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Improving safety culture: the impact of the construction induction training on the construction industry in Western Australia

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Abstract

Australia strives to be a world leader in safety practice however improving safety cultures to reduce work-related injuries in the hazardous environment of the construction industry is a continual challenge. It is particularly difficult in Western Australia (WA) where the industry is engaging with the second development boom this century, often in isolated locations, and simultaneously adapting to the national harmonisation of OHS regulations. In 2006, Worksafe WA introduced mandatory certification in safety awareness training for all employees, before they could begin work on a construction site. This paper reviews the impact of this training on the construction industry, presenting both the perceptions of the stakeholders from their survey returns and through the analysis of lost time injury/disease statistics. The findings of the study indicate that the training has played a role in decreased work-related injuries and changing attitudes to safety training.

Key Words: Safety culture change, mandatory training, safety training, construction industry, work-related injury.

Introduction

Injury figures

The Construction industry has the fourth highest fatality rate per 1000 employees in Australian, with 19 workers alone dying in 2006/07, trending towards similar figures in 2011 (exact numbers not yet available) (Worksafe WA, 2011a). In addition in 2009-10, around one work related lost time injury/disease LTI/D was recorded per 42 employees in the Construction division; this dropped to around one LTI/D for every 35 employees during

1

2010-11, placing construction as the third highest industry for injured workers (Worksafe WA, 2011b). The number of workers compensation claims has also been steadily on the rise in the construction industry since 2003 with the peak in 2004/05. In addition, in 2006/07 the number of workers' compensation claims was only 355 less than the peak in 2004/05 and had risen from the previous year. However, during this period there has been a steady rise in employment within the industry with ebbs and flows that mirror the changes in compensation figures. Focusing on the WA statistics in more detail, Figure 1 displays the incidence rate and number of workers compensation claims 2000/01 – 2006/07 (Safe Work Australia, 2010).
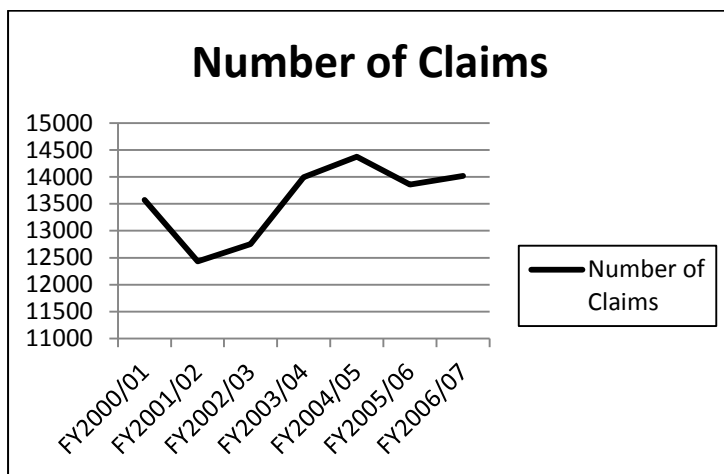
Source: Adapted from Safe Work Australia, 2010

Figure 1: The number of workers compensation claims 2000/01 – 2006/07 for all Australian workers in construction

Worksafe WA as the regulatory state government authority for WA has identified Lost Time Injury and Diseases (LTI/Ds) workers compensation claims for the construction industry. Table 1 displays the LTI/Ds for the construction industry in WA per 1,000 workers from 2005-2010. The table shows that there has been a slight increase in injuries that require sixty or more days off work to recover; however, the number of work-related injuries requiring at least one day off work have decreased since 2006/07.

Table 1: LTI/Ds for the construction industry in WA 2005/06 – 2009/10

| Financial Year | LTI/Ds 1+ days lost | | LTI/Ds 60+ days lost | | Total |
	Frequency rate	Incidence rate	Frequency rate	Incidence rate	Days Lost
2005-06	14.7	3.1	3.2	0.7	138,847
2006-07	15.8	3.3	3.0	0.6	150,464
2007-08	15.2	3.2	3.2	0.7	163,715
2008-09	14.4	3.1	3.6	0.8	202,806
2009-10	11.6	2.4	3.0	0.6	164,140
5yr Average	**15.3**	**3.2**	**3.2**	**0.7**	**163,994**

Source: Worksafe WA, December 2011

Table 2 dissects the Western Australia construction LTI/D's into four categories: commercial construction (construction 3 storeys and above), house construction, residential building construction (below 3 storeys) and road and bridge construction (civil construction). The overall total for one or more days LTI/Ds have decreased since a peak in 2008-09. Housing construction has shown a steady reduction; however, residential building construction (which includes construction of multiple storey residences up to 3 storeys), commercial construction and road and bridge construction (civil construction) have had an increase in 2008-09 and decreasing again in 2009/10 (Work Safe, 2011).

Table 2: Commercial, House, Residential Building, and Civil Construction: LTI/Ds 1+ days lost

ANZSIC 1993 edition	2005-06	2006-07	2007-08	2008-09	2009-10	Total
House Construction	166	220	208	189	150	**955**
Non-Building Construction	228	222	282	335	286	**1332**
Non-Residential Building Construction	137	163	180	210	160	**830**
Residential Building Construction	34	64	51	58	47	**238**
Road and Bridge Construction	152	177	154	157	164	**755**
Total	**717**	**846**	**875**	**949**	**807**	**4110**
5yr Avg	**143.4**	**169.2**	**175**	**189.8**	**161.4**	**838.8**

Source: Worksafe WA, June 2011

Housing construction completions have reduced in Australia as a consequence of the Global Financial Crisis (GFC) in 2008/09 and this may be indicative in these figures. However, WA experienced the first wave of increased commercial construction projects in 2006 with the GFC having only a minor impact on work projects. 2010 saw the beginning of a second wave of significant construction infrastructure development. The LTI/Ds must be interpreted in relation to the employment patterns of the industry. Indeed, Table 3 shows that there has been an increase of 15,000 workers in the construction industry since 2006/07 with a small increasing trend in the number of LTI/Ds. This is a significant relationship as the expectation would be that an increase in employee numbers within the construction industry would produce a much higher increase in days lost due to work-related injury. It is particularly interesting given that this recent rapid expansion of the industry has been made by attracting migrant workers and the fast tracking of newly qualified workers into the industry, potentially more vulnerable employee groups.

Table 3: Construction LTI/Ds 1+ days lost and employee growth in WA

Financial Year	Construction LTI/Ds	Employee Numbers
2004-05	723	88,000
2005-06	717	102,000
2006-07	846	110,000
2007-08	875	115,000
2008-09	949	125,000

Source: Worksafe WA, May 2011

Safety culture

Reducing accidents and incidents in the workplace is dependent upon changing workplace behaviour both individually and collectively; that is what individuals do, and what is accepted practice in the workplace. Those actions are influenced by the safety culture that surrounds them which in turn is specifically mediated by the acts of management. Martin (1992)

recommends that in order to promote a safety culture organisations need to introduce organisational behaviour change models and initiatives. The CIT is an example of a change initiative. It is training that seeks to improve the safety culture within organisations by ensuring all workers in the construction industry have basic safety knowledge and is designed to effect positive industry change. Considerable work has been done on 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 by, not only commitment, but by ability, leadership 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). A study conducted in 2005-08 by Bahn (Bahn & Barratt-Pugh, 2009) in the civil construction industry found that the value managers placed on safety led to the level of safety culture in the workplace. Those that placed a value on safety often placed a higher priority on training. The literature indicates that to make an impact on organisational safety cultures initiatives need to be introduced that have universal coverage and industry support creating a 'convergence' of attitudes and subsequent practice.

There is considerable evidence that safety training interventions have led to an improvement of safety behaviours and a reduction of hazards in the workplace (Kinn, Khuder, Bisesi & Whoolley, 2000; Dong, Entzel, Men, Chowdhury & Schneider, 2004; Gillen, Baltz, Gassel, Kirsch & Vaccaro, 2002; Varonen & Mattila, 2000). However the complexity of instigating such action is highlighted by Biggs, Sheahan & Dingsdag (2006, p.2) in their statement that 'under current legal frameworks, construction companies are required to ensure that people in charge of works are competent to manage OHS obligations; however there is no nationally based or accepted framework that specifically articulates who needs to do which tasks and

5

what competencies they require'. This is perspective is supported by Zanko (2006, p.4) who found that there is currently no clear understanding of what constitutes occupational health and safety management and without this definition in place there is ambiguity and uncertainty about 'what to do and what not to do'. Burke, Salvador, Smith-Crowe, Chan-Serafin, Smith and Sonesh (2011) noted that safety-related problems in organisations are often training related or training relevant. In their study investigating how safety training and workplace hazards impact the development of safety knowledge and safety performance they found that the method of safety training delivery has an effect. They argue that when training becomes more 'engaging' it is also more effective, and results in "greater knowledge acquisition, a higher level of safety performance, and a greater reduction in accidents and injuries" (Burke et al, 2011:48). Goldstein and Ford (2002) argue that engagement in training is the first stage in a process that requires a positive transfer of training to the job in order to secure relevant changes in safer work performance.

In 1997, the United States Occupational Safety and Health Administration (OHSA) developed a Union-based ten-hour hazard-awareness training program (Smart Mark) for the construction sector. This program is the most widely used construction safety and health awareness training course in the US (Sokas, Nickels, Rankin, Gittleman & Trahan, 2007) and is frequently incorporated into apprenticeship training courses. Sokas, et al. (2007) evaluated Smart Mark to assess the strengths and weaknesses of the training materials, to determine the most commonly encountered hazards and the impact the training may have had. Their findings included: identifying electrical safety and fall protection as the two most useful modules; a little over half of the work sites improved safety practices by either changing their safety policies or work practices. In addition, Kinn, et al. (2000) conducted a study with plumbers and pipe fitters in Ohio and found that workers who had received a site specific

safety induction[1] had fewer injuries, although the impact of the safety awareness training could not be determined. Finally, in 2010, Shaikh completed a PhD study into the impacts of safety training on Newfoundland fishermen's knowledge and attitudes toward safety and found that the group moved from a general aversion to support for continual training in safety following their immersion in safety training courses.

To summarise the preceding literature, safety culture is primarily mediated by managerial values and actions, which are the standards they set, police and demonstrate to produce a safe working environment. However, training plays an important role in creating a convergence of awareness and knowledge to improve safe practice within the organisational environment.

Construction Induction Training (CIT)

Worksafe WA took a step towards addressing safety culture issues by introducing a mandatory pre-site safety awareness induction, the 'Blue Card' in 2006/07, for all construction workers in Western Australia. The aim of the Blue Card was to ensure that all construction workers had minimum training in general site safety including working at heights, working in confined places, general lifting, and working with hazardous materials before they work on any construction site. This training was not intended to replace company, site specific, or job role inductions, but was additional to these established practices. In 2009, the Blue Card was subsumed into a similar nationwide training program Construction Induction Training (CIT – 'White Card'). The rationale for this move was that the previous Blue Card was only valid in WA and did not reflect the need for more universal and transferable national competencies of a mobile workforce. Therefore, Worksafe WA moved to embed the CIT, a national minimum safety standard for all construction workers, as part of

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[1] Inductions carried out at individual work places to address specific hazards such as safe handling of machinery.

the WA industry culture. There was however one significant difference as the state Blue Card required renewal and re-training every 3 years, however the national Construction Induction Training (CIT) provides workers with a unit of competency within a certified training package and thus does not require reassessment.

Materials and methods

The Construction Training Fund of WA commissioned this research to evaluate the impact of the Blue Card and CIT as a two phase study. The first phase concentrated on examining the effect of the CIT on the commercial construction sector and was completed in 2010, with the subsequent phase focusing on the housing and civil sectors during 2011. This study focused on collecting industry perceptions of the value and effectiveness of the *training system*, the associated relevance of the *training activity* and the subsequent *workplace impact*. The key participants in the study were the site managers and supervisors who could reflect on the changes in the workplace culture and the individual workers for which they were responsible.

The research design was based upon an evaluative field study utilising a mixed mode data collection as both social perceptions and recorded data are relevant to the phenomena under investigation. In each phase of the study, document and statistical scanning was followed by a broadly distributed questionnaire and then semi-structured interviews (results published elsewhere, see Bahn & Barratt-Pugh, forthcoming). The research was iteratively constructed as each engagement with the subjects informed the design of subsequent instruments and protocols. As a multiple embedded field study (Yin, 1996), access to industry participants was critical. The design of the study was from the outset collaborative with industry partners involved at each stage of the project to critique and inform each subsequent research stage. From this perspective the study incorporated an action learning approach of evaluating the

effectiveness of the training program and feeding back the findings to the industry to facilitate future change. For the industry reference group collaborating on the research design this study formed an action learning experience as they reflected on the outcomes of the initiative they had introduced into their industry (Zuber-Skerritt, 2001). The CIT had already made an impact on the field of practice and this study now was instigating industry reflection about the implications of the training (Stringer, 1999).

The three key research questions that drove the study were: Having completed the Construction Induction Training within the past 3 years in WA:

1. How effective has the Construction Induction Training certification system been for the industry?
2. How effective have the Construction Induction Training practices been for the industry?
3. How has the Construction Induction Training system impacted upon organisations and safety in the industry?

Each research question investigated the issues, benefits and barriers associated with the training as well as gathering the perceptions from a range of managers and employees about the value they placed on the scheme (see table 4 for study sample). The research collected data and reviewed the findings collaboratively with a reference group established for this study. Members of the reference group were made up of representatives of Worksafe WA, the Construction Training Fund (CTF), the Master Builders Association of WA, the Housing Industry Association of WA, the Australian Workers Union (WA division), and the Construction Forestry Mining and Energy Union WA and Civil Contractors Federation WA. The reflections on the data collected both informed the subsequent data collection, and also developed recommendations to fine-tune the current practice of the Construction Induction Training system. The CTF provided access to the network of companies involved and Worksafe WA provided the study with legitimate State authority LTI/Ds statistics for the WA construction sector.

Table 4 indicates the sample purposively selected for the two phase research project to explore the research questions. In phase 1, an online questionnaire consisting of 10 questions with a 5 point Likert scale and additional comments, was developed with the reference group. This first phase survey was distributed in March and again in April 2010 to 669 CEOs and supervisors in the commercial construction sector. Only 25 (4%) surveys were completed.

In phase 2, the online questionnaire was distributed in December 2010 to 820 CEOs and supervisors in the housing and civil construction sectors. However, only 6 surveys were completed online. Given the similar low response to the online survey in phase one and the extremely low response rate in this phase, the survey was posted in April 2011 to the same 820 recipients with 45 additional questionnaires completed. Combining all surveys in phases 1 and 2 we had almost 5% completion rate of 76 completions. We acknowledge the response rate is very low and agree that the findings in this paper cannot be considered a generalisation of the views of CIT effectiveness in the industry. However, within the survey responses some qualitative data was also gathered that provides insight into some of the issues and benefits of the training to the organisations that did complete the questionnaire.

The low response rate is an indication that online questionnaires and mailed surveys are not supported by a participant group that is particularly manual in their work practices, not regularly working with a computer and perhaps over-surveyed. We argue that the criteria that should be used to determine the appropriate method of data gathering for diverse populations of subject is worthy of further exploration. In phase 1, 84% of the completed surveys were with managers from companies operating in the commercial sector, while 4% were from the civil sector and 12% in the housing sector. In phase 2, 36.5% of the completed surveys were

with managers from companies operating in the commercial sector, with 25% in the civil sector, and 38.5% in the housing sector. Of all completed surveys from phases 1 and 2, 65% were with managers from companies operating in the Perth metropolitan area, with 32% also conducting work in regional WA, and 3% in remote areas in WA. Of those surveyed 14% had been employers for under five years, 23% employers 6-10 years, 36% employers 11-20 years and 27% employers for 20 years and over. Employees were not surveyed in this study due to difficulties with access and a requirement to investigate managerial perspectives by the organisation funding the research. The numbers of employees the surveyed companies employed ranged from 1-300 employees, with 53% employing under 20 employees (micro-sized companies); 28% employed between 20-49 employees (small sized companies); 13% employed 50-199 employees (medium sized companies); and 6% employed 200+ employees (large sized companies).

Table 4: The sample

Phase 1(2010)	Phase 2 (2011)
Incident Statistics	**Incident Statistics**
Tabulation and segmentation of the Commercial Construction sectors records from Worksafe WA for the previous 6 years – Pre and during the Construction Induction Training scheme.	Tabulation and segmentation of the Housing and Civil Construction sectors records from Worksafe WA for the previous 6 years – Pre and during the Construction Induction Training scheme.
Questionnaire	**Questionnaire**
Online distribution to MBA Memberships of approximately 669 CEOs and supervisors (distributed twice) – 25 completed.	Online distribution to HIA and CCF Memberships of approximately 820 CEOs and supervisors – 6 completed. Mailed survey to HIA and CCF Memberships of approximately 820 CEOs and supervisors - 45 completed.

Results

The results of the survey that was completed by the 76 participants provide an overview of attitudes towards the new safety initiative taken by this industry. The statistics that follow

combine the data generated from both phases of the study and cover all three sectors of the industry.

Table 5 illustrates the responses to the statement that the CIT provided a good first step to developing safety awareness for their staff. 35% of respondents strongly agreed, 36% agreed, and 22% were undecided. This shows that the majority of those sampled are in favour of the CIT which is a change from previous findings in research on safety culture and improvements conducted by Bahn in 2006 (Bahn & Barratt-Pugh, 2012).

Table 5: CIT is a good first step

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	2	2.0	2.7	2.7
	D	3	4.0	4.1	6.8
	N	16	22.0	21.6	28.4
	A	27	35.0	36.5	64.9
	SA	26	34.0	35.1	100.0
	Total	74	97.0	100.0	
Missing	System	2	3.0		
Total		76	100.0		

There were a number of additional comments made by the managers on the questionnaires that illustrate the rationale for their responses and these included:

- *Good first stage training via White Card is necessary.*
- *Very important and basic knowledge for people preparing for site visits/working.*
- *Better than nothing.*
- *As we conduct company and site specific safety inductions I see no need for White Card.*
- *A waste of a day.*

Although 71% of the respondents agreed that the CIT was a good first step in providing safety awareness training for their staff, some managers indicated that they provided a similar and more in-depth site induction training programme. However, those in support of the CIT maintain that especially for new entrants to the industry the CIT training is an important introduction to 'work on a construction site'.

The managers were asked whether they believed that the CIT provided benefit to their staff. There were 62% of managers who agreed with this statement and 13% strongly agreed. Although 9% were undecided and 5% respondents disagreed, with 3% strongly disagreed (Table 6).

Table 6: Benefit to staff

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	2	2.0	2.7	2.7
	D	4	5.0	5.4	8.1
	N	9	12.0	12.2	20.3
	A	46	61.0	62.2	82.5
	SA	13	17.0	17.5	100.0
	Total	74	97.0	100.0	
Missing	System	2	3.0		
Total		76	100.0		

Again the additional comments by the managers illustrate the rational for their responses:

- *Workers are more aware of safety issues now than 10 years ago.*
- *Aware of problem leading to accident.*
- *Makes staff aware that they have to keep their eyes open.*

Most of the managers (75%) who completed the survey agreed that training their staff in the CIT was of benefit because it raised the issue of workplace safety once again.

The managers were also asked if after their staff completed the CIT they perceived a measurable benefit to their business. There were 46% of managers who agreed with this statement, with a further 12% strongly agreeing and 24% undecided. However, 17% of those surveyed report no measurable benefit to their business by completion of the CIT by their employees (Table 7).

Table 7: Measurable benefit to business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	SD	4	5.0	5.4	5.4
	D	9	12.0	12.2	17.6
	N	18	23.0	24.3	41.9
	A	34	45.0	45.9	87.8
	SA	9	12.0	12.2	100.0
	Total	74	97.0	100.0	
Missing	System	2	3.0		
Total		76	100.0		

Those managers who were unsupportive of the CIT made these additional comments:

- *Very little relevance in course to my business.*
- *They were already aware.*
- *Being more specific to each field.*
- *It's only a small part of what needs to be a wider strategy.*
- *Without supervision during safety regulations on site this training has little effect. This highlights the statutory requirement – but this is only the start of safety training.*

Although the managers surveyed generally supported the CIT as a good first step, especially for new entrants, they were particularly critical of the course content. Some managers argued

for more specific content that related to their individual business. Many managers highlighted the need for extensive site specific induction follow ups.

The majority of respondents (62%) believe that the CIT assisted their business by reducing accident/incident rates, (table 8).

Table 8: CIT reduced accident/incident rate

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	46	60.0	62.2	62.2
	No	28	37.0	37.8	100.0
	Total	74	97.0	100.0	
Missing	System	2	3.0		
Total		76	100.0		

Other statements to this question by the managers that indicated their rationale included:

- *Anything is better than nothing.*
- *Reduced the risk but we already had extremely low rate i.e. no major incidents.*
- *Training gave good first step, but specific safety at work place more important in reducing accidents.*
- *When we did Blue Card the instructor told us one of the most dangerous things on site is rat droppings. That's when I thought the whole test is all s***. Work safely to me is common sense.*

Many of the managers surveyed (62%) agreed that the CIT had improved safety on their work sites and had led to a reduction in work-related injuries. However, almost 40% of managers believed the CIT was a 'time waster' and that they could provide better value in-house training themselves.

Discussion

The Blue Card was developed by representatives of the construction industry, Worksafe WA and the unions responding to a call from the industry to provide basic training for everyone working in construction and in particular to train new entrants. It was an initiative born form

11

local needs and owned by the key stakeholders. Around Australia various states had similarly developed pre-site construction induction courses and so there was an expectation that a national training scheme (CIT) would unify these local initiatives. As most of the individual state training schemes had fed from each other and were similar in design, it was not too difficult to agree on a composite national safety awareness training course. Although some managers are critical that the current course content is not specific to their individual business, the training has been designed to be generic and as a basic safety awareness course, not to displace or replace specific site inductions for each construction business or worksite. The training somewhat transcends industrial issues in the construction industry such as sham contracting (employees recorded as contractors) (Sarina & Riley, 2007) and piece work (workers produce small parts of the project and are not employed by the parent organisation) (Guillén, 1994) that place pressure on the general structure of safety culture on sites in that every worker, contractor, supplier and visitor must complete the training before entering a worksite.

Our sample indicated that in general the training was valued by the industry as a first step in safety awareness for the industry. Over 75% of our sample was made up of small businesses employing less than 50 people. Small business in Australia makes up 99% of all businesses, of the 2.05 million economically active firms, 40% have employees but only 1% of these employ more than 200 people (ABS, 2010). Small business owners are often under resourced and structurally vulnerable (Nichols, 1997) and so the CIT goes some way to provide valuable inexpensive training as the first step in safety awareness. Delivery of this training by other means would be difficult for this section of the industry to organise, deliver and monitor. This notion is supported by the 75% of the managers sampled who believed the CIT provided a positive benefit to their staff.

Construction in WA is currently in a phase of high production, taking on more numerous and larger contracts than ever before. Managers are therefore focused on ensuring that this opportunity is used to stabilise and build their businesses and is not eroded by unnecessary additional costs. Small business is particularly vulnerable from this perspective (Nichols, 1997). It is therefore very reassuring that of the managers surveyed 58% believed that by having their staff complete the CIT there was a measurable benefit to their business. In addition, given that over three quarters of our sample was managers in small and micro-sized business it is interesting that over half of them attributed the CIT to improvements to their bottom line. Furthermore, 62% of the managers sampled stated that the training had assisted their business by reducing work-related injury rates. Work-related injury is costly to business, and especially small business, as an injured worker requires financial support, temporary replacement and reportable injury directly affects the cost of insurance premiums. When we examine the LTI/Ds statistics we can see that work-related injury in the construction industry is only slowly rising, and that this has occurred with a significant increase in new entrants to the industry. This reduction in lost time equates to an increase in business profitability. While there is no hard evidence that the CIT is responsible for these figures, either directly or in association with other mediating influences, the responses and statistics suggest that the mandatory CIT training has increased safety awareness across the industry and contributed towards a decrease in per capita lost time and injuries. The evidence indicates that the CIT has therefore had a positive impact on WA construction industry safety. We acknowledge that this reduction is not solely due to the CIT and that there have been other contributing factors. Additional safety training in the form of the uptake of formal occupational health and safety qualifications, more, comprehensive organisational safety inductions, heavier penalties for safety breaches, and possible reporting of incidents. However, the correlation between the

introduction of the CIT, an expansion of the industry and only a small decrease in lost time and injuries supports such an optimistic analysis and perspective.

Conclusions

The findings of this study indicate that the CIT is valued by managers working in the construction industry in WA. There is evidence to suggest that the CIT has raised awareness of safety in the industry and had a positive effect on the safety culture of organisations within the industry. Managers reported that the training was of benefit to their employees, had a measurable benefit to their business and reduced work-related injury. Since the introduction of the training there has been a reported reduction of days lost from work due to work-related injury at a time of increased production and increased new entrants to the industry. While we argue that the CIT has had a positive effect on safety culture in the industry, the managers who responded to our survey have called for more robust and regulated training that is regularly repeated as work-related injury in the industry still remains at an unacceptable level. Further research is needed to evaluate the safety climate within the industry to determine the range of mechanisms, not just the CIT that have been responsible for the slowing of work-related injury in times of increased production and therefore increased employee numbers.

Impact on the Industry

The CIT has impacted the construction industry by providing basic safety awareness training that ensures all construction workers have a minimum knowledge of the dangers of working in that environment. The study has shown that there is evidence that the training has contributed to the decrease in work-related injury since its introduction in 2006.

Acknowledgements

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