited teaching courses. Table 1 details the training that was available in Australia in 2012.
Table 1: Supervisor training in Australia 2012 relevant to the construction sector

<table>
<thead>
<tr>
<th>Training</th>
<th>Training provider</th>
<th>Delivery mode</th>
<th>AQF award</th>
</tr>
</thead>
<tbody>
<tr>
<td>The New Supervisor Training Course</td>
<td>Australian Institute of Management</td>
<td>3 day intensive - face-to-face (Perth)</td>
<td>BSB FLM 412A</td>
</tr>
<tr>
<td>Frontline Management</td>
<td>Australian Institute of Management</td>
<td>7.5 days - face-to-face (Perth)</td>
<td>Cert IV Business (Frontline Management) BSB40807</td>
</tr>
<tr>
<td>Construction Safety Supervisor</td>
<td>Construction Industry Training Centre</td>
<td>3 day intensive – face-to-face (Perth)</td>
<td>Certificate of Attendance</td>
</tr>
<tr>
<td>Mine Site Safety Supervisor Training</td>
<td>Training Aid Australia</td>
<td>Online</td>
<td>• RIIRIS301A Apply Risk Management Processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• RIIOHS301A Conduct Safety and Health Investigations</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>• RIICOM301A Communicate Information</td>
</tr>
<tr>
<td>OHS for Supervisors</td>
<td>Training Services Australia</td>
<td>2 day intensive - face-to-face (Perth)</td>
<td>BSBOHS407A Monitor a safe workplace</td>
</tr>
<tr>
<td>SuperSafe Training - OHS for Construction Supervisors &amp; Managers</td>
<td>People Safe Australia</td>
<td>2 day intensive - face-to-face (Sydney)</td>
<td>Certificate of Attendance</td>
</tr>
<tr>
<td>Making the transition to supervision</td>
<td>Frontline Management Institute</td>
<td>1 day intensive - face-to-face (Sydney)</td>
<td>Unit within Cert IV Business (Frontline Management)</td>
</tr>
<tr>
<td>Becoming a Supervisor</td>
<td>Gestalt Therapy Australia</td>
<td>50 hours face-to-face (Victoria)</td>
<td>Australia Psychological Society (50 PD points)</td>
</tr>
</tbody>
</table>

4.0 Methodology

4.1 Research plan

A critical realist perspective (Sayer, 1992) informed the study. The “realist asserts that organisations are real. They have form, structures, boundaries, purposes and goals, resources, and members whose behaviours result from structured relations among them” (Dubin, 1982:372). Sayer (1992) defines organisational structures as sets of internally related objects and mechanisms as ways of acting. Objects are internally linked to the structure and their identity depends on their relationship with the other components of the structure. Safe work requirements are structures, safety leadership skills are the mechanism, and employee actions influence those structures in the workplace. Actions are mediated by the structures of safety culture maturity. Structures in organisations can be changed; safety leadership skills can be improved, however whether these changes permeate to the individual supervisor to create a change in their behaviours is of interest to this study. The seminal work on Situational Leadership by Hersey and Blanchard (1969a) provides a life cycle theory of leadership whereby leadership style is described as directing, coaching, supporting or delegating (1969b). This model is used to analyse a component of the data to discuss leadership styles of the supervisors interviewed for the study to highlight possible gaps that could be addressed with additional training.
This project investigated how supervisors perceived their safety leadership skills. Demographic data was collected in the first instance in the interview to determine such details as length of time in a supervisory role, previous working roles, age, gender, and the number of employees they supervise. Semi-structured questions followed that asked supervisors to comment on the difficulties they encounter in managing their teams in the area of safe work performance, the support and training they received while transitioning from worker to supervisor, and the their style of supervision and management. Finally, they were asked to suggest future support needs to perform their role better that encourage better safety performance and their ability to lead more effectively. Section 5 of this report presents the dominant themes that emerged from the interview data supported by examples of the verbatim quotes of the supervisors interviewed. The quotes are identified as from Supervisors from Company A, B and C.

Specifically the research questions for the study were:

1. Do supervisors perceive their safety leadership skills positively?
2. What gaps exist in their current safety leadership skills and knowledge?
3. If a gap exists what explains it?
4. What strategies could be used to increase their safety leadership skills?

4.2 Sample

The project investigated how supervisors perceive their safety leadership skills. Twenty semi-structured interviews were conducted in September 2012 with supervisors across three civil medium sized construction firms in Western Australia. All the participants were male. The interviews were audio recorded with participant’s permission, fully transcribed and then checked for errors and paralinguistic information. The data was analysed using a template approach (Miles & Huberman, 1994), which entails analysing the text through the use of a ‘guide’ consisting of a number of relevant themes including future training needs, support mechanisms and attitudinal change, supported by NVivo in the data analysis (Grbich, 2007). Table 2 indicates the number of supervisors interviewed across the three civil construction companies and the type of interview that was undertaken.
Table 2: Sample

<table>
<thead>
<tr>
<th></th>
<th>Company A</th>
<th>Company B</th>
<th>Company C</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Supervisors</td>
<td>7</td>
<td>9</td>
<td>4</td>
<td>20</td>
</tr>
<tr>
<td>Face-to-face Interviews</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Telephone Interviews</td>
<td>1</td>
<td>9</td>
<td>4</td>
<td>14</td>
</tr>
</tbody>
</table>

5.0 Results

5.1 Company profiles

This section of the report provides a profile of each of the companies where the supervisors interviewed were working. The three companies are all in civil construction within Western Australia.

Company A specialises in sub-contract civil site works installing sewerage reticulation and stormwater drainage systems in Perth and regional WA. They currently have work that spans over 15 projects for nine contractors and employ over 150 staff. They currently employ 15 staff in supervisory roles.

Company B is a civil engineering company that provides services in civil, mining and marine infrastructure. They currently have 19 civil infrastructure projects underway in Perth, 4 mining projects and 1 marine project in the Pilbara (north west WA) and employ over 170 staff. They currently employ 11 staff in supervisory roles for their civil projects.

Company C is an earthmoving civil site works company providing construction services for subdivision developments and public infrastructure, including stormwater drainage, water main reticulation, deep sewerage and underground utilities. They currently have 22 projects underway and employ 70 staff. They currently employ 4 staff in supervisory roles.

5.2 Demographic data

This section of the report provides some demographic data about the participant supervisors who were interviewed for the study. Table 3 details the age of the participants, the length of time working in civil construction, the length of time in a supervisory role, the number of staff they currently supervise and the number of sites they are working across. Five of the participants had experience working in the mining sector and two had experience working on civil sites on the east coast of Australia. Some staff were long term employees of the company; others had moved between employers but remained in the industry sector.

Table 3: Demographic data of participants

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Years in Civil</th>
<th>Years Supervising</th>
<th>Staff Supervising</th>
<th>Worksites Supervising</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age N (%)</td>
<td>Years N (%)</td>
<td>Years N (%)</td>
<td>N (%) N (%)</td>
<td>N (%) N (%)</td>
</tr>
<tr>
<td>3 (15%)</td>
<td>20-29 yrs 3 (15%)</td>
<td>1-4 yrs 8 (40%)</td>
<td>1-4 yrs 1 (5%)</td>
<td>1 site 3 (15%)</td>
</tr>
<tr>
<td>7 (35%)</td>
<td>30-39 yrs 5 (25%)</td>
<td>5-9 yrs 5 (25%)</td>
<td>5-9 yrs 2 (10%)</td>
<td>2 sites 10 (50%)</td>
</tr>
<tr>
<td>4 (20%)</td>
<td>40-49 yrs 3 (15%)</td>
<td>10-14 yrs 2 (10%)</td>
<td>10-14 yrs 10 (50%)</td>
<td>3 sites 1 (5%)</td>
</tr>
<tr>
<td>2 (10%)</td>
<td>50-59 yrs 3 (15%)</td>
<td>15-19 yrs 1 (5%)</td>
<td>15-19 yrs 3 (15%)</td>
<td>4 sites 4 (20%)</td>
</tr>
<tr>
<td>4 (20%)</td>
<td>60+ yrs 1 (5%)</td>
<td>20-24 yrs 1 (5%)</td>
<td>20-24 yrs 0 (0%)</td>
<td>5 sites 0 (0%)</td>
</tr>
<tr>
<td>5 (25%)</td>
<td>25+ yrs 3 (15%)</td>
<td>25+ yrs 3 (15%)</td>
<td>30+ 2 (10%)</td>
<td>6 sites 2 (10%)</td>
</tr>
</tbody>
</table>
5.3 Interview results

The dominant themes that emerged from the interview data included how the supervisors came to be in that role, the training they had completed prior to their promotion to Supervisor and training that supports their current supervisory role, their method of supervision, their views on their effectiveness to manage safety, the level of respect they receive in their role, the communication between them and their subordinates and management and the additional support they need to perform their role better.

5.3.1 The move to a supervisory role

Eighty per cent (16) of the supervisors interviewed for this study began work in civil construction as labourers and machine operators before being approached by management to move into supervisory roles.

Started off as plant operator, showed initiative by doing extra hours, company asked me to be a Supervisor (Company B).

Oh look I think I showed a flair for it. I liked the industry as soon as I got in it and I started off as, you know, under the labouring role actually (Company B).

Twenty per cent (4) of the sample approached management to move to supervisory roles or were hired directly into that role because of experience in either the mining sector or on large projects on the east coast of Australia.

I progressed through into a couple different machines and then got to the stage where I was getting bored of the repetition of digging a trench, the same trench, over and over again so I looked for a new challenge and I approached a couple of people from the old company I used to work at to move to working as a Supervisor (Company A).

I was getting I was actually getting a few injuries with my body and things like that. I did actually approach them at one stage and said look I’m not really up for this anymore, my body can’t take it and then they offered me a position supervising (Company C).

The supervisors interviewed had two distinct groups: those who were relatively new to the industry and those with extensive experience. Three of the supervisors were under 30 years of age with a further 50% of the sample between 20 and 39 years of age. Forty per cent of the sample had held supervisory roles for less than 4 years. In contrast, 25% of the supervisors had worked in the industry for over 25 years and had a minimum of 15 years in a supervisory role and were 50 years of age and over.

I had a company ute and my first crew of guys when I was nineteen (Company B).

Around nineteen, twenty I started to take on work of my own then I got offered a job by the contractor I was working for to work for him as Site Supervisor and run the jobs for him (Company B).

Many of the supervisors interviewed reported that there was very little transition between their previous general working roles to that of a supervisory position.

I became a Supervisor within about ten weeks. Just changing hats because they thought I could do the job and I got the job out of a hundred and fifty people (Company B).

I got tapped on the shoulder and asked if I wanted to... there’s a job available for a supervisor and asked if I wanted to take the job (Company C).

Just tapped me on the shoulder and asked me if I wanted to be a foreman and a couple of weeks later said oh we’ll put you up for supervisor (Company C).
5.3.2 Training completed prior to promotion to supervisor role

The move to supervisory roles was particularly informal for 80% of the Supervisors interviewed for the study. Table 4 indicates that very few undertook training to support their promotion with only 35% reporting that they had received any training at all during their transition to a supervisor role. Only 4 participants had undertaken specialised training in Supervision (two on the East Coast and one in the United Kingdom) and one had undergone training in Frontline Management while working in the mining sector before moving over to the construction industry.

Most of the training I receive has all been yeah in house, on the job (Company B).

At that point it was sort of hand over straight away but I’d already been on the ground and sort of knew everyone there so there was no special outside training at that stage. It was more just you’re here to finish up the job (Company A).

Table 4: Training completed prior to promotion to Supervisor role

<table>
<thead>
<tr>
<th>Supervision</th>
<th>Cert III Civil Construction</th>
<th>Frontline Management</th>
<th>Safety/Leadership/Management</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (%)</td>
<td>5 (25%)</td>
<td>3 (15%)</td>
<td>1 (5%)</td>
<td>13 (65%)</td>
</tr>
</tbody>
</table>

Some of the Supervisors explained that specialised training in supervision for construction workers was difficult to find and often too generic.

Supervisors range doing totally different jobs. They can’t specifically get one course to do, not unless there’s a heap of civil supervisors wanting to go through doing it. It’s a broad-spectrum type course so they try and cater for everybody (Company A).

5.3.4 Training completed after promotion to supervisor role

Table 5 shows that since moving to a supervisory role 50% of the participants are undertaking training in a Certificate IV in Civil Construction and one new entrant to the industry and newly promoted to the role of Supervisor is working through a Certificate II in that course. However, once again participation in training that is specific to the supervision role is extremely limited with only one participant currently in training.

Table 5: Training completed after promotion to Supervisor role

<table>
<thead>
<tr>
<th>Safety/Leadership/Supervision/Management</th>
<th>Cert IV Civil Construction</th>
<th>Frontline Management</th>
<th>None</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (%)</td>
<td>5 (25%)</td>
<td>10 (50%)</td>
<td>2 (10%)</td>
</tr>
</tbody>
</table>

Of the 55% of those who are not undertaking any accredited training, 5 of these Supervisors have had over 15 years supervision experience and are aged over 50 years and either feel they don’t need additional training or are not being offered it by their managers.

I’ve done a couple of courses, which I don’t like doing (Company A).

I believe the informal training as far as on the job and mentoring would probably work out better than the formal type training (Company A).

Several of these older Supervisors agreed that they are continually learning in their roles. Some found that training in safety leadership was beneficial; others supported the training in civil construction.
Well you’re always learning and there are courses out there all the time. The company now that I work for now are putting us through different courses, Cert IVs and all that, to try and improve our skills (Company B).

Safety leadership just a few days; that was a really good one (Company A).

However, some Supervisors identified a lack of specialised training in Supervision specifically for construction.

[It’s] broad-spectrum type training that has to deal with such an array of different supervisors that they can’t always pinpoint everything that you’re trying to pick up. It makes it hard to pinpoint exactly what sort of training we need to get to the people (Company A).

5.3.4 Methods of supervision

This research study as a key outcome sought to determine the skills that the Supervisors who were interviewed had in terms of leading behaviour in relation to safety on their work sites. The Supervisors were asked to determine the style they used when leading their work crews. They were asked to nominate whether they used a style that was either: directing, coaching, supporting, delegating or all four depending on the staff they were working with. Hersey and Blanchard’s (1969b) work on situational leadership noted that those new to supervision and management roles begin with a predominantly directing approach and move through to coaching, supporting and delegating. The experienced and transformational leader (Avolio, Bass & Jung, 1999) will move between all four methods adapting his style to meet the needs of those he is supervising. As shown in Figure 3, the Supervisors that were interviewed for this study rated their leadership style as follows: 20% of the sample indicated that they ‘direct’ their work crews, 15% stated they ‘coach’, 15% said they ‘support’ their people and finally 10% ‘delegate’ the work to be done. Forty per cent (8) of the Supervisors interviewed were using all four leadership behaviours, changing them to manage the individual requirements of the work crews.

<table>
<thead>
<tr>
<th>Supporting</th>
<th>Coaching</th>
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<td>3</td>
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<td><strong>All</strong></td>
<td><strong>8</strong></td>
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<tr>
<td>Delegating</td>
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Directing = Provides specific instructions and closely supervises performance
Coaching = Explains Supervisors decisions and provides opportunity for clarification
Supporting = Shares ideas and facilitates decision making
Delegating = Turns over responsibility for decisions and implementation

**Figure 3. Number of Supervisors and their leadership behaviour**

Table 6 provides examples of the types of leadership behaviour the Supervisors reported they use analysed by their verbatim quotes.
### Table 6: Examples of leadership behaviour style

| Directing | • I will pull up workers if they are unsafe, not on how fast they do the work (Company B).  
|           | • I think we always direct them. Always direct them. It’s like you get to know basically what a person’s skills are then you’ll know how to manage them in their job that they’re doing (Company B). |
| Coaching  | • I’m sort of a hands-on supervisor so I show them how to do it (Company A).  
|           | • I’m probably coaching them in terms of what we want them to do and then just through the day keep an eye on them make sure that’s happening (Company B). |
| Supporting| • It’s good for people to find their own feet, you’ve got to teach them but you’ve got to allow them to make mistakes so they can learn from those as well (Company A).  
|           | • You ask them what they think they should do and how they should go about it (Company B). |
| Delegating| • You sort of set them up a task that you want done, in a certain time frame and how you want it done and if they need a hand they’ll come and ask you and you’ll check them along the way and make sure it’s going all right that sort of thing (Company C).  
|           | • Make sure everyone’s happy and on the same page instead of going ‘oh get up here and get it done!’ (Company A). |
| All       | • Well there’s a bit of everything going on with me at the moment because I’ve got certain types of people that need direction, and certain types of people I can leave alone (Company C).  
|           | • Each case is individual. Some guys have been doing it for twenty years then you just say that’s what I want. Someone new coming in they need coaching and some come from different sort of approach so you would say well you need to re-direct a little bit (Company B).  
|           | • A bit of everything really. When we start new works I’ve got to direct what we’ve got to do, show what we’ve got to do, how we’re going to do it and then a lot of the times can just leave them to get on with it. If they’ve got a problem I’ll have a drive round make sure they’re doing it right, doing okay and if they’ve got any problems they’ll come and see me. If I’ve got a problem then I’ll see them, we’ll look into what the job is, why I don’t think they’re doing it right, discuss it and try and work out the better way of getting it right. There’s always a bit of everything really. A bit of coaching, a bit of direction and a lot of some of the lads you can just leave with a set of plans and away they go (Company C). |

### 5.3.5 Effective management of safety by Supervisor

In general the Supervisors interviewed for the study reported that they effectively managed safety on their work sites. Some draw on previous work experience in the mining sector to encourage higher levels of safety and are critical of the work practices in the construction sector.

> **I reckon I do. I think most of it is because of my mining background because mining was so far in to it before civil so a lot of the stuff that I bring in is new for these guys and that’s I implement a lot of safety that way** (Company A).

> **I think here, which they are addressing at the moment, a lot of the safety stuff is a little bit, what would you say? Behind the times as well. I was surprised when I first moved here a couple years ago. Jeez where’s all the safety? Your mining is at a level, which is an elite level if you might say. Really up there and your other stuff your metro stuff seems to be at a lower level** (Company B).

There was evidence from the study that the Supervisors were concerned about the level of safety on their sites and the danger to their people in the work they conducted; however many agreed that there could be further improvement.

> **I’m very conscious of safety because I’ve been involved in two sites where safety’s very lax and people have got injured** (Company B).
Definitely my main concern is safety on the job – pre-starts, pick up, high vis vests, but I can’t say site is 100% safe because no construction job is accident free (Company B).

5.3.6 Respected as a Supervisor

Many of the Supervisors reported that they were respected by their work crews in their Supervisory roles; however this respect had to be earned. There was an acknowledgement that every Supervisor has his own way of running a work site.

I guess it just takes a bit of time and you’re just still going through a learning phase and having a good relationship with the boys over a gradual period of time. As you gain more and more knowledge in the job itself and what you’re doing, people come to respect you for what you know as well (Company A).

Every supervisor has own way of running a site. So long as it’s on budget and within OHS specifications and on time. As long as the outcome, safety and price is the same the different steps you take doesn’t matter too much (Company B).

However, the newer, younger Supervisors indicated that their Supervisor role was challenging when managing older, experienced work crews, particularly when they had previously held a general working role in the same work crew prior to promotion to a supervisory role.

It was hard coming from being one of the boys. Most of the people respect you for the position that you’re in but some people it’s a little bit iffy, you know, they don’t like the authority coming from someone younger than them but the boys here are really good. They respect what I’ve got to do and they help out (Company A).

Hard to have the authority role in as far as hang on I’ve now got to answer to people above me and you’ve got to answer to me so I’m stuck in the middle, you’ve got to keep a happy medium (Company A).

I did go through two years where I did find it very difficult coming from rank and file and then all of a sudden being put in charge of that particular crew and I had a few issues with respect, that’s probably not the best word, but you know just getting the guys to warm to me as their supervisor when a short period before that I’d just been working in the rank and file with them but we overcame that (Company B).

The younger Supervisors interviewed drew on support from the senior Supervisors in their companies and the experience of the older workers in their work crews.

I had a good bunch of people and Supervisors above me so I had a good understanding of what I was doing and how I was doing it and the people around me knew that (Company A).

The crew’s pretty good so they’ll because I’m such a young supervisor and learning the older people seem to help out a fair bit more (Company B).

I get on with the old boys, just use them for their knowledge and sort of take their opinion on board and make them work my way (Company B).

The older experienced Supervisors explained that their younger work crew members are not always easy to manage and require considerable coaching due to a reduction in their skill levels.

Skill levels of people are not there. They don’t listen like they used to (Company B).

I treat them like normal people. I don’t go off my head at them at all It’s very easy to do that to a lot of young people and I’m a fairly good teacher. I’m an easy chap to get on with (Company C).
5.3.7 Disciplinary actions by Supervisor

The Supervisors interviewed for the study were asked about the disciplinary actions they draw on to manage their work crews when safety is breached or there are differences in opinion on how the work should be completed. Some used persuasive negotiation strategies.

*Persuade them into doing it in a nice way* (Company A).

*We discuss it and I’ll give them my opinion. I look at what they think should be done, look at how I think it should be done and work out the right way. If their way’s the right way then we just move on with it and do it* (Company C).

*I’d just show them the easier way of doing it. Show them how it’s done and how it achieves what we need done* (Company B).

Even when confronted by workers who refuse work, these Supervisors have the skills to negotiate with the workers to encourage them to complete the work in the manner that they require.

*I’ve found since I’ve been here they always listen because my mining background because I’ve spent more mining and safety and they’re really interested in knowing how they did it and how they implement a lot of it now* (Company A).

*I’ve had someone refuse straight out but after about ten minutes of discussion they’ve come around and gone oh yeah no I don’t see the problem with that anymore* (Company B).

*I’ve had one guy blow up at me before and instead of going off my nut, which most people would, I stayed away and said “mate this is not like you what’s else is going on?”* (Company A).

Others, particularly the younger Supervisor, draw on their managers above them to support their own actions.

*If I don’t get any joy then I’ve got people above me who I can go and speak to as well* (Company A).

Others used firm directed instruction and noted that this was more an issue with younger inexperienced work crew members than the older workers.

*Just got to crack down on them, explain to them that this is the way it’s got to be done for a particular reason. It’s not you go off at them it’s just you explain to them why it’s got to be done that way and there’s a reason behind everything, especially with the young labourer and it’s only through inexperience* (Company A).

*I’ll sit the boys down and we’ll talk through it and lay the cards on the table and say guys I’m hoping for suggestions here but this the task. It’s not nice and it’s not easy. I’ll take on board any comments you’ve got but if you haven’t got anything better this is what we’ve got to do and do it we will and I’ll jump in and lead the charge physically, manually if I have too* (Company B).

*We are going to be doing it this way, if there’s a problem with it we’re going to sort it out right now, and just be fair to a point. By that stage I would have been as fair as I could so I’d have to basically explain that at this stage it’s not a democracy* (Company A).

However, some Supervisors are less tolerant and will dismiss a worker who refuses to work as they expect.

*If they don’t want to do it they can go home* (Company B).

*I just ask somebody to take them away and give me somebody else that is prepared to do what I want* (Company B).
You obviously give them, as much opportunity as you can but if they don’t suit the job just tell them you’re not suited to this job and you have to find something else (Company C).

I’ve only ever had one guy that totally insisted that no he’s not doing it because that is not his job and after ten minutes of discussion I said to him “yes you’re right mate it is not your job. You go and pick your lunch bag up, sign out, see you later” (Company B).

5.3.8 Communication to improve safety on site

Communication between the Supervisors and their work crews and senior management appears to be well developed for all three companies. All participants interviewed reported that they were happy to listen to the ideas of those they supervised in terms of completing the work in a safer manner.

If they’ve got a better idea than me I listen to it and if it’s better than mine I do it (Company A).

I think you get a bit older and a bit wiser but I’m always open to good ideas or initiative or someone that shows a bit of flare with just anything these days that can put two and two together and I always try and encourage that for future, future roles, but I must say guys like that are very few and far between these days? (Company B).

One Supervisor who had completed training in Supervision remarked:

That was one of the things that we learnt in the course that the way I see it isn’t always the best way to do it; that’s just one person’s opinion. I always ask for feedback from the boys (Company A).

All Supervisors interviewed reported that their managers were also happy to discuss their ideas for improvement.

I’m a big one for communication; I will ring up Project Manager and suggest things (Company B).

Senior management’s very, very good. I’ve come up with some ideas or said “look we need to get this” or said “we should look at doing that”. He jumped straight on to it, looked straight into it (Company A).

5.3.9 Additional support needed to improve Supervision role

The Supervisors were asked to suggest mechanisms that would provide them with support to better conduct their role. Additional training for themselves and their work crews was called for repeatedly including, Supervision training, first aid courses and safety training as frontline managers.

Providing first aid courses and pin-pointing people to put on this training (Company B).

Civil supervisor training course (Company A).

I think probably the guys; some of the guys need more training, which I don’t have a chance to get to all the time (Company A).

Just more frontline ones [training courses] because obviously the rules [OHS regulations] have changed now (Company A).
6.0 Discussion and summary

In July 2012, Western Australia had an unemployment rate of 3.6%, the lowest of all Australian states (DEEWR, 2012), driven by the global demand for the states resources and the development and expansion of major infrastructure projects (BIS Shrapnel, 2009). Presently Australia is experiencing a shortage of skilled workers specifically in mining and construction (AWPA, 2012). This has resulted in work crews that are either young and inexperienced or nearing retirement. The Supervisors interviewed for this study supported this trend with 40% supervising for less than 4 years, 15% having only worked in the industry for less than 4 years and under 30 years of age. A further 25% of the study sample had over 25 years experience working in civil construction, had held supervisory roles for more than 15 years and were aged 50 years and over (15% were in their early 60s).

This study sought to answer questions about the ability of Supervisors in the civil construction industry to lead safety successfully on their worksites. In response to the first research question: Do supervisors perceive their safety leadership skills positively? In general the Supervisors interviewed for the study reported that they effectively managed safety on their work sites (Herbst & Conradie, 2011; Moshav, Brown & Dodd, 2003). The Supervisors were concerned about the level of safety on their sites and the danger to their people in the work they conducted; however many were also critical of the work practices in the construction sector and suggested that there could be further improvement (Bentley, Tappin & Jackson, 2012). So in terms of workplace safety the Supervisors displayed commitment (Petersen, 2004; Drucker, 1995). Many of the Supervisors reported that they were respected by their work crews in their Supervisory roles; however this respect had to be earned. The newer, younger Supervisors indicated that their role was challenging when managing older, experienced work crews, particularly when they had previously held a general working role in the same work crew prior to promotion to a supervisory role. The younger Supervisors interviewed drew on support from the senior Supervisors in their companies and the experience of the older workers in their work crews.

In terms of the second research question: What gaps exist in their current safety leadership skills and knowledge? A significant gap in the Supervisors leadership abilities emerged in the study in that 60% of those interviewed are only some way in their supervisory capacity according to the Hersey & Blanchard (1969) Situational Leadership continuum. Twenty per cent of the sample indicated that they ‘direct’ their work crews, 15% stated they ‘coach’, 15% said they ‘support’ their people and 10% ‘delegate’ the work to be done. Forty per cent (8) of the Supervisors interviewed were using all four leadership behaviours, changing them to manage the individual requirements of the work crews and ultimately this is how those in supervisory roles should be managing. These Supervisors are important to these companies in that they could mentor the remaining 60% to improve their leadership skills when managing their people and safety on their work sites. This is particularly important for the younger less experienced Supervisor as they reported difficulties in managing older workers.

The differences in development of the Supervisors management capabilities also emerged when asked how they discipline their work crews when safety is breached or there are differences in opinion on how the work should be completed. The Supervisors with extended management skills used persuasive negotiation strategies. Even when confronted by workers who refuse work, these Supervisors had the skills to negotiate with the workers to encourage them to complete the work in the manner that they required. However, for the younger inexperienced Supervisor they tended to turn to their managers above them to support their actions.

The third research question sought to determine the reasons for the gaps in the Supervisors current safety leadership skills and knowledge. The move to supervisory roles was particularly informal for 80% of the Supervisors interviewed for the study approached by their Managers to move from the work crews directly into these positions. Many of the Supervisors interviewed reported that there was very little transition between their previous general working roles to that of a Supervisory position.
Very few undertook training to support their new role with only 35% reporting that they had received any training at all during their transition to a supervisor role. Only 4 participants had undertaken specialised training in Supervision (two on the East Coast and one in the United Kingdom) and one had undertaken training in Frontline Management while working in the mining sector before moving over to the construction industry.

Since moving to a supervisory role half of the participants are undertaking training in a Certificate IV in Civil Construction and one new entrant to the industry and newly promoted to the role of Supervisor is working through a Certificate II in that course. However, once again participation in training that is specific to the supervision role is extremely limited with only one participant currently in training. Even though several of the older, experienced Supervisors agreed that they are continually learning in their roles, some found that training in safety leadership was beneficial (Bryden, 2002; Flin & Yule, 2004; Barling & Weber, 1996) and others supported training in civil construction. However, some Supervisors identified a lack of specialised training in supervision specifically for construction and complained that the training available in Western Australia was difficult to find and often too generic.

The final research question sought to determine strategies that could be used to increase the Supervisors safety leadership skills. The Supervisors were asked to suggest mechanisms that would provide them with support to better conduct their role. Additional training for themselves and their work crews was called for repeatedly including, supervision training, first aid courses and safety training as frontline managers. On a positive note, communication between the Supervisors and their work crews and senior management appeared to be well developed for all three companies. All the Supervisors interviewed reported that they were happy to listen to the ideas of those they supervised in terms of completing the work in a safer manner. In addition, all the Supervisors interviewed reported that their managers were also happy to discuss their ideas for improvement. Therefore if increased training in supervision and leadership was to occur for those in supervisory positions there is a likelihood that the learning would flow through to the whole organisation and improve safety performance (Flin & Yule, 2004).

A review of the study findings has revealed a number of implications for the industry:

1. The pressure of accessing labour in the current economic climate is leading to a number of inexperienced workers entering the sector, rapidly moving to supervisory roles,
2. Young, inexperienced workers may lack the skills to successfully manage their work crews, particularly the older experienced worker, and
3. Poor supervision and a lack of leadership can lead to lower worksite safety practices.

Finally, one clear recommendation has emerged from the data:

The civil construction industry should provide additional support for young, inexperienced Supervisors through transitioning to supervisory roles, increased training, and coaching and mentoring from senior management.

6.1 Limitations of the study

This study is limited in that it investigated the safety leadership skills of Supervisors in one industry sector in one specific location and there may be different issues associated with such a study if it was replicated in other industry sectors such as manufacturing, retail and the food industry, or in different locations. The Supervisors sampled for the study were from three medium-sized civil construction companies. Further research to study supervisory safety leadership skills in a wider sample and in other sectors would be beneficial to gather a holistic picture.
7.0 References

ABS (June 2011). Australian Social Trends: Using a Picture to Paint a Picture of Australian Society.


