

Graduate School of Business

**Occupational Health and Safety: Generating regulatory
perceptions to encourage compliance**

Garry George Claxton

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Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgement has been made.

Signature

Date

Abstract

Workplace safety in Australia is a generally accepted management responsibility. Management is a crucial constituent of a safety system within organisations. The fundamental objective of safety management is to eradicate, where reasonably practicable, human-related suffering and distress within a context of the achievement of an efficacious economy of business operation.

In short, the duty on an employer/manager is to carry out their business operations in the workplace so as to not place an employee at unnecessary risk. This involves several aspects, including the provision of competent staff, appropriate materials, and proper and effective supervision.

Over many years, the courts have found that an employer's duty to provide a safe system of work, and a safe workplace is to be strictly observed. Although the standard of preventative conduct expected by employers is high, over the years the appellate courts have added qualifications to this duty. From the 1930s, it has been an employer's duty to demonstrate prudence in their duty to take reasonable care. More recently prudence as a requirement of a duty of care has been largely replaced by the concept and application of positive due diligence. The due diligence duty holder can be called upon to provide evidence of active involvement in managing workplace safety.

Since 1972, Australian occupational health and safety (OHS) legislation has undergone substantial reform. This reform relies heavily on Lord Robens committee recommendations in the 'Safety and Health at Work Report 1972' (Robens Report 1972). This has entailed a shift from a high regulatory burden on employers to general duties supported by process and performance standards, all of which cover a wider range of duty holders (i.e. those with the responsibility to maintain a duty of care), hazards and workers. This revised regulatory approach includes provisions to encourage employee participation (employees have a duty of care to themselves and those they work with), as well as new inspectoral powers and enforcement measures. Robson et al. (2007) provide evidence that the changes, together with other developments, such as the growing influence of risk management and systematic occupational health and safety (OHS) management, appear to have had a beneficial influence on recorded OHS incidents.

Despite this focus, workplace accidents that could have been prevented continue to occur. This research seeks to identify strategies that may be applied in the future to promote a reduction in work-related fatalities and injuries. Data to support this position has been drawn from those who have a primary legal responsibility to ensure a safe workplace, and others who have an institutional responsibility to encourage safe workplaces. These are the people who are at the 'sharp end' of the OHS regulatory burden. The participants in this research are primary actors in OHS who have the institutional responsibility to encourage safe workplaces include the owner/managers of a representative range of small to large enterprises, OHS managers, OHS advisors, OHS trainers, a representative of the WorkSafe WA inspectorate, a representative of the trade

union movement and workers. These participants were consulted in the search for answers relating to genuine criticisms of, or support for, the current enforcement paradigm.

The underlying question upon which this research is premised is:

What, if anything, will motivate OHS stakeholders in a regulatory and broader compliance endeavour towards improved OHS?

Given the nature of the underlying research question, the absence of recent investigations in the OHS area directly involving a significant and diverse stakeholder group, and also the need to explore this issue with regard to identifying motivational outcomes, this study required a largely investigative mode. This approach was adopted, utilising an interview survey process primarily focusing on the collection and analysis of qualitative data. The findings culminate in the '*Generating OHS Compliance Model*' (the model) which provides elements to be considered that have the potential to improve an OHS Management System (OHSMS).

Prologue: A Purposeful Journey

As a tradesperson and then mature age graduate who became a barrister and solicitor of the Supreme Court of WA, the researcher has first-hand experience of the tragedy that a failed Occupational Health and Safety endeavour can have on those left behind after a major workplace accident causing death. The researcher began by plying his trade as a mechanical fitter on various WA mine sites and later as a lawyer in his legal career. The researcher is a 12-year professional member of the American Society of Safety Engineers, Registrar Accreditation Board and Quality Society of Australasia (RABQSA) qualified OHS systems lead auditor and a senior OHS consultant for the Industrial Foundation for Accident Prevention (IFAP), a not for profit safety organisation.

The researcher has worked in the workers' compensation jurisdiction representing many hundreds of injured workers with a varied scale of injury severity. Sadly, lawyers who practise in the workers' compensation jurisdiction, which includes remedies pursued under the *Fatal Injuries Act* 1959 (WA), for the most part generate their income from other people's misfortune. In effect, this is a reactive contribution to OHS failures, as opposed to a proactive endeavour by using the knowledge gained in the quest of justice to contribute towards preventing such failures.

Fifteen years ago, the researcher decided that he had learnt enough of the OHS paradigm and the causes of workplace accidents to proactively pursue the prevention of such accidents.

The researcher is fortunate to have developed and provided some very effective OHS seminars that focus the training on consequence. In 2015, Woodside Petroleum endorsed one of the researcher's OHS courses – the 'Mock Coroners Court Course' as a part of a package of endeavours that lowered its lost time injury (LTI) rate by almost 50%. The researcher also presents at safety conferences and has contributed support material for some of the applicable regulators; amongst many other ardent OHS pursuits.

To conclude, it is clear that the motivation for this study has been sparked by the experiences of being an employee, literally working at the coal face, then a safety professional, and in the courtroom. An unusual mix of work experience but nevertheless a purposeful journey that has culminated in this thesis.

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The metaphor that comes to mind when I reflect on my PhD journey is that of an adventure, one which is very unpredictable and highly challenging. The successful completion of this particular journey depended on the help and support of many people, some who were there from the very beginning and others who joined the trek along the way, but who have all been instrumental in inspiring, motivating and in some cases keeping me healthy to the present.

Thank you to the late Gordon Westall for convincing me many years ago, that it is education, and not their beginnings that shapes the future of the person.

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Better a thousand times careful than once dead. ~ Proverb

1 Introduction

1.1 Background to the Research

While providing a paper to the Safety Institute of Australia conference titled ‘Towards a policy on OHS research’ Quinlan (2010) announced:

“We need local research in Australia. We can’t rely purely on imported research (Quinlan 2010, 30).

This thesis started life as an enquiry into ways the current approach to occupational health and safety (OHS) can be improved in the workplace. While OHS is an issue for the world the context of this study is Australia, more specifically this study has a Western Australian (WA) focus. Some international OHS research is used in this study where it is applicable to the Australian context. This thesis was prompted by Professor Quinlan’s words provided above, a review of OHS statistics over the last 25 years and from personal experience as an OHS lawyer. There have been peaks and troughs, but on the whole OHS statistics have not improved to any large extent over this period. More recently those statistics have taken a turn for the worst. This research seeks to examine ways that the current level of WA OHS compliance can be improved in the broader workplace as well as from an individual perspective.

Practices and policies linked with OHS are multifaceted and are replete with complex prescriptive and non-prescriptive regulations. The role of the prosecution in achieving compliance with OHS regulation is a highly contentious issue. Gunningham (2007) suggests that many companies argue that prosecution is counter-productive, inhibits adequate safety investigation, and encourages a defensive rather than a proactive OHS culture; hence the importance or otherwise of an OHS culture is explored in this thesis. Gunningham’s (2007) research would seem to be supported by the number of cases before the courts which continues to evidence that a prosecutorial approach has failed to prevent high levels of work-related injury, disease and death (see Table 1-1). Many of the businesses mentioned in the table are small businesses.

Walters and Lamm’s (2003) research focuses on small business and the level of commitment to OHS, where they argue it is senseless to introduce OHS regulations, policies and preventative initiatives. That is, such measures are unlikely to succeed unless there is an improved understanding of why and how small business employers comply with OHS regulation and their attitudes to their workers’ health and safety.

Not all OHS regulation is contentious. Twenty sections of the *Occupation Safety and Health Act 1984* (WA) encourage an employer to consult with their employees on matters of an OHS nature (Appendix A). Thirty-eight sections of the *Mines Safety and Inspection Act 1994* (WA) require the same (Appendix A). Why? Because it seems that consultation empowers. Where there is empowerment there is better understanding and more commitment to the OHS compliance endeavour because of a perception, by all at the workplace, of ownership of the resulting strategy. Blewett and Dorrian (2011) emphasise that worker participation and consultation in workplace health and safety are primary requirements in law and there is a legal duty on employers to consult with their workers. Aside from this, there is compelling international evidence (Tooma 2012) that consultation and worker participation in decision-making on work health and safety matters results in safe and productive workplaces.

So why does OHS need to improve when an annual downward trend in worker fatalities is apparent in Figure 1-1?

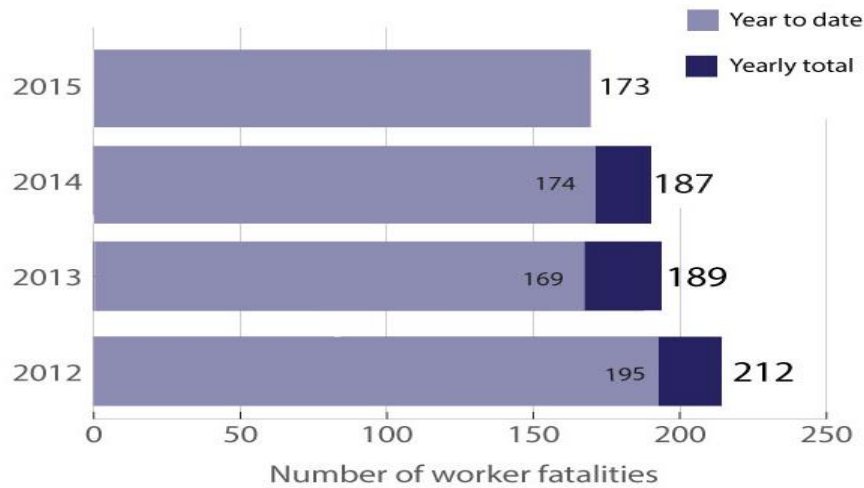


Figure 1-1: Safe Work Australia (SWA) ‘The Comparative Performance Monitoring Report’ 17th Edition, October 2015.

Figure 1-1 identifies that 173 Australian workers died from work-related injuries in the first ten months of 2015, the lowest number since the report series began in 2003. Federal Employment Minister Michaelia Cash stated, on releasing the SWA 2015 report (Minister’s Media Centre, 29 October 2015), that the “downward trend in workplace fatalities is a positive sign that Australian businesses and workers are committed to keeping their workplaces safe.” Minister Cash offered this positive statement:

“I am pleased that Australia has made great strides in improving health and safety over the last decade”.

Within weeks of the release of the SWA report, WorkSafe Victoria announced that November 2015 was the worst month for workplace fatalities in the state in more than ten years, with eight workplace deaths in total. This includes five worker deaths in a nine-day period. Queensland’s Department of Natural Resources and Mines 2014/2015 Annual Health and Safety Report stated that six mine workers were killed in the period from May 2014 to March 2015. This number represents the worst fatality record for the sector since 1997. WorkSafe WA issued a safety warning in November 2015, after five West Australian workers were killed in a ten-day period in the same month. Three workers were killed on the same day; two at the same building site in East Perth and one just outside of Perth in a fall from a scaffold on the Kwinana industrial strip.

A SWA (2016) report headed “*Work-related Death Tolls Spike*” reported that as at 20 April, 2016, 41 Australian workers had been killed at work in 2016. SWA offers the following advice “the number of worker deaths listed directly above is based on initial media reports and is a preliminary estimate for the number of people killed while working. Once the appropriate authority has investigated the death, more accurate information becomes available from which SWA updates details of the incident” (Safe Work Australia 2016)

On 31 March 2017 SWA released a preliminary estimate report which offers the following update - 45 Australian workers were killed at work since the start of 2017. This represents 10 more fatalities than for the same period in 2016 (Safe Work Australia 2016).

This increase in the number of workplace deaths prompts a number of questions: Do OHS stakeholders really understand the risks inherent in workplace hazards? Do they have rigour in their processes? The myriad of OHS cases negatively determined by courts in Australia suggest that many employers may not understand relevant risks or have appropriate process to mitigate risk. With this in mind, perhaps the question should be: do stakeholders understand what is required to be OHS compliant and efficient? Is it because stakeholders do not want to provide the necessary resources or is it because many undertakings allow, even foster, a risk-taking culture to exist as opposed to actively promoting a culture of risk awareness? Or is it understandable if the leaders of some organisations do not understand what they must do to provide a safe workplace and a safe system of work for employees? Taken in context it is worth remembering that ignorance of the law is not an acceptable defence in OHS, or any other related legal requirement. Table 1-1 illustrates case examples of legislative failure to mitigate workplace consequence, the subsequent court decision and the penalty prescribed. Penalties vary subject to mitigating circumstances, state or territory penalty levels and early guilty pleas.

Table 1-1: Selected case examples of recent OHS prosecutions and enforceable undertakings in Australia

Case Citation	Workplace Consequence	Decision	Penalty
SafeWork NSW v Grant [2017] NSWDC 99 (9 May 2017)	Workplace injury worker suffered severe brain injury	Employer found guilty of breaching the NSW WHS Act	\$80,000
Boland v Kentucky Fried Chicken Pty Ltd [2017] SAIRC 16 (5 May 2017)	Workplace injury worker suffered third degree burns	Employer found guilty of breaching SA WHS Act	\$105,000 after 40% discount for early guilty plea.
WorkCover Authority of NSW (Inspector Moore) v E & T Bricklaying Pty Ltd NSWDC 16 (24 February 2016)	Near-fatal electric shock to employee	Employer found guilty of breaching NSW WHS Act	\$80,000
Soulio v Aston Newman Timbers Pty Ltd [2016] SAIRC 4 (2 March 2016)	Serious hand injury with severed finger	Employer found guilty of breaching SA WHS Act	\$57,000 after a 40% discount for early guilty plea.
DPP v Frewstal Pty Ltd [2015] VSCA 266 (24 September 2015)	Workplace fatality	Employer found guilty of breaching Victoria's OHS Act	\$250,000 (An appeal to increase the penalty failed).
Mckie v Al-Hasani and Kenoss Contractors Pty Ltd (in Liq) [2015] ACTIC 1 (23 June 2015)	Workplace fatality	Employer found guilty of breaching ACT WHS Act	\$1.1 million.
Russell v Leonhard Kurz (Aust) Pty Ltd [2015] SAIRC 13 (20 May 2015)	Forearm amputation	Employer found guilty of breaching SA WHS Act	\$42,000 after 40% discount for a very early guilty plea.
Nash v Dracon Mining Pty Ltd [2015] NSWIC 14 (19 October 2015)	Workplace fatality	Employer found guilty of breaching NSW OHS Act (as it was at the time of the offence)	\$80,000

Case Citation	Workplace Consequence	Decision	Penalty
Comcare v John Holland Pty Ltd [2015] FCA 388 (23 April 2015)	Workplace fatality	Employer found guilty of breaching CTH OHS Act (as it was at the time of the offence)	\$110,000
Comcare v Linfox Australia Pty Ltd [2015] FCA 61 (12 February 2015)	Crushed head injuries (forklift related injury)	Employer found guilty of breaching CTH OHS Act (as it was at the time of the offence)	\$90,000
Inspector Nash v Bulga Underground Operations Pty Ltd (re Newstead [2015] NSWDC 6 (5 February 2015)	Multiple injuries due to falling coal	Employer found guilty of breaching NSW OHS Act (at the time of the offence)	\$75,000
Comcare v John Holland Pty Ltd [2014] FCA 1191 (7 November 2014)	Workplace fatality	Employer found guilty of breaching the CTH OHS Act (as it was at the time of the offence)	\$180,000
Damday Pty Ltd v Work Health Authority [2014] NTSC 7 (11 March 2014)	Workplace fatality	Employer found guilty of breaching the NT WHS Act (now repealed)	\$120,000
(Re Boles) WorkCover Authority of NSW (Inspector Pile v Fletcher International Exports Pty Ltd NSWDC 181 (26 August 2014)	Fractured right wrist and severed nerve.	Employer found guilty of breaching NSW WHS Act.	\$150,000
(Re Jun Yong Lee) WorkCover Authority of NSW (Inspector Pile v Fletcher International Exports Pty Ltd NSWDC 179 (26 August 2014)	Crush injuries and deep cuts to arm	Employer found guilty of breaching NSW OHS Act (as it was at the time of the offence)	\$75,000
Perry v Hart Retail Group Pty Ltd [2014] SAIRC 21 (17 July 2014)	1.7 metre fall from forklift cage	Employer found guilty of breaching SA WHS Act	\$45,000 after 40% discount for an early guilty plea
Perry v Tru-Coat Pty Ltd [2014] SAIRC 24 (28 July 2014)	Crushed under a falling beam	Employer found guilty of breaching SA WHS Act	\$120,000
Nash v Glennies Creek Coal Management Pty Ltd (No.9) [2015] NSWIC 15 (18 November 2015)	Workplace Fatality	Employer found guilty of breaching NSW OHS Act (as it was at the time of the offence)	A total \$399,000 for two offences
Nansen Yuncken Pty Ltd Enforceable undertaking* (23 April 2015)	Near miss incident	Employer entered into an enforceable undertaking	Employer agreed to spend a minimum of \$177,480
Alcan Gove Pty Ltd Enforceable undertaking* (18 December 2015)	Fatality	Employer entered into an enforceable undertaking	Employer agreed to spend a minimum of \$644,560
SRG Building (Southern) Pty Ltd Enforceable undertaking* (7 February 2017)	Fatality	Employer entered into an enforceable undertaking	Employer agreed to spend a minimum of \$911, 520

*An enforceable undertaking is a legally binding agreement between a state or territory OHS inspectorate and the person (offender) who proposed the undertaking. The offender is obliged to carry out the specific activities outlined in the undertaking; these activities may be onerous upon the offender. See Alcan Gove Pty Ltd enforceable undertaking in the table above. Johnstone offers a short but relevant definition of an enforceable undertaking:

“Enforceable undertakings seek to secure quick and affective remedies for contraventions, without the need for formal court proceedings. They provide a constructive and non-adversarial way to genuinely fix a problem and provide regulators with more innovative, expansive and preventive remedies” (Johnstone 2004, 419).

1.2 Research Question, Objectives and related study Questions

This research seeks to contribute to the process of on-going OHS regulatory and OHS systems compliance, improvement. To achieve this goal and to contribute to improved compliance, stakeholder participant perceptions have been sought in relation to the objectives of this research and related questions outlined below.

Quinlan (2010) advises regarding OHS improvement:

“We need to look at listening to and engaging with stakeholders” (Quinlan (2010, 32).

The underlying question upon which this research is premised is:

What will motivate OHS stakeholders towards improved OHS compliance?

What emerges from the underlying question are objectives that set out to:

1. Identify those factors that are perceived to encourage or hinder compliance with OHS legislation.
2. Identify to what extent the present deterrence strategy and its advise and persuade components are perceived to contribute to compliance with OHS legislation and beyond.
3. Develop a model that reflects the positive and/or negative features of the current regulatory strategy to generate OHS compliance.

To resolve the research objectives, the study seeks to answer a series of related questions.

1. What are the perceptions of employers and employees in relation to the feasibility of complying with OHS regulations?
2. What are the organisational factors (e.g. structure and process) that support or hinder compliance with OHS regulations?
3. What would the ideal model that explains how OHS compliance can best be generated look like?
4. What, if any, OHS regulatory changes need to be made in order to enhance employer and employee commitment to compliance?

These questions were further refined to form the basis of questions discussed with study participants and then a further seven questions were framed as a vignette which was also discussed with participants (see sections 3.4.1 and 3.4.2)

1.3 Methodology

The focus of this study is more closely aligned with the fundamental assumptions and characteristics upon which a qualitative mode of inquiry rests. The goal is to describe and explain the research objective so it can be diagnosed and understood leading to the creation of theory through an inductive process of code analysis (Gioia and Pitre 1990). The research will therefore attempt to make sense out of, or interpret, experience from the perspective of those who live this reality (Schwandt 1994). This approach is more likely to provide relevant and useful answers with regard to research involving people and organisations in the world of business and management (Remenyi et al. 2005), which is the focus of this study. The experiences of managers, safety practitioners and employees in the private and public sectors in Western Australia form the nucleus of this study.

In addition to the direction outlined in section 1.2 regarding the research objectives and questions, several other features of this research are described below.

Letters of invitation to participate in the research were sent to approximately 125 potential participants (see section 3.4.4 for how organisations or individuals were identified). Sixty potential participants responded to the invitations in the affirmative and were interviewed. All interviews took place in WA. Data were drawn from those who have a primary responsibility in law to ensure a safe workplace and others who have an institutional responsibility to encourage safe workplaces. These are the people who at the 'more accountable end' of the OHS regulatory burden. They are the managers and CEOs of small to large businesses, OHS managers, OHS advisors, rank and file workers, representative of the WorkSafe WA inspectorate and a representative of the trade union movement.

Sixty interviews was considered an appropriate number for reasons of ensuring diversity and manageability of the data. Fifty-five participants contributed via the semi-structured interview process. Five participants responded with written answers. It was decided not to deviate from the semi-structured interview process. Therefore, the data from five participants who responded in a written format were not included in the study as data saturation had been achieved and there was no opportunity to clarify or seek further information from these respondents. Participants came from ten business sectors and were grouped into the relevant workplace categories (see table 4-1). Categorisation of participants was determined according to their organisational positions. Business owners, managers and supervisors were placed in the owner and management (O&M) group; OHS advisors, OHS trainers and an OHS inspector (represented as OHS professionals), workers and a union representative were placed in the professional, worker and representative (PWR) group.

1.4 Thesis Outline

The thesis is organised as follows: Chapter Two provides a review of the literature relevant to the state of OHS development in Australia. The chapter begins with an historical examination of how OHS regulation in Australia has developed; its founding influences and its current effectiveness in today's business environment. The chapter achieves this by incorporating the work of recognised scholars who are endeavouring to improve OHS outcomes.

Chapter Three outlines the research methods used to collect and analyse the data gathered. The chapter provides details of the research method and explains why qualitative approaches to data collection and analysis were adopted.

Chapter Four presents a conceptual framework derived from for analyses of the data collected in this study. The chapter details the process of analysis and the generation of theoretical constructs and concepts.

Chapter Five provides discussion of the conceptual organisation of the data culminating in the development of a model that offers considerations that could be used to generate OHS compliance. This chapter also includes a discussion of similarities and differences from previous research findings and theoretical approaches in the context of analysis of the data and findings within this research.

Chapter Six contains the conclusion and implications of this research and a discussion on how the findings from this research complement and differ from the insights available from the existing literature. It also provides discussion about the use of the model to generate OHS compliance as well as detailing the limitations of the study and recommendations for future research.

1.5 Definitions

While a minority of jurisdictions in Australia continue to use the short title Occupational Health and Safety Act (OHSA) or Occupational Safety and Health Act (OSHA), the majority of jurisdictions have more recently adopted the Work Health Safety Act (WHS Act). To provide consistency in this thesis, the term OHS will be used to define 'Occupational Health and Safety'. The rationale for this reliance is that much of the research commentary relevant to this research uses OHS to describe the broader subject of 'Occupational Health and Safety'. This will be the case except where there is a direct reference to a governing Act.

1.6 In Conclusion

This chapter has considered a number of issues encountered in the research undertaken into the effectiveness, or otherwise, of the deterrent nature of OHS law to encourage OHS compliance. This research seeks to contribute to the development of a more effective model of a holistic OHS compliance paradigm; one which workers in WA workplaces will potentially adopt because it has evolved from perceptions of what matters to them. This study intends to contribute to the theory and practice of OHS. The theoretical contributions includes the effectiveness of the elements of Robens today. Is the collaborative approach of the Regulator sufficient to affect encouragement and lasting change? Is the legislative approach to OHS providing the desired outcomes West Australian workplaces? The contributions to practice hoped to be achieved include the workplace strategies necessary to enhance OHS culture, improve levels of consultation, better targeted OHS education and training, sufficient resourcing of OHS and leadership setting the valid and authentic OHS example in the workplace.

While this research addresses OHS law its focus is not on legal research but rather on organisational culture, organisational behaviour and compliance. The conceptual or theoretical framework is organised around regulatory theory which leads into the discussion on the Robens' principles and philosophy in Chapter Two.

The OHS statistical and prosecutorial evidence provided in the introduction are testament to the fact that the identification of an improved OHS paradigm is a worthy cause. There need only be a small paradigm shift

towards more positive OHS compliance for this research to have an impact. A seemingly imperceptible shift could result in a life saved or an injury prevented.

The following chapter examines the body of literature relevant to research into OHS. The literature review commences with the history and development of current OHS law in Australia. This elucidates the history, depth and the relative complexity of OHS law. The literature review extends to the more recent efforts to harmonise OHS law in Australia.

2 Literature Review

2.1 Introduction

This chapter provides a review of the literature relevant to the state of OHS development in Australia. The search strategy focused on the development, and current effectiveness, of OHS legislation, and whether it encourages OHS compliance in the workplace. Corporate leadership and OHS culture were part of the search strategy, essentially because of the recent OHS legislative changes to corporate legal responsibility and the research attention afforded to OHS culture by several researchers. After a brief discussion about the gaps in current OHS literature the chapter offers an historical look at how OHS regulation in Australia has developed; its founding influences and its efficiency in today's business environment. While the OHS literature cited has some global connections the focus of this research is Australia, and more specifically Western Australia. It is possible to draw on global OHS research because of the many OHS regulatory and systems similarities to Australia in regions such as Europe and countries such as New Zealand, Canada, and America.

According to Gyekye (2006, 34), there is an extensive body of literature on OHS, particularly in the organisational and psychological literature. Gyekye (2006) describes this as literature on shared perceptions about safety values, norms, beliefs, practices and principles 'of workers in their work environments' that has been meticulously examined for the past thirty years. However, a review of the literature demonstrates gaps in knowledge of OHS sufficient to inform the rationale and significance of the research problem and questions that motivate this thesis. In the main, the literature has been written by academics, with some practitioner (legal and OHS) independent research. This has often resulted in limited empirical and/or theoretical support for some of the findings, and where empirical research exists, it has generally focused on immediate, rather than longer-term issues and outcomes.

Zanko (2005) citing McLain (1995, 1726) observes that research attention to health and safety has a long history, but management research and text-book treatments of issues related to a healthy workplace rarely go beyond stress management. This fits with Gyekye's finding identified earlier regarding psychological literature and the inclusion of brief descriptions of the laws addressing workplace safety. This current research takes a more holistic look at OHS in the workplace; what works and what doesn't work in today's OHS paradigm as perceived by the voices of OHS stakeholders.

Zanko (2005) offers this insight:

"In the management journals reviewed, there was not a single publication that examined occupational and safety management in organisations either conceptually or empirically as a primary subject of study" (Zanko 2005, 5).

Zanko (2005) explains that the reach of his study involved:

“A review of leading journals (13 in management and 6 in human resource management from 1994 to 2005) showed OHS to be largely missing as the subject or field of study” (Zanko 2005, 2).

The research questions inherent in meeting the objectives of this study require an exploration of the short history of OHS regulation and its attendant compliance initiatives. A historical overview reveals that OHS regulation in Australia has not deviated much from Robens’ recommendations (1972) (see section 2.2 for further related discussion). Therefore, this study will attempt to build on Robens’ thinking after analysis of the study data. The perceptions of the study participants are integral to the success of this endeavour. Robens recommendations suggested a shift from a prescriptive to process regulation in OHS. This resulted in the widespread introduction of new sets of OHS regulatory provisions into the regulatory mix already evident in advanced industrial societies (Walters 2004, 69). Australia was one such industrial society. Each of Australia’s states and territories initiated the Robens regulatory recommendations during the 1980s. These regulatory changes essentially remain in place today. Although, in an ever-changing world, some of the Robens recommendations such as OHS participative arrangements, which include the requirements of consultation between the employer and employees, joint health and safety committees, health and safety representatives and provisional improvement notices are under pressure. The effectiveness of OHS regulation can only ever be measured by how the requirements of such regulation are implemented in the workplace. One example is how actively and effectively are the hazards being identified, the risks assessed and the regulatory requirement for adequate control of the risks being actioned? Another example is consultation, it is rigorously encouraged by current OHS regulation (see Appendix A) but to what extent are the regulatory requirements for participative arrangements such as consultation practised in workplaces?

According to Walters (2004, 85) research shows that participative arrangements are grappling with changes in the structure and organisation of work and labour markets. Walters (2004, 85) identifies outsourcing, franchising and downsizing by large companies in Australia is contributing to growing job insecurity, an expansion of temporary work, self-employment and growth in the number of small enterprises is putting pressure on OHS participative arrangements. Walters offers this warning:

“It is in these circumstances that the managerial will, and the capacity necessary to support OHS arrangements, are likely to be least developed and most challenged” (Walters 2004, 85).

As recently as April 2017 Europe’s peak OHS agency has warned that a rise in management-led health and safety arrangements can reduce the effectiveness of the worker representation processes. The report titled “Worker participation in the management of occupational safety and health: qualitative evidence from Esener-2, 2017” (European Agency for Safety and Health at work (EASHW) 2017) presents a qualitative study of worker representation in OHS in the European Union. The report appears to reflect the view of (Walters 2004) by referencing the decline in worker OHS representation across a majority of member states (report 2017, 6). The report cites Walters et al (2014) where previous studies indicate that participatory workplace arrangements are associated with improved OHS management practices which, in turn, might be expected to lead improved OHS performance outcomes (EASHW 2017, 30).

2.2 Legal Context: History and Development of OHS Law in Australia

Quinlan (2010) provides this critical advice for those embarking on OHS research:

“We need a historical and comparative perspective. A subject, a discipline, needs to be reflexive and it needs to look past, look at where it’s come from and ask serious questions about what it can learn about itself” (Quinlan 2010, 30).

Australia’s Constitution does not provide the Commonwealth with a general power to legislate for OHS (see section 51) of the Constitution of the Commonwealth of Australia), hence there have been ten OHS statutes (six state acts, two territory acts, two Commonwealth Acts covering Commonwealth employees and employees of certain licensed corporations, an offshore petroleum and greenhouse storage act and a Commonwealth act covering the maritime industry (see Table 2-1).

Table 2-1: Australia’s OHS Acts old and new.

Old Act	Present Act
<i>Occupational Health, Safety and Welfare Act 1986 (SA)</i>	<i>Work Health and Safety Act 2012 (SA)</i>
<i>Occupational Health and Safety Act 2000 (NSW)</i>	<i>Work Health and Safety Act 2011 (NSW)</i>
<i>Workplace Health and Safety Act 1995 (Q)</i>	<i>Work Health and Safety Act 2011 (Q)</i>
<i>Occupational Health and Safety Act 2004 (V)</i>	Unchanged
<i>Occupational Safety and Health Act 1984 (WA)</i>	Unchanged
<i>Workplace Health and Safety Act 1995 (Tas)</i>	<i>Work Health and Safety Act 2012 (Tas)</i>
<i>Work Health Act 1986 (NT)</i>	<i>Work Health and Safety Act 2011 (NT)</i>
<i>Work Safety Act 2008 (ACT)</i>	<i>Work Health and Safety Act 2011 (ACT)</i>
<i>Occupational Health and Safety Act 1991 (Cth)</i>	<i>Work Health and Safety Act 2011 (Cth)</i>

As can be identified from the information provided in

Table 2-1 recent efforts to harmonise OHS law has resulted in Work Health Safety Acts in most of Australia’s states and territories. This will be discussed detail later in the chapter. There are also specialist OHS statutes, not mentioned in

Table 2-1, covering the mining industry and oil and gas industries in some states.

The *Occupational Safety and Health Act 1984 (WA)* (OSH Act) reflects the Robens principles of:

- an effective self-regulatory system in which employers and employees and their representatives accept primary responsibility for reducing occupational accidents and disease;
- workers participate in establishing and monitoring the arrangements for safety and health in workplaces, and
- the basic function of safety inspectorates is the provision of expert and impartial advice and assistance to industry.

Subsequent amendments have further developed these principles without diluting the underlying philosophy of the Robens principles.

Similar to OHS legislation in the United Kingdom (UK), laws enacted by the various Australian jurisdictions have generally been informed by the model established in the UK by the Robens Report (1972). Prior to the report in 1972, each Australian state adopted most of the provisions of the 19th century British health and safety legislation (particularly the *Factories Act 1878*, and later the *Factories Act 1901*), so that by 1970 each of the six states had an OHS statute that implemented the traditional British model of OHS regulation. This model relied upon detailed regulatory standards. The prevailing idea was that workplace safety could be obtained by setting onerous rules and then securing compliance. With increasing workplace complexity and rapid pace of change, the rules-based system was found to be inadequate to cover all contingencies affecting workplace health and safety.

A weakness of OHS regulation noted by Biggins (1993), was that OHS law prior to Robens' recommendations was a morass of detailed and technical rules, often difficult to understand and update. According to Biggins (1993) this confusing and eclectic regulatory approach may have been partly responsible for over 1,000 British workers dying at work as a result of work-related accidents. Regulatory standards were developed *ad hoc* to resolve problems as they arose, and concentrated mainly on factory based physical hazards, resulting in uneven coverage across other workplaces. Biggins (1993) also identified that many hazards, such as those arising from new materials and processes, were not always identified in the course of their employment, and to consider whether any changes were needed in:

- the scope or nature of the major relevant enactments, or
- the nature and extent of voluntary action concerned with these matters, and to consider whether any further steps were required to safeguard members of the public from hazards, other than general environmental pollution, arising in connection with activities in industrial and commercial premises and construction sites (Biggins 1993, 227).

The final 'Robens Report' was released in 1972 and contained a large number of specific recommendations to be developed in a two-tier approach and implemented in a three stage 'Programme of Action' (Robens 1972, 157-158). Paterson sums up the Robens Committee Report "as embodying a non-prescriptive goal setting approach to OHS regulation while also recommending a move away from industry specific OHS regulators in favour of a single body" (Paterson 2011, 376).

Each of the Australian OHS statutes adopts the two-tiered approach recommended by the Robens Committee. The first-tier is constituted by the State OHS Acts which were introduced in varied years and include broad, overarching general duties for those who influence or exercise control over OHS in workplaces. Aspects of the Robens Report adopted in this manner include consultation and representation provisions, along with provisions to help enforce each of the specific OHS Acts. This is followed by a second-tier of more detailed provisions, where obligations and requirements within regulations were complemented by guidance on how to comply with the Act and regulations outlined in codes of practice and guidance notes. Robens' approach to self-regulation and advocacy of greater consultation between workers and employers helped formulate regulatory strategies for health and safety at work. As previously mentioned,

these strategies have been extensively adopted internationally in modern OHS legislation. Adoption was encouraged by relevant national regulatory agencies internationally.

Johnstone and Quinlan (2006) suggest that the Robens Report established general duty provisions aimed at identifying the responsibilities of various parties (such as employers, self-employed sub-contractors, employees, designers, suppliers, importers, and manufacturers of plant, equipment and substances). These duties place greater responsibilities on employers rather than employees, in recognition that the former exercise far greater control over the work process and resources. Bluff et al. (2004) argue that such provisions have a constitutive and structuring function for employers. This requires employers to focus on the organisational means with which they are equipped to assess and manage risks.

With a view to encouraging better OHS compliance the ‘Australian Chamber of Commerce and Industry’ (ACCI) (2005) argued for a restoration of balance to OHS laws after foundation regulation had been amended to include more onerous requirements with higher penalties for a failure to apply those requirements. The ACCI (2005) contend that the interpretation of Australian OHS law has moved away from the intended and common sense principles that Robens provided in his original report.

As a matter of principle, the legislation should not have the effect of imposing obligations on employers concerning circumstances over which they have no control (ACCI 2005, 51).

The ACCI (2005) make a case that over the previous decade some OHS laws had gradually imposed extreme or excessive obligations with high penalties for employers that fail to meet the obligations. The ACCI (2005) claim the concept of ‘duty of care’ based on what is ‘reasonable and practical’ had been distorted and this had caused a serious decline in confidence amongst Australian employers on the way OHS is regulated. The ACCI emphasise the concluding statement of the Robens introduction to the Report (Robens 1972) introduction:

If individual experience is not in the normal course conducive to safety awareness, then safety awareness must be deliberately fostered by as many specific methods as can be devised (cited by ACCI 2005, 1).

McCallum et al. (2010) take a different view to the OHS compliance debate by invoking classical deterrence theory. This theory is defined very generally as the avoidance of criminal acts through fear of punishment, in an OHS sense is heavily influenced by rational choice theory. McCallum et al. (2010) offer a definition of rational choice theory where individuals and companies are conceptualised as rationalist materialists or utility maximisers. For example:

“Heavily influenced by rational choice theory, individuals and companies are conceptualised as rationalist materialists or utility maximisers who calculate the costs and benefits of OHS compliance, choosing to comply only if it will provide them with maximal benefits and minimal costs” (McCallum et al. 2010, 7).

Gunningham (1984) was one of the first OHS commentators to identify that consultation, more effective self-regulation and voluntary measures (for all components of an OHS management system) only, *do not* form the foundation of an effective safety strategy. He said there is also a need for more vigorous enforcement sanctions capable of deterring recalcitrant employers from breaking the law, and a broader role

(incorporating enforceable rights) for worker representatives. Mathews (1993) broadly concurred with Gunningham (1984) in his manual for unionists. In all, Mathews (1993) considered enforcement is crucial to ensure OHS compliance.

Frick (2011) recommends a narrower approach to encouraging OHS compliance by suggesting that OHS compliance is best achieved when the organisations' OHS management system encourages management and workers to take a consultative and committed approach to reduce risks:

“As with any OHS management system it requires worker influence and management commitment to reduce risks at work” (Frick 2011, 947).

Wachter (2009) informs us that organisations manage safety functions using different approaches. Historically, these approaches have been geared towards achieving specific outputs. After passage of the OHS Acts beginning in the 1970s, the prominent approach to safety management involved regulatory compliance. This approach still prevails today, especially among smaller companies whose size and monetary constraints dictate the level of commitment to OHS compliance.

Wachter (2009) suggests that many workplace hazards and risks are not covered or controlled by existing regulations. Thus, regulations may not be optimal to control risk or to provide a duty of care to employees. In addition, adopting a strict regulatory approach to safety management can lead organisations to operate near the boundaries of the regulatory playing field, which could result in non-compliance. Wachter and Bird (2010b) argue that safety managers may be forced to elect to perform regulatory compliance activities at the expense of dealing with more pressing workplace safety issues. Eves (2015) summed up the Robens approach to regulatory compliance activities (1974 to present) in this way:

“The Robens Report (1972) (the Report) was a genuine watershed, enabling the modernising of OHS statutes. The report introduced a fundamentally different, less prescriptive OHS regulatory system based on goal-setting duties in a paradigm supported by Regulations, Codes of Practice and Guidance Notes. All perceived to be generated in an open, communicative/consultative process with stakeholders whereby employers and employees could become co-operatively engaged in building a workplace culture with a safer workplace being the mutually beneficial outcome” (Eves 2015, 35).

A problem with reliance on the longevity of the Robens OHS era was identified as far back as 1998. Rimmington (1998) points out in a Health and Safety Executive (HSE) speech delivered on 12 September 1998 the folly of safety management systems (SMS) developing a narrow focus:

“Many people now seem to take the attitude that it is quantity rather than quality of health and safety documentation that is important. The ability to provide reams of risk assessments and safety reports is seen as the primary aim” (Rimmington 1998, 5).

It is worth noting that the development and application of an Occupational Health and Safety Management system (OHSMS) is often an organisational attempt to ensure that OHS regulation is applied in the workplace. Appleton (2001) notes that major accidents in the workplace are frequently traced to failures in the OHSMS. Investigations often reveal that OHSMSs are little more than sets of manuals and collected safety data occupying metres of shelf space and bearing little resemblance to workplace activities. On the

surface of it there appears to be enough evidence to support this assertion. The Royal Commission of Inquiry into Esso's gas plant explosion in Longford, Victoria, in 1998 came close to describing Esso's Operations Integrity Management System (OIMS) at the Longford site as 'virtual' (Hopkins 2005, 4). Dawson and Brooks (1999) provide a commentary on what the Royal Commission had to say about the OIMS:

OIMS, together with all supporting manuals, comprised a complex management system. It was repetitive, circular and contained unnecessary cross-referencing. Much of the language was impenetrable (Brooks 1999, 13).

None of this suggests that safety management systems are unnecessary or always ineffective but it does indicate that additional measures are required to ensure that OHSMSs work effectively. Such measures might include developing an appropriate organisational culture that encourages communication through the prism of consultation. These essential elements can equal an appropriate organisational OHS culture which is the engine that can potentially drive the OHSMS paradigm towards a successful OHS legacy, as Reason observes:

"There is a widely-spread misconception that somehow systems sit apart from culture. It is this belief that drives managers' over-reliance on systems on the one hand, and an insufficient understanding of, and emphasis on, workplace culture, on the other. They believe mistakenly that compliance with such rules and procedures can be achieved simply by the imposition of systems, while ignoring the crucial cultural dimension. Yet it is the latter that ultimately determines the success or failure of such systems" (Reason 2000, 54).

In summary, the literature suggests that OHS compliance can be motivated or discouraged by several considerations. Organisational size, thus more or less resources available to the OHS endeavour, higher penalties imposed by the regulator for OHS breaches, less complexity in OHS regulation, more OHS related consultation and communication encouraged between the employer and worker (improving the OHS culture), more time devoted to practical OHS solutions as opposed to maintaining a paper trail and the applicability of the Robens approach to OHS in today's modern business world. *Development of OHS Law in Australia post Robens*

According to Bluff and Johnston (2004) the Robens Report (1972) signalled the beginning of a particular process of OHS risk management in Australian health and safety regulation in all jurisdictions. Bluff and Johnston (2004, 4) inform us the new process required duty holders to systematically identify work hazards, assess risk and implement controls. In essence, the 'general duty' as it became known, had its beginnings in the Robens Report of 1972. The Robens recommendations outlined in his 1972 report were over time adopted nationally by each state, territory and commonwealth of Australia.

2.2.1 A National Approach to OHS Regulation

Since the Robens Report, alternatives to the employment relationship for the arrangement of work have become more diverse and more common (introduced at section 2.1). Buchanan (2004) identifies that there is a growing incidence of contract and labour hire arrangements. Different states and territories use different approaches to law to accommodate these arrangements. Johnstone (2008) informs us that the first major initiative towards a national OHS policy came in 1985 with the establishment of the National Occupational

Health and Safety Commission (NOHSC), a tripartite body comprising representatives of the Australian federal, state and territory governments, and of employers and trade unions.

The national uniformity process began to pick up pace in the mid-1990s and primarily focused on seven priority standards which were implemented under regulations and codes of practice in the Australian jurisdictions. At the level of the OHS statutes themselves, there was a surprising inconsistency. Johnstone (2004) suggests that at least on an abstract level, the Australian OHS statutes conform to a common ‘shape’ but the fact remained that when it came to examining the actual provisions in the statutes there was a remarkable lack of uniformity. Bluff (2009) points out that an important principle underpinning the aspirational uniform national Work Safety and Health Act (WHS Act) is that all duty holders (other than workers, officers and others at a workplace) must eliminate or reduce hazards or risks so far as is reasonably practicable. In effect, complying with the duties of care would require the primary and specific classes of duty holders to implement OHS risk management to identify hazards, assess risks (the degree and likelihood of harm), and eliminate or reduce the risk.

The two Australian states of WA and Victoria are yet to adopt the uniform WHS legislation. WA appears to be moving towards some form of Work Safety and Health Act with Victoria recently announcing its intention to align its current OHS Act with the WHS Act.

The newly elected WA Labor Government (2017) through its spokesperson, Bill Johnston, announced it will introduce workplace health and safety laws, work with other jurisdictions to ensure the harmonised WHS laws are maintained and where applicable made stronger with the incorporation of the highest international standards, and develop a stronger regulatory framework for the safety and wellbeing of fly-in-fly-out workers.

Johnston went further to offer the view that “the current state OSH Act fails to apportion legal responsibility to management, owners and directors of companies when a death or serious injury occurs in the workplace” (Johnston, reported in OHS Alert 2017). The likelihood of owners or directors who have acted recklessly, or in a grossly negligent manner, facing the threat of serious legal sanctions simply does not exist in WA. “Maximum jail term for work-related reckless, or gross negligent, conduct should be 20 years, instead of five years under the current Occupational Safety and Health Act. Unions (or other parties with an interest) should have the right to initiate a prosecution where a regulator has failed to do so” (Johnston, reported in OHS Alert 2017).

It is intended that the new WHS regulatory approach in WA will cover the mining and non-mining sectors, thus almost all persons (regardless of business size) conducting a business in WA will need to comply.

2.3. Will One Regulatory Approach Fit All?

Unlike large businesses, conforming to OHS regulation often places greater financial burden on small businesses as they are unable to spread their compliance costs over a number of products, markets, or plants. Bell (1996) believes this puts the smaller business at a distinct disadvantage in conserving and implementing OHS regulation:

“Personal attitudes to the concept of regulation will affect a small business operator’s perception of the burden of complying with the regulation. The complexity of the regulations, the frequency of

complying and coping with constant changes, and the time needed to comply with the record keeping requirements, have added to the frustration felt by small businesses” (Bell (1996, 15).

Clearly some employers, usually from larger organisations, have considerably more resources to support OHS systems. To add to this, one regulatory size may not fit all. Walters and Lamm (2003) argue that the burden of compliance is a perennial issue for small businesses. Walters and Lamm (2003) suggest there is a suspicion that while medium-sized and large businesses have been able to keep abreast with the changes in OHS law, due to a lack of resources small businesses have not. They conclude that the resources medium-sized and large businesses have at their disposal, the capacity to implement regulatory changes and to maintain existing ones cannot be matched by smaller businesses.

Research conducted by Bottani et al. (2009) identifies that small businesses were almost 20 per cent less likely than bigger enterprises to adopt an occupational health and safety management system (OHSMS):

“OHS Safety Management System adopters range from 58.33% of the companies surveyed, in the case of big enterprises, to 41.67% in the case of small enterprise” (Bottani et al. 2009, 158).

Eakin (1992) and Halse and Kines (2009) conducted research into identifying the reasons why small workplaces find it particularly challenging to eliminate or reduce risk therefore promoting occupational health and safety in the workplace. The Halse and Kines’ (2009) study explores how owners of small business attribute accident causation and what they learn about accident prevention after an accident. Twenty-two small business owners (construction and metal industries) were interviewed. Data were analysed using thematic analysis. Halse and Kines (2009) concluded that:

“The circumstances unique to small business such as close social relationship contributes to their owners predominantly attributing the causes of accidents to unforeseeable circumstances, and a rejection by owners that circumstances under their control have caused the accident” (Halse and Kines 2009, 9).

The Halse and Kines (2009) study also presents a paradox: learning from accidents appeared to be negative as the owners needed to abstain from accident prevention in order to maintain that accidents are unforeseeable. This consequently, creates a situation where the injured worker returns to work under the same conditions as before the accident and indicates that the hazard has not been dealt with.

Eaken (1992) used semi-structured interviews with 53 small businesses employing fewer than 40 employees. The businesses were drawn from a broad range of industries identified as having a potential for hazardous working conditions. Most of the small business owners in the study reported very limited involvement in activities explicitly related to OHS. Fundamental to the owners’ perceptions was a ‘leave it up to the workers’ stance (Eaken 1992, 693). (Eaken 1992, 694) explained that “There are no problems here” was a common refrain in the interview data. This widespread perception was associated with a tendency to discount risks or to normalise them. One participant in the Eakin research put it this way:

“Health and safety is a very minor thing, very minor. Compared to problems of getting business, collecting money and dealing with bankers, and things like that. Oh yes, it is way down the line” (Research participant cited by Eaken 1992, 694).

Eakin (1992) recognised that the study had a narrow focus; only employers were interviewed and concluded that the perspective of employees needed to be explored if a comprehensive understanding of safety behaviour in small worksites is to emerge. This current study follows this recommendation.

2.4 OHS Harmonisation Regulatory Impact

The main object of the model *Work Health and Safety Act 2011* (Commonwealth), cited in the rest of the thesis as (Cth), is to provide for a balanced and nationally consistent framework to secure the health and safety of workers and workplaces. The Work Health and Safety Regulations 2011 (Cth) were developed to complement and support the general duties under the model WHS Act which has provisions for:

- preliminary matters;
- representation and participation; general workplace management;
- hazardous work;
- plant and structures; construction; hazardous chemicals; major hazard facilities; mines;
- compliance;
- review, and
- exemptions and miscellaneous provisions.

Johnstone (2008, 36) explains that non- harmonisation of OHS law in Australia means workers in different jurisdictions who face essentially similar risks are afforded different levels of legal protection. Organisations conducting business in more than one State or Territory can be faced with inconsistent regulation which can make compliance multifarious and costly therefore providing incentives for businesses to move to jurisdictions with less severe or expensive regulation. This may encourage State and Territory governments to reduce their levels of OHS regulatory standards and enforcement activity to attract business. Johnstone (2008, 36) concludes that if all of this is considered it should come as no surprise that since the early 1980s there have been calls for a more uniform system.

From the outset, Safe Work Australia (SWA) contends that it is important to ensure that WHS Regulations strike the right balance between providing the requirements that are necessary to maximise health and safety outcomes without being overly prescriptive and are nationally consistent; this is seemingly an attempt not to deviate too much away from the Robens philosophy (SWA 2010, 6). In reality the much higher penalties for work-related recklessness, or gross negligence promised by the WA Government do represent a recent shift from the Robens recommendations. Company directors and the recent positional construct in the WHS Act of ‘company officers’ will be the target of such penalties and are described in the following passage.

2.5 Unprepared Directors and/or Company Officers Face Jail under Model WHS Laws

Currently company directors and other officers (responsible persons) can face up to five years in jail for safety failures under WHS laws, regardless of whether their company has committed a breach. Under s27 of the WHS Act, officers may be liable if they fail to exercise due diligence to ensure compliance by the corporation. The WHS Act defines an ‘officer’ as a person who makes, or participates in making, decisions that affect the whole or a substantial part of the business, (as found in s9 of the *Corporations Act 2001* (Cth)). The WHS Act requires officers to take ‘positive steps’ to ensure businesses comply with their OHS

obligations and penalties for failing to do so – at a maximum \$600,000 and/or five years' jail – are significantly higher than under previous regimes (see WA government intention of up to 20 year prison sentences for reckless or grossly negligent offenders at section 2.2.2). However, it is rare that a maximum penalty is given by a judgement. Even if a responsible person is only driven by penalty avoidance there has never been a better time to build a workable OHS framework in the organisations they lead.

Wachter (2011) posits that this approach is unethical because placing values (and especially variable values) on human life, and for the loss of partial or total functioning of various body parts, is too calculating and uncaring. Wachter's (2011) final analysis is that it is hard to justify doing the right thing when it is underpinned by the potential use of a cost benefit business approach. Instead Wachter (2011) argues for an ethics-based safety approach to be adopted by employers. She goes on to suggest that the greatest economic reason to support an ethics-based approach to safety management within a capitalistic system is that the potential prosperity generates an environment where continual improvement and reduced risk are affordable and economically desirable. In contrast, the economic desperation that the cost benefit analysis model is argued to represent often creates environments for unsafe working conditions, thus, increased risk. Wachter (2011) concludes that the prosperity in the ethics-based approach comes from the much-improved quality of life of workers and values of the public. As a consequence, capital is generated via the cost savings related to the more acceptable real outcomes that result from less harm in society.

2.6 OHS Compliance

The minimisation of prescriptive requirements in OHS regulation was a recommendation of Robens in 1972, fundamentally to make it easier for OHS duty holders to comply with regulations. Walters and Lamm (2003) argue that it is senseless to introduce OHS regulation, policies and preventative initiatives unless we understand the reason why and how small business employers comply and their attitudes to their workers' health and safety. Hence the rationale for this study.

The importance of OHS compliance cannot be overstated. Johnstone (2004) suggests that:

“...deterrence through enforcement, that is, encouraging a duty holder to comply through the imposition of a penalty if a duty holder fails to comply, is designed to contribute to the improvement of OHS” (Johnstone 2004, 401).

It may be reasonable to suggest that before a duty holder is able to support the weight of OHS regulatory compliance, and thus avoid a penalty for non-compliance, they would have to be able to evidence understanding of the compliance burden carried. This is a question considered by McCallum et al. (2014). In their analysis of a compliance approach to enforcing WHS legislation it was concluded that:

“A substantial body of empirical social research suggests that in practice Australian Work Health Safety (WHS) regulators have overwhelmingly adopted a compliance approach to enforcing WHS legislation” (McCallum et al. 2014, 3).

McCallum et al's. (2014) findings reinforce the view of Johnstone (2004) who concludes that:

“The role of enforcement, that is all dealings between OHS inspectorates and duty holders, contributes to the improvement of OHS by ensuring compliance with OHS legislation” (Johnstone 2004, 401).

Compliance with legislation under the Robens' concept of 'duty of care' places obligations on employers, employees and others. While employers must ensure that conditions are safe and risk is kept as low as reasonably practicable, the Robens approach means that employees are obligated to cooperate to ensure they do not adversely affect the safety and health of any other person through any act or omission at work. S19 of the *Work Health Safety Act 2011* (Cth) essentially embraces the Robens principle of the primary duty of care:

(1) A person conducting a business or undertaking must ensure, so far as is reasonably practicable, the health and safety of:

- (a) workers engaged, or caused to be engaged by the person; and
- (b) workers whose activities in carrying out work are influenced or directed by the person;

while the workers are at work in the business or undertaking.

Kolieb (2015) appears to advance the notion that the law determines minimum standards that must be adhered to at the risk of civil or even criminal prosecution for breaches. There can be little doubt that the comprehensive regulatory goal in OHS law is to ensure the health and safety of employees and other persons in the workplace. Kolieb further argues that adherence to legal standards only partially achieves this goal. He believes that the law must be coupled with other aspirational regulation - regulation that offers a goal without the prescriptive methodology to achieve it. This, Kolieb concluded, will encourage employers and employees to develop ever safer workplace environments. Kolieb's finding reinforced Hopkins (2005, 3) earlier view which he bases on two decades of OHS professional opinion that a requirement for something more than regulation was required to ensure an adherence to a holistic compliance paradigm:

"For the last couple of decades, safety professionals, regulators and others have been arguing that safety is not simply a matter of compliance with externally imposed regulation" (Hopkins 2005, 3).

Hopkins (2005) adds that organisations need to manage safety proactively in the same way that they manage their other activities. Hopkins and Kolieb's reasons emphasise that aspirational workplace safety should be encouraged by non-prescriptive means. Jacobi (2012, 69) appears to agree by adding insight that regulations are only relevant to minimum standards and that aspirational aspects of OHS can be expected to vary between individuals and organisations:

"Federal regulations have two fundamental shortcomings: They cannot take into account differences among workplaces and workers, and they define only minimum standards that can be expected of every company" (Jacobi 2012, 69).

Jacobi (2012) continues by suggesting that treating such generic goals is as unwise for OHS systems as it is for other business functions. Instead he asks us to imagine executives telling employees not to go beyond the minimum level of product quality or productivity reached by every competitor. Jacobi's comments place OHS regulatory compliance as the minimum compliance standard. What appears to be consistent in the research cited so far is that more than OHS regulatory compliance is required.

Importantly, given the number of OHS and WHS prosecutions each year (see Table 1-1) and the injury and fatality statistics continuing to be unsatisfactorily high (see Figure 1-1), there appears to be a failure of current OHS regulation to guide some employers in relation to the conduct of their business. Bennet (2002, 155) references the ‘International Labour Organisations Guidelines’ (ILOG) when determining the effectiveness of OHS management systems and suggests that the ILOG make it clear that compliance with health and safety laws and regulations is more than legal compliance, it is an essential management function:

“By contrast, legal compliance is either not required or is not a prominent part of national safety management systems. The rationale – or the excuse – for such a void is that legal compliance engenders a mentality of minimum standards and so militates against the notion of continual improvement” (Bennet 2002, 155).

Following are two key approaches to what is described as good OHS practice. Both approaches suggest there must be something more than mere regulatory or legal compliance; a minimalist approach that relies on organisational practices and aspirations, and an extended approach that spells out what else is required, because of the diverse contexts in the way OHS is implemented:

Sherriff and Tooma (2010, 11) offer this critique of the problems with a minimalist OHS proposition:

“OHS legislation/regulation based on the (Robens) employment relationship accordingly does not clearly provide protection for all who are undertaking work, or require those who have control and direction of work to take appropriate measures for the protection of the health and safety of all those who are working for them” (Sherriff and Tooma 2010, 11).

Hopkins (2005, 10) provides an example of what one component of an extended OHS proposition could look like. He begins by suggesting that there is an increasing number of people who talk about a shift in emphasis from legal compliance to a more inclusive OHS risk management approach. Hopkins offers advice to leaders who wish to attend systematically to an OHS risk management approach, and be seen to be doing so. Hopkins (2005, 10) suggests that such leaders need to develop regular safety practices. One critical practice is walking the talk with front line staff. According to Hopkins this is achieved by speaking informally with front line staff at their workstations about the safety issues they may be facing.

In summary, knowledge of what it is a duty holder must do to ensure a safe workplace and a safe system of work is the precursor of successful OHS compliance. The question therefore is how could someone understand what is an acceptable level of OHS compliance if they do not have an understanding of the regulatory status quo that already exists? Survey research by Laurence (2005), conducted over several mines in Australia, found that the workforce did not demonstrate any meaningful awareness of the concepts of duty of care, risk assessment, safety management systems, or any of the promulgated legislation that embodies these concepts. Laurence (2005, 44) indicates that the developments in OHS regulation that have taken place in Australia since the Robens Report have failed to engage those who are most at risk in the workplace. Perhaps there is a recognisable benchmark still to be identified? The answer may lie in developing a benchmark that identifies an average capacity for understanding of OHS regulation so that more duty holders comprehend what it expected of them. But care must be taken not to over simplify OHS regulation as it may not be broad enough to have the desired outcomes. A well-researched fine line is required.

In addition to specifying regulations and responsibilities, OHS legislation also has a strong influence in the institutional structure relevant to the implementation and monitoring of OHS requirements. Johnstone et al. (2010) reference two key OHS institutions, inspectorates and workplaces. We turn first to the role of inspectorates. OHS and WHS inspectors perform a range of functions including audits, investigations of accidents and dangerous occurrences, issue of improvement and prohibition notices, advising employers on their duty of care as well as providing advice on health and safety matters. Inspectors have the authority to initiate prosecutions for serious breaches of the OHS and WHS Acts which can result in heavy penalties. Inspectorates also have limited resources.

Khanzode et al. (2012) inform us that inspection is the enforcement tool used to increase general and specific deterrence. Workplace inspection is a form of statutory prevention of workplace injury. Agnesi et al. (2016) examined statutory prevention of work injuries in Italy between the years 1998 and 2005. These researchers identify that inspection interventions provide the best outcomes if the inspection is carried out as soon as possible after an accident. This ensures that the business entity did not have time to correct any problems that may have caused the accident. Agnesi et al. (2016) also estimate that after an OHS inspection by the regulator, where a penalty was imposed on the employer, lost time injuries are reduced by 19-24 per cent. Earlier research by Gray and Mendeloff (2005) establish that inspections with penalties were far more effective than those without penalties and the positive effects on injury rates were greater in smaller firms. Authors of this study examined the impact of Occupational Safety and Health Administration (OSHA) inspections on injuries in manufacturing plants.

Bluff et al. (2004) suggest that most of the Australian OHS inspectorates are now unified, with multi-skilled generalist OHS inspectors. Nonetheless, some jurisdictions have retained specialists in some areas such as construction and dangerous goods. Other jurisdictions have specialist investigators whose energies are devoted entirely to the investigation of matters for prosecution. Johnstone identified that the trend since the 1980s had been for inspectorates to move away from a central control model to a regionalised model with regional managers as the key decision-makers, and broad policy frameworks being produced by the central offices. Federal and state inspectorates appear to be becoming more focused on organisational structures and are training inspectors in specialist areas of OHS; for example, high risk industry. Johnstone (2004) noted that many inspectorates had changed their organisational structures, and had divided their field inspectorates into industry-based teams. Over the past decade Australian OHS inspectorates have focussed on a more proactive enforcement regime as opposed to reactive workplace inspections (Johnstone et al. 2010, 551). In recent years' types of proactive enforcement has included:

“Individual inspectorates prioritising bullying and harassment and a national compliance campaign on client aggression in hospitals” (Johnstone et al. 2010, 551).

Jones (2009) notes that it has become increasingly popular for the OHS inspectorate to be called in early on high-hazard organisations (HHO) projects. This enables projects to meet high safety standards in the planning stage thus lowering the chances of latent hazards potentially being designed or built into a high risk facility. This is a good development.

Toohy, Borthwick and Archer (2005) posit that a challenge still facing Australian OHS inspectorates is whether to adopt the more rigorous inspection strategies championed by the OHSA, and some of the European OHS regulators which tend to emphasise management systems as the focal point of an inspection.

More recently Johnstone, Bluff, and Clayton (2012) informs us that some Australian OHS inspectorates have trialled the inspection of OHS management rather than workplace hardware, and there is more attention being paid to systems of work in inspections than there was in the past. While the debate on the best way forward for Australian OHS inspectorates continues, it is worth noting that all of the Australian OHS statutes (see Table 2.1) provide inspectors broad inspection powers, and empower inspectors to issue improvement and prohibition notices, and to prosecute duty holders found to be in breach of the legislation. Most of the OHS inspectorates have publicly available enforcement strategies and policies.

One of the uniform messages to come from all current state and territory OHS/WHs Acts is some fundamental regulatory requirements for organisations to work towards building an OHS culture. Consultation, safety and health committees, provision of relevant safety information, instruction, training and cooperation between employer and employees represent some of OHS cultural building blocks.

2.7 OHS Culture

Finally, but perhaps most importantly, specific workplaces and organisations are the sites where OHS requirements are interpreted, implemented and either succeed or fail in terms of providing a sufficiently safe and efficient system of work. Within the workplace or organisations concepts such as ‘safety culture’ or ‘safety climate’ are translated into actions. Hale (2000) explains that ‘safety culture’ and ‘safety climate’ offer specific definitions but appear to be used interchangeably. However, Goldenhar (2016), offers a different view of the two terms:

“Safety culture pertains to a company’s espoused safety related values and norms demonstrated by its policies and procedures, while safety climate refers to employees’ perceptions of those values and norms on the actual job site. Which term someone uses is probably less important than knowing where to target needed change to improve overall safety performance” (Goldenhar 2016, 25).

Australian commentary, as can be evidenced below, notably refers to ‘safety culture’ as the necessary precursor for successful implementation of a higher standard of workplace health and safety. Given this accepted definition this current research uses the term ‘safety culture’ to mean a company’s espoused safety-related values and norms. Cameron and Quinn (2005) remind us that management commitment to changing organisational culture like the daily requirements of the safety regulations is continually torn by competing values in their roles as managers. Poell et al. (2000) discuss one such competing value as the management dilemma which is the daily challenge of being torn between production and learning production. Gherardi and Nicolini (2000) explain organisational (production) learning as:

“A cultural approach that considers safety to be a collective ability to produce organisational and inter-organisational work practices that protect both individual welfare and the environment.” (Gherardi and Nicolini 2000, 8)

Hopkins (2005) suggests that safety culture is one of a number of ideas seen as having the potential to inspire organisations to adopt higher standards of safety. Hopkins linked safety culture with the limitations of safety management systems when he pointed out that:

“The attention now being paid to the cultural approach to safety stems in part from a recognition of the limitations of safety management systems as a means of achieving safety” (Hopkins 2005, 3).

Hopkins (2005) goes on to explain that the successful workplace safety culture requires indicators that build on prevailing attitudes, behaviours, values, practices and beliefs to develop and implement systems of work. These systems need to take into account the type of work and the need for horizontal and vertical consultation, between management and management and management and workers respectively, on an OHS issue across the business at all levels.

Some particular aspects of workplace practices have been the subject of research in OHS. The first focuses on the capacity of contracting and supply chain practices to influence OHS outcomes in the workplaces. A second area of research focuses on the capacity for particular approaches to ‘blame’ to adversely affect, or enhance, workplace culture and therefore OHS outcomes.

Gunningham (1998) focuses on the use of supply chain pressure as a means of informal market control over the OHS practices of entities within the supply chain. In the case of OHS, it has been largely the use of the OHSMS and safety culture that has prompted many large organisations to contemplate extending their often positive OHS influence. That is, extending OHSMSs and cultural influence to not only employees, but also to others with which the larger enterprise has substantial dealings, including, in particular, suppliers, contractors and sub-contractors. Gunningham (1998) further argues that it has been possible to use the substantial leverage these larger enterprises have over their smaller suppliers and contractors to insist that those suppliers and contractors (including the employees of such) conform to their OHSMS and safety cultural requirements. If smaller contractors are monitored/audited, and if the consequence of persistent non-compliance with the SMS is losing the opportunity to tender for future work, then economic disadvantage will follow. From an OHS cultural perspective, the smaller enterprise must be willing to culturally adapt across its organisation to the OHSMS requirements of their business masters or eventually perish.

Hopkins (2005) puts the supply chain OHS improvement strategy into perspective, concluding his work *Safety, Culture and Risk* with these words:

“I conclude that efforts to change cultures should be focused not on changing individual values but on changing organisational practices” (Hopkins 2005, ix).

Contractor prequalification and selection by principal organisations through consideration of a safety record has been considered by several researchers (Palaneeswarn and Kumaraswamy 2001, 77; Tretheway 2003, 21; Eaton et al. 2007, 467; and Thommessen and Andersen 2012, 6). One of the findings of this current research identifies that that small contracting companies with proven capabilities related to health and safety generally, and accompanied by a solid OHS cultural foundation, may occasionally be preferred bidders in pursuit contracts. Eaton et al. (2007) highlight the fact that principal contractors are looking to avoid disasters and work-related accidents/incidents that may tarnish their brand and potentially cause them other forms of financial pain. Thommessen and Andersen (2012) propose that bids to principal contractors from sub-contractors:

“Should include safety measures and above average safety measures should be rewarded in comparison with other competitors” (Thommessen and Andersen 2012, 6).

Abdurrahman (2010) discusses the possibility that some principal contracting companies, particularly in the Australian construction industry, expect a high OHS cultural and regulatory standard from their chosen sub-

contractors. They expect that standard to be adhered to by the sub-contractor when it comes to a commitment to the principal company's safety management system (SMS).

Tretheway (2003) appeared to provide a foundation for Abdurrahman's (2010) hypothesis with this earlier prediction:

"Failure to focus on and measure sub-contractor performance by the Australian construction industry has been a significant barrier to improved safety" (Tretheway 2003, 21).

Ostensibly, the requirement for evidence of a safe workplace, a safe system of work and a proven OHS safety culture may influence smaller operators to rise to the challenge and meet head on the principal contractor's requirements, or alternatively, miss out on the business opportunities that potentially lie ahead.

Reason (1997) points out that developing a good OHS culture is a critical part of implementing workplace health and safety. He describes safety culture as:

"That assembly of characteristics and attitudes in organisations and individuals which establishes that as an overriding priority...safety issues receive the attention warranted by their significance" (Reason (1997, 194).

Dekker (2008) offers a specific component of an OHS culture. He points out that an OHS culture should be 'just'. He explains that an OHS culture ought to encourage a balance between learning from incidents with accountability for their consequences (Dekker 2008, 177).

From the preceding, it suggests that principal contracting organisations ought to be looking, not only for a sub-contractor with a committed OHS culture but such an OHS culture must include the hallmarks of fairness and equity. One example of an equitable and fair OHS culture would be a safety culture that is premised on a 'no-blame ethos' which is discussed next.

2.7.1 The No-Blame Safety Culture

A second specific area of organisational OHS research focuses on issues of culture and 'blame' within organisations. Two key researchers in this area are Dekker (2008) and Dunn (2013). Dekker (2008) emphasises the importance of accountability with respect to workplace OHS. He suggests that a no-blame safety culture is neither feasible nor desirable but emphasises that a 'just' safety culture should be more concerned with the sustainability of learning from failure. His insights are relevant to the contracting context discussed earlier but also applicable more generally. His arguments extend to support the development of a safety culture which is a combination of being a 'learning organisation' (Senge 2006), that 'facilitates', in this case the OHS learning of a workforce and a no-blame safety culture at the workplace level. Dekker (2008) further adds that the intent of facilitation to continually improve the OHS endeavour, and, only where necessary, culpability should be identified and pursued through the court process.

In a similar vein, Dunn (2013) provides the following valuable insight:

"Incident/accident investigation should seek to avoid making value judgements as to what individual may be to blame" (Dunn 2013, 153).

Dunn (2013) argues that focusing on one cause or person tends to obscure the underlying causes that may have contributed to the accident. Instead, any accident investigation should aim to explain faults in the OHS system that led to the accident and identify control measures to prevent further incidents/accidents. Dekker's (2008) and Dunn's (2013) arguments are illustrated in a recent unfair dismissal case where the worker was found to have been unfairly dismissed for a safety breach. This case is testament to the fact that if blame is to be apportioned it needs to be done very carefully.

In *Tran v Parmalat Food Products Pty Ltd* [2015] FWC 5535 (27 August 2015) the employer was ordered to reinstate a worker who was dismissed for OHS breaches. The Fair Work Commission (2015) determined that the worker had rational explanations for his actions. The material facts of the case are that the worker Mr Tran was a forklift driver for the defendant at the time of the alleged safety breaches. Tran was dismissed in March 2015 for failing to properly secure a pallet of milk, which split in a truck's trailer. Tran entered the trailer to clean the spill without the trailer being locked-down, which was a safety requirement. Tran claimed unfair dismissal, arguing that he failed to secure the milk pallet because he was charging the forklift battery, which he argued, was an important task. He also informed the tribunal that he had reasonable grounds to claim that he was under the belief that the *leading hand*, who had entered the trailer before him, had locked-down the trailer.

Deputy President Lawrence from the Fair Work Commission concluded that Mr Tran had a good performance record and it was hard to see that he should be treated in any way differently from the leading hand in the case who had only received a warning from the defendant. Deputy President Lawrence added that although there was a breach of the defendant's health and safety policies and practice, it did not represent a valid reason for dismissal. There were lesser punishments open, he argued, that would have been more appropriate. Mr Tran was ordered to be reinstated because the employer could have confidence in Tran's capacity to adhere to company safety practices and procedures in the future.

Mayhew (2007) offer the following advice on the subject of incident/accident investigation. The minor heading informs the reader that: *Blame is not a factor* and goes on to suggest that:

"The key objective of incident reporting and investigation should be not to allocate blame for the incident under investigation. If attempts are made to apportion blame, people who might otherwise provide useful information will become defensive" (Mayhew 2007, 145).

Mayhew' (2007) advice culminates in the three dangers of attempting to prematurely apportion blame:

1. Witnesses may not reveal all of the circumstances and events surrounding the incident.
2. Deliberate obstruction or provision of false information.
3. Removal of relevant information, documents or evidence.

Reason (2000) discusses the necessity to accept the difficulties in trying to change the human condition. What needs to be the focus of organisations is changing the conditions under which people work.

"Blaming individuals is emotionally more satisfying than targeting institutions" (Reason 2000, 5).

It is informative to contrast a situation where a forklift driver has been unfairly dismissed for a safety breach (see earlier) to where a forklift driver causes injury to a third person at the employer's site as described below.

In *Barker v Rand Transport* (1986) P/L [2013] QDC 172 (31 July 2013) the facts of this case, in brief, are that a forklift entered the back of a truck where the truck driver was attending to cargo in the back of his truck. The forklift operator knocked a 15 kg spring-loaded spacing bar which fell and struck the truck driver. The truck driver was badly injured and sued the defendant for damages.

In an effort to avoid a vicarious liability damages claim, the defendant argued that it had instructed the forklift driver not to drive in the back of a truck if the driver were inside. The Court heard that the forklift driver had only been with the defendant for five days prior to the incident. The forklift driver had completed an induction programme, part of which stated that "a person is not allowed in the back of a truck while the forklift is operating there." Justice David Andrews found that this sentence sounded more like a rule to stop persons walking in on a forklift rather than a rule to stop forklifts driving in on a person. Justice Andrews went further and said the sentence "did not emphasise the obligation upon the forklift driver" and he was not satisfied that the induction course document adequately brought the risk to the attention of the forklift driver. The plaintiff was awarded damages for his injuries.

In summary, it is clear from the case law and the relevant research (see for example Investigative Fairness) discussed at sections 2.7.1 and 5.5.2.3, that employers and accident investigators should not be too quick to apportion blame; particularly when the facts are at best arguable, or at worst, premised on an incorrect assumption. Apportioning blame prematurely, without investigating a matter fully and with an open-mind, could end up being very costly for the employer. Perceptions in regard to blame and incident/accident investigation are an area of focus for this research. Perceptions will assist in meeting one of the objectives of the research which is to 'identify those factors that are perceived to encourage or hinder compliance with OHS legislation'.

2.8 Conclusion - Defining the Research Objectives, the Questions Designed to Meet the Objectives and Significance of this Research

While considerable Australian research has been undertaken into OHS legislation, current OHS law and associated research remains firmly focussed on duty of care, risk management principles and workforce representation, with the primary responsibility for the provision of a safe workplace residing with the employer. Employees are required to follow instructions and act in a way that does not place at risk their own health and safety or that of any other person.

Historically, each state and territory in Australia has managed OHS separately, with its own general legislation applicable to most workplaces. However, in recent years there has been a concerted effort led by the Federal Government to harmonise the various state mainstream OHS legal frameworks through the development of model legislation. The model work health and safety legislation consists of an integrated package of a Work, Health and Safety (WHS) Act, supported by Work, Health and Safety (WHS) Regulations, Codes of Practice and a National Compliance and Enforcement Policy. All of these continue to rely on the principles espoused by Lord Robens in 1972.

Despite these reforms and efforts, there is a scarcity of empirical research into how implementation of the WHS Act may be improved to be more inclusive, equitable and applicable to the widely varying and dynamic contexts of specific Australian workplaces. The perceptions of employees and employers with respect to OHS compliance receive relatively scant attention in OHS research. Ultimately, however, these are the agents who have key responsibility for the successful implementation of OHS legislative requirements.

Johnstone (2003) argues that there are two seminal strategies used to encourage OHS compliance. The first is the deterrence strategy, which emphasises a confrontational style of enforcement and the sanctioning of rule-breaking behaviour. The second, in contrast, is an advise and persuade strategy, sometimes referred to as a compliance strategy. This latter strategy emphasises cooperation rather than confrontation, and conciliation rather than coercion. The question is, is either of these applicable today and appropriate for the future?

These two enforcement strategies represent two extremes along a continuum, both reflecting scenarios that may be espoused, but seldom found in the reality of organisational life. Haines (1997) suggests that deterrence, while important in influencing the behaviour of small and medium-sized enterprises, may have a much smaller impact on large organisations. Wright et al. (2004) argues that a judicious mix of compliance and deterrence is likely to be the optimal regulatory strategy to pursue.

If a safety culture, general in nature, should be accepted and supported in terms of collective practices, what are collective practices? Reason (1997) identifies four sets of practices: a *'just'* (in an equitable sense) OHS culture, a flexible culture, a reporting culture and a learning culture. Hopkins (2002, 28) agrees that a safety culture is one of a number of ideas currently seen as having the potential to move organisations to higher standards of safety. Hopkins (2002, 28) adds a second concept which seems to spark interest whenever it is mentioned - mindfulness. Organisational mindfulness is a concept that promises a radically new way of moving organisations to a higher stage of safety. Aicken et al. (2012) explain organisational mindfulness and how it relates to OHS:

“Organisational mindfulness reflects awareness of potential errors and orientation toward learning from these to minimize future risk. Mindfulness is thus a state of organisational readiness; being culturally and systematically ready to cope with the unexpected” (Aicken et al. 2012, 4453).

To reiterate, arising from the review of the literature, the detailed objectives and research questions designed to uncover insights into productive enforcement approaches, compliance strategies and cultural paradigms that work are:

1. Identify those factors that are perceived to help or hinder compliance with OHS legislation.
2. Identify to what extent the present deterrence strategy and its advise and persuade components are perceived to contribute to compliance with OHS legislation and beyond.
3. Develop a model that reflects the positive and/or negative features of the current regulatory strategy to generate OHS compliance.

The research questions inherent in meeting the objectives of this study are:

1. What are the perceptions of employers and employees in relation to the feasibility of complying with OHS regulations?
2. What are the organisational factors (e.g. structure and process) that support or hinder compliance with OHS regulations?
3. What would an ideal 'Generating OHS Compliance' Model look like?
4. What, if any, OHS regulatory changes need to be made in order to enhance employer and employee commitment to compliance?

The next chapter presents the methodological framework that guides this research. The chapter outlines the paradigm, strategy, data collection methods and data analysis methods used. A rationale for the selection of a qualitative strategy is also provided.

3 Methodology

3.1 Introduction

The objective of Chapter Three is to present the methodological framework that guided this research. This is achieved by outlining the paradigm, strategy, data collection methods and data analysis methods used, after which the research design is explained. The evolution of the interview process, the ongoing contemplation during the data collection phase and the data analysis are also discussed.

The chapter will provide the rationale for the selection of qualitative strategies and methods presented. Reflecting the research question, the methodology focuses on the assumption that participant's perspectives are important, both for arriving at an understanding of how they view their occupational health and safety (OHS) responsibilities and gaining insight of possible changes to OHS regulation, enforcement, or regulatory requirements that may improve overall OHS compliance. In obtaining such insights, it is hoped to put them to good use in reversing the on-going increase in work-related fatalities and injuries in WA, with the potential for a wider jurisdictional applicability.

3.2 Research Inquiry Paradigm

A paradigm may be viewed as a set of basic beliefs that deals with ultimate or first principles of the individual researcher. It is the basic belief system or world view that guides enquiry, or the individual to enquire about their place in that world, the range of relationships to that place and its parts (Guba and Lincoln 1994, 1998).

Guba (1990) provides an eclectic mix of some of the paradigms we use in guiding our actions with the last one being relevant to this research journey:

“There are many paradigms that we use in guiding our actions: the adversarial paradigm that guides the legal system, the judgemental system that guides the selection of winners in a competition, the religious paradigms that guide spiritual and moral life...and those that guide disciplined inquiry” (Guba 1990, 18).

As a researcher, it is important to know where your discipline belongs, that there are different ways of viewing the world and that your approach to knowledge is one of many. According to Guba (1990), paradigms can be characterised through their ontology (What is reality?); epistemology (How do you know something?) and methodology (How do you go about finding out?). These characteristics create a holistic view of how we view knowledge: that is, how we see ourselves in relation to this knowledge and the methodological strategies we use to discover it.

The primary research question this study explores is: what are the perceptions of OHS stakeholders that motivate them, in a regulatory sense, towards better OHS compliance? Denzin and Lincoln (2008) state:

“All research is interpretive; it is guided by a set of beliefs and feelings about the world and how it should be understood” (Denzin and Lincoln 2008, 46).

Interpretive studies assume that people create and associate their own subjective and inter-subjective meanings as they interact with the world around them. Interpretive researchers thus attempt to understand phenomena through accessing the meanings that participants assign to them. Brown and McIntyre (1993)

declare that interpretive methodologies offer fruitful ways to study day-to-day experiences and practice in context. Decisions in relation to research approach, design and methodology lie at the heart of what is believed about reality; that is, the ontological positions held by those who are observing their 'reality' (Sale et al. 2002). Epistemology examines the nature of knowledge, how the nature of knowledge is understood by the world, and how it might be accessed in the social world. Mason (2002) suggests that ontological and epistemological questions direct the researcher to establish, early in the research process, what they value as evidence of knowledge of social phenomena. A discussion of the concepts of ontology and epistemology follows.

3.2.1 Ontology - Constructivist

There remains considerable conflict amongst researchers about the best ways to view and investigate social phenomena, which some researchers have referred to as the paradigm debates (Klenke 2008). Social researchers work in a number of disciplines such as psychology, anthropology, sociology and professional fields, such as education, business and the health professions. These researchers face a range of increasingly complicated questions and issues, and therefore, strive to choose the appropriate approaches for investigating these complexities. Increasingly, social researchers are choosing to use qualitative research, pairing it with their choice of paradigm, and thus it has emerged from these debates as an increasingly important way in which social researchers carry out their work (Savin-Baden and Howell-Major 2013).

Ontology defines a common vocabulary for researchers who need to share information. Sharing common understanding of the structure of information among people is a common goal in developing ontologies (Musen 1992; Gruber 1993). At its core the concept of ontology has questions relating to the nature of reality. Denzin and Lincoln (2000) contend that ontological assumptions involve consideration relating to the phenomena being examined to determine whether that consideration is objective and external to the individual, or integral to the individual's consciousness. The ontological nature of a research paradigm addresses the nature of reality for the researcher and participants (Creswell 1998).

This research adopted a constructivist framework because it allowed the researcher to draw conclusions about the behaviour and opinion of individuals and the relevance of this behaviour and opinion to the present day OHS paradigm. In a constructivist paradigm, the nature of reality or ontological perspective is dependent on the individuals holding the constructions (Guba and Lincoln 1994). This is well established by Patton (2002, 96) who states that "...the world of human perception is not real in an absolute sense, as the sun is real, but is 'made up' and 'shaped' by cultural and linguistic constructs."

3.2.2 Epistemology – Interpretative (how is knowledge generated)?

Schwandt (1994) informs us that epistemology studies the nature of knowledge, justification, and the rationality of belief. Much of the debate in epistemology centers on four areas: the philosophical analysis of the nature of knowledge and how it relates to such concepts as truth, belief, justification, various problems of skepticism, the sources and scope of knowledge and the criteria for knowledge and justification. The epistemological assumption for constructivism is subjective, the investigator and the informant, are assumed to be interactively linked, so that findings are literally uncovered as the investigation proceeds and the interpretive role played by the researcher is clearly acknowledged (Guba and Lincoln 1994).

In contrast, the epistemology of this research can be described as interpretative. This refers to an interpretative approach, which means that it interprets the response from a given person in a given context and makes sense of a given phenomenon; usually these phenomena relate to experiences of personal significance. The interpretative approach also assumes that there is little, if any, distance between the researcher and those involved in the research, namely the stakeholders within the participant cohorts. This is an essential element of the research as it attempts to discover the participants lived experiences of OHS.

In positivist research, verification is the process of checking, confirming, making sure, and being certain (Creswell 1997). In interpretive research verification refers to the mechanisms used during the process of research to incrementally bring rigour to a study. These mechanisms are woven into every step of the inquiry to construct a solid product (Creswell 1997; Kvale 1989) by identifying and correcting representations before they are built into the developing model and before they subvert the analysis. Reflecting the socially constructed nature of knowledge, the research setting, the investigator and the participant are assumed to be interactively linked so that the findings are created through the process of the investigation itself (Patton 2002). For more on rigor see section 3.6.2.

Data in this research were gathered through semi-structured interviews. Participants were asked questions regarding their experiences and perceptions of working within an OHS legislative framework. In responding to those questions, participants used their own words to provide their own stories to share their experiences, and at times commented upon their understanding and prejudices resulting from those experiences.

3.2.3 Phenomenology – Methodological Approach

The origins of phenomenology, attributed to Edmund Husserl (1859-1938), are philosophical, relating to consciousness and experience. As a philosophy, phenomenology is best understood as a radical, anti-traditional style of philosophy (Moran 2000). The philosophy emphasises the attempt to get to the truth of matters; that is, to describe the ‘phenomena’, in the broadest sense as whatever appears in the manner itself to the consciousness of the experiencer. DeMarrais and Lapan (2004) propose that phenomenology enables researchers to examine every day human experience in close, detailed ways.

Asper (2009) notes it was the sociologist Alfred Schutz who developed the approach to phenomenology as it is generally understood in current day research, and O’Leary (2004, 44) explains that phenomenology, simply defined, is “...the study of phenomena as they present themselves in direct *experience*”. Schutz (1962) discusses two defining features of phenomenology. First, the subject matter of the natural sciences and social sciences (people) are fundamentally different and therefore a different epistemology is required for the study. The key difference is that social reality has meaning for human beings and human action is meaningful. Second, the function of inquiry is to access meaning and interpretation. All interpretation of meaning, like all scientific observation, strives for clarity and verifiable accuracy of insight and comprehension.

As Kvale and Brinkam (2009) explain:

“In qualitative inquiry phenomenology is a term that points to an interest in understanding social phenomena from the actors’ own perspectives and describing the world as experienced by the subjects, with the assumption that the important reality is what people perceive it to be” (Kvale and Brinkam 2009, 75).

Phenomenology takes the view that reality is not objective and external but is socially constructed. Research essentially seeks to uncover and understand the meanings given to a phenomenon. In phenomenology, the research process is concerned with exploring phenomena which can be experienced in a number of qualitatively different ways (Marton 1981). Bryman (2004) refers to phenomenological research as seeking access to peoples’ ‘common sense thinking’, and interpreting the social world from their point of view.

According to Lawler (1998), the attraction of a phenomenological approach as a theoretical perspective lies in the extent to which researchers are allowed to roam over the rich and fascinating territory of human experience. This is of critical importance when listening to and then analysing the perceptions of the people on the OHS ‘front line’. This research project will draw on phenomenological approaches to data collection and analysis to gain insights into the experiences of those involved in the OHS endeavour within the context of the study. Indicated in Table 3.1 is a summary of initial design decisions that led to the choice of methodology.

Table 3-1: Summary of initial design decisions leading to choice of methodology.

Design issue	Perspective/activity	Reasoning
Philosophy	Idealist (as opposed to realist)	A concern with meaning and recognition of purposive human agency.
Ontology	Constructivist	Recognises that multiple understandings are constructed by participants.
Epistemology	Interpretivist	Researcher is engaged in re-representing participants’ meaning. The research is able to provide voice to the participants.
Methodological Approach	Phenomenological	Phenomenology locates the research in the life world of the occupational health and safety paradigm and presents the problem of individual understanding of occupational health and safety regulation and systems.

3.3 Research Methodology

Higgs (1997) contends that the extent of depth and detail of research will vary, depending upon the nature and purpose of a particular study. Depth and detail may emerge from responses to open-ended questions. An open-ended question is designed to encourage a full, meaningful answer from participants in order to explore their knowledge and/or feelings in relation to the topic being researched. The open-ended question is the opposite of a closed-ended question, which encourages a short or single-word answer from participants. Open-ended questions are those questions that will elicit additional information for the inquirer; sometimes called ‘infinite response’ or ‘unsaturated type’ questions. By definition, they are broad and require more than one or two word responses. Open-ended questions tend to provide more focus and conversation by the participant than closed-ended questions (Bryman and Bell 2011). The open-ended approach is the approach consistent with the research questions which requires rich data about the experiences of participants and OHS within their working lives.

It was during the 1970s that qualitative inquiry came of age with its origins in constructivist philosophy. Constructivists believe that the conception of knowledge as a ‘mirror of reality’ is replaced by the conception

of the ‘social construction of reality’ where the focus is on the interpretation and negotiation of the meaning of the world (Kvale 1996). Constructivism is based upon the view that reality is a product of one’s own creation and that “all knowledge is a compilation of human-made constructions” (Raskin 2002). Further to this proposition Savin-Baden and Howell Major (2013) advocate that:

“Truth is a result of perspective and therefore knowledge and truth are created rather than discovered” (Savin-Baden and Howell Major 2013, 63).

In a qualitative study, the ontology assumes that multiple realities exist, such as those held by the researcher and the readers of this study. This research seeks to capture the individuals’ points of view, examining the constraints and the enablers of everyday life in the OHS arena “...and securing rich descriptions” (Guba and Lincoln 2005, 12). It is also acknowledged that the researcher is a ‘passionate participant’ (Guba and Lincoln, 2005, 196). A frank admission of the researcher being a passionate advocate can also suggest a temptation for bias. A common criticism of qualitative research is that it is merely an assembly of anecdote and personal impressions, strongly subject to researcher bias. Further, it is argued that qualitative research lacks reproducibility.

Bracketing is a key part of some qualitative research philosophies, especially phenomenology, and other approaches requiring interviews and observations. It is also known as ‘mind mapping’ or ‘phenomenological reduction’, this process intends to develop a ‘non-judgmental research objective’ whose objectivity about the participants and the material will not impede the perception of the phenomenon at the heart of the study. Tufford and Newman (2010) view bracketing as a method used in qualitative research to mitigate the potentially deleterious effects of preconceptions that may taint the research process. This ‘important’ endeavour must be undertaken with care and rigour. Such a level of rigorous care can be achieved by letting the data ‘speak’ truly. By following this approach there is the likelihood the same findings will ‘emerge’. The researcher used memos on the participant information sheets, which were designed to accommodate such reflections, during the data collection. The memos mirrored the researcher’s engagement with the data and were a combination of observational comments that allowed the researcher to explore understandings about what was perceived by the participant and methodological observations that made the procedural aspects of the research pellucid. This allowed the researcher to remain objective and engage extensively with the raw data

There is no single way to approach qualitative research; rather there are a number of diverse methods, different approaches and various strategies (Savin-Baden and Major 2013). Regardless of method, approach or strategy there are two goals that a diligent qualitative researcher should seek to achieve (Bryman and Bell 2015, 403). The first is to “create a dependable account of the method and data which can withstand independent scrutiny whilst being clearly understood by those reading the report” (Bryman and Bell 2015, 403). The second is to produce a plausible, coherent and confirmable explanation of the phenomenon under scrutiny (Bryman and Bell 2015). By applying the two confirmable and dependable goals the data were categorised and sub-categorised as congruent emerging issues in this research. This is a “form of thematic analysis of qualitative data which refers to the extraction of key themes in the data” (Bryman and Bell 2015, 599). The initial thematic analysis was done by the researcher with the guidance of the lead supervisor to ensure inter-rater reliability.

In this research, informative and insightful data were sought by conducting semi-structured interviews, as opposed to counting or measuring a known or pre-determined set of variables in a survey questionnaire. Qualitative research provides the opportunity for participants to paint a rich picture of participant reality. Through analysis of qualitative data, overriding themes emerge from what people say by using coding and analysis.

3.4 Data Collection Methods

According to Savin-Baden and Howell Major (2013) researchers face a series of choices related to the specifics of when and where to conduct their research, as well as the identities of the participants. What is at stake as a result of the choices that a researcher makes about these matters has the potential to damage the integrity of the study and the findings. In making these choices, researchers set parameters that will ultimately frame what they will discover.

3.4.1 Semi-Structured Interviews

The data were gathered through fifty-five semi-structured interviews. Yates (2004) argues that the best way to find out about people is to ask them about themselves. People have a story of their own to tell and this rich narrative needs to be encouraged, but not directed. In line with this view, semi-structured interviews were the appropriate data collection method for this research.

Bernard (1988) contends that during a semi-structured interview the interviewer may have a paper-based interview schedule that he or she follows. Since semi-structured interviews often contain open-ended questions and discussions may diverge from the interview guide, it is generally worthwhile to record interviews and later transcribe these recordings for analysis. This also allows the researcher to concentrate fully on what is being said, how it is being said. The researcher used a set of research questions to ensure every participant was asked the same initial questions. Probing questions were used to follow up on particular issues and ideas raised by participants. The fifty-five semi-structured interviews were recorded with the permission of all participants and then independently transcribed by a third person.

Quinn and Patton (1980) suggested three basic approaches to collecting qualitative data through open-ended questions. These are the informal conversational interview, general interview, and standardised open-ended interview. All three approaches involve different strategies for preparation, conceptualisation, and instrumentation. Conceptualisation is the process of identifying and clarifying concepts, through which people specify what they mean when using certain terms. Instrumentation is mainly concerned with the design and development of novel techniques for gathering data and can involve questionnaires, interviews or abstract forms.

It must be noted, according to Lofland (1971), that the informal conversational interview, general interview approach, and standardised open-ended interview each serve a particular purpose, and all three have advantages and disadvantages. The three approaches are considered in further detail below.

Informal Conversational Interview

The informal conversational interview is sometimes referred to as ethnographic interviewing (Gall et al. 2003). This type of interview is considered to be the most open-ended and unstructured technique, enabling the researcher to flexibly pursue spontaneous lines of questioning based on what emerges from observing a

culture or other setting (McNamara 2008). Therefore, informal conversational interviews do not involve pre-determined questions, as the researcher often may not know in advance what will happen, or what will be the most important issues to explore.

General Interview Approach

The general interview approach is more structured than the informal conversational interview, although still promoting a level of flexibility in the composition of questions to interviewees (Gall et al. 2003). This approach is intended to ensure that general areas of information are collected from each interviewee. This provides a consistent and focused base of questions for data collection, while allowing a degree of freedom and adaptability in getting information from the interviewees (McNamara 2009).

The general interview approach was chosen for this research because the process allowed access to more in-depth experiences of the participants. The researcher had a paper-based set of questions that were followed. The questions had already been provided to the participants by letter or email. The interviews were digitally recorded and later independently transcribed for analysis. The interview process was facilitated through a variety of settings; the relaxed and informal setting of the researcher's office or the participant's own office via telephone link or face to face. Five of a total of sixty participants chose to respond to the questions with written answers. In keeping with the semi-structured interview approach the five respondents who chose to answer the questions in writing were not included in the data set.

Interviews were transcribed verbatim from recordings. Each interview transcript was checked by the researcher by replaying the interview recording and confirming that the transcript was accurate. Field notes were also taken by the researcher during the interview noting specific and salient points, along with summaries of the interviews. An example of this was when a participant answered a question and then added some specific point that, while not directly applicable to the question, the participant clearly perceived some connection.

For example, when participants were asked the question: 'What do you understand OHS compliance to mean'? Having answered this question, a participant may have provided an additional comment, such as, 'there are multiple isolation procedures so compliance can come in many forms'. This was a salient point to be noted, because the participant was answering the question by adding a site-specific approach to OHS compliance, as opposed to the holistic nature of the question. The first five questions provided to participants were:

1. What do you understand OHS compliance to mean?
2. How would you describe the OHS culture of your organisation?
3. What has been your most successful strategy, if any, for encouraging OHS compliance in your workplace – please explain?
4. What factors in or outside of your organisation (e.g. structure, process or outside influences) hinders or encourages compliance with OHS regulation?
5. If you were given the opportunity to offer law makers some advice on the OHS legislative approach, what advice would you provide?

In summary, benefits of the semi-structured interview technique include:

- opportunity for questions to be prepared ahead of time. This allows the interviewer to be prepared and appear competent during the interview;
- semi-structured interviews allow informants the freedom to express their views in their own terms. and
- semi-structured interviews can provide reliable, comparable qualitative data.

3.4.2 Use of Vignette

Development of the vignette scenario was presented as a hypothetical, the content of which was based on a real life legal matter that contained both legal and ethical issues. While the facts of the vignette are premised on a legal case the name of the organisation has been changed. Barter and Renold (1999, 1) identify that vignettes may be used for three main purposes in social research. These are to:

- allow actions in context to be explored;
- clarify people's judgements; and
- provide a less personal and therefore less threatening way of exploring sensitive topics.

Sample of the Vignette

A licensed forklift driver commenced work with Protus Industries (Protus) on 6 September 2011 as a level 4 forklift operator. The worker was inducted at the time of his employment and his induction was specific to the site he was to work at. The worker was told at his induction that under no circumstances would Protus accept working in an unsafe manner. A safety booklet was also provided to the worker with the final page of the booklet containing an acknowledgment that was signed by the worker that he would at all times work in a safe manner and would adhere to all safety policies and practices.

On 14 September 2011, the worker was injured when his forklift tipped over due to what was later identified as travelling at excessive speed around a corner causing the forklift to tip over on its side. There were four witnesses to the accident and CCTV footage that all suggested excessive speed was an issue. It was later identified that the worker had been terminated from his previous employment for a serious safety breach.

Related questions

1. Was the employer at fault for not checking the worker's past safety record? Please explain your answer?
2. Should the employer have been any more specific in the induction regarding speed limits for forklifts? Please explain your answer.
3. It was identified during the accident investigation that there was no speed limit sign located at or near where the accident happened. Should this have been an important consideration in determining the worker's future with Protus? Please explain your answer.
4. If the workers position with Protus were terminated would you expect any tribunal to find in favour of the worker? Please explain your answer.
5. Should WorkSafe WA be called to investigate this accident? Please explain your answer.

6. In your opinion is there anything else that the employer could or should have done to avoid the accident?
7. Would your opinion be different if prior to the accident, the worker's supervisor had insisted the worker "get a move on because things are going to be busy today"? Please explain your answer.

Frizsche et al. (1995) point out that the use of a vignette provides a further, often rich, source of data. According to (Wilkes 2016):

"Vignettes have long been used to study attitudes, perceptions, beliefs and norms within social science and are simulations of real events depicting hypothetical situations" (Wilks 2016, 80).

Wilkes (2016) alluded to the researcher being able to tap into fundamental ethical values that lie behind interviewees' responses to a hypothetical scenario presented to them in writing. As an adjunct to the semi-structured interview, the use of a vignette provides several advantages, including:

- disguising the ethical focus of the question so that any perceived bias is minimised;
- ascertaining a response in line with a person's moral values since no right or wrong answer is sought
- requiring the participant to discuss their actions to a given situation rather than just provide 'yes' or 'no' responses, and
- gaining an explanation about an action taken or recommended in relation to the vignette.

As stated previously, the vignette used in the research was modelled on legal issues and inherent ethical dilemmas. These are situations where participants may not be aware of legal precedent or may be unsure what to do from an ethical perspective. "Responses by participants to vignette questions can harness the extremely complex relationship between reports of behaviours and the behaviours themselves" (Wilkes 2016, 82). For example, if blame is apportioned to an individual or individuals after a workplace accident, will the truth about a matter ever be told so that an accident of a similar nature can be avoided?

Participants from each stakeholder group (O&M) - management group, and the (PWR) - worker group, were asked the same set of questions in relation to the vignette. The management group consisted of business owners, business managers and supervisors. The worker group consisted of OHS professionals, OHS trainers, workers and their representatives. The vignette encouraged participants to use their ethical judgement and knowledge of procedural fairness to provide answers to the seven questions linked to the vignette.

3.4.3 Sample

Participants who were invited to take part in the research came from a variety of business sectors and held a variety of work positions. Purposeful sampling was used and the targeted participants work in small to large businesses and entities. Some effort was made to target different types of industries and sectors by the way invitations were distributed to various participants. Four criteria were used to ensure insights were gained from a diversity of participants (see number four at section 3.4.4). These criteria were chosen to ensure the collection of data provided opportunities to explore commonalities and contrasts across a range of experiences and contexts. Using these strategies will increase confidence in analytic findings by way of input from a diverse range of contexts (Miles and Huberman 1994). The participants hold positions such as

business owners, line managers and supervisors, OHS managers, OHS advisors, workers and union representatives. They undertake their roles in the private and public sector industries, as well as advisory organisations such as the WorkSafe WA inspectorate and trade union associations. Data from these participants were gathered in order to obtain a broad spectrum of perceptions, and identification of resultant themes, in relation to understanding and complying with OHS legislation in the current industrial context. Some participants were concerned that they may be identified so no record of the name of their employer or, in some circumstances, their organisation, is recorded in this research.

3.4.4 Accessing the Organisations and Responses

Invitations by letter and email were sent to 125 employees and employers in an eclectic mix of 94 organisations. Specific employers, employees and contractors were identified in four ways:

1. Having attended a safety training course run by the Industrial Foundation for Accident Prevention (IFAP). With permission from IFAP the researcher had been informing attendees from various industries, at the training courses of the impending research and asked for people to contact him if they were interested in participating.
2. Meeting the ambition of the research to attract a diverse mix of participants from varied industries invitations were sent to people who held a variety of positions within diverse organisations (see tables 3-2 and 3-3)
3. Through word of mouth where some eventual participants heard about the research by means other than having received a direct invitation. Often referred to as snowballing.
4. A participant must work for, represent those who work for, manage, or own an organisation subject to OHS regulation at the time of the data collection.

From the 125 invitations, 60 people (48 per cent) responded with a willingness to participate in the research.

Participants were drawn from the occupations shown in Table 3-2.

Table 3-2: Participant groups and relevant vocation.

Number of Participants	Occupation
3	Owners of small and medium sized business
21	OHS professionals
6	OHS educators
18	Business managers and supervisors
7	Workers and their representatives

Participants were drawn from the following business sectors shown in

Table 3-3.

Table 3-3: Number of participants from relevant business sector.

Number of Participants	*ANZSIC Division	Industry
19	P	OHS and vocational training (non-mining and non-public service)
12	B	Mining industry
6	A	Agriculture
2	M	Science
9	O	Public service
1	N	Union organiser
3	C	Manufacturing industry
1	L	Hire industry
7	S	Miscellaneous

*NOTE: The Australian and New Zealand Standard Industrial Classification (ANZSIC) was developed in both countries for the production and analysis of industry statistics. The ANZSIC is a hierarchical classification with levels, namely divisions, sub-divisions, group and class levels. At the broadest divisional level, as evidenced in Table 3–3 above, the main purpose of the capital letters is to provide a limited number of categories that present a broad overall picture of the economy and are often used for the publication of summary tables in official statistics. In this thesis, the ANZSIC division codes were used to represent the industries from which research participants came from. The ANZSIC classifications maybe useful in any future specific industry research where this current research has the potential to contribute. See Table 4-1 for participant group coding.

An important element to the interview preparation is the implementation of a pilot test. The pilot test will assist the research in determining if there are any flaws, limitations, or other relevant weaknesses within the interview design and will allow the researcher to make timely revisions before the implementation of the study (Kvale, 2007). A pilot test was conducted with participants 1 – 4. There was no refinement made to interview questions, or order of questions, as the interview allowed the researcher to explore the OHS experiences and knowledge of the participant. Participants were provided with a range of options for the format of their interview and contribution to data collection. This approach reflected the practicalities of collecting data from a wide range of participants who were often time poor and working in a diverse range of locations in WA. Of the 60 participants, five participants chose to provide written responses and 55 were interviewed. It was decided not to deviate from the semi-structured interview process. Therefore, the five participants who replied in a written format were not included in the study as data saturation had been achieved and there was no opportunity to clarify or seek further information from these respondents. Of the 55 participants that were interviewed six were interviewed face-to-face and 49 participants provided a telephone interview. The reason for the large number of telephone interviews was because the time constraints of the participants, availability at specific times of a day and working at remote locations appeared to be factors for participants. Telephone interviews were conference calls and recorded using a digital recorder. Each interview lasted on average of 25 minutes. The time constraint factor provided the researcher with some valuable insight into the work pressures of many participants. The diversity of industry

groups and vocational roles represented, together with sample size, provided a rich source of data encapsulating a range of experiences.

A distinguishing feature of this methodology is the occurrence of qualitative research in a setting familiar to the participant, rather than one that is artificially constrained or constructed (Marshall and Rossman 1995). The vast majority of interviews conducted in this study were recorded telephone interviews where many of the participants were ensconced in their office or normal place of work. Of all the participants interviewed in the study, only five interviews were conducted in the researcher's office on a face-to-face basis at the behest of the participant. As noted above another five participants chose to provide written answers.

Organising the availability of several participants was problematic as they would often cancel on the morning of the proposed interview due to production pressures or other work demands. In all cases the researcher was able to re-establish contact and conduct the interview at a time more suitable to the participant.

3.5 Data Analysis Method

The first stage of analysis consisted of transcripts of interviews. The transcripts were completed independently of the researcher. The subsequent data was then managed through QSR NVivo version 9 software to code overarching themes and categories, thus assisting the researcher to uncover emergent attributes of the central phenomenon of identifying regulatory perceptions that may encourage or hinder OHS compliance in organisations.

The second stage of analysis involved the use of Mindjet MindManager version 14. Mindjet is a suite of applications which focuses on managing information and projects using a visual technique known as mind mapping. The objective behind visual mapping is that it creates a focus point that allows the researcher to view the data with optimal clarity. MindManager 14 allowed the researcher to identify emerging themes from the data, and organise categories and sub-categories efficiently through the visual interface available through the software.

3.6 Research Design

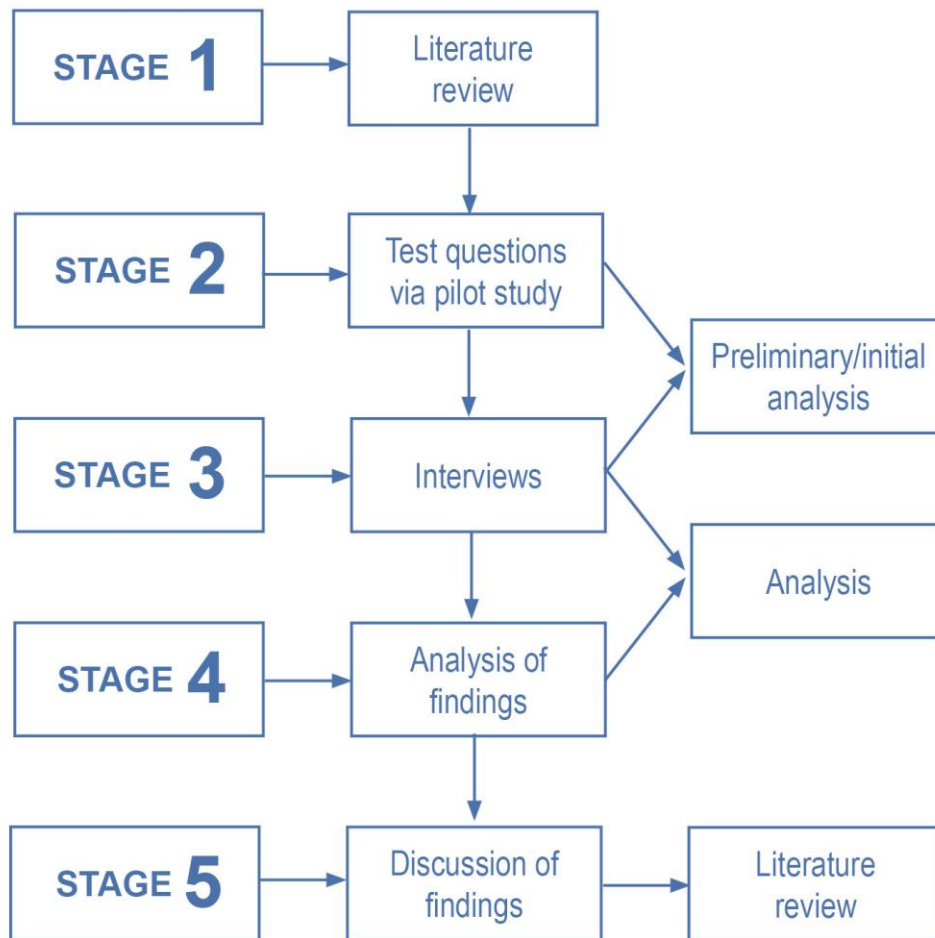


Figure 3-1: Illustrates the five stages in the research design

The research design comprised five key stages (see Figure 3-1). The first stage consisted of a literature review to explore the current academic thinking on OHS regulation and its propensity to encourage or discourage compliance by the participant's organisation.

The second stage was a testing of the interview questions through the use of two preliminary interviews. This was undertaken to ensure the questions were understood and encouraged participants to provide rich conversation. The results of the testing were very encouraging.

The third stage consisted of undertaking the interviews. This was achieved through semi-structured interviews and the request for interviewees to respond to a hypothetical vignette.

The fourth stage of the research design consisted of testing of the accuracy of the transcription for data integrity. Only after the transcription integrity of the data was confirmed was analysis of the research data

undertaken. The collected data were managed using the qualitative software programme QSR NVivo version 9. The coding and retrieval system assisted in the development of themes and categories.

The fifth and final stage presented a discussion of the findings. This stage included a second review of the literature, to enable comparison with the findings of the research.

3.6.1 Coding

The use of semi-structured interviews as the data collection method resulted in a substantial database for coding, categorisation, analysis and subsequent interpretation. Organisation and analyses of interviews were undertaken in two stages (see section 3.5). This preliminary stage of analysis produced three themes. Themes one and two encompassed three major categories, with theme three providing two major categories. The major categories were broken down into sub-categories. Further analysis of the sub-categories identified elements.

3.6.2 Rigour

While the criteria for well-defined rigour in quantitative research methodology are well-utilised, rigid and generally accepted, this is not the case for the concept of rigour in qualitative research. This does not imply, however, that agreed and practised criteria for rigour are unimportant or random. Without rigour, research is degraded, becomes fiction, and loses its utility. Hence, a great deal of attention is applied to reliability and validity in all research methods (Altheide and Johnson 1998). It was initially suggested that to satisfactorily demonstrate rigour, the criteria for qualitative research should approximate positivist terminology (Creswell 1997). This approximate positivist terminology is reflected by Guba and Lincoln (1989), who developed parallel criteria for positivist and constructivist research (see Table 3-4).

Table 3-4: Parallel criteria for positivist and constructionist research

Positivist	Constructionist
Internal Validity	Credibility
External Validity	Transferability
Reliability	Dependability
Objectivity	Confirmability

Lincoln (1995) shifted the focus of evaluating criteria that relate almost solely to the inquiry community, to criteria reflective of the responsibilities the researcher has to those who make themselves vulnerable by participating in the interactive, subjective process of qualitative research; the participants. As a result of the ongoing debates concerning methodological issues in general, and criteria for evaluation in particular, Lincoln (1995) proposed three commitments for the new paradigm. These were adopted in this research because the broadness of the commitments. Their expansiveness ensures that not only the participants benefit from the research experience but the broader community also gains. Put simply, the researcher is not only taking but is giving something in return by developing OHS policies and practices etc. It was this essential ethos that motivated this researcher through the data gathering process.

The first commitment is to new and emergent relations with participants. The second commitment is “to a set of stances, professional, personal and political – towards the use of inquiry and towards its ability to bring about action”. The third commitment is to a vision of research that both enables and promotes social justice, community, diversity, civic discourse and caring. Lincoln (1995), in effect, shifts the focus of evaluating criteria that relate almost solely to the inquiry community to criteria reflective of the responsibilities the researcher has to those who make themselves vulnerable by participating in the interactive, subjective process of qualitative research. Lincoln (1995, 277-285) proposed that these three commitments surfaced criteria such as:

Positionality

Positionality is an epistemological concern requiring that contextual grounds are fully disclosed, viewing detachment and author objectivity as barriers to quality, not insurance of having achieved it. At a fundamental level a personal stance can affect researcher views about research context and participants, a process that is connected inherently to the notion of bias. This equates to a preconception about a thing, person or group. It means that a researcher holds a preferential perspective at the expense of (possibly equally valid) alternatives. Bias can cloud researchers’ judgement and lead them to see what they expect or want to see, which may or may not be what the data suggest. In summary, the concept of bias highlights the apparent dangers of the old adage: you are not going to learn what you don’t want to know (Adams and Sardiello 2000). The solution is that researchers should be prepared to engage with biases – the researcher’s own biases as well as those of the participants (Savin-Baden and Howell Major, 2013, 70). See section 3.3 for important information on ‘bracketing’ and how it was applied to this research.

Positionality Statement (as indicated in the Prologue)

My working life has been an eclectic one with regards to exposure to OHS. I have experienced OHS as a worker on a mine site, as a health and safety representative on the same site, as a production manager at a large conveyor belt manufacturing facility where I was responsible for the health and safety of 77 workers, and for a short period as a marketing manager. Later as a lawyer I legally represented workers’ compensation claimants and recipients and practised in OHS law. During my time as a legal professional I also represented several widows who had lost their husbands or partners to workplace fatalities. It could be argued that I have experienced OHS from several perspectives and it is this simple fact that allows me to position myself as open to all new learning in the area while also being aware of the biasing effect of my experience.

Community

Community as arbiter of quality reflects the fact that the research takes place in a community and is addressed to the community (Lincoln 1995, 58). “When research is conducted together with the affected persons (the community), the methodological question arises as to which persons should, or must be involved” (Bergold and Thomas 2013, 195). The community in this research is identified at Table 3–3. All participants experience OHS at various levels of responsibility and personal experiences on a daily basis in their working lives. The methodological aim of this research was to access and harness the different experiences of persons who possess different knowledge (Bergold and Thomas 2013, 195). To achieve this aim participants came from a wide and varied OHS stakeholder group. See Tables 3-2 and 3-3.

Voice

Voice is giving attention ‘to who speaks, for whom, to whom and for what purpose.’ It also involves the airing of alternative voices. It is very important to faithfully represent their views. Participants held a variety of work positions. Participants groups held a varied degree of OHS responsibility. In this research, each participant was provided with the same questions and afforded the same opportunity to voice their perceptions. All data in each subsequent transcript was presented with equal value.

Critical Subjectivity

Critical subjectivity requires heightened awareness and discernment on the part of the researcher to discriminate between personal and psychological differences of others and oneself. Also, this is a requirement of the ability to understand one’s psychological and emotional states before, during, and after the research experience. For further information on how this was achieved see the discussion on bracketing at section 3.3.

Reciprocity

Reciprocity assumes that the researcher and the participant come together as equals; each has something to give and something to gain. In this research the researcher and all participants were afforded a mutual exchange of respect and relevant research privileges – see ‘sacredness’ and ‘sharing perquisites of privilege’ discussed below.

Sacredness

Sacredness is found in the interpersonal respect generated between researcher and the participants in a qualitative research project. It emerges from a profound concern for human dignity, justice and interpersonal respect. At all times during the research journey sacredness was respected and upheld in this research.

Sharing of Perquisites of Privilege

Various researchers have in different ways made a commitment to the investment of human and personal capital poured into their respective research efforts. Hence, there is a need for a commitment to action as a result of the study. All participants were informed of the importance of the study and the potential value to the OHS endeavour by adding to the body of knowledge that seeks to lessen injury and death in the workplace.

Denzin and Lincoln (2008) note that if qualitative data are collected within a rigorous paradigm, they may provide depth and detail. Nonetheless, there can be instances where there is rigour but no depth and detail. It is this depth and detail that provides research outcomes with credibility and, therefore respect. This is supported by (Whiteley 2002, 1) who stated that the purpose of striving for rigour in qualitative research is to “...produce high quality, meaningful and relevant data, such that it is possible to emerge valuable insights within a social context.” Mays and Pope (1995, 110) stated that “...the basic strategy to ensure rigour in qualitative research is systematic and self-conscious research design, data collection, interpretation’, and communication”. This researcher pursued rigour through a number of strategies linked to those writers’ recommendations. These included: undertaking a thorough review of the extant and relevant literature prior to, during, and following the main research phase; employing a systematic approach to the research design and implementation (Whiteley 2002); and maintaining meticulous records of interview content and transcript

production. In relation to the latter, attention was required to ensure consistency and thoroughness in the transcription process (Roulston et al. 2003). Tilley (2003, 750) questioned the way in which the person typing the transcriptions might influence the research data, stating "...the transcriber's interpretive/analytical/theoretical lens shapes the final text's construct." This culminated in the researcher adopting a reflective approach. The researcher reflected on, and applied, four essential rules that are not restricted to validity (Porter 2007, 85):

1. The interviewer must not influence the contents of the participant descriptions in any way. Otherwise, the provided descriptions would not truly reflect the participant's actual experience.
2. The transcription must be accurate. It must convey the depth of meaning of the oral presentation in the interview.
3. The analysis of the transcriptions must be entirely accurate otherwise the richness of the data collected is lost.
4. It must be possible to go from the general descriptions to the transcriptions with unambiguous evidence of an account between the specific contents and the connections in the original examples provided by participants.

Further, all assumptions and reasons for decisions made during the study in relation to sensitivity, respect, awareness and openness were applied (Davies and Dodd 2002). Engaging in reflexivity in social theory, reflexivity may occur when theories in a discipline should apply equally forcefully to the discipline itself to minimise researcher bias (Koch 1994; Barbour 2001), and applying relationally (Hall and Callery 2001) were undertaken in support of rigour. Demonstrating exactly how the data themselves shaped the conclusions is important in reinforcing the link between data and conclusions in qualitative work. Cross referencing data and conclusions strengthens the study write-up (Kitto et al. 2008).

3.6.3 Ethical Protocol

To ensure a transparent and authentic effort is utilised to achieve applicable and relevant outcomes in the research endeavour it must begin with a solid ethical foundation. Ethical conduct when undertaking qualitative research involves "consideration of both how data collection is conducted and analysed data are presented, and will vary significantly depending on the details and particularities of the situation of the research" (Ezzy 2002, 33). Ethical protocols exist where the researchers must weigh the quality of the data they gather against principles such as confidentiality, privacy, and truth-telling (Howe and Eisenhart 1990). None of the participants are referred to by name in the thesis, maintaining both privacy and confidentiality within the database. All tape recordings, transcripts and traceable documents have been withheld from people not directly involved in the development or examination of the thesis. The outcome of this research is presented in a format that does not indicate the origin of the data, although they are traceable by the researcher to their original source. In doing so, the confidentiality assurance provided to participants at the commencement of every interview is supported.

Individual confidentiality was observed for, and written informed consent from participants was obtained from, participants in this research. Curtin University provided ethics approval for this research (GSB 13-10). In accordance with that approval, the participants were fully informed, in writing, about the data collection methods and storage. All research data were de-identified and confidentiality of the participants was assured at all times. This was in accordance with Curtin University's ethical guidelines and policy on the storage of raw data. All other material such as diary notes were securely stored in accordance with the university's policy.

Code names were used on both the digital recordings and transcripts to maintain confidentiality throughout the process. After a period of five years after examination of the thesis the digital recordings will be erased to ensure the identity of participants is protected. In the meantime, Curtin Graduate School of Business will retain the data. Curtin University uses this standard protocol for such research.

3.6.4 Conclusion

The purpose of this chapter was to present a detailed outline of the enquiry paradigm governing this research, along with the developed methods and strategies utilised. The chapter addressed the selection of semi-structured interviews and use of a vignette for data collection, analysis and theory building. The content seeks to demonstrate an approach that provides robust understanding of methods, procedures and techniques used to ensure an interpretative approach to the research findings. The chapter presented quality criteria applied to the research process to enhance the rigour and acceptance of the findings.

The purpose of the next chapter is to present the findings. The chapter is restricted to the presentation and analysis of the collected data. Analysis is presented in the form of emerging themes, categories and sub-categories to inform the findings of this research. A comparison of these findings with other research into this paradigm is presented in Chapter Six.

4 Data Analysis

4.1 Introduction

This thesis examines the understanding and application of occupational health and safety (OHS) compliance in industry, and from the data analysis aims to develop a model that has the potential to generate OHS compliance. As discussed in the previous chapter, the research method involved collecting data through semi-structured interviews held with participants in WA industries and sectors. This chapter presents the conceptual framework developed from the analysis and categorisation of data. In developing this conceptual framework, the goal is to clearly communicate the links between data, analysis and theory formation. Each category is illustrated with a specific example of interview data.

The interview consisted of two parts. The first involved participants responding to open-ended questions. In the second part of the interview participants were presented with a vignette based on an OHS legal case which could realistically be encountered by most participants from either private or public organisations. Along with responses to the open-ended questions, responses to the vignette were recorded, and transcribed independently of the researcher. The categories developed from the collected data are displayed in figures that provide the theme, categories and sub-categories relevant to the data throughout this chapter. The information in these figures is the result of extensive coding, categorising and constant comparison.

Table 4-1: Number of Participants and Coding of Stakeholder Groups

Number of participants	Participant group	Group code
22	Employer Group - Business owners, business managers and supervisors	O&M
33	Worker Group - OHS professionals, OHS trainers and workers and their representatives	PWR

The level of OHS responsibility is reflected in the two groups. Morally and ethically both groups have equal responsibility but legally the employer group has more responsibility to ensure a safe workplace and a safe system of work. In applicable instances analysis of the data was undertaken to identify the differences between the two groups.

Chapter Three (Methodology) outlined the constructivist/interpretivist paradigm under which informed this research. It also outlined the interview method and provided a justification for the approach. A rationale was provided for the theoretical sampling of 55 participants. This chapter provides findings from analysis of the interview data from participants who were divided into two stakeholder groups (refer Table 4-1 for stakeholder category and relevant code). The first stakeholder group consisted of 22 business owners, business managers and supervisors and they are identified as O&M. The second stakeholder group consisted of 33 participants including OHS professionals, OHS trainers, workers, a union representative and a WorkSafe WA OHS inspector, all identified by the code PWR.

Qualitative research is demonstrably trustworthy and rigorous when the researcher demonstrates understanding of the nature, or context, of participants' interpretations and meanings (Ezzy 2002). The quality of qualitative data analysis depends on following well thought-out procedures, and on ensuring that these procedures reveal the structure of understanding of participants (Ezzy 2002). NVivo 9 and Mindjet

MindManager 14 computer software for data management and display were used for coding and assisting with categorising. That is, the data were coded into categories and subcategories; and where relevant, further categorisation described as ‘elements’. These three levels form a hierarchy showing the relationships of the concepts (Whiteley 2004).

Three overarching themes emerged from the data and are used to structure the discussion within this chapter. These are:

- OHS Law
- Management Commitment
- Management Deficiencies

Each theme was developed from categories and sub-categories and these are illustrated and discussed below, culminating in the generation of OHS compliance Model (‘the model’). In addition, some categories contained data which, while grouped together, demonstrate various nuances in participants’ context or perception that provide important contrasts within particular sub-categories. In the following discussion, these are referred to as ‘elements’. Thus, the following discussion presents three different levels of data aggregation: categories, sub-categories and elements. There are also two super themes that emerged from the data relating to the three themes discussed above. The super themes are **Duty of Care** and **Consultation**.

4.2 Theme One: Occupational Health and Safety Law

Occupational health and safety (OSH) law refers to the *Occupational Safety and Health Act 1984* (WA) and the Occupational Safety and Health Regulations 1996 (WA). Occupational safety and health is more commonly referred to in Australia as occupational health and safety (OHS) or workplace health and safety (WHS). All incarnations of these two statutes represent the area of law concerned with the safety, health and welfare of people engaged in work or employment in Australia. The goals of OHS programmes include the fostering of a safe and healthy work environment. OHS may also protect co-workers, family members, employers, customers, and many others who might be affected by the workplace environment directly or indirectly. This chapter will use the more general abbreviation, OHS, to describe Australian safety and health law.

4.2.1 Data Findings for the Categories of OHS Law

The 55 interview participants provided insights into the questions about what is meant by OHS compliance, OHS culture, successful strategies that encourage or hinder OHS compliance and what advice could be offered to law makers with a view to improving OHS compliance. Seven questions related to a vignette were also asked of participants. Questions ranged from identifying fault, regulator involvement in an accident involving a forklift, what could have been done to prevent the accident and what effect should the accident have on the involved worker’s position with the employer. The richness of the data collected will be explored starting with the relevant themes, categories and sub-categories. The first theme to emerge was OHS Law. Categories of:

- Encouraging Compliance
- Legal Consequence, and
- OHS Compliance emerged.

The three categories include a total of six relevant sub-categories. The most distinguishing feature evidenced in this theme was the range of perceptions held by the participants as to what OHS compliance means. Essentially there were 55 participants who, generally, provided disparate responses.

4.2.2 Category: Encouraging Compliance

The category of *Encouraging Compliance* refers to several participants expressed concerns about the role of the OHS regulator and their perceived difficulty in understanding the requirements of OHS law as it is currently written.

While overall participants had varied views about how to encourage OHS compliance, these participants perceived that more regulator support and greater simplicity in the written language used by lawmakers to draft OHS law would potentially encourage them towards better OHS compliance. Put simply, it was perceived that if OHS law were drafted so that more people could understand the requirements, and the OHS regulator (WorkSafe WA) were more available to assist in the application and understanding of the law, then better OHS outcomes would result.

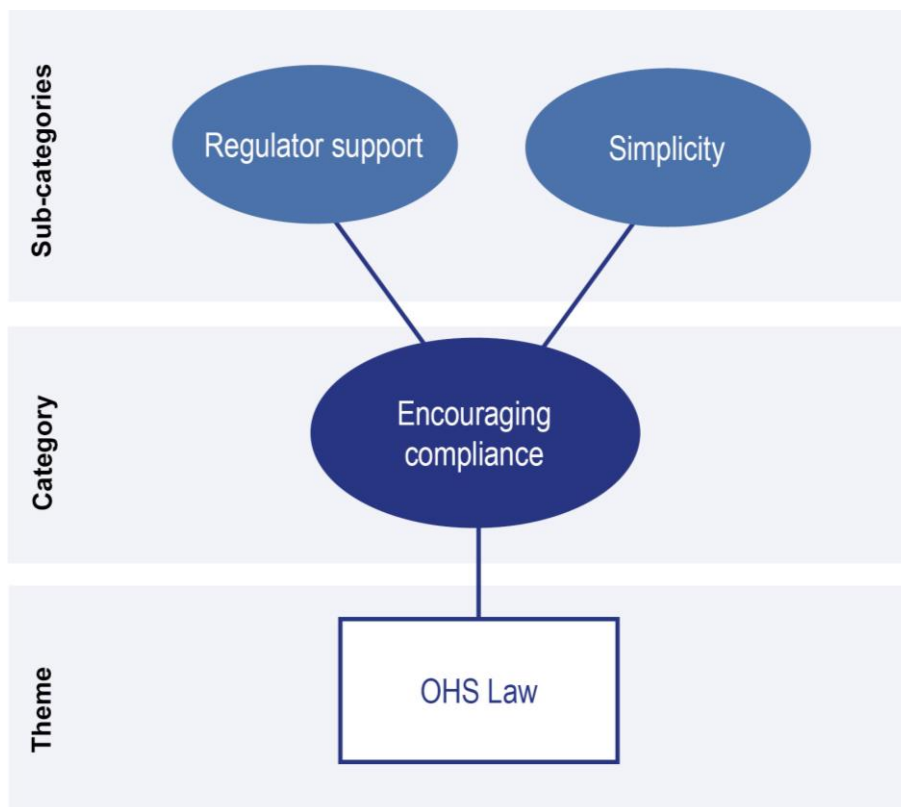


Figure 4-1: Illustration of sub-categories from the category Encouraging Compliance

As shown in Figure 4-1 the category of *Encouraging Compliance* contains data from two sub-categories: *Regulator Support* and *Simplicity*. The concept of *Regulator Support* was discussed by participants from both the O&M (Management) and PWR (Worker) stakeholder groups (see Table 4-1). Perceptions were mixed, as evidenced by participants' requirements for more contact from the regulator, more education programmes provided by the regulator, access to Workers Compensation (WC) records, so that employers

could see if risk-taking behaviours were evident in potential employees. Finally, there was the perceived bias in the way the regulator deals with big business as opposed to smaller business. What is abundantly clear from the data is that all participants whose comments fell within this sub-category felt the regulator should be providing more assistance to them or others. The sub-category of *Simplicity* refers to keeping OHS legal provisions easy to read, allowing sufficient understanding to facilitate application in the workplace. Participants from both groups appeared to perceive that the law as written is unnecessarily complicated and thus provides a constraint on its successful application.

4.2.2.1 Sub-category: Regulator Support

Data in this sub-category refer to the advice participants would offer law makers, if given the opportunity. Most participants took the opportunity to also discuss what the law maker could do that would make OHS compliance easier for them. Participants identified a need for the law maker to encourage the OHS regulator, WorkSafe WA, to provide more assistance. That assistance could simply be more communication by the regulator, as stated by a business manager who explained:

“I think they [the regulator] could be talking to people like me; that would probably help people at the coal face.” [O&M7]

There was a request for more education to be provided by the regulator with equal availability for remote locations commensurate with a city-based business. The perception that a city-based business has more access to information offered by the regulator was also expressed. Participant PWR51 suggests that city-based locations receive more consideration and support by the regulator as opposed to those working locations based in country regions of Western Australia:

“Get out more education programmes or advertise more on what compliance is, what we need to do for compliance. My organisation works all over the state and we are working in big cities, remote locations and we find that information that you might get in the city does not get out to the people in the bush.” [PWR51]

Rather than seeking further education or communication from the regulator (as appears to be the focus of other participants in relation to this category), participant [PWR54] wants access to OHS and WC records. This access was perceived as an integral component of employing only risk aware employees and avoiding the employment of OHS risk-takers. The participant appears to desire access to the previous workplace OHS and Workers’ Compensation (WC) behaviour of a potential new employee to help determine if the applicant is suitable to fit the OHS culture of his organisation.

It must be noted that while OHS advisors do not generally hire new employees they can be provided with the opportunity to sit in on the interview, ask applicable OHS-related questions of the interviewee, and later be consulted for advice on a potential new employee’s level of commitment to OHS. This participant appears to play a role in the new employee selection process as described. The following was the only reference to regulators, WorkSafe WA and WorkCover WA. This participant appears to believe that ‘the regulator’ involves more than one party and that WorkCover WA could also play a role in improving employment endeavours enabling him to locate potential employees who are pre-eminently predisposed to an OHS culture:

“If I could see an improvement I think it could be that the employer has access to safety and workers’ compensation records with the likes of WorkSafe WA and WorkCover WA...I am fairly keen to employ someone that has a reasonable level of OHS culture and they’re not going to be a risk to the company.” [PWR54]

Data in this category continue to address the type of advice participants from both the O&M and PWR groups would offer law makers, if given the opportunity. Two participants appear to be seeking more support from the regulator for small business. One participant [O&M12], a small business owner/operator, appears to have the clear perception that the regulator provides more advice/resources to big business as opposed to a lack of support afforded to small business. This participant also appears to link the disparity of *Regulator Support* with the perception that bigger, more established businesses, are able to afford external expertise, possibly referring to consultants and the like, while presumably implying small business cannot afford such support. The second is a HSEQS coordinator who also perceives that small business operators find OHS onerous, thus tacitly suggesting support from the regulator would be beneficial. This participant appears to go a step further than the previous participant by suggesting that OHS compliance is a real headache for small business:

“I believe there’s quite a lot of stuff out there for big industry and big business and they also have the kind of power to be able to have OHS experts and human resources people on their team but I think there’s a real lack of support for small business.” [O&M12]

“OHS can be a pretty onerous thing especially for small business where compliance can be a real headache.” [PWR30]

Participant [O&M27] is a business development manager and appears to have a preference that OHS law should be clear and accessible. By referencing the difficulties in clarity of OHS law she may be referring to a perceived complexity of OHS law. In this case of the use of the word ‘accessible’ the participant appears to be referring to the accessibility of OHS law, or as described by the participant ‘the rules’ where they would like to be able to locate a relevant provision, or provisions, when it is appropriate for her to do so:

“I think if the rules were a bit clearer and more accessible.” [O&M27]

An element to emerge from the category was *visibility* of the regulator and the whole OHS process. This element can be illustrated with insights from two participants, who each offer subtly different advice. The first focuses on both visibility and access to resources, while the second suggests that greater visibility, or a broader knowledge of potential consequences of OHS failures may encourage greater participation in the OHS endeavour. The second view is closely aligned with the belief that people fall foul of OHS law because a simple message becomes invisible in a labyrinth of legislation or websites. *Visibility* of the regulator and resource assistance from the regulator are two matters of importance to participant [O&M34]. Unselfishly, on the part of this participant, who comes from a large enterprise, the recommended target of the reference to resource assistance appears to be small and medium sized business. There is also some advice to the regulator on what avenues to utilise to demonstrate greater visibility. Participant [O&M56] suggests a broader knowledge of potential consequence and/or the whole process being more ‘visible’ may encourage participation in the OHS endeavour by leaders. He appears to believe people fall foul of OHS law because a simple message is lost in complex legislation or information overload provided by web sites. The reference

to web sites may relate to the myriad of OHS information on those sites that is not always accurate or applicable to the jurisdiction of the seeker:

“Make OHS more visible and the regulator more visible. Use multimedia campaigns, get into schools, onto TV and try to help or resource the small to medium size enterprises with their compliance, which is always going to be hampered by limited resources.” [O&M34]

“Make the whole process more visible. It seems to be lost in a labyrinth of legislation or web sites where people fall foul of the law and are held accountable but nobody knows about it. I think if leaders could see that there are consequences for their actions, or lack of action, we would see a much greater participation in compliance.” [O&M56]

4.2.2.2 Sub-category: Simplicity

The following data are representative of the responses that appear to be pleading with law makers to consider the end-user when drafting OHS legislation. A significant number of participants in this sub-category reflect a strong overall perception that the OHS law is overly complex, difficult to read and that this makes compliance less likely. Four main elements fall under this sub-category ‘Keep it simple’, ‘consider education levels’, ‘plain English drafting’ and ‘over complicating the law’. These elements are intrinsically linked but contextually different. For example, as previously noted the participant perceptions contained the element of ‘keep it simple’ so that people who have the legal responsibility to apply the law can understand what it is they must apply and to what, particularly those working in high-risk industries as perceived by the first participant. Comments such as ‘the amount of people spoken to’ and the use of ‘we’ implies that they are aware of others who experience difficulty understanding OHS law. This awareness is borne out by the number of participants who referenced *Simplicity* of law as a concern. Appeals by participants for less complication in OHS law/regulation resulting in a lack of understanding which appears to result in a potential lack of OHS compliance.

There is also a request to law makers to consider the educational level of people as it is everyone who must apply the law regardless of their education and understanding. This perception is complemented by the last comment which broadens the overall request for individual understanding of OHS regulation. It does this by referencing the poignant example that if the law were simple in its construction then it would result in an improved understanding for the people who are expected to comply.

Data such as the following demonstrate the range of PWR responses suggesting that OHS regulations are overly complex. The plea to consider high-risk industries suggests their concern that the legal complexity does not work for some of the people employed in those industries:

“Keep it simple, think about the people that want to use the law. Think about high risk industries, think about their education, and think about their level of understanding of the legislation.” [PWR2]

“The amount of people I’ve spoken to in my role as OHS facilitator that have difficulty understanding the legislation ...I’d say simplification, I’m thinking of the complex terminology that’s used in the legislation.” [PWR11]

“Just make it as simple as possible so that everybody understands that they have a responsibility.” [PWR20]

“Keep it relatively simple for organisations to understand.” [PWR29]

The next element evident in participant perceptions is the reference ‘consider education levels’. This reference provides three different perspectives that appear to evolve from personal and job-related experiences. The first participant does not mention what they perceive the required education level is but does reference the fact that OHS regulation affects everyone so it ought to be written with everyone in mind. Participant PWR3 was working with the regulator at the time of data collection. They appear to be highlighting the apparent danger that if those involved in the enforcement of OHS compliance can’t understand what it is they have to do to meet the requirements of OHS law then those requirements will remain unfulfilled. The last view expressed by a participant in this element links complication of law and non-compliance. This is evidenced by the use of the words ‘the less likely people are to comply’:

“Unfortunately, when the Act and Regulations are written they’re written for a person with a certain level of education and understanding but they still affect everyone regardless of their education and understanding.” [PWR9]

“The wording is legal, 99% of Australians do not speak legal jargon, even as an Australian speaking the language I still have trouble with the law.” [PWR3]

“For me it is about not overcomplicating... the more complicated things get, the less likely people are to comply.” [PWR10]

Appealing for a plain English approach to the drafting of OHS law appeared to support the perception that OHS law is inaccessible and recorded in complex passive language. This type of written language can be difficult to understand when long prolix sentences, with multiple sections and sub-sections, leave the reader losing the subject at the beginning of the sentence as they approach the objective end of the sentence. Participants expressed their suggestions for plain language in varying terms. Participant [PWR19] provided the clearest and most succinct appeal to: “Put it in plain English.” Many participants echoed this request with various suggestions to keep the language short, sharp and accessible. Clearly participant [PWR19] wants the law drafted so that it is understandable. No particular style of language was provided other than a request that the law be less vague and be expressed in simple language free from jargon.

Avoiding difficult language is the plea from participant [O&M39]. Participant [O&M27] would like OHS law to not only be clear but also ‘more accessible’. ‘Short and sharp’ can be viewed as a reference to plain English which supports a more reader friendly approach to regulation. ‘More accessible’ can be seen as a reference to better availability and ease of understanding of OHS law by those who are required to comply with it. While OHS law is available at the regulators’ web site participant [O&M27] is possibly referring to ‘accessibility’ in terms of readability; this premise is more likely when the participant sums up his concern in the same sentence with ‘instead of long winded’. Participant [PWR17] suggests that keeping people safe is not that difficult; it is the inclusion of legislation where things get complicated. Clearly this participant feels that there is a common-sense component to the endeavour of keeping people safe from harm, but add complex OHS regulation and there exists the embryonic potent for failure of the endeavour. It also needs to be noted that the meaning of ‘common sense’ does vary with people.

In contextual summary, the following participants are supplicating for a plain, non-vague, non-complex and simple language approach to be used by law makers. Ostensibly, the consequences of the absence of a plain English approach when drafting OHS law provides the potential for poor compliance and may result in people to getting hurt in the workplace:

“Put it in English, plain English.” [PWR4]

“From my perspective, I find difficulty in the vagueness.” [PWR19]

“For me it is really about making the laws and policies understandable and not using difficult language.” [O&M39]

“I think if the rules were a little bit clearer and more accessible instead of long winded, lengthy legalisation...short and sharp is best.” [O&M27]

“We are actually out to try and prevent people getting hurt and that’s not very complicated until you get all of the legislation and procedures involved in it.” [PWR17]

The following participant perceives that *Simplicity* of OHS law is required so that individuals in organisations can understand it. The reference to ‘organisations’ may mean this participant sees failure to understand OHS law as recumbent across organisations not just a particular cohort of people. The use of the term ‘relatively simple’ also suggests that this participant recognises that the law will inevitably always have a degree of convolution. Participant [PWR30] is an OHS coordinator who specifically references small business as being the victims of OHS legal complexity. He invokes the ‘KISS’¹ principle and suggests if the principle were adopted by legislators it may assist in preventing people from getting hurt in the workplace:

“I’d probably go for the old KISS model because OHS can be a pretty onerous thing especially for small business where compliance can be a real headache.” [PWR30]

Finally, from a participant in the PWR group there was the following short, but *prima facie* honest response to the question; ‘If you were given the opportunity to offer law makers some advice on their OHS legislative approach, what advice would you provide?’ Participant [PWR49] provides a distressing reminder that there are people who have an OHS legal burden placed upon them who do not understand OHS law well enough to provide an answer to the question:

“To be honest I don’t know OHS law well enough to comment.” [PWR49]

There are two possibilities that arise from this. The first is that it be concerning given the high degree of OHS responsibility placed on all individuals who work within an OHS paradigm and the subsequent penalties for failure. The second possibility is there does exist moral and ethical components in individual OHS endeavour and this may be enough for some to meet their obligation to keep themselves safe at work while also looking after those who work with them. This matter is discussed in more detail in the next chapter.

Notably the O&M group appears to concur with the PWR group that OHS law would be better for all if it were clear, concise and specific. Participant [O&M15] sees benefit in including input from people who are dealing with grassroots people in the workplace when OHS law is being drafted. This may include an opportunity for some of those who would be expected to apply the law be given an opportunity to comment on the law’s level of comprehension before the law comes into effect:

¹ KISS – keep it simple stupid.

“I know that it probably doesn’t come into it when it comes to law makers but a common sense and practical approach and some input from some people that are dealing with the grass roots workplace.” [O&M15]

Other recommendations to law makers towards the same end but with contextually different approaches were made. This included, ‘Keep it short and to the point’ [O&M35]. Participant [O&M42] adds a new dimension to the plea for clarity in OHS law. ‘Simple in its language’ because of the difficulty to read and understand, and finally, a request from [O&M58] for OHS law to be ‘a little more specific’. While each perception is contextually different it suggests that there is a view that parliament to should consider drafting OHS law that is short and to the point, simple in its language but specific in its detail. The similarities in the O&M group perceptions to some of the contemplations of their colleagues evidenced above from the PWR group is testament to the richness of the data. Both groups appear similar in their desire for better drafting of OHS law:

“I suppose keeping it fairly short and to the point.” [O&M35]

“I think probably keep it a little simpler in its language...it’s just very hard to read and understand.” [O&M42]

“It would be nice sometimes if it was a little more specific.” [O&M58]

Finally, from the O&M group there was a request from a business owner for more time to think about a possible response [O&M41]. This participant is a ‘medium size business’ owner who has significant OHS responsibilities. Clearly, they were unable to provide any definition of OHS compliance at the time the question was asked. Arguably, an inability to define OHS compliance may not bode well for a healthy and positive OHS culture within their organisation. The OHS culture of any organisation is generally driven by management. OHS culture and OHS compliance are intrinsically linked constructs.

4.2.3 Category: Legal Consequence

The data in this category fall into two sub-categories: *Higher Penalties* and *Responsibility*. The *Higher Penalties* sub-category evolved from participants’ perceptions that *Higher Penalties* for OHS breaches were required. The requirement for *Higher Penalties* appears to originate from the view that current penalties are not encouraging OHS compliance. A further sub-category to emerge is *Responsibility*. OHS responsibilities are usually outlined in position descriptions, policies, guidelines, procedures and other OHS management system documentation where appropriate. Some participants appeared willing to share their views on where *Responsibility* ought to lie, while others wanted to see OHS *Responsibility* create a shared function. *Higher Penalties* and *Responsibility* are sub-categories of Legal Consequence as can be shown in Figure 4-2.

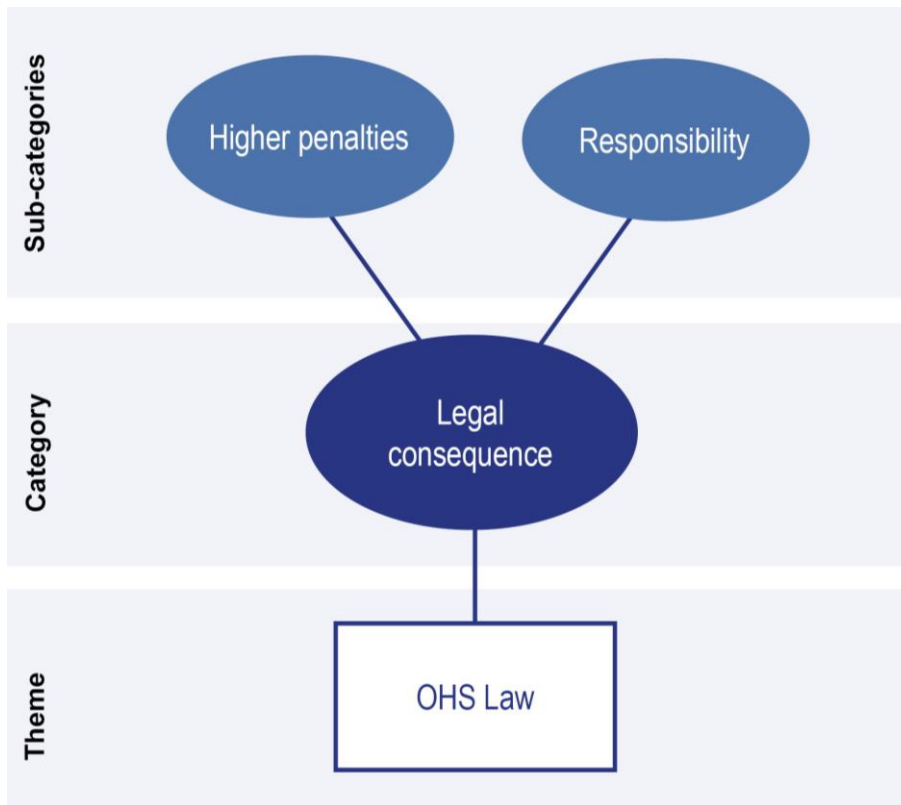


Figure 4-2: Illustration of sub-categories from the category Legal Consequence

4.2.3.1 Sub-category: Higher Penalties

The PWR group directly referred to higher pecuniary penalties and in one case, imprisonment, for OHS offences. Two comments that come from the O&M group in relation to this category illustrate the range of views in relation to penalties. The first concerns a perception that a more inclusive and broad strategy for stronger legislation and *Higher Penalties* across the workplace is needed.

The second contention put forward by the O&M group was that employers ought to be able to summarily dismiss employees who breach OHS requirements. Summary dismissal is the highest workplace penalty a worker can suffer for an OHS breach; it is generally limited to a serious OHS breach.

There were clear views regarding the need for *Higher Penalties* from four PWR group participants who perceived that the current OHS penalty regime is an inadequate deterrent. Other perceptions included the need to close legal loop holes that allow people to escape penalty and to impose a much bigger penalty when companies, as in legal persons, do the wrong thing by taking no preventative OHS action.

The following data illustrate the strength of perceptions that *Higher Penalties* are required. The range includes differentiated financial penalties according to the structure and size of organisations. [PWR16], appears to express a concern about responsible people charged with an OHS breach avoiding an appropriate penalty:

“I’d be making sure that the penalties are strong and don’t leave any kind of wriggle room for employers or workers to dodge their responsibilities.” [PWR16]

Participant [PWR44] appears to prefer a much ‘bigger increase’ in penalties for OHS breaches. Bigger increases may be referring to the announced increases in OHS penalties at the time of writing. If WA ventures down the work health safety (WHS) harmonisation paradigm, (which appears to be a real possibility with a recent change of state government), the words ‘bigger increase’ may simply be in reference to the subsequent increase in current OHS penalties to the WHS penalty framework. What is clear is that this participant perceived that a company, after having been charged with an OHS breach and subsequently found guilty, should be forced to pay a substantially increased penalty:

“I would like to see a much bigger increase in penalties when companies totally do the wrong thing.” [PWR44]

The two comments below appear to give more force to the argument that people are using current penalties as their ‘reference point’ for how ‘stronger’ legislation and penalties are defined. In contrast to participant [PWR40], however, they are not providing a definition of what ‘stronger’ means. The first participant narrows down the increase in penalties to an increase in what is in place at present. The perception here appears to suggest that the current OHS penalty regime is inadequate. The next participant is from the O&M group and perceives a more inclusive and broad strategy for where *Higher Penalties* should lie. First, there is a requirement for ‘stronger OHS legislation’. This appears to be in stark contrast to the call for more user-friendly OHS legislation discussed in section 4.2.2.2., but there is a possibility that OHS legislation maybe perceived to be stronger if it is more user friendly. Second, is the desire for ‘harsher penalties’ for companies and workers who injure their workers and fellow workers respectively, and thirdly, there is an appetite to see these penalties applied to people who don’t necessarily injure workers but ‘put others in danger’ of being injured:

“I would personally be in favour of more stringent penalties than what is in place at the moment.”
[PWR53]

“...I guess we need stronger legislation and we certainly need harsher penalties for companies that are injuring people or fellow workers that are guilty of doing things that put other people in danger...” [O&M43]

The assessment of sufficient ‘increases’ in penalties is, of course, very dependent on the capacity of an organisation or individual to pay a financial penalty and this will vary across industries, firms and individual means. Implicit in the argument put forward by participant [PWR40] is that financial penalties are ineffective as a deterrent for the executives of large multinational companies. It is apparent from the perception of participant [PWR40] that the more applicable penalty is a custodial sentence for OHS offending company executives. This is explored further in the discussion chapter at section 5.3.2.1. It is initially suggested that the weak deterrent factor of pecuniary penalties for company executives has been an issue for a long time:

“I guess this has been talked about for a long time if the multinational company getting fined is no deterrent at all...some people have pushed for prison time for executives that have been proven to breach their OHS obligations...that’s something law makers should be looking at.” [PWR40]

The only other view offered by the O&M group was that non-compliance with OHS requirements should warrant a cancellation of the employment contract i.e., summary dismissal, without, it would appear, any reference to procedural fairness in the disciplinary process. The law allows an employer to summarily dismiss an employee who commits a serious breach of safety; see *Cheetham v Helensburgh Coal Pty Ltd*

[2016] FWC 4607 (12 August 2016). The Court recognised that it is the seriousness of the breach and the surrounding facts that need to be examined before a definitive decision is made regarding the worker's future. The following perception appears to be suggesting that summary dismissal ought to be the only course of action for any OHS breach:

"I think for people who breach OHS requirements it should be a lot easier to remove them from the workplace because over the last ten years you've seen an approach when somebody offends they are given counselling." [O&M21]

What appears to be emerging here is that participants appear to want the penalties for OHS breaches to be tougher. But O&M and PWR perceptions vary in terms of who, specifically, will be the subject of these higher penalties. The O&M group would like to see higher penalties for employers and employees who breach the OHS Act. The PWR group appear to focus their attention on higher penalties for company executives and the company as a legal entity when OHS law is breached.

4.2.3.2 Sub-category: Responsibility

As outlined in the previous chapter, participants were provided with a short vignette where details were provided of a workplace accident involving a forklift. Insufficient details of what may have been the root cause(s) of the accident scenario were purposefully absent in the vignette. Interestingly, some participants were willing to apportion *Responsibility* for the accident on relatively scarce and untested evidence. Other participants took a more balanced view of the event. Finally, there were some participants who appeared willing to predict the outcome of a potential judicial hearing.

The analysis of the vignette is included because it provides excellent data for the sub-category of *Responsibility* and how *Responsibility* is apportioned in cases of accident investigation, and importantly, who allocates that *Responsibility* and to whom.

In the context of participants' discussions, accountability is an individual characteristic or role. Thus, it appears to be viewed as something which is often shifted from the accountable person elsewhere or to someone else. It would appear that the forklift driver involved in the vignette linked accident needs to be accountable and/or totally responsible:

"I'm sick and tired of the accountability being pushed off the accountable person...the driver needs to step up to the plate and be accountable." [PWR4]

A health and safety regional manager appeared to take a more balanced approach when *Responsibility* is a real and palpable issue. Participant [O&M13] would like more information before offering a decision that would need to be based on 'merit'. The use of the word 'merit' may be in reference to 'procedural fairness' being afforded, alternatively, the reference to 'merit' could possibly relate to the legal intrinsic of 'right' or 'wrong'. The difference between participants [O&M13] and [O&M24] is that several people might be accountable for a breach and so rather than being an individual issue it is becoming one of shared *Responsibility* with the matter of where the 'blame' should rest depends on the facts of each case:

"Each case is determined on its merit...I believe there are circumstances, from what I see here, haven't been clearly and specifically provided." [O&M13]

Some participants were willing to share their views on where *Responsibility* ought to lie in general terms. Participant [O&M24] appears to want *Responsibility* shared between individuals (workers) and the employer for OHS breaches but would like to see the primary or overriding *Responsibility* for OHS to remain with the employer:

“It isn’t about individual responsibility only...the responsibility rests with the employer to create a safe environment conducive to safe work.” [O&M24]

Participant [PWR25] appears to suggest that adverse safety events are the result of shared *Responsibility*. There is no specific detail provided to enable determination of whom the *Responsibility* is shared between; is it shared amongst workers or shared between workers and their employers? Alternatively, is the reference to ‘shared *Responsibility*’ broader than the workplace?

There were also participants who did not want to commit to making a judgement, because of the lack of information provided in the vignette, on who had *Responsibility*; shared or otherwise. Two participants from very different industries had closely aligned views when they expressed their unwillingness to make a decision on the basis of the minimal factual background provided:

“It’s very hard to say with the information given.” [PWR52]

“I find that one very difficult...not knowing all the information.” [PWR54]

Other participants also recognised the lack of adequate information on which to base a decision but this did not necessarily prevent them from making a decision on the scenario presented. For example, participant [PWR16] contemplated dismissal of the worker while recognising that there are processes in place if the worker appealed against the decision:

“...the employer had the case to dismiss them if they could be sure first that the case was open and shut and no real avenue for rebuttal.” [PWR16]

Similarly, participants from the O&M group recognised that external institutions, such as the Fair Work Commission or Industrial Relations Tribunal (industrial tribunals) hold some *Responsibility*, outside the work context, for determining issues of accountability, responsibility and merit. For example, the two participants quoted below appeal to their understanding of the role of industrial tribunals in this type of event, suggesting a perception that *Responsibility* is not only shared but that its investigation and interpretation extends beyond the boundaries of a particular organisation:

“Due process had not been followed...there had been no other formal warnings, therefore, I believe that an industrial relations tribunal would require the employee be reinstated.” [O&M32]

“A difficult one; I would like to hope that the tribunal would support the organisation but obviously, I think it could go either way.” [O&M29]

Overall it appears that there is a willingness to apportion responsibility regardless of the information available. This has the potential to limit investigations and to identify the root cause of workplace accidents and incidents.

4.2.4 Category: OHS Compliance

There was very little consistency demonstrated within the category of *OHS Compliance*. It was however possible to discern a range of sub-categories that captured key aspects of particular areas of variance and the depth of the perceptions. The *OHS Compliance* category is comprised of four sub-categories, as illustrated in Figure 4-3.

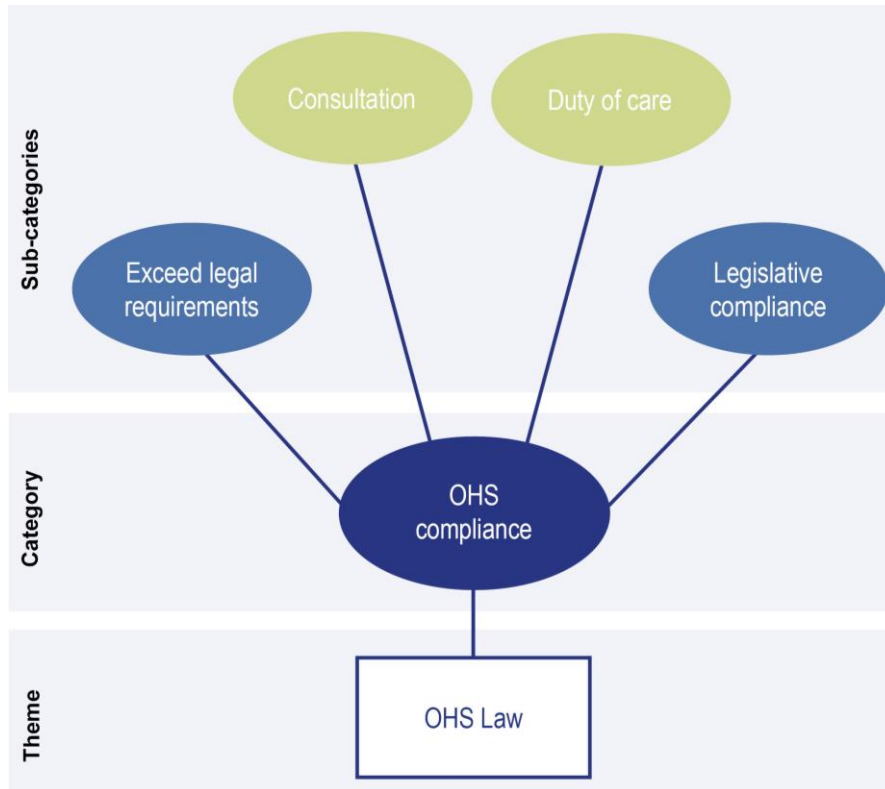


Figure 4-3: Illustration of sub-categories from the category OHS compliance

4.2.4.1 Sub-category: Exceed Legal Requirements

Data informing this category are those directly addressing participants' definitions of OHS Compliance and the associated actions. Perhaps unsurprisingly, 53 of the 55 participants discussed their views about compliance across many of the questions and into the vignette.

Data within this category are particularly rich and diverse. The perceptions of each participant shared little commonality, with little evidence of consistency about the meaning of compliance or how it is practised. These differences are an important consideration as they provide insights and direct particular attention to the nuances associated with the diversity of perceptions and ideas in this category.

The following data are grouped according to both key elements and insights provided by interview participants of the PWR stakeholder group. This has been done because of the variety of definitions of the elements and the differences between the participants of this group.

The multiple elements linked to the category are 'policy and legislation', 'OHS management system and best practice', 'contractual level compliance' and 'risk awareness' The term 'compliance' was described by

some participants as the inclusion of particular policy and practice that could be best described as having a particular mindset or approach to OHS at a relatively general level. The following participants appear to be expanding OHS Compliance beyond the limited compliance of legal requirements by invoking policy, organisational guidelines, procedure and legislation:

“For me OHS compliance is the workforce ensuring they are working to the organisational guidelines, policies and procedures.” [PWR10]

“OHS compliance to me means complying with the legislation and regulations and also internally complying with your own systems and guidelines.” [PWR52]

Statements regarding compliance were provided by participants who appeared to have a focus on a management system and risk-based methodology that could be either ‘legislatively based’, ‘best practice’, or by implementation of an OHS management system. The three perceived methods of OHS Compliance are linked because all three involve a systematic approach:

“My view is that compliance is the successful implementation of an OHS management system which has to be consistent with AS 4801 and in line with current legislation. I guess in saying that it is really only compliant if it’s followed to the letter and there’s a robust system in place to identify, capture and manage non-compliance.” [PWR57]

“It is about best practice and adopting risk-based methodology.” [PWR8]

“OHS compliance means people in the workplace must have an adequate system in place to meet the obligations of the OSH Act and must all be subject to continuous improvement.” [PWR1]

Some participants recognised, however, that relatively straightforward statements about compliance become complex when multiple organisations are involved in a specific project or operation and when contractual requirements between organisations exceed those specified within legislation and regulations. For example, a principal may expect a level of compliance that contains components beyond legal requirements as illustrated:

“From my point of view there are two levels, firstly there’s the legal level so that would be the current Act and Regulations, secondly, which I don’t think many people understand is the contractual level. This is when two companies engage in a contract sometimes there are HSE clauses that may be above and beyond legislative requirement and these also become part of compliance.” [PWR9]

The recognition that compliance extends beyond legislative requirements was described in further detail by participants who described compliance as a process of maintaining organisational guidelines, policies and procedures. Meeting internal and external compliance, internal company requirements and the reference made to an external requirement may include legislation or external organisational expectations, such as the reference to the principal contractor relationship, company shareholders, the regulator or the public:

“For me it’s meeting internal and external compliance.” [PWR13]

One way of addressing the organisational and legislative layers of compliance is to take a holistic approach that will ensure that work is undertaken in a safe manner. Participant [PWR20] succinctly expressed this

approach, although the final two words used by the participant ‘I guess’ appear to suggest a degree of doubt as to whether the strategy outlined would be effective. The use of these words suggests the participant was not speaking from successful experience of the matters discussed but alternatively providing a personal opinion based on what they believe it may take to ensure safe work. Participant [PWR31] links the successful implementation of the ‘zero harm’ OHS concept to an organisation that follows unspecified safety procedures. This participant is arguably postulating an ambition as opposed to a construct they are familiar with; evidenced by the first five words of the perception. Both perceptions appear to suggest an overarching ‘principle’ – i.e., operates safely or encourages zero harm, and if that is followed then a safe workplace will ensue:

“Complying with whatever requests, verbal or written, in terms of policies, procedures, operations, whatever, to operate in a safe manner, I guess.” [PWR20]

“I believe in an organisation following all the right procedures to ensure zero harm in the workforce.” [PWR31]

In contrast to the last two participants, the next participants focus on particular details that are required to ensure a safe workplace such as standards, processes and procedures. Specifically, there is the following perception that OHS standards ought to be in line with what is required. This is not clearly defined but the content of OHS standards is clearly perceived as the guide to determine what is required:

“Ensuring that health and safety standards are in line with what is required.” [PWR46]

An awareness of all associated management of the risk involved in the OHS paradigm is highlighted by participant [PWR50]. This reasoning appears premised by the reference to ‘processes and procedures’ that lead to risk compliance and a necessity for it to cover the ‘scope’. The use of the word ‘scope’ is possibly referring to the inclusion of all components of the OHS paradigm. To guarantee success in the OHS compliance endeavour it would appear to require the application of relevant rules, procedures and processes involved in managing OHS risk, in short, this perception appears to have all the hallmarks of a holistic approach to OHS compliance:

“To me OHS compliance means adhering to the processes and procedures to ensure compliance not only with the processes themselves but with the risk associated with the scope. To be compliant you must not only follow the rules but also be aware of all the risks and assess these accordingly.” [PWR50]

Other participants are more specific regarding what OHS-related instruments are best suited to achieving OHS compliance. Once again, we see not only reference to the non-specific processes or procedures but specific instruments are referenced, as are legislation, codes of practice and guidance notes and then the inclusion of the less specific ‘all that kind of stuff’ possibly referring to other related materials. Compliance with something that is simply referenced as required ‘at all levels’ by participant [PWR47]. The reference to ‘all levels’ appears to suggest that organisational OHS rules and legislative OHS rules emerge as OHS compliance. Alternatively, OHS compliance was described as a ‘literal interpretation’ of all the provisions of the OHS Act and OHS regulations by participant [PWR54]. While there is contextually little in common between the two perceptions the congruence evolves from the fact the both perceive a partial link between ‘OHS compliance’ and ‘OHS law’. Also, both participants provided other components such as ‘internal rules’ and ‘personal endeavour’, respectively:

“Processes or procedures that we are following or adhering to, internal work practices. I think it encompasses everything such as legislation, codes of practice and guidance notes, and all that kind of stuff.” [PWR19]

“I view compliance as compliance at all levels to the rules that we establish internally and also the laws that relate to OHS.” [PWR47]

“From my perspective, there is a literal interpretation which is compliance with all the sections of the Act and Regulations...however my view is basically ensure the health and welfare of the workforce.” [PWR54]

The O&M group appeared to provide much the same eclectic mix of perceptions that exceed the minimum legal compliance as did the PWR group. There were no discernible differences between the perceptions of the groups. The uniqueness of data appears to uncover the view that both groups offered a varied set of perceptions in their definition of OHS compliance. Neither group provided a settled view. The variety of definitions and the differences between definitions culminated into a valuable finding. This will be discussed further in the next chapter. The O&M group split their understanding between three distinct perception sets: legislation and business management, exceeding standards to generate a safe and healthy workplace, and embracing business policies, practices and processes that encourage OHS. For some participants, this was just part of managing a business, whether it be focussed on risk management or employment relationships:

“Well it’s kind of two-fold from my perspective as an employer. I believe it is meeting the requirements of the Act and Regulations, which I personally believe is the blue print for creating a safe workplace, and I consider that it’s just another component of business management that works towards improving outcomes for the business.” [O&M12]

“For me it is a partnership between employers and employee.” [O&M14]

“To me it means meeting or exceeding the standards set for a safe and healthy workplace.” [O&M27]

“It’s all about understanding the legislative framework, meeting or exceeding standards, it’s all about actions not words.” [O&M32]

Others within the O&M group mirrored the comments by PWR participants in recognising, first the importance of complying with legislation and regulations and secondly, the capacity to go beyond legislative requirements and to consider policies and processes that exceed standards:

“Compliance has many layers...regulatory requirements, company rules and other internal requirements.” [O&M58]

Participants within the O&M group provided slightly different positions to initiate policies and processes around OHS because of their leadership roles. In the next two participant perceptions, there is a notable change in language with respect to the use of ‘we’ by the second participant, while the first participant talks of ‘your’ workers as though he is speaking with a peer. These are clearly reflections by O&Ms about their capacity to influence policy and process.

Participant [O&M50] views OHS compliance to be the workers possessing an understanding of relevant business policies, practices and processes. The reference to ‘returning home the way they come to work’ and

adopting policies to ensure this happens appear to be admirable endeavours. Participant [O&M56] cited legislation, standards, processes, rules and doing what ‘we’ say, to encourage OHS. As participant [O&M56] is a general manager of health and safety there is a strong possibility that when they refer to ‘we’, they appear to be referring to those who work in the health and safety division. The reference to ‘legislation, business standards and other rules’ possibly reflects an effort by the participant to provide some of the relevant sources relied upon by the OHS division while in pursuit of broader OHS compliance:

“For me OHS compliance is a matter of setting business practices and processes in place to comply with the relevant laws in that area but then also ensuring that the policies are understood by workers within your organisation so that they return home the way they come to work...it’s a matter of adopting policies that also keep your workers safe.” [O&M50]

“My understanding is OHS compliance is doing what we say we are going to do for people...this includes legislation, business standards and other rules.” [O&M56]

4.2.4.2 Sub-category: Legislative compliance

Data in this sub-category contrast markedly with data in the previous sub-category because it reflected perceptions that *Legislative Compliance* alone is sufficient to be OHS compliant. Participant colloquy reveals that there were several differences between what constituted *Legislative Compliance*. Some participants only discussed requirements of the law without referencing specifically the OHS Act or OHS Regulations; these perceptions and more that are documented here. As with the previous sub-category, data came from participants classified as being in the PWR group but data from the O&M group was relatively ‘thin’. Thus, while the contrast in views was not clearly aligned with the particular role or responsibility that a participant held in their workplace, the data from PWR participants is considerably richer.

Data discussed in this first section of the sub-category analysis are all from participants classified as being within the PWR group. These participants perceive compliance to be limited to an ‘adherence to a legislative strategy’. The first two participants appear to suggest that OHS legislation alone ensures worker safety while at work. The third, fourth and fifth participants propose that OHS compliance is achieved by an employer when the employer, as far as is reasonably practicable provides a workplace that is safe.

The participants suggest that OHS is the employer responsibility and is premised on OHS *Legislative Requirements*. Participant [PWR3] does not mention the employer directly but it worth noting that in WA it is the employer that legally owes the duty of care premised by the words ‘so far as is reasonably practicable’. All five participants offer contextually different responses but a clear congruence is that all directly reference the perceived synergy of ‘OHS *Legislative Compliance* and a safe workplace’:

“Basically, compliance with the legislation and regulations to ensure workers health and safety while at work.” [PWR2]

“OHS compliance is providing a safe workplace as far as reasonably practical.” [PWR3]

“There are a minimum set of rules or legislation that we have to comply with to keep people safe at work.” [PWR4]

“Compliance is adhering to what has been written, or put together, by legislators.” [PWR11]

“OHS compliance to me means employers are to provide and maintain a working environment that is safe...so far as is reasonably practical thus complying with the legislation.” [PWR59]

Participant [PWR6], perhaps reflecting on their role as a risk specialist for a large mining group, discusses the statute law of this state. This may include other relevant law within the OHS legal paradigm: possibly referring to the twin statutes of the *Occupational Safety and Health Act 1984 (WA)* and the *Mine Safety Inspection Act 1994 (WA)*. Many professionals working to enhance the OHS endeavour in the mining industry have responsibilities that can come under both statutes. This may explain the broad reference to statute law:

“OHS compliance to me is about an organisation aligning itself with the statute law of the state.”
[PWR6]

Participant [PWR51] suggests that meeting the requirements of legislation, while first having reviewed the legislation, possibly to understand its requirements, will ensure OHS compliance. OHS compliance appears to be viewed as a personal endeavour:

“In my language OHS compliance to me is basically meeting the requirements of the legislation as long as you’ve reviewed what the legislation states.” [PWR51]

Participant [PWR40] suggests that by ensuring relevant statutes are followed, and the competence and certification of those involved in high risk endeavours are checked, OHS compliance will be achieved. Worthy of noting is that a requirement of the OHS legislation is that competence and certification checks are made to ensure a safe workplace, so there was no need to split statutory requirements from competency checks. This participant may be emphasising a particular legislative requirement because of the importance of that requirement in their workplace:

“Relevant statutes need to be followed, competence and certification of crane drivers, riggers, dogmen and that sort of thing.” [PWR40]

Finally, a member of the O&M group that suggests that OHS compliance is firmly linked with *Legislative Compliance*. There appears to be a couple of elements to this perception:

“OHS compliance I think has a couple of elements to it, one is an interpretation of the law and statutes, you have to have knowledge of them, and two, you have to interpret them and form a strategy around them.” [O&M24]

The use of the word ‘strategy’ may suggest a tailoring of the legislation to adapt to a specific industry or sector OHS endeavour; alternatively, it could also mean a broader perspective of running a business.

4.2.4.3 Sub-category: Duty of Care

The *Duty of Care* and ‘consultation’ sub-categories evolved during the course of the analysis became super-themes.

As discussed in section 4.1 *Duty of Care* is one of the two super-themes that hold a common place throughout this research. ‘*Consultation*’ is the other super-theme. Both super-themes appear in the middle circle of the ‘Generating OHS Compliance Model’ is the representation created as a result of the research data. (See Figure 5.1) To avoid any confusion *Duty of Care* and *Consultation* will be referred to as sub-categories during the course of analysis.

The sub-category *Duty of Care* includes data demonstrating a degree of congruence between the PWR and O&M groups. For example, participant [PWR29] is an OHS professional and participant [O&M18] is a business owner. It is worth noting that participant [PWR29] refers to ‘our *Duty of Care* obligations’, and participant [O&M18] refers to the *Duty of Care* an employer has towards employees. This is an important perceived difference because the OHS professional participant who appears to view the *Duty of Care* requirement as an inclusive pursuit which suggests the OHS professional perceives the duty as something shared by all for the benefit of each other:

“When you say OHS compliance my first thoughts are organisational compliance to legislative frameworks meaning our duty of care obligation under the state-based health and safety legislation.” [PWR29]

Incisively, this business owner appeared to view the *Duty of Care* to be the responsibility the employer has for employees as opposed to the broader definition provided by participant [PWR29]:

“I understand compliance to mean the duty of care an employer has towards employees.” [O&M18]

While this is only a small category in terms of data from the entire data set, it is important because it suggests a broad ‘duty of care’ responsibility without the specific detail of how that responsibility is achieved. The [O&M18] approach appears to rely solely on the employer duty holder to understand and ensure application of all relevant safety considerations involved in the productive pursuits of their organisation.

4.2.4.4 Sub-category: Consultation

The final sub-category *Consultation* indicates there is some commonality across the traditional trade union and employer divide when it comes to the power of *Consultation* within the OHS compliance paradigm. As will be discussed further in the next chapter, recent changes to OHS law heralding the Work Health Safety Act have added a new dimension to the requirement for *Consultation*. This new dimension translates to a broader horizontal and vertical *Consultation* regulatory requirement. This is captured in the comments of participant [O&M58]. First, however, it is worthwhile noting the similarity in comments from participants classified as O&M with those who are PWR. For example, the quotation below is from a small business operator who emphasises just how important *Consultation* and cooperation is to the ownership of OHS compliance across the workforce:

“We all got together and talked it through and walked it through with everybody having a go at doing it that lead to the best way to do it.” [O&M12]

The views of participant [O&M12] are closely aligned with those of a trade union representative who clearly values the OHS *Consultation* mechanism for both members of the union and the employers of the members:

“It’s something that we value...in our discussions with our members we always emphasise the importance of OHS and underline the need for the employers of our members to be mindful of that and adhere to the laws to ensure a safe and healthy workplace.” [PWR46]

While other participants provide views along similar lines to those presented above, one participant [O&M58] added further detail by distinguishing between horizontal and vertical *Consultation*. This helps to illustrate that the type of *Consultation* envisaged in the Work Health Safety Act appears to resonate with the

language and understanding of at least one participant. The ‘top down’ approach is consistent with vertical *Consultation* while ‘constantly talked about’ appears to indicate horizontal *Consultation*:

“It’s certainly one of my priorities given to me and my manager and obviously to him from the general manager...it’s definitely driven from the top down and constantly talked about.” [O&M58]

4.3 Theme Two: Management Commitment

The second overarching theme concerns Management Commitment. In broad terms, this theme contains categories and sub-categories that describe issues and actions where it appears that management has some level of capacity and discretion to influence OHS practice. The three main categories that capture this aspect of participants’ perceptions are:

- OHS Leadership
- Workplace Culture
- Industry Best Practice.

There are ten sub-categories contained within these three categories, some of which contain distinct elements reflecting participants’ specific contexts and experiences. The analysis begins with the first 5. The data in this category suggest that it is clear to participants of both the PWR and O&M groups that safety leadership is about what you do, how you act, what message you send to others, not what title you held. The data inform us that everyone at the workplace is, or ought to be, an OHS leader. The ‘OHS leadership’ category has four sub-categories as illustrated in Figure 4-4.

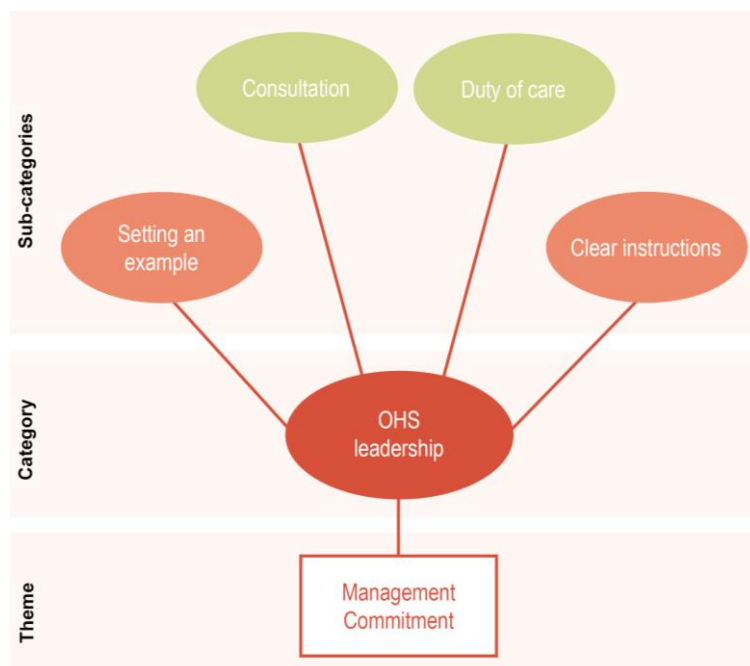


Figure 4-4: Illustration of sub-categories in the category OHS leadership

4.3.1.1 Sub-category: Setting an Example

This sub category reveals perceptions covered in a range of data relevant to ‘OHS example setting’. There are three distinct elements to the data in this sub-category: ‘motivation and reputation’, ‘management/worker divide’ and examples of ‘leading by example’.

It can be noted from the three comments below that there are differences between them which demonstrates the importance of workplace context and dynamics for understanding participants’ insights. For example, one participant appears to believe that the threat of legal proceedings is a key motivator for managers, while others draw links between motivators, such as individual prudence and organisational reputation. There is also some suggestion in the final quotation that the size of an organisation is linked with reputation. This participant reflects on experience working in smaller organisations, while emphasising that his current employer is a large organisation with a commensurate vested interest in reputation:

“What factors encourage it I think is the threat of being exposed to legal proceedings...particularly the individuals in management” [O&M5]

“For me personally I just try to operate by example.” [PWR20]

“Pretty good I would say...I have worked in quite a few organisations and in a company as large as this one obviously has a vested interest in reputation and sending people home safely.” [O&M58]

The second of the three elements relates to the commonly perceived ‘management/worker divide’ in OHS issues. Participant [O&M18] perceives that the management team in his/her organisation do not make themselves fully aware of what the job entails in the field. Setting a good OHS example fails because of the cultural divide between what management doesn’t know about the hazards faced by workers in the field and what they ought to know to keep those workers safe. Participant [PWR4] would like management to leave the confines of their offices to mentor and provide leadership at the coal face. Both perceptions emphasise a management/worker divide. Contextually the difference lies in the perceived facets of management. Participant [O&M18] suggests cultural differences between management’s approach to OHS and what is practised by the workers in the field, while participant [PWR4] evidences a general lack of management oversight and a lack of management leadership of the OHS endeavour:

“I would say there is definitely a gap between the culture of the management team and what actually happens out in the field.” [O&M18]

“Instead of sitting in a big castle telling people what they think they should be doing they should be getting out there and mentoring and providing leadership.” [PWR4]

The final element to *Setting an Example* is that of ‘leading by example’. As with the first and second elements in this category the contributing participants come from both the O&M and PWR groups. The data suggest that leading by example may be linked with different rationales and causes. For example, it might be linked to pressure from senior management ‘to do the right thing’. However, it can also relate to actions and experiences of those who are not in formal leadership positions but who choose to embody their ideas of good OHS practice in their individual actions, or can be more simply a reflection of past success. Thus, the clear link between these data is the focus ‘leading by example’ but the key insight is that this approach does not always stem from deliberate actions from those in formal leadership positions:

“I think for our organisation there is pressure to be seen to be doing the right thing, setting the example, and I think that to some extent this leads to encouraging compliance.” [O&M10]

“Relating back to my old employer, first of all leading by example...I tried to impress upon the organisation compliance with the legislation and the strategy I used...to be the most successful part of the whole process was communication.” [PWR11]

“I would think that organisational commitment plays a huge role in ensuring that everybody at a workplace focuses on safety from the time they come to work until the time they leave work at the end of day.” [PWR1]

Across all responses in the sub-category *Setting an Example* there exists an equal number of participants from both stakeholder groups. Both groups equally expressed both positive and negative perceptions of OHS example setting.

4.3.1.2 Sub-category: Clear Instructions

The second sub-category in the *OHS Leadership* category is *Clear Instructions*. A distinguishing characteristic of data in this sub-category is that only the O&M stakeholder group offered perceptions on *Clear Instructions*. Clearly workplace leaders are aware of the OHS success that can be achieved by providing *Clear Instructions*. Two key elements were central to this sub-category: ‘keep instruction and policy easy to understand’, and ‘take a practical approach to educate OHS requirements’.

The first element in this sub-category is demonstrated by one participant who emphasises the necessity of explaining OHS goals using language that the workforce can understand. These data suggest that poor clarity of expression does not fit with management’s overall goal of encouraging or enforcing OHS. This first response is contrary to the more positive responses provided by the balance of the O&M group in this sub-category. The other responses highlight leadership and internal and online safety training as providing the workforce with clear and valuable safety related instruction:

“I would say that we have a management team that are trying to enforce it but we have a workforce that doesn’t understand properly because of the way it is communicated.” [O&M17]

Contrary to [O&M17]’s view, most data reflect discussion of successful methods for providing *Clear Instructions*. Particularly, methods that were delivered through programmes that educate the workforce, keep instruction and policy easy to understand and take an on-line learning approach to educate about OHS requirements. Participant [O&M9] uses the fine-tooth comb analogy for describing his efforts to provide important advice to operational colleagues. This suggests that advice that is communicated by breaking down tasks into clear bite size steps and explaining risk ratings and so forth is preferred:

“The successful thing that I have done was to get all the operational people together and go through and identify what their tasks are and really going through with a fine-tooth comb risk ratings etc.” [O&M9]

The *Clear Instruction* framework appears to include some unique strategies. It can involve giving people knowledge through in-house and external safety training, as well as providing feedback and systematic communications about the importance of OHS from the uppermost levels of an organisation. It is worth noting that *Consultation* is a requirement of the employer duty of care and feeding back relevant information

fits in well with the legal requirements for *Consultation* and the requisite for timely and detailed responses to concerns.

“Continuing to give people knowledge about what they are doing, keeping them up to date and then feeding back the actions that evolve from their concerns.” [O&M47]

“We implemented an on-line training system which covered manual handling, how to report incidents and accidents and other processes...that’s probably when it started to come to the awareness of everyone.” [O&M50]

“The advent of a new chief executive with a new vision on safety was very important...he put safety first and foremost in any conversation...he set the example and pushed it down right to the people at ground level...he organised dedicated training interventions for various levels of employee with the presence of the executive team and others leaders.” [O&M24]

4.3.1.3 Sub-category: Consultation

Data in the third sub-category suggest that *Consultation* plays an important role according to both the management and worker-related stakeholder groups. *Consultation* is not only driven by recognised leaders of a company but also by the rank and file employees. This sub-category therefore has some similarities with the sub-category of *Consultation* discussed in the first overarching theme of OHS Law. The difference with data in the theme of Management Commitment relates to methods of *Consultation*, rather than the outcomes of a consultative approach. The O&M group participants provide perceptions that relate to their successful leadership of *Consultation* and communication strategies. Perceptions in the PWR group range from sharing information through to education. This eclectic positional mix is evidence of the richness of the data.

The links between leadership and consultative practices are demonstrated through experiences, such as having successful OHS endeavours or, alternatively, failures recorded on a manager’s work performance review or audited through the systematic collection of anonymous survey data. These strategies demonstrate that leadership on implementing such overt measures clearly plays an important role in the safety leadership endeavour. The safety culture anonymous survey strategy was viewed as particularly useful because it provides an approach which combines a form of *Consultation* with anonymity. This would encourage feedback on what respondents want to say about their organisation’s approach to OHS without fear of reprisal. This was a unique approach within the context of this study:

“I think having safety and health representatives and encouraging managers to support them and to place the duties and functions of the SHRs on their work performance review.” [PWR2]

“We recently rolled out a corporate strategy called a safety culture survey...the strategy was an anonymous survey which asked key questions of employees and encouraged their feedback on issues.” [PWR30]

Open and frequent communication is a distinctive but relatively minor element of this category and is captured by data from three participants. The first perception is particularly interesting because of the reference to open communication channels. Two-way communication is encouraged in the participant’s organisation. A similar approach is evident in data from the two other participants. What appears to be held in high regard is a consultative/communicative approach that has been built from years of experience.

‘Explaining what you want and providing others the opportunity to suggest their own solutions’ is, holistically speaking, ‘OHS by walking, talking and listening’.

“We openly share information with all of our staff and there are open communication channels for staff to report any issues that come to their notice...I think our best tools are sharing of information and education.” [PWR1]

“In my experience, and I have been in OHS for a long time now, about the fifteen years. OHS by walking around is the best approach...by that I mean communicating with people as frequently as possible, explaining what you want from them and giving them the opportunity to put forward what they think the solutions are.” [PWR6]

“My strategy that I have tried and tested is one step at a time...I like to get everyone’s involvement, get people working as a team...collaboratively, have everyone’s opinion, discuss the issues and seek broad agreement with pending resolutions.” [PWR8]

A second minor element evolved from participants, notably from both groups in this category, who discussed the importance of ‘face-to-face’, or one-on-one communication/consultation strategy. In a lexical comparison to participant [PWR8] – participant [PWR16] perceives a one-on-one relational communication and contextualisation of the OHS objective works best for them. Participant [O&M17] appears to be in congruence with participant [PWR16] with a reference to a face-to-face or one-on-one communication strategy being the best strategy:

“For me it is about face-to-face relational communication and relational contextualisation of the OHS objectives.” [PWR16]

“Probably my best strategy is to sit down and talk to people face- to-face.” [O&M17]

Finally, from the PWR group was a simple, but clearly effective communication strategy. It would appear from these comments that the best way to achieve good safety results is to consult with the operational people. This perception appears to be alluding to *Consultation* with workers at their point of work. This is referenced by the use of the words ‘going and talking to people’ as opposed to collecting workers in a training facility or office:

“I think the best way that I have found to get results is actually going and talking to people who are involved in the day-to-day operations.” [PWR52]

The O&M group, not unexpectedly, provided ideas that appeared to relate more closely to their own successful organisational *Consultation* and communication strategies. The data suggest some congruence between the two groups with regard to the perceived importance of links between leadership and *Consultation*. Both groups provided examples of a willingness to walk and talk or engage with colleagues at various other levels on OHS issues.

Reflecting the relatively different roles and access to resources, the links between leadership and consultation among this group included communication strategies such as monthly newsletters, monthly joint activities and simply showing an interest in individual well-being:

“I guess for me in the community care sector it is about a leader showing an interest in individuals and their well-being...it’s about putting in place communication strategies like monthly newsletters and monthly activities that focus on a health topic and a safety topic.” [O&M10]

“The consultation and communication with the workforce.” [O&M32]

“Probably the main one is engagement with the guys on the floor so there’s lots of noise around safety...discussing any issues with them.” [O&M58]

An alternative approach was to embrace the strategy of Job Safety Analysis (JSA). One O&M participant felt that this process encourages consultation about the resolution of safety matters or issues, often including both management and workers. The JSA is a type of safety risk management strategy completed by a group of workers involved in a particular workplace endeavour. Curiously, participant [O&M18] was the only participant to perceive that the JSA, as a communication strategy, was an effective way of ensuring OHS compliance:

“Implementation of JSAs that’s the strategy for ensuring compliance.” [O&M18]

Participant [O&M32] is the CEO of a large organisation who views OHS success as predicated upon the level of *Consultation* and communication with the workforce. Using the two descriptors of *Consultation* and communication may suggest that this CEO identifies the words mean different things. Participant [O&M58] refers to ‘engagement’, as opposed to *Consultation* and communication’, with the workforce so as to create a lot of noise around safety. Common definitions of ‘engagement’ include ‘to win over’ or to ‘take part’. To win over or to take part would require ‘*Consultation* and/or communication with those whom you are attempting to engage. The reference by participant [O&M58] to a lot of ‘noise’ around safety appears to reinforce the definition of ‘engagement’ as a strategy that is often pursued and encompasses a great deal of *Consultation* and communication’ thus keeping safety at the forefront of workers’ minds. This strategy would ensure that inadvertence to the hazardous nature of workplaces is suppressed.

4.3.1.4 Sub-category: Duty of Care

The final sub-category in this group is *Duty of Care*. Again, this sub-category label was used in the first theme but is reintroduced here because of its strong links with OHS leadership. The overlaps between particular sub-categories such as *Duty of Care* and *Consultation* and overarching themes is an aspect of the data that is discussed further in the concluding section of this chapter, where links between various parts of the data are fully explored.

Noteworthy, is that there was only one participant from the PWR group whose comments could be attributed to this category. The view expressed by this participant was that the *Duty of Care* policy is a good strategy for looking after mates. The O&M participants were not that different in their understanding of the *Duty of Care*. A *Duty of Care* was viewed as a *Due Diligence* strategy by one participant and a strategy to ‘alert people to hazards’ by the other. All three participants appeared to view a *Duty of Care* as something owed by one person to another.

The following perception is tantamount to that of a worker’s *Duty of Care* legal requirement to take reasonable care of themselves and those working around them while also endorsing the added component of the Australian cultural ethos of ‘mateship’:

“A policy that encourages everyone at all levels to look after their mates and to actually step in if necessary.” [PWR31]

In comparison, we find that participant [O&M5] takes the view that a *Duty of Care* means alerting people to hazards that they perceive. Participant [O&M7] refers to the *Duty of Care* in terms of *Due Diligence* awareness. The application of *Due Diligence* appears to have been a good strategy for his company. Participant [O&M7] was one of two participants who perceived *Due Diligence* as a construct of the *Duty of Care* requirement. When he uses the words ‘what they need to have in place’ it is an apparent reference to OHS *Duty of Care* responsibilities. While it is clear that both groups have a different way of expressing *Duty of Care*, the individual perceptions offer a commonality of its meaning and some positive or proactive responsibility that must be undertaken:

“I would see my duty of care strategy as simply alerting people to any hazards that I perceive.”
[O&M5]

“I think due diligence awareness for supervisors and managers and what they need to have in place has been the best strategy to date.” [O&M7]

The next participant likes the concept of *Due Diligence* because of its expectation that the duty holder is to be pro-active in the endeavour. The participant may be relying on provisions like section 27(5) of the Work, Health and Safety Act (Cth) which requires duty holders to be aware of, and act upon, emerging issues, or be ‘ahead of the game’.

“I like the due diligence stuff that says it’s your duty to be ahead of the game, it’s your duty to be aware of what’s needed in your particular business, what are the hazards, what are the learnings from other industries, other companies in your industry.” [O&M47]

4.3.1 Category: Workplace Culture

The second category within the theme of Management Commitment is that of Workplace Culture, which includes two sub categories, *New Employees* and *Proactive Approach*. Both participant groups offered perceptions about *New Employees*, which ranged from the failure of government to give OHS more visibility, to an organisation’s capacity to apply more checks on backgrounds of prospective employees. Such checks are arguably required to ensure that *New Employees* are risk aware and not risk takers in the workplace. See Chapter Five for further discussion on *New Employees*.

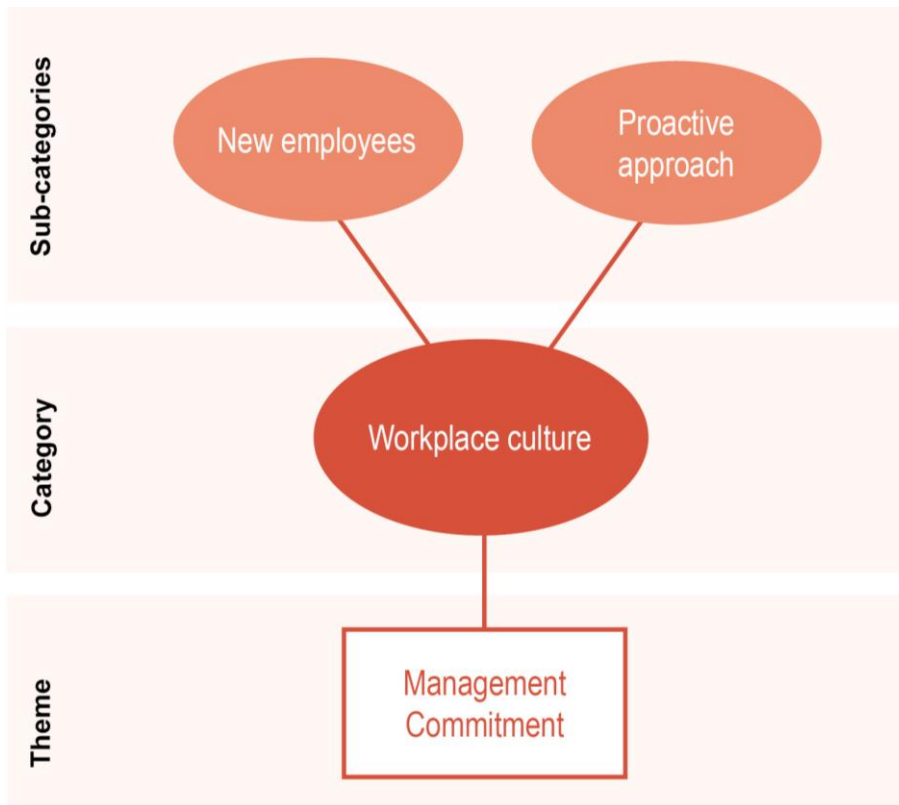


Figure 4-5: Illustration of sub-categories from the category Workplace Culture

4.3.2.1 Sub-category: New Employees

Several participants expressed concerns that relate to *New Employees*. The data suggest that many *New Employees* are hired and the employing company may have no idea of how committed to OHS the new employee is. Reference to *New Employees* appeared to encompass the extended definition of employee that can include contractors or sub-contractors.

Casual staff, temporary staff, labour hire workers, apprentices and trainees, outworkers and students on work experience can also fit the ‘new employee’ definition. Participants suggest that the level of OHS commitment in the workplace can be generally well established by those already working there but this may not be the case with a new employee’s level of commitment to OHS. Interestingly, both the PWR and O&M group participants provide congruent perceptions in this sub-category. Both groups generally perceived *New Employees*, on occasion, to be problematic to the established level of OHS commitment.

Three key elements within this sub-category are:

- health and safety awareness
- quality employees, and
- casuals and seasonal workers.

The first element reflects data relevant to an expressed desire to employ people with a ‘health and safety awareness’. It was argued that there is a requirement to get the OHS message out to all people so that employers can be sure of employing people who are OHS risk informed. Whether that message is one of

OHS law or safety culture awareness does not matter as the two are intrinsically linked within the OHS paradigm. To have one without the other would arguably not lead to an organisation committed to the OHS endeavour. For example, participant [PWR1] refers to ‘coming across people’ which suggests that some *New Employees* are not OHS aware. The reference to ‘a sad reflection’ suggests there is evidence that OHS law has failed to reach some people in the workplace. Similarly, participant [PWR54] is keen to ensure that *New Employees* have an acceptable level of knowledge of OHS culture; at least enough to warrant that the new employee is not going to be a risk. [PWR54] is suggesting that access to workers’ compensation records is a way to ensure such a requirement:

“There needs to be much more focus on getting the message out, not just to employers but to all people...we come across people who have never heard of the Occupational Safety and Health Act and that’s a sad reflection when the law has now been in place since 1984.” [PWR1]

“I’m fairly keen on ensuring right from the start when we employ someone that they have a reasonable level of health and safety culture and they’re not going to be a risk...so if I could see an improvement it could be that the employer has access to safety and workers’ compensation records.” [PWR54]

A slightly different element within the sub-category of *New Employees* relates to participants’ arguments that ‘quality employees’ have some acceptable level of OHS education and training, possibly provided by a previous employer, which may determine their level of commitment to OHS in any new organisation. In common with the first element, this argument suggests that someone other than the new employer is responsible for ensuring OHS commitment and competency training are present, although in this case it lies with another employer:

“It’s the quality of the people and the amount of education and training that they have had in previous roles and the competencies of those people to apply for new roles.” [O&M34]

Other approaches to ensuring quality employees were discussed by participants and included contractor vetting and approval processes and recruitment criteria:

“We have a fairly active contractor vetting and approval process so we don’t aim to have them on site unless they have been vetted and can demonstrate...safety performance.” [O&M47]

“Getting good safety trades and operators is the key issue for us.” [O&M13]

A distinctive perspective was provided by two participants working in the agriculture industry. This industry has peak employment levels, particularly when it is time for seeding or harvest. Harvest often requires a raft of *New Employees*. The *New Employees* consist of ‘part-time, casual and seasonal workers’. Ostensibly, there is an eagerness for *New Employees* to prove themselves as valuable employees. But this eagerness is not always conducive to good OHS practice. The first participant is a senior manager for a company whose core business revolves around the grain harvesting seasons. He highlights the eagerness by some *New Employees* to get the job done by whatever means, possibly to ensure a potential continuing employment relationship. Participant [PWR14] was a training coordinator who also makes reference to harvest time. They must ensure that 1500 temporary staff are safety and risk aware. Clearly, some of the casual staff and seasonal workers will be working in remote areas which appears to attract extra OHS concerns:

“When the harvest is on people just want to serve and part of serving means I’ll get it done right now which is not always the best way to do it.” [O&M24]

“We go through harvest whereby we employ 1500 staff on a casual basis...to train them on occupational health and safety and also allow them to be on our sites where they are quite isolated is fraught with problems.” [PWR14]

4.3.2.2 Sub-category: Proactive Approach

The second sub-category is that of a *Proactive Approach*. This sub-category contains three relatively complementary elements. The first contains perceptions about the ‘proactive’ OHS influence of bigger companies. These perceptions were linked to an element of negative perceptions about the ‘regressive influence of OHS non-compliant smaller contractors’. The third element is a ‘proactive initiative’.

Several participants suggest that there is a causal relationship between working for big companies and a greater commitment to OHS compliance. Bigger companies like those listed by participants set an OHS example and expect it to be followed by contractors coming onto their sites. Participant [O&M21] begins the *Proactive Approach* element by referencing two large mining organisations and their drive to ensure contracting organisations possess a high degree of commitment to OHS before being allowed to work on their sites. Participant [PWR23] informs us that a large mining company that he is associated with appears to proactively keep safety in people’s minds, which includes contractors, using various communication techniques:

“I’d say that the companies that we do business with like two large mining organisations are very proactive in OHS and that drives us to become more proactive.” [O&M21]

“On a mining contract with a large mining company at the start of every meeting you have what’s called a safety moment...somebody will talk about something that they have noticed in the preceding couple of days...I think this keeps health and safety in people’s minds.” [PWR23]

Linked with the relatively positive perceptions of OHS for large organisations, some participants also appear to credit a safety commitment as inherited from customer organisations via an expectation by the customer that OHS compliance will be proactively adhered to. As a group, these perceptions suggest that organisations committed to OHS can and do have a positive influence on other organisations that work for or with them:

“We are fundamentally an IT outsource business...typically that involves our staff working on site in our customers’ organisations and we therefore inherit their safety systems where our staff have to comply.” [O&M26]

“We have a huge demand from our clients to prove health and safety compliance...and it’s a big work load on us.” [PWR54]

The four previous participants highlighted the role of OHS encouragement as a factor driven by the principal organisation the smaller firms contract to. A different perspective of the principal organisation is provided below. This perspective appears to evolve from an alternative view of how the principal/contractor relationship can also hinder OHS practice.

The following two participants clearly perceive that external influences like small business contractors, third party contractors and visitors who are not as proactive in OHS and this can adversely affect their organisational approach to OHS. It is difficult to identify the negative view of the status quo presented next as opposed to the more positive view previously expressed above. It is evident that some organisations don't scrutinise who is coming onto their sites to work or visit. If scrutiny were applied to such visitation then a lack of OHS commitment could be determined before workers are allowed on-site, and non-compliant organisations would not be permitted to adversely threaten, influence or hinder a good OHS system:

"Having to work with other small business who don't have the same commitment...when you have different levels of commitment it can cause conflict in your own approach to OHS." [O&M12]

"Because we have such high compliance to OHS standards...the main issue is that we have third party contractors or visitors." [PWR30]

Finally, participant [PWR2] suggested that OHS vision and creativity if *proactively* progressed will lead to natural outcomes. The reference to natural outcomes suggests that if you take a *Proactive Approach* using a 'basic' technique which does not set out to stifle or extinguish people's OHS vision, integrity or creativity then a natural outcome, which appears to be an outcome that naturally evolves without external influence or manipulation, occurs:

"I suppose it's bringing OHS back down to basics...that we are not there to stifle people's integrity, vision or creativity...we're there to help things progress and come out naturally." [PWR2]

There were also several management participants who offered perceptions embracing a variance of organisational *proactive* initiatives. These ranged from winning the hearts and minds of employees to the cause, as opposed to dogmatically enforcing OHS rules or regulation. There is a link between the previous perception and the following three views. This link is evident but contextually different in that participant [PWR2] specifically informs us what behaviours to avoid in order to develop a natural OHS outcome. The next participants recommend proactively developing relationships at all levels of the organisation with the essential OHS cultural engagement between management and staff. Participant [O&M29] offers a top down safety transformation as an example of proactive OHS. Winning over the senior managers to the importance of OHS and then encouraging them to *proactively* direct accountability down the line is a perception of [O&M29]. The 'proactive initiative' element consisted of the following perceptions; each perception offer a contextually different initiative:

"Winning hearts and minds has probably been more successful over and above any added rules or regulations." [O&M26]

"What we have done in order to encourage OHS is develop good working relationships between managers and supervisors and staff...it has taken a lot of time and effort to get them engaged." [O&M28]

"We embarked on our safety transformation programme in August 2009 the focus at that point was around leadership...getting the commitment of our senior managers at the top of the organisation...driving accountability down the line." [O&M29]

Perceptions of OHS pro-activity were not just restricted to the management group. The following perception comes from a safety advisor. This participant appears to suggest that there are site managers and operators within his organisation who are *proactive* in their commitment to OHS and there are those who are not.

“We have strong operators in our business who drive safety at their sites...the stronger managers and operators help to run sites better than others in terms of compliance.” [PWR52]

Increasingly, it became clear from the participant perceptions offered above that *proactively* pursuing the OHS paradigm within an organisation can involve one person, more than one person, or everyone. It was also clear that ‘proactivity’ by one person, or many, in the pursuit of a valued OHS approach can embody organisational OHS cultural change.

4.3.2 Category: Successful OHS Strategies

As shown in Figure 4-6, Successful OHS Strategies encompassed two subcategories: ‘site-specific OHS strategies’ and *Education and Training*, each of which contains a range of key elements reflecting varying contexts and experiences. The first sub-category of site-specific strategies, reflected discussions of strategies ‘developed from injuries (post incident/accident). The ‘threat of pecuniary penalty’, to a ‘combination of approaches,’ and a final perception in this category is unique to this pursuit.

The second category encompassed *Education and Training*. Both can be internal or external and is a requirement of law. Some participants do not say whether they are referring to internal or external OHS training but it matters not because both appear to subscribe to the OHS training matrix of individual employees. It is worth noting that each training or education perception harnesses a uniqueness in how the training is encouraged or achieved.



Figure 4-6: Illustration of sub-categories from the category ‘Successful OHS Strategies’

4.3.3.1 Sub-category: Site-Specific OHS Compliance Strategies

This sub-category was dominated with data from the O&M group compared with that provided by the PWR group. The first element, ‘strategies that evolved post incident or accident’ consists solely of data from the O&M group while the other elements include data from both groups of participants.

Strategies that ‘evolved post incident or accident’ can be characterised as reactive. While perceived as ‘successful’ they involved reactions to either incidents or near misses, as opposed to lead *Strategies* which evolve from the identification of a hazard before it causes harm:

“About two years ago, we had a couple of injuries at our warehouse...and rather than the old approach of blaming the worker...we actually re-engineered the process and provided lifting tables so that bags are at waist height and easy to lift off the pallet.” [O&M21]

“Look we do a lot of things but the best strategy I’ve seen is to encourage OHS compliance...after an incident...people start to reflect and it makes it more real for them they start complying more thoroughly with systems.” [O&M57]

Several *Strategies* were identified to avoid incidents and accidents, including strategies that encompass a threat. These *Strategies* are borne of the ‘stick’ approach to encourage OHS compliance as opposed to the ‘carrot’ approach. The stick approach enforces OHS compliance with threat and sanction while the carrot approach encourages OHS compliance with reward and/or appreciation. Forcing people to comply or developing fear of dismissal are highlighted as successful approaches within these data:

“I think my most successful strategy is forcing it to be done...in other words enforcing it, making it a formal policy and testing that policy from time to time.” [O&M33]

“I would say that if there has been an obvious breach of OHS law then there have been plenty of people sacked for that breach...I suppose it is a sensible strategy” [PWR40]

“I’m afraid sometimes I think it is the threat of penalty or the threat of law that does create the most movement.” [O&M46]

“I think in our organisation there is pressure to be seen to be doing the right thing setting the example.” [O&M10]

In contrast, other participants described incentives including a monetary reward for OHS compliance and making OHS requirements easier to understand:

“The most successful strategy that I have seen, and a lot of people disagree, has been an award for compliance; monetary or some other sort of incentive.” [O&M22]

“The best strategy I have seen...is making OHS easier for them.” [PWR53]

Other participants described approaches that encouraged motivation by referring to benchmarks evident in competitor practices or gaining recognition from client organisations. In these cases, there was an inter-organisation aspect indicating the motivational driving force:

“We quite often benchmark ourselves against our competitors within our industry.” [O&M29]

“On the positive side, most of our clients do recognise when we have made inroads or we are compliant with OHS...it’s acknowledged and therefore that in itself is also a driving force.” [PWR54]

A final group of *Strategies* described by participants are variants of the above-mentioned. These data highlight a combination of proactive and reactive approaches to safety which brings a conscious awareness of OHS to the workplace. This can involve, for example, a combination of best practice and adopting a risk-based methodology to encourage their organisation to adopt better OHS outcomes. This can also involve a behavioural safety initiative which encompassed a peer-to-peer assessment component to bring about change resulting in long term success:

“I would regard it as being conscious of their obligations with a combination of proactive and reactive approaches to safety.” [O&M5]

“It is about best practice and adopting a risk-based methodology.” [PWR8]

“We have had success for over ten years now with a behavioural safety initiative which took it back down to peer-to-peer assessment type understanding of safe behaviours.” [O&M47]

Finally, there was this ostensibly forthright perception of a site-specific OHS *Strategy* that is important to this business owner:

“The main factor for me, as the owner of the business, is simply that I don’t want any of my employees to be hurt.” [O&M18]

Site specific OHS compliance *Strategies* that encourage OHS compliance appear to come in many forms. A reliance on lag events, a reliance on lead strategies, or a combination of both appear to motivate people to embrace OHS compliance at various levels. Concern for the welfare of employees also acted as a motivator.

4.3.3.2 Sub-category: Education and Training

Despite the fact that it is a requirement of law that information, instruction, and training is provided by the employer to employees on OHS practices and requirements, only five participants mentioned *Education and Training*. Perceptions of the participants ranged from the narrow response of ‘regular training’ [PWR23], to a more holistic expression provided by participant [PWR51], who is a health and safety coordinator.

Given the regulatory importance of *Education and Training*, each of the five responses is discussed in detail, and is also discussed further in the following chapter. We begin with the perception of an OHS inspector who suggests that if a balanced approach is taken towards education and enforcement the result is generally positive:

“As an inspector, I’ve got the benefit that I’m allowed to educate as well...I find that taking a balanced approach between education and enforcement works really well.” [PWR3]

Workplace safety training linked to the relevant training matrix of an employee is one way of meeting the current legal requirement of Section 19(1)(c) of the *Occupational Safety and Health Act (1984)* WA. The requirements of the section are discussed in more detail in Chapter 5. Participant [PWR23] perceived ‘regular training’ to be a succinct and successful OHS strategy. Participant [O&M34] suggests that the quality of people, combined with their level of *Education and Training*, results in good OHS outcomes. This perception links quality people with the amount of *Education and Training* they appear to have had with other organisations, or, the possibly in previous roles within the same organisation:

“It’s the quality of the people and the amount of education and training that they have had in previous roles and the competencies of those people.” [O&M34]

The next participant perceives it was rules shared with workers that encouraged them to think about OHS more holistically:

“We developed and introduced about nine golden safety rules...people had to consider plant design, hazards, training and competencies.” [O&M35]

Education and Training that is highlighted by the next participant as improving OHS outcomes through better awareness. Specifically, the example of an online training system was considered as a way to identify hazards in manual handling techniques:

“It has probably been through education and training...we implemented an online OHS training system which covered manual handling, how to report incidents and accidents...that’s probably when it started to come to the awareness of everyone.” [O&M50]

The perception of participant [PWR51] evidenced a rather unique educational approach that included the traumatic endeavour of sharing and discussing pictures of OHS incidents with the workforce, while at the same time discussing in house practices that were not encouraging OHS compliance. Participant [PWR51]

is suggesting that educational success emerged from combining pictures of thought provoking safety failures with site specific OHS bad practices:

“Educating the workforce using pictures of incidents that have happened...letting them know if they are not doing the right thing...so education is a big thing.” [PWR51]

4.4 Theme three: Management Deficiencies

The third overarching theme is that of *Management Deficiencies*, which contains two categories of data: ‘Practices that Hinder OHS’ and ‘Incident Causes and Investigation’. In contrast with the second theme of *Management Commitment*, the categories and sub-categories in this section reflect discussions of various issues related to omissions or counter-productive actions that are perceived to be within ‘management’s’ capacity to influence or change. The first category, ‘Practices that hinder OHS’ relies largely on data drawn from the first five study questions (see section 3.4.1), while the concluding category titled ‘Incident causes and investigation’ is comprised mainly of data generated from participants’ comments about the scenario presented in the form of a vignette. The third, and last, theme begins by exploring data within the category of ‘Practices that hinder OHS’.

4.4.1 Category: Practices that Hinder OHS

The data revealed that while many managers perceived they were committed to the OHS process, this commitment was not always shared by the PWR group. The third theme of *Management Deficiencies* captured the perception of those participants who highlighted management failures that hinder the successful implementation of OHS in the workplace. For the reasons identified above the subsequent sub-categories focus on the negative aspects of OHS.

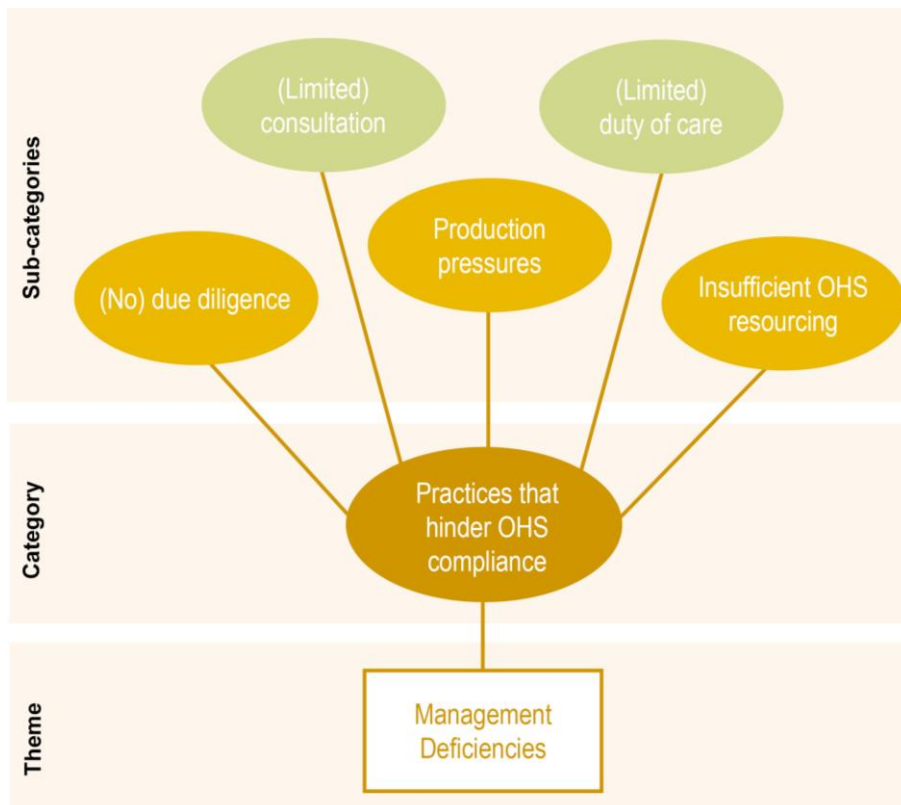


Figure 4-7: Illustration of sub-categories from the category Practices that hinder occupational health and safety

4.4.1.1 Sub-category: Limited Consultation

What became evident from the categories established in the Management Commitment theme is that consultation plays an important role. When *Consultation* is not carried out effectively then shortfalls in the OHS management system will prevail. The central element in this category was *Consultation* with the regulator. Five participants, two from the O&M group and three from the PWR group, made contributions to this element. Although the total amount of data in this sub-category is relatively small, it contains some useful insights and contrasts that were not revealed in other parts of the analysis, where positive and frequent consultation was extolled.

Perceptions from members of the PWR participant group range from *Consultation* being replaced with a strategy of ‘banging the big stick’ to the perceived consultative vacuum when new technology is introduced. The O&M group appeared to focus their perceptions on insufficient consultation by government and silos operating within the organisational safety paradigm. The O&M group appears to find themselves in need of more government consultation/assistance when it comes to the changing nature of the legislative framework.

Recognising a need for regulation to set benchmarks while also suggesting that to achieve those benchmarks there must be an understanding of the requirement by all who have the regulatory duty to comply is the perception of the first participant; this is evidenced by the use of the word ‘we’ by participant [PWR4]. General understanding is thought to be passed on through a consultative and inclusive process, a process which appears to be lacking according to participant [O&M22]. A lack of knowledge regarding legal updates referenced by participant [O&M22] may be due to internal or external factors. External factors are probably related to a lack of consultation by the regulator with those organisations that are expected to comply with ever changing legal requirements. Participant [O&M32] offers a perception in this element regarding the dynamic nature of the changing legislative framework. Also, the controllers of safety education and safety implementation don’t appear to consult with each other:

“I really get annoyed when some people feel that to get the OHS message across they just bang the big stick and they say if you don’t like this you can be taken to court and put in jail and they think the job’s done.” [PWR4]

“Obviously, we need OHS law to set benchmarks but we need to get that law understood and complied with.” [PWR8]

“Something that hinders would be a lack of knowledge of the legal updates.” [O&M22]

“First of all it’s just the changing nature of the legislative framework...there are masters who drive the education agenda and then there are masters who drive the safety agenda and unfortunately those two separate masters are incommunicado.” [O&M32]

An interesting insight came from one of the PWR participants who perceives that changes in technology do not always come with new regulations and procedures. This particular participant perceives it is challenging to maintain a high safety standard without the relevant information or consultation from the supplier of the technology:

“I think it’s an industry that’s often had a lot of changes in technology and that’s a bit of a challenge as I don’t think it always comes with new OHS regulations and procedures along with it.” [PWR25]

4.4.1.2 Sub-category: Limited Duty of Care

The importance of perceptions and practices surrounding a *Duty of Care* is evident in all three overarching themes. In this sub-category, the data reflect perceptions of a lack of care, thus a *Limited Duty of Care*, and the implications this holds for OHS practices. This is illustrated by one participant's discussion of a workplace dilemma which evidences a lack of care by a supervisor. After a workplace accident, a supervisor appears to ignore their *Duty of Care* to report the accident with the perceived intention of avoiding a problem. This failure to report may be a result of the required paperwork to report the injury and document an investigation which may be seen as time consuming and problematic. Many safety systems are paper driven:

"I actually had a scenario this morning where someone had a tight back yesterday afternoon while they were lifting a 25kg bucket of material and the supervisor decided not to report it and they put him on light duties...I guess they were trying to avoid a problem." [O&M58]

Participant [PWR3] is a regulatory inspector who perceives that 95 per cent of small business operators have little understanding of the central tenet of the OHS law's duty of care paradigm:

"95% of our businesses are small and are not aware of a lot of the requirements under OHS...they have no idea what the law is, or how to read the law, or what it means." [PWR3]

The data in this sub-category are complementary to, but distinguishable from, those included in the first and second themes. The significance of this is discussed further in the conclusion to this chapter and in the discussion in the following chapter.

4.4.1.3 Sub-category: Due Diligence

Two very different organisational paradigms are brought together by participant data in this sub-category. Firstly, the *Due Diligence* category exposed the element of 'more needs to be done'. It contains data that relates to the OHS efforts of supervisors and the workers but is critical of management as following 'the path of least resistance' when it comes to change. Resistance to change is contrary to the *Due Diligence* expectation of responsible people to turn their minds to emerging OHS issues. The breadth of the duty of *Due Diligence* is intended to capture every business activity including monitoring the OHS system.

Secondly, the data reveal the story of participant [PWR46], a union organiser, who is referring to their union's approach to safety. Initially, they appear to offer restricted approval for OHS awareness but then they contradict this.

"Most employees follow procedures to identify hazards and participate in safety programmes, supervisors probably tend to ensure work is completed safely, however their monitoring is probably a little low...and on the management side of the house they tend to follow the path of least resistance when trying to implement some of the change." [O&M35]

"I would say that it is not too bad but a lot of work needs to be done, I think that at the moment there's a lack of proper processes...there are some holes there, so I think that it's that it needs significant improvement in terms of getting things together in a structured way." [PWR46]

Finally, there appears to be a link between the need for *Due Diligence* and the perceived risk profile of an organisation's work activities. While the primary duty of an organisation is to ensure persons are not put at

risk, this cannot be achieved without an accurate account of the level of OHS risk within an organisation. The next participant demonstrates this concern:

“I think that there is a perception in our organisation that much of the work we do is relatively low risk.” [O&M26]

4.4.1.4 Sub-category: Insufficient OHS Resourcing

Participants from both groups contributed to the sub-category of *Insufficient OHS Resourcing*. Arguably, a nation dominated by economic rationalisation often finds OHS under resourced, a view supported with data in this sub-category. While each perception in this category references OHS resourcing, each is contextually different. Participant [O&M35] points out that government funding is perpetually being reduced while there is an expectation that a high safety standard be maintained. This appears difficult, particularly with machinery that requires urgent replacement due to its age. Participant [O&M35] works for a relevantly high OHS risk government utility. Participant [PWR46] provides an excellent example of the OHS and cost conflict. It is worth considering the context of his concern first. For too long, the business case for investing in measures to ensure the health and safety of workers has been viewed in restrictive financial terms and based on inadequate and inherently biased data. The illustration participant [PWR46] provides is an example that shows that cost is considered more important than the potential risk of a worker suffering a serious injury. The last participant in this category, who also hails from the PWR group, appears to provide an example of serious under-funding of OHS in his organisation. The seriousness arises because the provision of training and the requirement of risk assessments are significant components of the statutory Duty of Care owed by employers:

“I suppose on the hindering side we have a government efficiency type scheme where over the next two to three years we have to reduce by 5% each year...years four and five we have another 1.5% chopped out and in the fifth year we’ll be dropping 8% so that’s a factor...age of plant and infrastructure is an important consideration, some of the plant is 70 or 80 years old.” [O&M35]

“I think what hinders OHS compliance is sometimes apathy and concern about financial cost...for instance there was an issue recently about hundreds of mugs purchased that were faulty, the handles were falling off and they were a significant burn risk and there was some push back about actually taking those mugs out of circulation immediately and getting them replaced because of the inconvenience of the cost.” [PWR46]

“Compliance would be capital in terms of money...funding, lack of resources in terms of man-power to actually do risk assessments and carry out training.” [PWR52]

4.4.1.5 Sub-category: Production Pressures

The sub-category of *Production Pressures* contains two key elements: ‘production before safety’ and ‘the mixed message’.

Putting ‘production before safety’ is an element that was apparent only in data from PWR participants and appears to have an adverse effect on proper OHS procedure being followed. The differences between the next three participants that make publication of their perceptions worthy is that participant [PWR40] premised his perception on ‘OHS being reasonable’ even given the reality of *Production Pressures*

influencing adherence to OHS procedures, whereas participant [PWR11] offers no such premise but appears to simply refer to the hindrance of production over safety. The congruence lies in the perception that most places suffer this perceived production prioritisation disillusionment. The next participant worked in the drilling industry at the time of interview. [PWR16] appears to suggest his employer is focused on daily drilling quotas (productivity) which he does not perceive to be conducive with good OHS practice.

“I’d describe it as pretty good under the circumstances...like most places I guess production pressures tend to influence closely the proper OHS procedures followed.” [PWR40]

“The biggest hindrance was and it is the same in most places today, is production over safety.” [PWR11]

“I think one of the big ones that hinder OHS compliance is operational objectives...this business needs to drill and to get a certain amount of production each day or shift.” [PWR16]

The data on the second element comes from the interview of an O&M group participant who works in the health care sector. Participant [O&M28] identifies a mixed message that exists between the expectation of a patient focused approach which is not reciprocated by management as staff appear to come second:

“We are a very patient-focused organisation which means we provide excellent care for our patients and staff come second.” [O&M28]

4.4.2 Category: Incident Investigation

The data for the second category of the theme Management Deficiencies were drawn solely from participant responses to the vignette. The qualifying category ‘Incident investigation’ represents participant perceptions that evolved from a scenario detailed in the vignette. Importantly, this category brought out perceptions that participants have developed from having to deal with similar events in their workplaces. The working background of many of the participants allowed sentiments to be premised on past experiences. The willingness of participants to share their experiences is evident in the data and reflected below. Not every participant was able to draw on their experience, and perceptions were often expressed as an opinion on what they feel is the case.

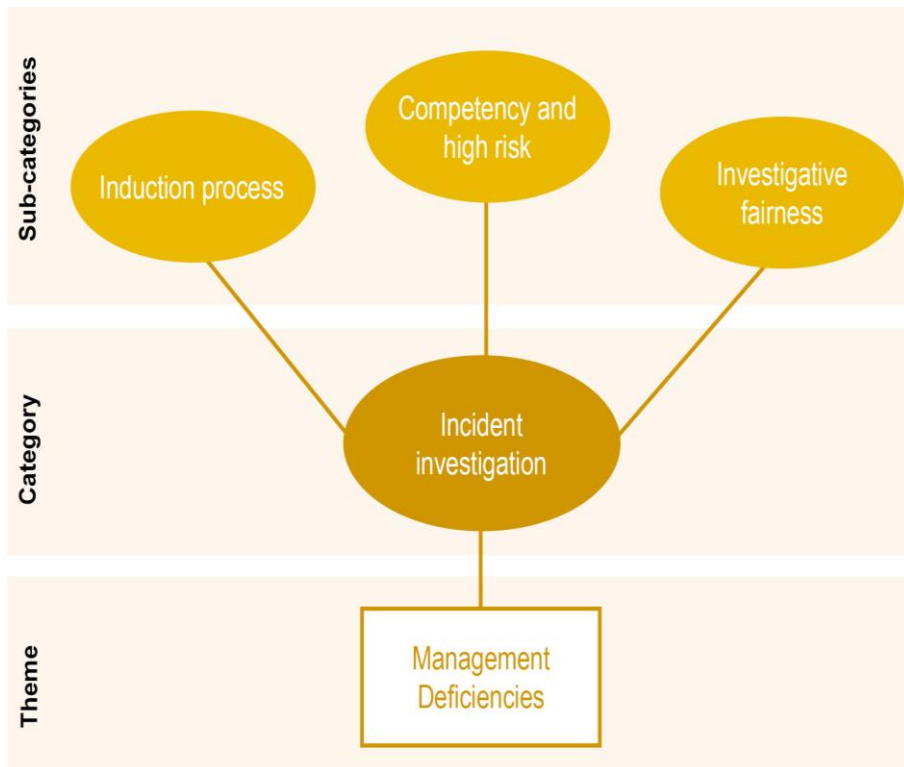


Figure 4-8: Illustration of sub-categories from the category incident causes and investigation

4.4.2.1 Sub-category: Induction Process

The first of the three sub-categories focuses on participants' discussions of the *Induction Process*. Many of the views provided by participants regarding the *Induction Process* were in answer to the vignette question: 'Should the employer have been any more specific in the induction regarding speed limits for forklifts?'

Some participants cited the element of 'competency tested at the induction stage' as an issue. Notably, the participants provide suggestions of what could improve the *Induction Process* to ensure a safer system of work and a safer workplace. The participants appeared not to be willing to explain what they currently do at their own workplaces as they were answering a question related to the vignette. However, it would be reasonable to assume that participant perceptions might be influenced by experience gained during their working lives.

Several participants comment that one part of the *Induction Process* should involve checking a worker's level of competency. But what should be included in the overall *Induction Process* provided different perceptions. The participant responses suggest that identifying any safety weaknesses in knowledge or involvement in previous workplace accidents may be uncovered by directly interrogating a new employee directly and any weaknesses or concerns the new employee may have ought to be addressed at the induction. One participant perceived that the induction could be used as an opportunity for a verification of competencies. He also suggested that an induction should include a walk around the employment organisation's areas of activity to familiarise the worker with relevant hazards. In summary, participants appear to be suggesting that the *Induction Process* should also be used to test a worker's skill and knowledge of the job they are about to embark on. Participants from both groups offered perceptions relevant to this element:

“Absolutely, if they had a site forklift speed limit, maybe it was included in the induction booklet which the employee claims he read, without testing competency you can’t prove that he has read it.” [PWR3]

“I suppose the benefit of asking the worker directly if he has been involved in accidents helps to determine whether there is a weakness in the employee’s knowledge that you need to address.” [O&M5]

“I will say yes, they could have done verification of competencies...they could have had a walk around, saying be careful of this area and so on and so forth.” [O&M9]

Some participants cited different types of induction and these data are relevant to a second element in this sub-category. Comments ranged from the non-specific generic induction being insufficient, to providing a worker with the necessary information to ensure their safety and the safety of others. The necessity for having inductions that contain specific information on specific tasks a worker will be expected to do was highlighted by one participant. The same participant also notes that this is something well in the control of the employer. All data in this element are from PWR group members and all emphasise the requirement for site specific, as opposed to generic non-specific inductions:

“Yes, very much so, when I read it (the vignette), it came across as a generic induction.” [PWR4]

“Yes, I do think so...I think that is something well in their control...I think inductions are undervalued...and I do think they should contain specific information where an employee is employed for a specific task.” [PWR6]

“I think that the information given in an induction should be explicit...we say that it is to be site specific.” [PWR8]

A further aspect of data in this sub-category involved a requirement for the provision of ‘specific information relevant to a particular task’ and includes perceptions from members of both the PWR and O&M groups. The data suggests that induction information must provide clarity about well-documented safety rules, and it would appear these should be defined and outlined throughout the *Induction Process*. Participants highlight the high-risk nature of some workplace pursuits and the importance of the induction process being the first line of defence in the prevention of adverse events. While all perceptions are linked by some similarities, each participant offers their own unique recommendation. Participant [O&M26] identifies the requirement for specific safety rules relevant to a worker’s vocation to be defined and discussed in the *Induction Process*. Participants [O&M39] and [PWR51] appear to place emphasis on the high-risk nature of forklift operation and the necessity to cover all aspects of the environment and the equipment the forklift driver will be operating in, and on, respectively. Participants [O&M7] and [PWR31] narrow down their perceptions which they directly link to the facts of the vignette. They both appear to want specific speed limits relevant to a workers’ position discussed in inductions:

“Yes, I think they should have...I think if there are clear safety rules they should be really well documented and then defined and outlined in the induction process.” [O&M26]

“I think that it is really essential given the nature of the work that it may be a type of machine that this person hasn’t seen before, different conditions...I think there definitely should be specific information about the environment that they’re working in and the actual forklifts.” [O&M39]

“Yes, especially with forklifts, it is high risk so you would want to hear the worker was inducted and the induction was specific to the site....” [PWR51]

“Because the guy is actually a forklift driver they should have said the maximum speed limit is 5 km an hour and you must not exceed it under any circumstances.” [O&M7]

“I think there should definitely have been something in the induction about speed limits...maybe a bit more specific and less general.” [PWR31]

4.4.2.2 Sub-category: Competency and High Risk

The second sub-category is *Competency and High Risk*. Data in this category concern the importance of ‘considering high risk activities’ and the need for ‘reassessment’ when using high risk machines. ‘Considering high risk activities’ included discussions such as reference to the potential for resulting injury or death. In the context of discussions about the vignette, some participants thought carrying out a comprehensive risk assessment could ameliorate the possibility of injury and death. For example, participant [O&M56] stated that forklift operation is a recognisable high risk activity that should be realised. Data relevant to this element in the sub-category suggest that the higher the risk of a task, the more comprehensive the risk assessment process ought to be:

“Absolutely, my understanding is that a lot of people die or are seriously injured with forklifts so I think that’s a really high risk in any working environment and I think you need to do a comprehensive risk assessment of everything that can go wrong.” [O&M28]

“Yes, I think it is a recognised risk and it is feasible for that risk to be realised.” [O&M56]

“Yes, in my view on high risk equipment I would be going to the point of a reassessment which is best practice” [O&M13]

Several participants from the O&M group considered the forklift operator was at fault. Notably, there were no PWR group members who provided this perception. The O&M group perceptions ranged from the forklift operator was ‘licensed and therefore competent’ and he must understand the risks. The next selection of perceptions appears to highlight a level of confidence in the apparent synergy between the words ‘licensed’ and ‘experienced operator’. This salient observation may provide much concern from a workplace safety perspective, concern that will be addressed in more detail in the discussion chapter. The element of ‘licensed and therefore competent’ is a presumption that appears to find favour only from within the O&M group:

“I think the forklift driver was licensed so he should have been working as an experienced forklift operator...he should have been working within the limitations... [O&M17]

“You would presume that to be driving a forklift he would have a forklift ticket...he would have had to pass some sort of competency, that he would understand the risks.” [O&M27]

“I think...those sorts of things should be in the ticket for the driver, the employer should make sure he has a licence to drive the forklift and that is where it should be left.” [O&M33]

“In my view, there is sufficient information he has been given and he signed off on and that he’s got a forklift operators ticket.” [O&M37]

“I think that if this gentleman had a forklift ticket and there was a specific speed regulation on-site, operation of the forklift should have been covered in his forklift ticket.” [O&M42]

Two participants expressed the perception that the forklift operator was a qualified level four operator and with that qualification there could be a sense of certainty, or assumed sense of certainty, that he was ‘trained and therefore competent’. This is the next element to evolve from the sub-category to be addressed:

“I guess you would consider that a level four operator would be well trained.” [O&M43]

“No, and the reason is that he is a level four and this is on the assumption that he is a qualified level four.” [O&M45]

Finally, this perception from [O&M32] who is the CEO of an intra-state organisation is instructive. A strong view softened only by the use of the word “almost” in mid-sentence. The suggestion appears to embrace the premise that no matter what level of competency the employee has, in any breach of their own duty of care, to themselves and those working around them, the employer will almost always be held to account by the judiciary for that breach. The last element in the sub-category illustrates ‘misdirected blame’:

“...I do believe the employer duty of care is so overwhelming that it almost abrogates the employee responsibility.” [O&M32]

4.4.2.3 Sub-category: Investigative Fairness

This sub-category also evolved from data collected in response to the vignette, which purposely provided vague information. Not enough information was provided to enable the reader to come to any fair judgement without first being afforded the opportunity to investigate further. There were two main elements identified within the data. The first element is based on perceptions relevant to the need for ‘a fair investigative process’. The second element is ‘a willingness to pre-judge’ where it appears ‘judgement was made based on scarce facts’.

All data in the first element of ‘a fair investigative process’ involves perceptions and arguments about various methods to ensure a fair process is used before any determination may be made apportioning blame, and revealed several perceptive comments and suggestions. These included suggestions for involving the regulator in any subsequent investigation. One could presume the inclusion of an OHS regulator would encourage a fair and independent investigation. A second area of comment focused on the desire for more information before any procedurally based fair decision could be made. This desire for fairness was subsequently reinforced by a desire for an open and transparent investigation as perceived by participant [O&M13]. The fairness factor mentioned by both contributing PWR group members was the lack of information sufficient to make a decision. All three approaches from the O&M group and two from the PWR group culminate in the desire for ‘a fair investigative process’:

“Forklifts are a high-risk licence, I think giving WorkSafe WA the opportunity to come in and investigate an accident around a high-risk licence is a benefit to the employer and the employee.” [O&M10]

“There are so many factors I would want to know more about.” [O&M12]

“My view is the whole investigation is to be open and transparent and once you’ve undertaken that properly then make a decision on fair treatment.” [O&M13]

“If the employer had the case to dismiss the worker they would have to ensure first that a case was open and shut and there was no real avenue for rebuttal.” [PWR16]

“I don’t believe there is sufficient information to make a judgement...on the information given he should not have been sacked.” [PWR17]

The second element, which evolved from both O&M and PWR responses, was ‘a willingness to pre-judge’. These opinions illustrate suggestions of reckless behaviour and a preparedness to assume that even if a relevant speed limit sign was in position, the worker would have ignored it. For example, participant [O&M29] had an expectation that the worker would embrace safety holistically. This participant appears to be suggesting that fault would lie with the worker because of their perception that the worker did not embrace safety holistically. Possibly the participant is suggesting that there would be no need for an investigation, given all necessary safety behaviours have not been adopted. Similarly, participant [O&M41] also finds fault lies with the worker. These participants appear to draw on experience to suggest that even if there are safety signs available, people will undertake risky behaviour to get the job done. All participants contributing to this element appear to attribute initial blame to the worker and not consider whether a procedurally fair investigation has been completed:

“I think the worker was reckless and had there been a speed limit sign there I think he would have done exactly the same thing.” [O&M 21]

“I would say there would be an expectation that the employee should adopt all relevant protocols and embrace safety holistically by adopting all necessary behaviours.” [O&M29]

“I really feel it would be entirely the fault of the driver...there are signs up but people will, to get the job done, do silly things or travel fast.” [O&M41]

“...there’s no doubt that the worker’s own behaviour contributed towards the incident.” [O&M26]

“On the assumption that the forklift has been properly maintained and is working in an orderly fashion then no a decision would not favour the worker.” [O&M45]

It can be noted from responses that the majority of the O&M group perceptions embrace ‘a willingness to pre-judge’ by apportioning blame to the operator. As previously mentioned these perceptions are made with minimal evidence and without the benefit of a thorough accident investigation. If we contrast the two participants from the PWR group, and the three from the O&M group, who contributed to the previous element of ‘a fair investigative process’ a more careful approach emerges that identifies an unwillingness to pre-judge a safety matter. The emerging conclusion is that the desire for investigative fairness does not rest solely with one particular group. What could be considered as salient is that the contributing members of the PWR group to the category embraced perceptions that desired ‘investigative fairness’ only and no PWR group members contributed to the second element of ‘a willingness to pre-judge’ which was an element dominated by O&M group members.

4.5 ‘Generating OHS Compliance Model’

The model in Figure 5-1 is the result of a culmination of themes and categories that evolved from the data collected for this research. The model is derived from the perceptions of 55 participants answering 12 OHS-related questions which includes the vignette. The model was developed into a construct in answer to question three of the original research questions. It is a useful guide for determining some of the important, and current, factors involved in generating OHS compliance. While it is not inclusive of all factors that may generate OHS compliance the model does provide many positive factors that encourage OHS compliance in

the workplace, and also it provides some of the pitfalls to avoid if OHS compliance in the workplace is to be a sustainably successful endeavour. The centre of the model presents a circle with two recurring sub-categories emerging from the three overarching themes. These are the super themes of Duty of Care and Consultation. The bold print in each of the three elliptic shapes are the overarching themes. The titles printed under these themes are the categories. The model has a circular purpose which is evidenced by the arrows. This represents a continual improvement ethos that is integral to an OHS management system. See Figure 5-1.

4.6 Conclusion

This chapter examined information provided by the 55 participants who contributed to this research. Demographic data included participant's occupation. Participants were categorised into a 'management group' or 'worker group', subject to their occupation. The management group consisted of business owners, business managers and supervisors. The worker group consisted of OHS professionals, OHS trainers, workers and their representatives. The groups were uneven in number with 22 in the management group and 33 in the worker group. However, this mismatch appeared to have no adverse effect on the insightfulness of the emerging data, as would be expected in a qualitative study. Both groups were asked the same questions in the same manner by the same interviewer. The questions were constructed to meet the objectives of the research.

Using inductive analysis three main themes were identified from the data with eight categories emerging by using inductive analysis. Nineteen sub-categories then emerged from the categories.

The final objective of the research was to create a model of OHS compliance that is representative of the findings. To satisfy this objective, a 'Generating OHS Compliance Model' was constructed from the findings. This model shown in Figure 5.1 reflects a reality constructed from insights contributed by participants from both groups. These insights have the potential to assist in encouraging OHS compliance.

A key finding in this chapter is that while workers are identified as reliant on the OHS endeavour they were considered to have the potential to provide significant input into ensuring OHS compliance in the workplace. Participants from the management group appear to concur with the premise that worker and management proactivity in OHS is essential to effecting real and sustainable change.

The following chapter discusses the findings. The discussion includes a comparison of what each contributing group perceives and any specific concerns relating to a group. These perceptions are examined to identify congruent outcomes that meet the research objectives.

5 Discussion

“We need more critical analysis of what works and what doesn’t work in OHS” (Quinlan 2010, 31).

5.1 Introduction

In this chapter the research objectives and findings are critically examined. Discussion of these findings are explored from the perspectives of ‘leaders’ (management group) and those ‘reliant’ (worker group) positions. As discussed in Chapter Three the first group included business owners, business managers and supervisors (management group – O&M). The second group consisted of occupational health and safety (OHS) professionals, OHS trainers, workers and their representatives (worker group - PWR). Three themes are considered in this discussion: **OHS Law**, **Management Commitment** and **Management Deficiencies**, each of which is in bold above their related categories in the ‘Generating OHS Compliance Model’ (the model). Positioned in the centre circle of the model are two super themes which are discussed in section 5.3. The two super themes are **Duty of Care** and **Consultation**.

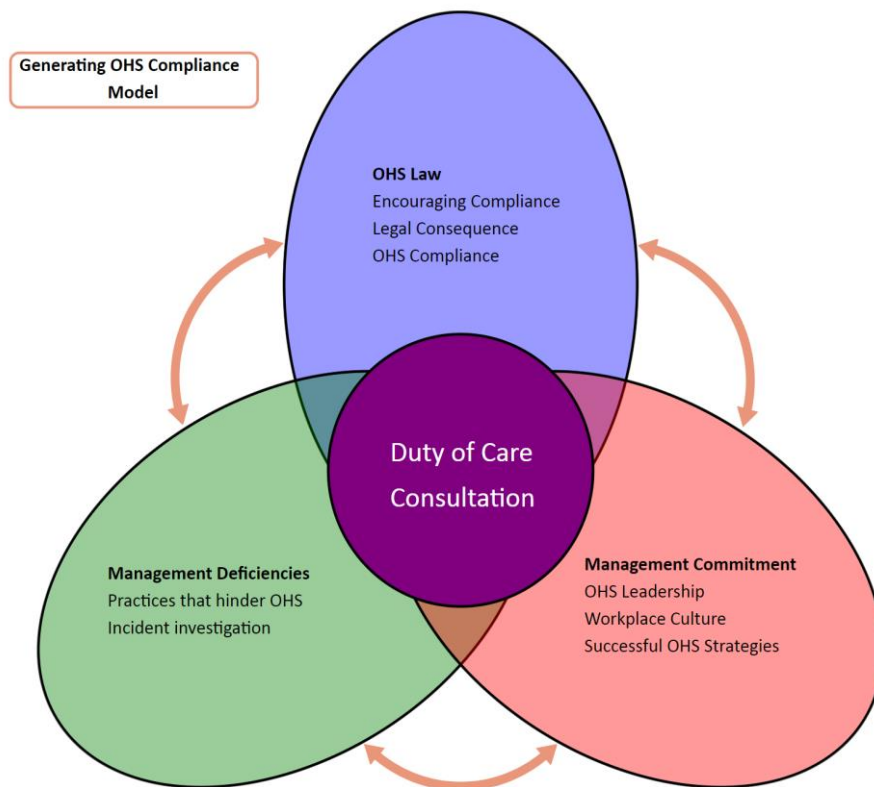


Figure 5-1: Generating OHS Compliance Model

The model emerged from the key findings of the research and was developed to demonstrate what may need to be considered by policy makers and/or business leaders to secure effective change to a future/emerging OHS paradigm. The following discussion considers links between the model and previous research while

also noting new findings that are not well recognised in prior research. Key aspects of the model are discussed further in Section 5.2.

5.2 Key Aspects of the of Generating OHS Compliance Model

The model provides a paradigm that enables strategies to be developed by OHS stakeholders for each of the categories highlighted. Osterwalder et al. (2005) inform us that:

A business model is a conceptual tool containing a set of objects, concepts and their relationships with the objective to express logic... therefore we must consider which concepts and relationships allow a simplified description and representation of what values it provides. (Osterwalder et al. 2005, 5).

The information provided by the model evidences areas of the OHS system that with good planning and implementation have the potential to enhance the pursuit of OHS compliance while at the same time ensuring the necessary complimentary cultural changes in the workplace. An example would be for managers to achieve the requirements of *Management Commitment* while making themselves aware of *Management Deficiencies* will require them to consider their leadership styles, their OHS knowledge base and relational capabilities to generate changes in the OHS and general culture of the workplace. Goleman (2001) refers to the use of strategies by management that encompass empathy and emotional intelligence to achieve these ends. OHS law places significant responsibility on managers, in the event of failing to meet those responsibilities, serious penalties may result (see section 2.2.1). Sufficiently *resourcing OHS* by management also appears to send an important and positive OHS message to all employees.

The following discussion links the research questions and objectives detailed in Chapter Three, with the findings in Chapter Four to the current literature to provide additional insights for future directions in OHS legislation and implementation. There is a particular emphasis on what may or may not work in achieving OHS success at the organisational level. Finally, the discussion summarises the extent to which current deterrence strategies are perceived as contributing to compliance with OHS legislation.

As previously noted in Chapter Two, much of the existing OHS literature characterises employees as being reliant and managers as responsible. Gallagher et al. (2001) conclude that an occupational health and safety management system (OHSMS) will not make a difference to OHS statistics unless it reflects an overall positive approach to management by the principals of an organisation. Hudson (2001) considers that an organisational culture that supports the principles enshrined in the OHSMS allows such a culture to flourish. For an OHS culture to be successful it must be explicitly supported by senior management (Hopkins 2005, 8). In this regard, Fint (2008) quotes Cipolla, former safety manager of the John Holland Group:

“A lot of companies buy OHS systems off the shelf, but if they’re not owned and driven from the top down they’re not sustainable” (Fint 2008, 6).

These views are consistent with a key finding from the previous chapter, which shows that managers recognised their OHS responsibilities, even though their understanding of OHS compliance came in various forms. In addition, however, reliant workers also appear to believe they have significant input to ensure OHS compliance. The model enables strategies to be developed for each of the themes. A key thread throughout the analysis and this discussion is that both worker and management involvement are essential elements for

the holistic ownership of the OHSMS and its success. This notion is supported by Fint (2008) in quoting Cipolla further:

“For us to get ownership at all levels of the workforce required knowledge and understanding. If you have knowledge, then you have more chance of owning it and ownership compels behaviour and behaviour drives culture” (Fint (2008, 6).

The findings of this research support the premise that worker proactivity in OHS is essential to effect real and sustainable change. The incidence of injury and fatality rates outlined in Chapter One suggests that further, effective change to the OHS paradigm is required. Beer and Nohria (2000) indicate that it might be time to broaden the current strategic propositioning of OHS to systematically include employees’ views in order to enhance, or create, more effective change in OHS. Abrahamson (2000) explains the dynamics of organisational change as:

“Change has been with us forever, and it always will be, but the idea of change itself is changing, reflecting that the way in which it is practised may also need to change” (Abrahamson (2000, 79).

Some participants considered how organisations had changed their approach to OHS and offered insight on the dynamics of the change process. Change is discussed in more detail when OHS leadership is addressed later in this chapter.

Essentially, this research aims at achieving an emergent level of understanding by seeking participant perceptions of OHS as it affects their daily lives. This research has sought to identify factors that influence participant involvement, or otherwise, in the OHS paradigm that may influence effective organisational change.

The research objectives defined in Chapter Three were to:

- identify those factors that are perceived to help or hinder compliance with OHS legislation;
- identify to what extent the present deterrence strategy and its advise and persuade components are perceived to contribute to compliance with OHS legislation; and
- develop a model that reflects the positive or negative features of the deterrence strategy and its advise and persuade components with the object of minimising workplace injury and death.

The first two objectives of the research culminated in the essential themes and categories which were used to construct the final objective which was the development of the model. The model contributes to the understanding of deterrence strategies and key components that have the potential to minimise workplace injury and death. This objective forms the basis of the following section, which expands on the model that originated from the data analysed in Chapter Four. The model demonstrates insights on a holistic participant perspective of effective and non-effective OHS strategies. It also forms the basis for the subsequent discussions in this chapter. The model reflects a reality constructed from the insights contributed by the participants of the research, and reflects the relived experiences of both participant groups. A model emerged to represent these experiences. Elements of the model are unpacked here to provide a delivery framework, consistent with the represented model and to identify specific links with previous research on OHS.

The model facilitates recognition that all three ellipses are intrinsically linked and each link provides themes that carry equal relevance and importance (see Figure 5-1). Each ellipse contains a theme highlighted in bold and is written above the related categories. The same process is reflected in the second and third themes as the reader negotiates the circular intent of the model. The circular intent is to represent the endeavour of continually improving OHS systems and outcomes. The two super themes of **Duty of Care** and **Consultation** represented in the centre circle of the model emerged from all three elliptic themes. Both super themes are discussed at more length later in this chapter. The theme of **Management Deficiencies** provides the counteractive OHS behaviours. The **Duty of Care** and **Consultation** super themes also incorporate the negative e.g. *Limited Duty of Care* and *Limited Consultation*. The key themes and categories reflected in the model are aligned to both the research objectives and address the primary research question:

What will motivate OHS stakeholders towards improved OHS compliance?

5.3 Occupational Health and Safety (OHS) Law

Categories and sub-categories of the theme – **OHS Law** begin this discussion. **OHS Law** is constructed using the perceptions of all participants and resultant data. The categories of ‘Encouraging compliance’, Legal Consequence and ‘OHS compliance’ were central to participant perceptions of OHS law. Use of the term ‘OHS law’ encompasses OHS regulation to accurately represent perceptions of the research participants. The **OHS Law** theme, also largely addresses the following research objectives:

1. identify those factors that are perceived to help or hinder compliance with OHS legislation, and
2. identify to what extent the present deterrence strategy and its advise and persuade components are perceived to contribute to compliance with OHS legislation.

These two objectives are relevant to all three of the following categories.

5.3.1 Encouraging Compliance

A first step in meeting the requirements of OHS is ‘compliance’ with the attendant regulatory requirements. As identified in the previous chapter, several participants are unsure what compliance means and how to achieve it. An effective OHS system requires, as a minimum, a regulatory compliant strategy. With this in mind, Kolieb (2015) notes that:

“Rule compliance is an impoverished view of regulation. Regulation, appropriately conceived should not only be synonymous with compliance mechanisms or enforcement of rules only, but rather should also encompass methods and mechanisms that encourage regulates to go beyond regulatory compliance” (Kolieb (2015, 137).

Going beyond regulatory compliance is a concept further discussed in the literature (Hopkins 2005, 3), as well as the perceptions of many participants involved in this study. Hopkins (1994) relates compliance to behaviour; such that:

“The term compliance refers to the behaviour of the regulated” (Hopkins 1994, 431).

Understanding of the term compliance varied across the two groups. The term can have a ‘broad’ definition where something more than mere regulatory compliance is perceived to be a vital endeavour in meeting the OHS goals of the organisation. Alternatively, a ‘narrow’ (limited in extent) definition is adopted where

regulatory compliance is perceived by a duty holder as being OHS compliant. The variation across the two groups is important because, as recognised by Hopkins (1994, 433), the real problem facing policy makers is the use of government regulation to achieve a wide range of social policy objectives. In particular, the control of harmful business behaviour is identified as crucial to achieving public policy objectives such as OHS harm reduction. Hopkins also states that the real problem facing policy makers concerns not only selecting the best strategy for achieving broad compliance, but to decide what it is the regulated parties are asked to comply with?

These findings are consistent with the argument that the central problem facing the regulation of OHS is the apparent impossibility of imposing an uncomplicated performance regulatory standard requiring employers not to harm their workers. In some cases, harm is accidental and beyond the control of the employer. To hold employers 'strictly liable' for workplace death would also be unacceptable (Hopkins 1994, 434). In any event, it appears that performance standards in the form of OHS 'codes of practices' and 'guidance notes' do not provide sufficient guidance to achieve OHS compliance as evidenced by this research. The findings support the argument of Bluff and Gunningham (2003) who posit that the regulatory requirement of performance standards should be underpinned by industry or sector specific codes of practice to provide the desired and predetermined OHS outcomes for employers. These evidentiary standards are capable of identifying appropriate preventive measures for specific industries or sectors. Appropriate preventative measures would enable employers to comply with regulatory performance standards (minimal required actions), while encouraging aspirational (additional) actions that could potentially achieve a superior standard of care.

Some participants perceive the necessity of going beyond regulatory compliance because of the safety and health concerns unique to their industry. As Kolieb (2015) agrees:

"There are few instances where binding legal standards exist to address societal concern, thereby also diminishing the viability of law-based compliance regulation mechanisms" (Kolieb 2015, 153).

Further, Kolieb (2015) suggests that simple adherence to the law is not the ultimate regulatory goal. He offers the example of companies that internally develop 'social charters' and industry 'corporate social responsibility' (CSR) codes reflecting an organisation's idea of its social licence to operate. At the other end of the continuum, there are minimalist OHS organisations that consider the requirements of OHS regulation is the standard.

Participants from the management group perceive OHS compliance in terms of just another component of business management that aspires to improving business outcomes. A lower workers' compensation premium rate would certainly assist in improving a business outcome (Hosie and Al Bhadley 2016). It is possible for management to negotiate a lower workers' compensation premium rate with their insurer by providing evidence of a low to zero OHS system failure rate. This thesis identifies that an OHS system framework can be encouraged to go beyond minimum regulatory compliance and potentially improve business outcomes by including aspirational improvements in OHS. One example that encourages aspirational OHS improvement is managers appeared to learn from system failures and organise thinking in relation to improving the OHS system by ensuring more effective management of specific risks. A position congruent with Borys (2001, 153).

Participants in this study offered some very broad perceptions of OHS compliance. One such perception from participant [O&M58] suggests that OHS compliance has many layers. These layers include *Legislative Compliance*, compliance with company rules, and other OHS internal requirements:

“Compliance has many layers...regulatory requirements, company rules and other internal requirements”.

There appears to be little doubt from participants that OHS regulation raises awareness, but despite regulation, many Australian workers are killed or seriously hurt every year. According to Safe Work Australia in 2015 there was a total of 205 notifiable workplace fatalities in Australia, up from 187 the previous year (see Figure 5-1 in Chapter One). For too long regulatory mandates have focused on broad objectives, rather than encouraging systems that are designed to accomplish specific organisational or industry OHS compliance by adopting a CSR code. One of several aspirational perceptions provided by participants reflects this ideal by perceiving that OHS standards should be in line with whatever is required.

Not all participants had an appropriate understanding of OHS compliance. While comprehensive responses are few, and to be expected in a group of 55 participants, they are a cause for concern. Ostensibly, the fact that seven to ten per cent of participants in previous compliance research exhibited a lack of understanding of OHS compliance suggests this is not an unusual outcome (Loosemore and Andonakis 2007). The research also indicates that employers and managers of large organisations are becoming increasingly more aware of their broader legal obligations including the lessor known ‘judicial precedent’ (decisions made by judges) as a source of law. In common law legal systems, a precedent is a principle or rule established in a previous legal case that is either binding on, or persuasive on, another court, subject to jurisdictional hierarchy. Audiffren et al. (2012, 1320) posit that ‘judicial precedent’ relevant to the interpretation of OHS statutory law can provide a broader understanding of OHS statutory provisions. This approach has the potential to lead employer organisations to adopt extended compliance requirements.

Research participants from both groups identified this expansive possibility when they included broad legal considerations in their perceptions of OHS compliance. This is clearly a relevant consideration for those who have the responsibility for OHS compliance. Some industry groups provide newsletters to their members, often in an effort to keep them up-to-date with current legal requirements. Not all employers are members of industry groups so keeping up to date with legal changes can be a challenge. Audiffren et al. (2012) cite an example where a Court was asked to determine what constituted ‘enhanced training’ required by the OHS statute relevant to the jurisdiction. The defendant organisation did not provide what the Court believed to be sufficient ‘enhanced training’, as required by the statute. There was no indication in the regulatory requirement on how long, or to what level, the training had to be so the Court, after considering the facts of the matter, determined the training provided by the employer was insufficient to allow the employee to carry out their expected duties in a safe manner:

“As for the legal consequence of non-compliance, the decision demonstrated that failure to provide sufficient operational knowledge and training to a temporary employee is seen as serious misconduct on the part of the employer” (Audiffren, et al. 2012, 1326).

The confusion over the length of training and to what level of competency is required by OHS regulation was an issue for several participants in this study. Participants offered different perceptions as to the required length of training and level of competency required for a high-risk task. The vignette provided to research

participants offered a scenario where the level of training and competency was in issue. The vignette concerned a competent forklift driver who subsequently had an accident. Participants offered very different perceptions on whether the training provided was sufficient or not. This matter is discussed in more detail later in the chapter.

At this point it is worth noting that in the 1980s a new dimension was added to OHS compliance policy. Since then workers' compensation premiums in Australia have been increasingly structured to reflect the cost of claims made by employees. Hopkins (1994) informs us that employers have a financial incentive to maximise workplace safety. Fewer workers' compensation claims made by an employer, on behalf of the employee, potentially equate to a lower premium cost. Moore and Viscusi (1989, 499) instruct us that the absence of the workers' compensation cost incentive of higher premiums for OHS failures fatality rates could increase by over 20%. So, it would be fair to suggest that a voluntary uptake of aspirational OHS systematic approaches, which exceed regulatory requirement, ought to be an economic imperative for employers.

Often it appears to be the level of *Regulator Support* offered to stakeholders that makes the difference between understanding the complexity of OHS regulatory requirements (the language of OHS law) or not. Clearly the level of regulator support in the form of advice in this area is important for encouraging OHS compliance.

5.3.1.1 Regulator Support

A key finding of this research was that participants perceive insufficient OHS support is provided by the regulator. The level and quality of *Regulator Support* for business operators is an area that remains relatively neglected by researchers. There does appear to be a documented commitment by the regulator to support enterprises in their OHS endeavours. This commitment by the state regulator has its roots in the WorkSafe WA, the peak OHS advisory body in WA, 'collaborative approach' statement reproduced in Appendix B.

One participant [O&M5] made an insightful comment when they clarified the important role of the regulator:

“Robens never said that industry should become self-regulated, Robens said that industry should become more self-regulating, so there was always a role for the regulator”.

It would appear from participant responses that small to medium sized businesses continue to desire and seek considered guidance from the regulator.

Many small business employers do not have access to industry group membership or informative newsletters. Often these businesses fail to adopt formalised OHS procedures to ensure compliance. The lack of OHS procedures has been linked with little training or experience on the part of small business owners or managers (Walters and Lamm 2003) and dissatisfaction with OHS conditions on the part of small business employees (Dryson 1993). It has been suggested that consultants are sometimes engaged to assist small business with OHS compliance (Walters and Lamm 2003). This was not an approach suggested by participants in the current study. Although some did suggest that they found it frustrating when they try to obtain assistance from WorkSafe WA, to be told to seek the advice of an independent OHS consultant. One of WorkSafe WA's documented missions is to “strengthen organisational capacity to assist business operators and workers to manage OSH effectively”.

The data analysis reflects participants' perceptions that the written law is too complicated for them to understand. Participants indicated if they could understand what it was they had to do, they would do it. These perceptions appear to fall within the collaborative approach outlined by WorkSafe WA but there appears to be a breakdown somewhere between WorkSafe WA's documented commitment to WA's OHS environment and the experience of some stakeholders trying to function in that environment. WorkSafe WA does undertake proactive inspection programmes in specific industries (see Appendix C for the WorkSafe WA 2016 inspection programme). Despite these programs participants from both the management and worker groups desired more direct assistance from the regulator to help them interpret what they perceived as OHS legal complexity and on occasion advice on how to control specific hazards, while others expressed the need for *Simplicity* in the language of OHS law, to which we now turn.

5.3.1.2 Simplicity

At a general level this study suggests that drafting OHS regulation, so that it can be readily understood by those charged with ensuring a safe workplace, is a matter of importance. This was a significant finding and an important component of the model, even though this area of activity has been relatively undocumented in previous research. The research finding appears significant compared with research literature to date.

When OHS policy shifted from a prescriptive framework to a less prescriptive framework, (post the Robens Report), a more self-regulated, consultative, performance based approach evolved to place substantially more OHS responsibility on employers and employees. The perception amongst research participants is that there is an ever-increasing quantity and complexity of OHS regulation. Two participants from the management group expressed concern about diffuse legislation and the complications of all relevant legislation. Research by Lewis et al. (2014, 7) emphasises the growing concern among small business over the extent of government regulation in Australia. Ironically this increase in OHS regulation appears to result in less, rather than more compliance. A survey attracted 391 responses where ten types of government regulation were measured (Lewis et al. 2014). Of these, OHS regulation was identified as second only to (tax regulation at 42%) as providing compliance difficulties. A total of 39% of businesses rated OHS regulation as problematic. Mistakes and misunderstanding of tax regulation does not generally cost lives or result in injury in the workplace. Therefore, it is surprising to find an apparent lack of research in this critical area of OHS. Loosemore and Andonakis (2007) highlight the required skill set of those who are expected to manage the responsibility of OHS compliance; *Simplicity* is lost to 'receptivity', 'skill' and 'knowledge':

"The success of any self-regulatory system depends heavily on the receptivity, skills and knowledge of those who have to administer these greater responsibilities" (Loosemore and Andonakis 2007, 597).

Multiple participants in this research representing both the management and worker groups desired that OHS regulatory language be simplified. Participants referenced such concerns as complex terminology and wanted legislators to consider the educational level of the people who have to apply OHS law. Loosemore and Andonakis conclude that the main barriers to effective OHS compliance have been the complexity of legal language, educational barriers and a fear of change. They recommend better communication between regulatory authorities and those expected to apply OHS regulation in the workplace. More targeted research in this important area may identify effective strategies that could be used by OHS regulators. Strategies that could increase regulator presence and meet the obligations of their mission statement. Advise, educate and persuade mechanisms, used efficiently and effectively by the OHS regulator, could result in better OHS

strategies being applied by employers and employees. Such strategies would lead to fewer injuries and fatalities in workplaces thus minimising human, economic and legal consequence.

5.3.2 Legal Consequence

The *Legal Consequence* category of the model emerged as participants answered multiple interview questions related to the research objective to identify the extent to which the present deterrence strategy and its advise and persuade components are perceived to contribute to OHS compliance. Some participants discussed OHS compliance as a failure to adhere to regulation which results in the subsequent legal consequences. Other participants found voice on legal consequence from the facts contained in the vignette. The *Legal Consequence* category assists in meeting the ‘advise and persuade’ concepts, particularly persuasion through threat of penalty for failure. These components are perceived to contribute to compliance with current and existing OHS legislation. The model identifies two sub-categories linked to the category of *Legal Consequence*. These sub-categories are *Higher Penalties* and *Responsibility*. Both sub-categories satisfy the objectives of this study by relating to the feasibility of a business or individuals complying with OHS regulation. The penalty aspect of a deterrence strategy assists in understanding how the *Legal Consequence* category emerged.

5.3.2.1 Higher Penalties and Responsibility

Higher Penalties and *Responsibility* were both highlighted by participants as requirements to ensure OHS legal compliance. Both of these sub-categories appear to be well supported in research and policy as can be evidenced below. These two sub-categories are also intrinsically linked by virtue of the fact that penalties increase with level of *Responsibility* and are therefore grouped together in this discussion. Participants wanted to see *Higher Penalties* and the people responsible for serious OHS failures to be dealt with severely so that the guilty may be encouraged to improve their compliance approach to OHS. Gunningham (2007:368) suggests that a failure of compliance has led some commentators to suggest that the imposition of substantial legal penalties is crucial to improve OHS outcomes. Schofield et al. (2010) went a step further to identify if there were empirical evidence to prove the deterrent effect of OHS prosecution. In terms of deterrence, the findings of the Schofield et al. study indicate that the prosecution provisions of the OHS legislation in the states of NSW and Victoria had a demonstrable impact on prosecuted employers. Schofield et al. (2010) conclude that:

“The study data demonstrated a strong association between prosecution and specific remedial action by employers to redress a wide variety of workplace circumstances and arrangements connected with serious injury and death” (Schofield et al. 2010, 274).

Responsibility has been considered through a framework of deterrence when comparing financial penalties with custodial sentences for OHS offences in the construction industry:

“Fines have proved ineffective, it is hoped that jail sentences might encourage individual employers and corporations to make more significant investments in preventative OHS strategies” (Fraser 2007, 14).

Blame-related language was identified as an important consideration when it came to deterring serious OHS crime. Hughes (2010, 128) believes it is more relevant to use terms that suggest an element of personal blame or responsibility as opposed to the faultless attributes of the three less accusatorial terms:

“The language surrounding OHS regulatory law, such as ‘accident’, ‘no fault’, and ‘occurrence’, rather than ‘murder’, and ‘crime’, only serves to add to a lack symbolism and thus a lack of stigma” (Hughes 2010, 128).

Participants from the worker group perceive that employers have overall control over OHS outcomes, therefore more responsibility equating to being more accountable. Jamieson et al. (2010) make it clear that the essence of the Robens approach extends the duty of care of employers to take measures to protect employees from their own risky, careless, inadvertent behaviour or foolish disregard for personal safety:

“The actions of employees should be considered as one aspect of risk-control strategies that employers are responsible for implementing, the implicit message being that through effective OHS measures employees can be prevented from harming themselves” (Jamieson et al. 2010, 12).

Before OHS *Responsibility* can be embraced by employers there must be a sufficient understanding of what is required to be OHS compliant. The following section discusses employer and employee awareness of what it is to be OHS compliant.

5.3.3 OHS Compliance

This category evolved and further assists in meeting the objectives of this research, specifically, the identification of those factors that are perceived to help compliance with OHS legislation. When participants were asked the question ‘What is OHS compliance’ (as shown in the previous chapter), received a mixed set of interesting, though contradictory, perceptions emerged from both the management and worker groups. This was also discussed in the category of ‘*Encouraging Compliance*’ at Section 5.3.1. As stated previously, the model identifies that most perceptions settle on the narrower definition of ‘Legal Compliance’ that contributed to the sub categories of *Consultation*, *Exceed Legal Requirements* and *Legislative Compliance*.

The discussion in this category begins with *Exceed Legal Requirements*. *Exceeding Legal Requirements* is a sub-category that was well-supported by this research, thus indicating evidence of a broad awareness that regulatory compliance is only a component of holistic, or aspirational, OHS compliance.

5.3.3.1 Exceed Legal Requirements

Participants from both groups highlighted the requirement to only meet the mandatory legal requisites of OHS regulation. But there was also an alternative view by participants that something else was required. To this extent, the results of this study can be viewed as broadening our understanding of a recognition that *OHS Regulatory Compliance* only warrants inclusion as non-holistic OHS compliance. Some participants expressed concern that more is necessary to meet their aspirational OHS compliance requirements. The need for understanding and addressing specific contexts was identified as one of the ways organisations can exceed requirements. That is, a simple risk assessment as required by law is not enough and a more complex form of risk assessment is necessary to control hazards in some industries. Makin and Winder (2008) support this position when they inform us that the OHS risk management process is often a simplified version of the full process, without considering the entire context of the workplace hazard.

Another internal procedure put forward by participants is that Safety Management Systems (SMS) need to include specific OHS guidelines that are also unique to an industry. Participants also wanted a continuous improvement safety ethos included in the SMS that goes beyond regulatory requisites. Participants may have

been referencing the requirements of certified management systems. These systems have increasingly been applied by firms in recent decades and now cover the management of health and safety, principally through the Occupational Health and Safety Assessment Series (OHSAS 18001). This is an internationally applied British Standard for OHS. Granerud and Rocha (2011) state that in order to become certified to this standard, firms must not only observe the relevant legislation, but also improve performance and raise goals within health and safety on a continuous basis.

Contractual expectation was also highlighted by participants. Expectation arises when a principal employer sub-contracts another organisation to carry out work. The safety expectation of the principal is often beyond minimum OHS regulatory expectations and can thus encourage the sub-contractors to meet a principal's requirements. Loosemore and Andonakis (2007) identify that improving the construction industry's poor safety performance requires a shift in OHS policy towards this type of a performance approach. The performance approach requires principals placing much larger responsibilities on contractors and sub-contractors to achieve effective management of OHS related risks. Participants who discussed principal/contractor OHS expectation in this research all come from contracting organisations in the construction and manufacturing sectors.

Organisational policies and procedures are elements of *Exceed Legal Requirements* and both contributing groups identified them as part of OHS compliance. Aspirational OHS compliance was perceived in many forms. Participants from the management group wanted to do everything that is required and to not only follow all the rules but also assess all risks. This suggests that the rules don't account for all risks. Some participants from the worker group wanted to comply with policies, procedures and operations. This suggests that 'operations' is a classification of its own not related to policy and/or procedure. 'Policies' and 'procedures' are generally linked to regulatory requirements while the use of the term 'operations' suggests a more self-reliant and targeted approach to managing OHS. An approach that is less reliant on the broad terms of regulation and more conducive with the specific OHS requirements of an industry or organisation.

In Chapter Two an introduction was made to the Robens Report in an endeavour to provide some foundational history to the development of current OHS regulation. Besides criticising the traditional model of OHS regulation, the Robens Report also rejected the view that detailed legal prescription can effectively regulate daily working conditions in a top down manner:

“Too many employers, managers and workers are still inclined to look rather too much to state intervention and prescriptions, and rather too little to their own interests, responsibilities and efforts” (Robens Report 1972, 12).

The Robens Report also made reference to future policy and what that policy should include:

“Future policy should not only increase the effectiveness of the state's contribution to safety and health at work but also, and more importantly, create the conditions for more effective self-regulation” (Robens Report 1972, 12).

Hopkins (2005) appears to maintain the Robens legacy arguing that something more than externally imposed regulation is required to ensure an adherence to a holistic compliance paradigm:

“For the last couple of decades, safety professionals, regulators and others have been arguing that safety is not simply a matter of compliance with externally imposed regulation” (Hopkins 2005, 3).

This research has identified the ongoing relevance of Robens' contributions to discussions about OHS regulation as the data demonstrate that there are some organisations in WA that are committed to the philosophy of self-regulation and self-reliance. This self-imposed commitment appears to require these organisations to exceed existing regulatory and policy requirements (*Legislative Compliance*). This research has also uncovered that there are resource implications for some organisations in achieving these important goals. As such, some participants clearly require more assistance from the regulator to meet these enviable goals.

5.3.3.2 Legislative Compliance

The reflexivity of self-regulation and self-reliance originally envisaged by Lord Robens is not always the norm in WA workplaces. This research identified that some workplaces do not appear to embrace the OHS goal of 'exceeding regulatory requirements' and instead rely solely on OHS regulatory compliance to maintain a safe workplace. Indeed, participants from both groups demonstrated a limited knowledge of OHS regulatory requirements. Participants [PWR25] and [O&M24] stated:

"I think it means you have been inducted and you know where to find OHS policies on the Internet".
[PWR25]

"OHS compliance I think has a couple of elements to it, one is an interpretation of the law and statutes, you have to have knowledge of them, and two, you have to interpret them and form a strategy around them." [O&M24]

Forty-four years after the Robens goal of self-regulation and self-reliance there appears to have developed a detachment between these goals and the reality in some workplaces. Gunningham (1999) acknowledges the increasing limitations of direct regulation to simulate models of self-organisation within firms, in such a way as to make them self-reflective regarding OHS performance. Gunningham suggests that:

"We see the potential of systems based regulation to function as a form of reflexive law which is procedure orientated rather than directly focussed on a prescribed goal" (Gunningham 1999, 195).

In essence, the theory of reflexive law refers to law that is designed to preserve diversity and adaptation at a local level. Gunningham is clearly reflecting on what he perceives as weaknesses in current arrangements for OHS regulation, as evident is the above quote. Gunningham uses the term 'prescribed goal' to refer to the ineffectiveness of these parameters in many workplaces.

The model identifies that some participant organisations exceed OHS regulatory requirements to meet what they perceive to be a more holistic and aspirational approach to managing OHS. This goal of achieving a safer workplace meets the intent of the Robens pronouncements. But some participant perceptions also encompass an understanding that OHS compliance can be limited to 'regulatory', or in some cases, 'legislative' compliance; the two terms essentially mean the same thing. What can be distilled from the several commentators cited in this research is that a direct, or command and control, regulatory only approach taken by governments has had limited success in encouraging an adoption of the broader occupational health and safety paradigm. Some participant perceptions evidenced an even narrower understanding of OHS compliance. One such narrow perception was the 'duty of care' regulatory

requirement. Some participants understood that meeting their ‘duty of care’ requirements, as outlined in the OHS Act, was sufficient for them to be OHS compliant.

5.4 Management Commitment

The second theme explored in this thesis is that of Management Commitment. Poell et al. (2000) discuss the dilemma experienced by management of being torn between production, and learning production, where a tension exists in all organisations. Legitimising learning time and action, which includes OHS learning depends on what activity is established as legitimate in an organisation as opposed to required. As is discussed in this theme the establishment of OHS compliance and regulatory requirements are often outsourced, strategies are minimised or simply avoided by management.

In broad terms, this theme contains categories and sub-categories that describe issues and actions where it seems that management has some level of capacity and discretion to influence OHS practice. The three main categories identified in the model that capture these features of participants’ perceptions are: OHS Leadership; Workplace Culture; and ‘Industry Best Practice’ Successful OHS Strategies. There are six sub-categories contained within these three categories, some of which contain distinct elements reflecting participants’ distinguishing contexts and experiences. The six sub-categories provide assistance in determining what helps and hinders compliance with OHS in the workplace. The subsequent analysis begins with the first category of OHS leadership and then moves on to offer some detailed discussion in the relevant sub-categories.

5.4.1 OHS Leadership

Measuring OHS performance helps to ensure that organisations are achieving their OHS policy objectives and targets. Health and Safety Management Systems – Australian Standard and New Zealand Standard (AS/NZS) 4801 ‘General Guidelines on Principles, Systems and Supporting Techniques’ states that:

An organisation (driven by OHS leadership) should measure, monitor and evaluate its OHS performance, and take preventive and corrective action (AS/NZS 4801 2001, 35).

AS/NZS 4801 recommends that indicators be established to measure OHS performance against organisational objectives. Performance indicators are generally quantitative but can be qualitative, for example descriptors of workers’ subjective judgements about Management Commitments to OHS (Lingard et al. 2011, 32). This research captured a diverse set of qualitative outcomes that aligned with OHS leadership, an important category of the theme Management Commitment. The question presented to participants to address the research objective of ‘Identifying those factors that are perceived to help or hinder compliance with OHS legislation’ was ‘what factors encourage or discourage OHS compliance?’ As discussed in the previous chapter both groups of participants provided diverse responses to this question. *Setting an Example* was the first sub-category that evolved from data related to ‘OHS leadership’.

5.4.1.1 Setting an Example

There were three distinct elements to the data relevant to *Setting an Example*; ‘motivation and reputation’, ‘management/worker divide’ and examples of ‘leading by example’. The importance of ‘example setting’ in an OHS environment appears to be well supported by research. For instance, Utal (1983) speaks of the importance of shared beliefs across the organisational divide. Of the same view, Kotter and Heskett (1992)

link the influence of leadership on culture and the influence of culture on performance. Reason (1998, 297) describes that an unwillingness by management to proactively deal with known OHS deficiencies (i.e., setting the wrong example) will result in defensive gaps being worked around and allowed to persist.

The similarity of responses of both groups provides a degree of convergence on the important element of leading by example. Some participants from the management group suggested they try to operate by setting a positive example. Participants from the worker group appear to concur by suggesting their own experience of organisational commitment ensures everyone is focused on safety. Specifically, by linking an organisational approach to holistic and ongoing OHS, communication was considered leading by example. Hopkins (2005) provides the following alternative perspective to the inclusive perception provided by the research participants:

“Too often leaders think they can achieve safe operation by stating publicly that safety comes first and that no job is so important that it cannot be done safely. But then they leave it to others to ensure the organisation runs safely” (Hopkins 2005, 8).

Further, Hopkins (2005, 9) suggests that such leaders often express surprise when they discover, after a major accident, that the organisation was systematically inattentive to safety.

Schein (1992); cited in Hopkins (2005) contends that:

“There is nothing surprising about this, it is a direct outcome of the behaviour modelled by leadership (Hopkins, 2005, 9).

Concern was expressed about a lack of consistent leadership in some workplaces. These leaders were seen as remote and disengaged from the workers and how the work was being undertaken. Managers and leaders were viewed as having mentoring as well as example setting responsibilities. One management group participant appeared to recognise the problem when he complained about a lack of an interrelationship between the office and the workshop.

Good safety in the workplace requires a culture of commitment from all in the workplace. Where a disengagement between management and workers exists, workplace safety will fall short. Hopkins (2005, ix) adds to the importance of a shared commitment to workplace safety when he speaks of collective practices in the workplace being the only way forward to improve the safety culture of an organisation.

Some participants consider that the threat of being exposed to legal proceedings and loss of company reputation if things went wrong, motivated managers to be OHS compliant. Ludlow (2014) offers the following, which appears to be congruent with participant perceptions:

“Industries with a high degree of workplace dangers...still follow very traditional business practices. As such, it is very common for workplace safety in these organisations to be motivated by the requirement to protect itself from the various legislative regulations and to avoid poor reputation resulting from workplace incidents. Concern for reputational damage, and the media coverage that is assumed to follow, still exists as a major motivator for implementing baseline OHS practices” (Ludlow 2014, 1).

The failure to lead by example may provide some insight into the reasons why the accident and injury rate in Australia increased in 2015 (see Figure 1-1 in Chapter One). While some organisations clearly promote an OHS cultural approach that is premised on leading by example and communicating broadly, it is apparent from this research that some organisations do not. Hopkins (2005, 9) explains that values can be inferred from the organisational practices to which they give rise. One participant [O&M24] provided this timely and poignant perception:

“The advent of a new CEO with a new vision for OHS was very important. He put safety first in conversations with the workforce and led by example. He organised safety training for all employees and insisted on the presence of the executive team and other leaders”.

This new CEO appears to embrace an agenda that includes stimulating safety conversations across the organisation. This company executive provides and encourages clear instruction in the way that he expects management and workers to work together. There is clarity of vision for a new safety ethos and leading by example while encouraging ownership by all organisational actors through consultation. There appears to be a new positive OHS agenda with executive support giving the new safety paradigm every chance of success.

5.4.1.2 Clear Instructions

The sub-category of *Clear Instructions* appears to be well supported by research and policy. The provision of ‘clear instruction’ as an OHS concern was highlighted by Vecchio-Sadus and Griffiths (2004) where the researchers provide a very broad recommendation to provide *Clear Instructions* on three important OHS proactive fronts:

“Preparing job safety procedures enhances employee involvement and teamwork in carefully examining aspects of the process, establishing clear instructions to prevent incidents and accidents, and planning emergency response” (Vecchio-Sadus and Griffiths 2004, 616).

Moorcroft (2013) adds to Vecchio-Sadus and Griffiths OHS priority paradigm with the following:

“Having current, detailed and clear instructions on what is required from all levels of staff. This would include regular risk assessments, reviews of current policies and procedures, regular staff training and designated staff representatives to attend meetings to facilitate processes involved in prevention strategies” (Moorcroft 2013, 214).

Small business was represented by participants from both groups which supported an appeal to the regulator for clarity of the OHS message. Mayhew (2002) speaking solely from a small business perspective had previously summed the necessity for *Clear Instructions* with this advice:

“They are generally practical people (small business people) who accept OHS messages better if they contain concrete rather than abstract information” (Mayhew (2002, 35).

5.4.2 Workplace Culture

The importance of a successful OHS culture in the workplace was discussed in the Chapter Two Literature Review. The broad review made it clear that the matter has been well documented in research. In this study, participants’ perceptions added two considerations that do not appear to have been dealt with at any length by previous research. These considerations concern the sub-categories of *New Employees* and a *Proactive*

Approach. The category of Workplace Culture specifically addressed one of the objectives of this research which was to identify factors that are perceived to help or hinder compliance with OHS legislation. The question that is related to this objective attracted significant data for this category. Participants were asked to describe the OHS culture of their organisation. The effect *New Employees* had on the OHS culture of an organisation appeared to be of some concern to participants.

5.4.2.1 New Employees

Hopkins (2005) puts forward the question:

“If culture in general is to be understood in terms of collective practices, what are the collective practices that make up a safety culture”? (Hopkins 2005, 12).

Hopkins’ question is seemingly a very important consideration when attempting to identify a robust safety culture. Collective as an adjective means ‘people acting as a group’. As a noun, it means a ‘cooperative enterprise’. A particular challenge in building a robust and sustainable safety culture is the fragmentation of work life due to outsourcing, the downsizing of production, and fixed, short term and precarious employment contracts. Participants from both groups made reference to the adverse effects that casual, temporary, labour hire staff and new staff can have on the collective group dynamic. Cooperative approaches to safety become problematic when temporary, or new staff, are introduced to an established group. Both participant groups expressed concerns about the negative effect temporary staff can have on a positive OHS culture. It appears that the OHS culture of an organisation suffers because of the influx of temporary or new staff who can be less adherent, or not as committed to, health and safety.

Underhill and Quinlan (2011) identify international studies that indicate temporary workers (often from agencies) are more likely to be injured at work than other types of employee. Explanations for their greater vulnerability have been constrained by the difficulties researchers face in accessing temporary or agency workers. Participants from the worker group equated a poor level of OHS training, and little or no commitment to an OHS culture with temporary staff. Comments were also made regarding casual staff as being overly eager to please and to be seen as performing work quickly and therefore not always adopting the safest way to do a job. Underhill and Quinlan (2011, 414) suggest that agencies are compelled to place workers quickly or risk losing the client host to another agency. As Underhill and Quinlan note, this ‘eagerness to get agency staff in place often results in mismatched placements’. They refer to these mismatched placements as increasing the workers’ risk of injury. Often, this is attributed to poor induction and OHS training precluding the development of knowledge about safe work practices. Participant perceptions appear congruent with elements of Underhill and Quinlan’s research.

Other participants from the management group wanted access to the temporary worker’s compensation records to become aware of any workplace injuries or OHS prosecutions. This level of access to records would allow for a better-informed decision to be made as to whether a worker is sufficiently committed to OHS before employing them. Privacy laws will not permit this level of access but it does provoke an interesting question; should employers be able to access a worker’s previous health and safety record? Would this access encourage workers to view a personal commitment to health and safety as potentially being career enhancing or a record representative of no such commitment potentially has an adverse effect on a career? Perhaps access to a worker’s OHS record may change the way workers view OHS?

It was clear a proactive approach to relating to a potential employee's level of commitment to OHS before employment was a favoured approach for some. This was just one of several proactive OHS measures participants desired. There appears to be a scarcity of research in this area and it has the potential to be an emerging issue in OHS.

5.4.2.2 Proactive Approach

Proactive approach as a sub-category contains two relatively complementary elements. The first element refers to the proactive OHS influence larger principal contracting organisations have on their smaller sub-contractors. Several participants perceived a causal relationship exists between sub-contractors and principal organisations. The larger principal organisation often requires a high level of OHS commitment from sub-contractors. Key research in this area was covered in the literature review.

Moraru and Babut (2012, 106) inform us that people are becoming more able to adapt to these new working conditions and learn to value their knowledge in other work situations. Participants from both groups also perceived that there is a huge demand by principal clients for sub-contracting organisations to prove OHS compliance in the field at the risk of sanction; clearly a form of co-production designed to reduce OHS risk.

Proactivity is also linked very strongly to the culture of the organisation and the influence a strong OHS culture has on employees to become active in OHS. Hopkins (2005, 18) suggests that to have an effective approach to OHS, risk awareness must operate at both the organisational and individual level. Hopkins goes on to say that risk awareness among individuals is crucially dependent on organisational context. Gunningham (2005, 340) suggests that the assumption of common interest between workers and managers is flawed: although workers and managers may agree in principle on the desirability of reducing workplace injury, they often hold very different positions on the best means to achieve this outcome. This research detected a different outcome from that identified as 'flawed' by Gunningham. Generally, the common perception identified in this research was that workers want to actively work with management to improve OHS outcomes. A good relationship between managers and workers was perceived by participants as being achieved by working together to accomplish the same desired end result. Gallagher et al. (2003) appear to agree that a proactive synergy of management and workers is crucial to OHS success:

"Worker participation and senior management commitment are not only critical but are interlinked" (Gallagher et al. 2003, 71).

Cooper (2000) articulates the factors that have an unfavourable influence on the development of a proactive approach to safety management. He advances this argument by linking poor organisational culture with a lack of proactivity in safety management. This research and literature support the view that well run businesses will integrate OHS into their strategies and policies and encourage workforce participation in the implementation process.

5.4.3 Successful OHS Strategies

The findings from this study reflect data contained in two particular sub-categories. The first, *Education and Training* has been noted previously by Mitchell (2000, 327) as one of six key areas of management practice that can have a positive effect on OHS. The other five practices noted by Mitchell were largely consistent with other findings from this research and included management commitment, effective OHS management systems, risk management and control of hazards, appropriate auditing of management systems and hazards,

and communication and consultation. However, a key area of data identified through this research and not specifically covered by Mitchell was the need for site specific OHS strategies.

5.4.3.1 Site specific OHS Strategies

The sub-category of *site specific OHS strategies* was dominated by perceptions provided by participants from the management group and consists of four elements. Participants referenced the threat of sanction post incident or accident as encouraging employees towards OHS compliance. The opposite was also perceived by participants; that is rewarding good OHS performance. Some participants considered that motivation to improve OHS compliance comes from the benchmark OHS performances of competitors, and finally, the adoption of a risk based methodology was perceived to encourage better OHS management. The first element of ‘strategies that evolved post incident or accident’ consists solely of the perceptions of management group participants.

According to (Hopkins 2006, 4) an OHS learning culture is a natural extension of a reporting culture. Hopkins’ views are supported by other researchers in the OHS cultural deliberation, as previously cited in the literature review (Chapter Two). To summarise, a reporting culture is one which gleans information from various sources and extracts whatever lessons there are and applies these lessons. While it is admirable that employers and employees respond to accidents and incidents with strategies for improvement, avoiding accidents is preferable. Participants from the management group explained that some of their best strategies involved the motivating effect a workplace injury had on OHS compliance. Strategies such as making relevant changes to work processes to make the work safer is often referred to as learning from accidents as opposed to avoiding them. Woods (2006) offers the following rationale for learning post-incident/accident but highlights the high price paid for post-accident learning:

“An organisation is often unable to recognize or interpret evidence of new vulnerabilities or ineffective countermeasures until a visible accident occurs. At this stage the organisation can engage in fundamental learning but this window of opportunity comes at a high price and is fragile given the consequences of the harm and losses” (Woods 2006, 24).

Participants from both groups heralded the success they have using the stick approach to enforcing safety. The stick approach is the alternative to the carrot approach. A carrot approach is where safety is encouraged through proactive OHS education as opposed to the threat of penalty. Some participants claim to use the threat of dismissal for safety breaches as a reason to insist on OHS compliance. Other participants reference a culture of awarding money or gifts in return for OHS compliance. These methods can be viewed as stick and carrot approaches by organisations to encourage OHS compliance. Brace et al. (2010) interviewed a total of 72 participants across British industry on the matter of enforcement and compliance. A consensus considered the stick approach is appropriate on occasion but that one size does not fit all and subsequently the carrot is viewed as just as important for encouraging OHS compliance. The Brace et al. finding of one size not being applicable to all appears to be consistent with the findings of this research.

One potential carrot approach by the WorkSafe WA, that could positively influence the commercial and public sector environments in WA, is more targeted, site-specific OHS training and education. OHS injury statistics or OHS prosecution data could be used to identify problematic businesses or industries. Once problem areas are identified then regulated compulsory OHS training provided by WorkSafe WA or nominated affiliates could follow.

Motivation to improve OHS compliance due to competitor influence or economic imperatives is an interesting element cited by participants. This suggests that good OHS is potentially spreadable. The wider the adoption by individual businesses the more likely other businesses will be encouraged to follow suit. Finally, it appears that individual businesses are adopting strategies designed to satisfy the level of risk in their businesses. ‘Motivation’ and ‘OHS strategies’ that are unique to a business appear to require more investigation because the current availability of research is limited.

WorkSafe WA has been involved in the inspection of targeted industries to ensure OHS compliance is adhered to by active employers in those industries. This has been discussed in more detail at section 5.3.1.1 – *Regulator Support*. During the inspection of targeted industries WorkSafe WA inspectors often adopt an *Education and Training* approach to improve OHS compliance.

5.4.3.2 Education and Training

The *Education and Training* component of OHS evident in this project is consistent with extensive previous research. A substantial number of studies evidence that OHS training increases knowledge and targeted OHS behaviours (e.g., Cohen et al. 1998; Johnston et al. 1994 and Fonteyn et al. 1997). It is also worth noting that the *Occupational Safety and Health Act 1984* (WA) has a provision at section 19(1)(b) that requires employers to provide training to employees. See Section 19 in Appendix D.

It is important to indicate that contributions to this sub-category came from both contributing groups. This suggests that the management and worker groups deem it worthy to ensure OHS training is an important component that encourages OHS compliance. OHS training and education is designed to facilitate the learning of OHS specific competencies. In this conceptualisation, *Education and Training* are the inputs and learning is the output. The perceptions of both participant groups were congruent with each other and previous published research (Bushnell 1990; Hoffmann 1999).

When relevant OHS training or education is provided, competency should be tested to measure the degree of success, particularly given the serious consequence or burden of OHS failure. Robson et al. (2012) places the necessity for OHS training in the following observation:

“The burden of workplace injuries, illnesses and fatalities on society is large, one common approach to mitigate such adverse outcomes is OHS training” (Robson et al. 2012, 193).

Participants from both groups perceive the importance of OHS training and the quality and regularity of OHS training and education. OHS success has been achieved through *Education and Training*. Robson et al. (2012, 193-194) suggest that OHS training empowers workers and managers to become more active in making changes to enhance worksite protection. Participants from both contributing groups in this research also perceived these values. One specific value, identified by participants as being deficient by management, was the insufficient level of training provided to the fictitious forklift operator in the vignette. See *Induction Process* at section 4.4.2.1 and *Competency and High Risk* at section 4.4.2.2.

5.5 Management Deficiencies

The third global theme explored in this thesis is that of Management Deficiencies. This theme consists of two categories: Practices that Hinder OHS Compliance and Incident Investigation as referenced in the model. Practices that hinder OHS compliance’ is derived from data drawn from all five study questions. Analysis

of the data fulfils one of the main objectives of this study; to 'identify those factors that are perceived to hinder compliance with OHS legislation'. The Incident Investigation category comprises mainly opinions generated from participant perceptions linked to the vignette.

The third and final theme begins with 'practices that hinder OHS compliance'. This theme also draws some of its data from analysis of the vignette.

5.5.1 Practices that Hinder OHS compliance

The data revealed that while many managers were committed to the OHS process there were some who were perceived by participants as not being adherent. The onerousness and variability of legislative enforcement within disparate OHS jurisdictions, even post the work health safety (WHS) harmonisation efforts, can hinder the effectiveness of OHS practice. Wong et al. (2015) identified the barriers to good OHS practice in small construction firms:

- *The lack of safety awareness and concern, where wrong perceptions or underestimation of risks and the onerousness and variability of legislative enforcement are the main contributors,*
- *Cost issues, comprising lack of resources and facilities, financial pressures and lack of bargaining power over main contractors, make it difficult for small construction firms to focus on issues other than project cost, schedule and quality, and*
- *Tight project deadlines and the long training and education period needed for good OHS practice.*

The factors that hinder good OHS practice need to be determined across all industries to enable the development of strategic solutions for improvement of the current OHS circumstance. Factors identified by this research, include *Insufficient OHS Resourcing*, *Production Pressures*, education and training, high risk work and better consultation. The first sub-category is (*Limited*) *Consultation*.

5.5.1.1 Due Diligence

Due Diligence was also covered earlier at section 5.4.1.2. This sub-category of *Due Diligence* is built on participant observations regarding a lack of due diligence in the workplace by responsible persons. Research on the *Due Diligence* legal requirement is scarce, mainly because the principle of positive *Due Diligence* in OHS is a reasonably recent regulatory construct. Participants' perceptions and experiences revealed in this research appear to be consistent with findings from earlier research. Participants from both groups contributed perceptions such as management tends to follow the path of least resistance and a lack of proper process.

This can be seen as a form of cognitive blindness on an organisational scale which is discussed earlier at section 5.4.3.1. Gallagher (2012, 227) points out that effective management of OHS continues to pose a challenge for many organisations. Holmes (1999) concluded that many small business employers believe OHS risks are created by workers and therefore view risk control as the responsibility of workers. Arguably, this is a form of blaming the victim. Not surprisingly it has been demonstrated that there are higher accident rates and larger magnitudes in small and medium sized enterprises (SMEs) compared with the larger organisations (Micheli and Cagno 2010). While it is not conclusive, it is interesting that the participants that offered perceptions in this sub-category come from SMEs.

An alternative approach to corporate officer liability can be located at section 55(1) of the *Occupational Safety and Health Act 1984* (WA) The following is a summary of the provision:

Where an offence against the Act committed by a body corporate is proved to have been committed with the consent or connivance of, or to have been attributable to any wilful neglect on the part of any director, manager, secretary or other officer of the body corporate, that person is also guilty of that offence.

In comparison to the *Due Diligence* requirements of the WHS Act, the WA OSH Act provision emerges as relatively narrow in its application as it relies on attributed liability rather than imposing a positive duty on corporate officers. A breach of this statute will result in an offence by the officer concerned. Johnstone (2008:30) suggests that the WHS Act encompasses a broader approach where it places a ‘positive duty on an officer to exercise *Due Diligence* to ensure the compliance by the entity, of which they are an officer, charged with the duty of care of that undertaking’. As previously discussed, research participants from the worker group want management to be more active in OHS, they want a proper OHS process followed and OHS risk treated with more respect. If the current WA OSH Act is not encouraging this positive duty by making individual managers responsible for their actions, then it is clear that participants may favour the more individually accountable positive *Due Diligence* approach of the WHS Act. Gallagher (2012, 238) emphasises the necessity for regulatory improvement when he concludes that at a regulatory level continued strengthening of the regulatory OHS framework is necessary to address the growing risks. At this juncture, it is important to strengthen the OHS regulatory framework to provide sufficient OHS resourcing which could be problematic for all concerned.

5.5.1.2 Insufficient OHS Resourcing

Participants from the management group were the biggest contributors of data relevant to the sub-category of *Insufficient OHS Resourcing*. All contributors expressed concern about the under resourcing of OHS in their respective organisations. According to one participant it would appear that a lack of government funding is adversely affecting the ability of a government run utility to meet the required OHS standard.

Gallagher (2012) references the changing nature of OHS post the introduction of the Robens recommendations in Australia in the mid-1980s. Gallagher provides this warning:

“More than two decades have passed yet OHS still appears vulnerable to being sidelined...some organisations have failed to fully deliver improvements because of conflicting organisational priorities” (Gallagher 2012, 227).

Within the management group participants highlighted the concern that government funding pressure is preventing OHS improvements. Concerns included hazardous items not being replaced and a lack of person power to carry out OHS related requirements. Bluff (2003, 11) sums up a committed management approach to OHS which she says must include the provision of leadership for occupational health and safety management (OHSM) in particular which entails leading by example and providing the necessary resources to implement OHS initiatives. According to Jallon (2011), OHS stakeholders rarely factor the cost of workplace accidents into decisions on prevention spending. Farrow (2002) appears to concur with this view and offers this poignant observation:

“When maintaining safety is the default activity, in the real options framework, the usual cost of a safety investment with irreversible consequences can be economically justified up to a multiple of the usual benefits (damages avoided) with the multiple to be determined by the particular problem”
(Farrow 2002, 172).

Farrow suggests that the usual benefits from an investment in safety represents a fraction of the compliance cost in the presence of uncertainty and irreversible cost such as fatal incidents. It would appear that OHS even when well-resourced, its priority remains subservient to other organisational pressures. The concerns expressed by participants in this sub-category appear to be congruent with previous research. One such organisational pressure that meets safety head on appears to be production.

5.5.1.3 Production Pressures

The issue of putting production before safety is covered extensively by previous research. Mearns et al. (2001, 144) inform us that unsafe behaviour is the best predictor of accidents/near misses as measured by self-report data. An example of the impact of production pressure is the Piper Alfa disaster. Lord Cullen’s ‘Inquiry into the Piper Alpha Disaster’ (Cullen 1990) initially determined the immediate cause of the incident was judged to be the ignition of a leakage of gas condensate, resulting from the pressurization of pipework that was undergoing maintenance. As the inquiry progressed, Lord Cullen uncovered evidence of a culture that appeared to emphasize the importance of production over safety. Some 167 workers lost their lives in this avoidable tragedy. Lord Cullen specifically states in his report that within the UK oil and gas industry:

“It is essential to create a corporate atmosphere or culture in which safety is understood to be and accepted as, the number one priority” (Cullen, 1990, 300).

The majority of participant comments garnered in this element came from the worker group where concerns were highlighted about production coming before safety. A participant from the management group involved in the health care sector considered a culture of primary care provided to others while staff came second. This perception suggests that an ethos exists in the participant’s organisation where the client is looked after ahead of the staff. A participant from the worker group identified production pressures as being the biggest hindrance to OHS. Other participants from the worker group appeared to support the perception that pressures of production are an anathema to OHS concerns. After conducting research into small construction businesses in WA Bahn (2009, 219) identified that the pressure of low returns combined with the need to get a job done on budget and on time means that safety is compromised by the short cuts necessary in order to complete the work.

Responses provided by participants in this sub-category assist in meeting one of the objectives of this research - to identify factors that are perceived to hinder OHS compliance. According to the participants the dynamic tension between conflicting safety and production demands negatively affect safety. McLain and Jarrell (2006) offer this disturbing additional perspective:

“If we conceptualize safety-production incompatibility as the perceived inability to achieve joint safety and production goals, goal conflict research suggests this will lead the worker to prioritise some goals at the expense of others” (McLain and Jarrell 2006, 299).

McLain and Jarrell (2006, 306) address the problem of workers employed in hazardous occupations being embedded in a complex system composed of several influential sub systems, including demands for production and safety hazards. Many of the most challenging situations in this complex environment arise where there is conflict between the sub systems (Perrow 1984; Roberts 1990 and Reason 1990). It is evident that OHS is a sub system of the organisational endeavour; unless it is treated as an equal there can never be a successful implementation of the OHS sub system because of the perception of conflicting priorities. Without successful implementation of the OHS sub system, safety-related incidents will continue. Incident/accident investigation data inform us that production pressure is the cause of many major industrial accidents, like Piper Alfa (Cullen 1990).

5.5.2 Incident Investigation

Data for the second category of the theme **Management Deficiencies** were drawn from participant responses to the vignette. While some participants provided perceptions that were related to their lived experiences in the workplace, not all participants were able to draw on such experience. These participants appeared to draw on perceptions that they determined to be fair and equitable in the circumstances of the facts provided in the vignette. We begin with the *Induction Process*.

5.5.2.1 Induction Process

Participant responses to the *Induction Process* centered on whether the fictitious employer in the vignette had done enough to ensure sufficient information had been provided to the employee in a generic site induction. Both groups contributed perceptions to this sub-category had similar perceptions. Despite the evidence (provided in Chapter Two), which provides the reader with the view that industry in Australia has an unenviable safety record, there appears to be few marked initiatives towards the facilitation of in-depth research into the value and applicable content of the site safety *Induction Process*. One group of researchers did confirm the importance of providing operatives with a safety booklet or manual when joining a company and a brief safety induction for every new recruit in their first week was found to positively influence safety on site (Sawacha et al. 1999, 313).

Participants in this research highlighted the need for a site-specific induction. They want the content of the induction to contain specific information relevant to the task for which the employees are hired. Some participants want the induction to include a walk around the area where the new employee would be working in order to mitigate safety risks. Participants desired specific information to be provided regarding known hazards in the expected work area. Several participants recognised the importance of the specificity of relevant information in the induction. In particular, the high-risk forklift operation was highlighted as an example of defective OHS. All of these perceptions culminated in a requirement for a more detailed and relevant site specific induction with *Competency and High Risk* licence confirmation included in the induction checklist.

5.5.2.2 Competency and High Risk

There have been surprisingly few studies into the impact of worker/employee competency in high risk work. One notable exception involved examining the links between critical safety tasks, the competency with which they are preformed, and the overall impact on safety culture (Christian et al. 2009, 1103). This research comprised a comprehensive meta-analysis on the effect safety motivation and safety knowledge has on safety performance (compliance and participation). ‘Competence’, as well as attitudinal and motivational factors,

appear to have a direct impact on safety culture. As defined in the ‘Training and Assessment Training Package (TAA04)’ competency standards are expressed in outcome terms as:

Knowledge and skill and the application of that knowledge and skill to the standards of performance required in the workplace.

Probably the most dramatic lack of illustration of safety training effort was the case of an LPG tanker operator employed by Boral Gas (Qld) Pty Ltd who was dismissed for overfilling customers’ LP gas tanks (Hosie 1993, 54). The decision by the Queensland Industrial Court (No 21 of 1986, 31 October, 1986) centred on the ineffectiveness of Boral’s safety training efforts. Significantly it was held that simply ensuring that an employee receives training is inadequate preparation; instead ‘Organisations will have to prove that the training was effective’ (Delahaye and Smith 1987, 6).

Several participants from both groups appeared to assume that because the forklift driver in the vignette is licensed then the operator must be competent. Participants openly admitted that an assumption of competency could be drawn from the significance of a level four licence as described in the vignette. Notably, the forklift driver was new to the business when the accident detailed in the vignette occurred. A combination of qualifications, skills and knowledge are the essence of the competence requirement, with associated aspects relating to selection, training, competence standards and their assessment (Flin et al. 2000, 187). Ayers et al. (2012, 542) support Flin et al.’s. (2000, 87) proposition but add that the competent resourceful worker, if ‘recognised’ as such, will remove some of the barriers between those who make decisions and those whose task it is to carry them out. Ayers et al. (2012, 542) suggests that it is necessary to ‘recognise’ that the worker is competent before assuming a qualification equates to competency. This would be particularly important in the operation of a forklift, which is recognised as a high-risk endeavour that requires a designated ‘Unit of Competency’ for a licence to operate.

On-site competency test or having a competent person monitor the new employee for a period of time until satisfying themselves that the new employee is competent was suggested by some as how OHS requirements could be met. Determining the level of competency post-accident is not ideal but does fit with the tenets of *Investigative Fairness*.

5.5.2.3 Investigative Fairness

Chapter Two of this thesis at section 2.7.1 introduces the concept of ‘blame/no-blame safety cultures’. While there appears to be some limited research in the ‘blame’ area of OHS, the research is generally limited to the perceptions of management. Research to date which is referred to below is not entirely congruent with the findings of this current research.

Blame without the added components of *Investigative Fairness* and just and fair sanctions was considered important from an OHS cultural perspective to several participants. Grey et al. (2011, 1) view the concept of a just culture as drawn from the broader idea of ‘safety culture’ now common in modern thinking about system safety. Blame can be distinguished from its earlier incarnation, the ‘no-blame’ approach, as it requires people to be held responsible for their actions, but only in circumstances where sanctions are just and fair (Grey et al. 2011, 1). Further Grey et al. explain that it is dissimilar to the no-blame approach because under a just cultural approach blame is taken into account only when appropriate. An appropriate opportunity would be when blame is restrained to only wilful violations of OHS policy or relevant destructive acts.

Participants were divided between a willingness to apportion blame to the forklift operator, even with the scant information provided in the vignette, and those who wanted to ensure procedural fairness. An open and transparent investigation, more information and a requirement to bring in an independent investigator where all issues of fairness that were identified. Interestingly, both groups were represented in the mix with some from the ‘management group’ recommending a manifestation of procedural fairness. There were notably no participants from the worker group who wanted to blame the forklift driver for the situation without some form of *Investigative Fairness* being applied. The representation from the worker group wanted more information. Those participants who blamed the forklift operator outright, generally, without qualification or explanation, came from the management group with some small business representation. This finding is congruent with previous research carried out by Halse and Kines (2009). They interviewed 22 small business owners (1 to 19 employees) about how they attribute accident causation and what they learn about accident prevention. Not surprisingly they conclude:

“Owners attributed the causes of accidents to unforeseeable circumstances and reject that circumstances under their control caused the accident” (Halse and Kines 2009, 17).

Eakin (1992) had previously identified a similar outlook for small business owners. Interviews with a sample of 53 small business owners revealed that the common approach to managing workplace health and safety was to ‘leave it up to the workers’. One research participant from the Eakin research explained why they don’t have many accidents reported: *“If they screw up there’s a demerit letter, bang right now”* (Eakin (1992, 692). This style of management ethos probably led to a culture of silence where near misses, even some injuries, would not be reported.

While Management Deficiencies has its place in the ‘Generating OHS Compliance Model’ (the model) there is also much to value in the model because it offers a framework for all stakeholders to strengthen the OHS culture of an organisation.

This chapter concludes with a summary of the framework.

5.6 Duty of Care (Super Theme)

Duty of Care is the first of the two super themes. Super themes were identified because they play a central role in each of the first three major themes of the model. “The employer’s *Duty of Care* is a statutory legal requirement and is recognised as a non-prescriptive OHS general duty” (Toohey et al. 2005, 27). A non-prescriptive duty means an employer has discretion to determine how duties are addressed. The *Duty of Care* super theme demonstrates a degree of congruence between the perceptions of both managers and workers. The broad requirements of the regulatory *Duty of Care* evolved from the Robens requirement for future policy to not only increase the effectiveness of the state’s contribution to safety and health but also to create the conditions for more effective self-regulation. The *Duty of Care* is a broad general duty that not only provides employers with the opportunity to determine strategies to meet the requirement of the duty but also provides some guidance on what an employer must consider when adopting and implementing the process. This finding is not unusual given that safety training, consultation, provision of OHS information, provision of safe plant and disposal of plant is required by an employer’s *Duty of Care*. As can be identified from the reproduction of the statutory section in Appendix D, ‘how’ to achieve these goals is generally left to the duty holder. For example, section 19(1)(b) of the *Occupational Safety and Health Act 1984* (WA) reflects the requirement for the provision of information, instruction and training. However, note that the provision is

not specific about what information, instruction and training is required, only that it should enable employees to perform their work in such a manner that they are not exposed to hazards. Many of the sub-sections of the *Duty of Care* provision mirror this non-prescriptive approach. It is therefore clear that the participants who relied on their *Duty of Care* obligation as their understanding of OSH compliance could also have been alluding to a broader degree of self-regulation and self-reliance. Alternatively, these participants may have been using the term '*Duty of Care*' as a narrow understanding of regulatory requirements and not from a self-regulatory or self-reliant context. Participants from both groups suggested that their understanding of OHS compliance was a 'duty of care' obligation thus providing insufficient information to be able to judge the context of their level of understanding.

The findings indicated that small business employers are seen as not understanding their *Duty of Care* regulatory responsibility. There has been a great deal of OHS research carried out in the small business sector (Smith 1994; Arocena and Núñez 2010; Hopkins 1993 and Fonteyn et al. 1997). The small business is recognised by government as the largest employer in Australia. However, as a sector it appears to struggle with fewer resources available for OHS compared to large business. Small business owners often appear to have minimal understanding and comprehension of OHS legislation. Fonteyn et al. (1997, 54-55) point out that the consequences of a lack of OHS legal and procedural information is that small business owners have a tendency to discount OHS risks and to minimise or underestimate the seriousness of hazards in their business. Clearly it is 20 years since this observation was made but the problem appears to remain.

The requirement for an employer to consult with employees can also be found in the duty of care provision reproduced in Appendix D. This adds weight to the argument that the duty of care provision is broadly prescriptive in its construction. The *Consultation* requirement concerns all matters of OHS in the workplace.

5.7 Consultation (Super Theme)

This second super theme reflects data demonstrating agreement between both managers and workers. The concept of Consultation is well supported in OHS research (Tooma 2012, 17; Frick 2004, 398; and Walters 2003, 7). One of the objects of the WA OSH Act is to foster cooperation and consultation between employers and employees.

Of particular importance in this research was the linkage of *Consultation* to the ownership of OHS compliance. This would suggest that the importance of *Consultation* in successful OHS compliance, as envisaged by Robens, is being adopted in some WA workplaces. Consultation is a legal requirement in WA, as indicated in section 19 of the WA OSH Act (Section 19(1)(c)) which requires an employer to consult and cooperate with employees as part of the employer *Duty of Care*. What is non-prescriptive is the methods of *Consultation* an employer may use to meet the regulatory requirement. A recent example of the nonspecific nature of the *Consultation* requirement leading to a successful OHS prosecution was highlighted in South Australia (SA). An organisation based in SA became the first entity to be fined for breaching the consultation provisions of the WHS Act. See *Boland v Trainee and Apprentice Placement Service Inc.* [2016] SAIRC 14 (27 May 2016). The case involved an employee who sustained horrific injuries when a section of guttering he was handling came into contact with an 11,000-volt powerline. The employer pleaded guilty to failing to consult, cooperate and coordinate activities with another duty holder on a construction site. This case has potential ramifications for all Australian jurisdictions.

Safe Work Australia has a code of practice titled *Work Health and Safety Consultation, Co-operation and Co-ordination* (the code). A code of practice may include explanatory information, recommendations for best practice, or references to occupational safety and health laws. It is important to note that while duty holders must comply with the occupational safety and health laws, the preventative strategies outlined in the code do not represent the only acceptable means of achieving a certain standard. A code of practice does not have the same legal force as a regulation and is not sufficient reason, of itself, for prosecution under the Act. But the code does provide practical guidance to persons conducting a business or undertaking on how to effectively consult with workers.

It is clear that the consultation provisions enshrined in all Australian OHS and WHS Acts places significant responsibility on leaders to include all affected stakeholders in safety related deliberations. Clarke and Ward (2006) completed a study examining the effect of leader influence tactics on employee safety participation. One of the findings the study identified was that:

“The effectiveness of consultation tactics fits with the suggestion that participative management provides better prediction of safety outcomes than authoritarian management” (Clarke and Ward 2006, 11).

Comments from both participant groups in this study focused on talking together (employers and employees) about safety matters and agreeing on the safest way to carry out a task, and consultation being driven from the top down. The ‘driven from top down’ approach identified is consistent with the Work Health Safety Act (WHS Act) requirement for vertical *Consultation* and the ‘getting together and talking about safety’ is consistent with the horizontal *Consultation* requirement of the same Act.

Consultation in the workplace acknowledges that everyone has a role to play in identifying and resolving health and safety issues. *Consultation* as a sub-category of *Legislative Compliance* is an integral inclusion but must be one of several relevant inclusions (*Management Commitment*) to ensure that a safety system is complete (Dunn 2013, 39).

Participants perceived several ways in which the *Consultation* process can be conducted in the workplace. The worker group wanted managers to talk to people about the safety message. Several participants from both groups discussed the various recommendations of the *Consultation at Work (WA)* code of practice including the inclusiveness of the Job Safety Analysis (JSA) process. This process, like the equivalent job hazard analysis (JHA), requires the employer, or employer representative, to discuss the work to be done through the prism of hazard identification, risk assessment and control mechanisms relating to the work expected to be done by workers. This process is then documented.

Just as *Consultation* plays a significant role in ensuring a safe workplace a lack of *Consultation* can have the opposite effect. As previously discussed, *Consultation* between employers and employees is mandated under Australian OHS legislation. For *Consultation* to be considered meaningful and effective, it is generally accepted that moral and ethical principles such as trust, honesty, commitment and respect need to be recognized and applied by individuals during consultation (Ayers et al. 2012). An organisation’s level of cultural maturity is an important element of the ability of individuals to freely engage in meaningful and effective *Consultation*. Ayers et al. (2012) allude to the fact that if the value of *Consultation* is best reflected in the degree of input and control that workers have regarding the very decisions that affect them, a lack of

Consultation will potentially have the opposite effect and there will be no input or control by the workers into OHS decisions.

A difference in perceptions covering the concept of *Consultation* was evident from the two groups. The management group perceived insufficient consultation from representative government agencies as well as silos operating within their own organisations. An example of this appears to result from a lack of direct consultation when OHS regulatory changes are made by relevant Australian governments. Another participant perception referred to disconnect between the changing nature of the OHS legislative framework and those who are expected to apply the law in the workplace. This disconnect was also referred to by participants from both groups as a separation between the new legislative framework of the WHS Act and the lack of an education agenda to bring those affected up to date with the changes; a perceived lack of ‘direct discussion’ or ‘relevant information’ on what to expect and how it might affect those at the coal face who are required to apply the WHS Act.

The worker group offered perceptions related to *Consultation* in their own workplaces having been replaced with either threats or simply nothing. One participant referred to this lack of *Consultation* as a vacuum. Despite such views, it is worth noting that there were relatively few from the worker group who were critical of management’s efforts to consult. Ayers et al. (2012, 558) explain that the data in their research demonstrated that the higher the level of organisational maturity that a company was deemed to have reached, the more involved and in-depth its *Consultation* was. As previously noted consultation is a requirement of the OHS statutory duty of care. See ‘Appendix A’ for more on the regulatory requirement for consultative arrangements at a WA workplace.

5.8 Conclusion

The original aspect of the work presented in this chapter contains insights into furthering the OHS endeavour. Representative of this endeavour is the model which acts as a framework to articulate relevant themes and categories developed in Chapter Four. A qualitative approach was used to collect and analyse the data collected through semi-structured interviews. A key challenge of this study was to translate qualitative data into a form suitable to summarise and articulate the salient points. Analysis of the data shows that a change in the way OHS is conceived, or needs to be conceived, is required for the process to be successful. Rune (2005) argues that the successful management of change is crucial to any organisation in order to survive and succeed in the hyper competitive and continuously evolving business milieu. Recent changes to the OHS paradigm have revolutionised the way work is performed. But these changes do not appear to be putting downward pressure on OHS injury and fatality statistics. How to change, what to change, and the impact of change on OHS for all employees remains the guiding concerns facing contemporary organisations.

The model presented in this study contributes a framework grounded in participant perceptions which can be developed with further investigation and study. This model provides a useful account of what would create effective change in OHS. As such these outcomes demand close and careful consideration by strategists and practitioners. The data source evolved solely from OHS stakeholder participants’ reflection on their perceptions. These factors all contribute to the uniqueness of this research and its findings. It presents both the ‘what’ and the ‘how’ of OHS change as perceived by participants; for example, what needs to be done (better OHS organisational cultural commitment), or not to be done (rely on culture being driven from anywhere but the top down), and how (high level of management commitment).

The model is prescriptive but is also malleable. The ultimate use of the model will be strongly guided by the skills of the user and the depth of the effectiveness will reflect workers' and managers' beliefs about managing OHS in the workplace. Handy (2002) argues that capability is the core of a humane society; that is, the ability to recognise what needs to be done to improve the world we live in. In OHS this needs to be accompanied by another focus, which is the concern for others. The final chapter of this study provides a summary and critique of the research findings. While it concludes that some of the findings generated in this study may be incomplete, they represent a contribution to a better understanding of the strengths and weaknesses of the OHS paradigm; an exercise that has been constructed on the solid foundation of an overarching concern for others in the workplace.

6 Conclusions and implications

6.1 Introduction

As explained in Chapter One, this study evolved as an enquiry into ways current approaches to OHS might be improved in Western Australian (WA) workplaces. This chapter presents a summary and critique of the research findings that identify the strengths and weaknesses of managing OHS in the context of such workplaces. These findings have the potential to be generalised and replicated into broader Australian workplaces, as well as in similar and disparate micro and macro organisational cultures.

Participant perceptions are included to explain how organisations go about the daily endeavour of operating a business while managing OHS. To address a crucial objective of the research emergent issues were also identified. These may encourage or hinder OHS compliance within organisations. Other sub-categories provide evidence of the need to further test the WorkSafe WA advise and persuading aspects of the present OHS deterrence strategy, the second objective of this research.

This research includes contributions to theory and practice and the limitations of the research are offered in this chapter.

6.2 Summary of Key Findings

Figure 1-1 is testament to the limited success in Australia of the current OHS paradigm which leads to the question – is it time to reinvigorate OHS in Australia as a major issue on the social policy reform agenda? Both participant groups wanted adequate government funding for OHS, a more consultative approach to the management of OHS that is simpler and more applicable OHS laws, more OHS education and training, larger penalties for OHS offenders and more help from the OHS regulator. The potential to encourage a paradigmatic shift to fewer injuries and deaths from the current statistical levels of workplace injury and death may lie somewhere along the continuum. Table 6-1 represents the continuum. The table provides a link between the research objectives and the research findings. The findings have been summarised in the model as a framework that has the potential to generate OHS compliance.

Table 6-1: Research objectives and corresponding findings.

Research Objective	Findings
Encourages OHS compliance.	<ul style="list-style-type: none"> Consultation between workers and management Setting the OHS example by management Clear OHS instruction from management Proactive approach to OHS by all stakeholders Site specific OHS strategies implemented and monitored by management Education, training and development (for workers and management by competent providers) Exceeding legal requirements in relation to OHS compliance Duty of Care Due Diligence by management

Research Objective

Hinders OHS compliance

Findings

New employees in relation to workplace safety culture
OHS Law (more simplicity in drafting required)
Insufficient OHS resourcing by government
Production pressures by management
Poor induction process
Absence of competency checks and/or high risk licence checks
Lack of investigative fairness
Limiting OHS compliance to regulatory compliance
Poor workplace culture

Current deterrence strategy and its advise and persuade components that are not effective enough, could be improved by:

Regulator support of better understanding of OHS compliance and more willing assistance when requested by the duty holder
Higher penalties for all OHS offenders in relation to OHS breaches
More willingness by the regulator to consult with business
Responsible people severely dealt with in the event of reckless failure to meet OHS compliance standards

The purpose of the third and final objective of this research culminates in a ‘generating OHS Compliance’ (the model), which identifies many of the salient elements of managing OHS (see Figure 5-1 presented in Chapter Five). The prevailing aspects of this model are initially presented as a thematic analysis that is further broken down into related categories.

6.3 Strengths of this Research

6.3.1. Contribution to Theory

The Robens OHS recommendations of 1972 had a profound effect on how OHS is regulated in several countries (jurisdictions) throughout the world. A finding of this current study is that 45 years on there are regulatory and practical shortcomings in the Robens paradigm. The ‘Generating OHS Compliance Model’ provides considerations that can be used to improve the Robens paradigm thus making it more relevant to the business world of today. In Chapter Two it was identified that in recent years several alternative employment relationships have developed evidencing a move away from the full-time employment contract, which was the norm in the early Robens era. Employment is now more diverse with labour hire arrangements, seasonal employment, casual employment and part-time employment becoming the norm. OHS risk taking behaviour by those engaged in these employment relationships was a concern for several study participants. It was perceived that the workers employed under such arrangements were often not committed to the existing OHS culture of the organisation, thus problematic in the good OHS endeavour.

OHS consultation between the employer and employees was a Robens recommendation that was enshrined in law in many jurisdictions. Some study participants perceived that OHS success in the workplace is heavily premised on consultation being adopted as a cultural norm. The subject of consultation encouraged positive and negative perceptions from participants. Some participants spoke of insufficient consultation in their

workplaces as having a detrimental effect on the OHS culture and OHS statistics. Even though consultation is a regulatory requirement it would appear that not all employers subscribe to its benefits. There appears to be a gap between the requirements of OHS regulation for consultative mechanisms to exist (see Appendix A) within an organisation and the practical application of these mechanisms by some employers.

Robens' recommendation for less OHS regulation and more initiative by employers and employees in meeting their duty of care obligations is supposed to make OHS compliance easier for all duty holders. This study uncovered the fact that very few participants from the employer or employee groups understood what it was to be OHS compliant. There were many definitions provided by participants but very few were holistically accurate. The range of perceptions offered would suggest that what it means to be OHS compliant has not been made easier for duty holders to understand by having less regulation. This is a concern because if duty holders do not understand what it is they have to do to be OHS compliant then it makes the requirement extremely difficult to apply. Several participants blamed the complexity of OHS regulation for a lack of understanding of what is required to be OHS compliant. A paradox is evident here where less OHS regulation that was designed to encourage more initiative from duty holders is in fact is not sufficiently understood to be effective. These findings have the potential to encourage the OHS regulator to support, educate and generally assist business to better understand the essential requirements of OHS compliance.

One of the documented collaborative approaches of the WA OHS regulator (WorkSafe WA) is achieved by strengthening the organisational capacity to assist business operators to effectively manage OHS. Some research participants considered that the OHS regulator was not 'visible' enough.

A possible alternative to the continuous scrutiny by the regulator of *Legislative Compliance*, and to ensure the resultant safety management system's level of legal compliance, could be achieved by encouraging industry to initiate enhanced safety management systems (ESMS). Such a system is procedure oriented, rather than being directly focused on a prescribed regulatory goal. This approach is commonly recognised as a form of reflexive law. An approach like this recognises the limitations of command and control regulation in terms of limited impact, rigidity, and tendency to produce regulatory overload. Reflexive law focuses on enhancing the self-referential capacities of social systems and institutions outside the legal system, rather than direct intervention of the legal system itself through its agencies, highly detailed statutes, or the delegation of great powers to the courts (Gunningham 1998, 548). This form of law offers the opportunity to effectively regulate not only through individual or organisational performance but also by influencing centres of reflexion within other social subsystems. The safety case process adopted by the high-risk oil and gas industries is one example of the value of such a social sub-system.

In recent years, these critical areas of the level and quality of regulator support to industry on *Legislative Compliance*, and the reflexive alternative, are often neglected by researchers and practitioners.

6.3.2 Contribution to Practice

The analysis of the findings presented in this research make a compelling and original contribution to the literature in the discipline of OHS. Evidence of strong agreement between participant groups, not previously identified in previous OHS research, suggests a consensus between both contributing groups. There are several findings of matched perceptions that contrast strongly with previous international studies on components of the journey to 'zero harm' in the workplace. The researcher is compelled to suggest that zero

harm is often a slogan printed on safety banners while a genuine focus on safety is about respect for people and concern for their safety. There is great benefit in not confusing the two.

A *Management Commitment* theme is identified in successful workplace strategies to enhance OHS culture and leadership. While it is acknowledged that the importance of a solid and unified OHS culture is well documented in research, there are important areas that have not been covered sufficiently by researchers. The necessity for *OHS Education and Training* is an example that has not been covered sufficiently by researchers. *OHS Education and Training* that can help to ensure a broad cultural OHS commitment by all stakeholders was an issue considered in this research. Research participants offered perceptions of their own successful strategies and how these approaches could be used in a wider range of workplaces to enhance the OHS cultural commitment. Affording *procedural fairness* in accident investigation can provide for a more valuable outcome that will prevent an adverse event happening again. More detailed (*clear instructions*) and applicable *workplace inductions* provide for more knowledgeable, and therefore more competent, new employees Getting the priorities right by putting *OHS first* as opposed to production first.

For managers to achieve the requirements of the *Management Commitment* and other relevant theme requires them to consider their leadership styles and relational capabilities to generate changes in the OHS and general culture of the workplace. As previously discussed Goleman (2001) refers to the use of strategies by management that encompass empathy and emotional intelligence to achieve these ends. Sufficiently *resourcing OHS* by management also appears to send an important and positive OHS message to all employees.

Critically, evidence from organisations both small and large, has demonstrated that the cost of failure associated with an injury or incident is substantially greater than the forgone cost of prevention (O'Neill 2014). This implies that many costs related to OHS failure are absent from a priori cost benefit analysis. Some are concealed, unrecognised and thus are left out unintentionally, while others are disregarded due to active but erroneous management risk assessments about the likelihood of an incident or injury. Research participants identified the necessity for management and employees to work together proactively in the critical risk assessment process. Some participants perceived that organisational OHS success occurs when management consulted with and encouraged workforce participation in many proactive OHS endeavours. What became clear from this research was that a proactive approach to safety is found in well run businesses where there is a concerted integration of OHS into the business strategy and also where workforce consultation and participation in these endeavours is encouraged. Unfortunately, this level of encouragement is not always the usual standard evident.

Sufficient resourcing of workplace safety represents a proactive investment in incident and injury prevention. The problem is that some employers need to be convinced that insufficient resourcing of workplace safety can also lead to failure costs. Examples of this include workers' compensation expenditure, penalties afforded to the guilty who breach OHS regulation and costs associated with injury or brand damage which often far exceed the missed opportunity of proactive safety investment. In Australia, the legal requirements alone present a clear business case for safety investment. Those conducting a business or undertaking in the Australian jurisdiction have a primary duty to ensure the health and safety of workers, and others including contractors (O'Neill 2014, 4).

Then there is the clear message from participants to managers and supervisors concerning *OHS example setting* and that is to *walk the talk*. This finding is reminiscent of the Hopkins (2005) view expressed earlier in chapter two concerning a shift in emphasis from legal compliance to a more inclusive OHS risk management approach:

“Leaders who wish to attend systematically to safety, and be seen to be doing so, need to develop some regular safety practices. One critical practice is regular site ‘walk arounds’ (walking the walk) to ‘talk informally’ (talking the talk) with front line staff about safety issues they may be facing” (Hopkins 2005, 10).

This thesis has provided valuable *Proactive OHS* practices that can be infused into Australian workplaces. How to implement those practices were also a concern of participants. Views were expressed that OHS education and training needs to be more targeted and relevant, more effective consultation mechanisms were recommended such as sharing information about health and safety more often, giving employees a reasonable opportunity to express their views, and taking those views into account. Purposeful and relevant inductions that deal directly with the hazards the new employee can expect to encounter was a suggestion. There was also advice provided to legislators and the Regulator. A plea was expressed to the legislators to use active language when drafting OHS law and for the Regulator to be more visible in workplaces and available to those who require OHS advice. Future research in this important area has the potential to identify more proactive strategic methods that will further enhance the OHS culture and thus OHS compliance in workplaces.

6.4 Future Research Recommendations

An important aspect of this research concerns creating a future agenda that is based on the emergent research opportunities, discussed above, to further enhance our current understanding of the OHS framework. These opportunities build on the approach of this research to further promote a broadened cohort of OHS stakeholders as a relatively untapped resource of informants in the field of OHS.

This research provides several new findings that are indicative of the future research agenda in OHS. A future research agenda is proposed that includes OHS stakeholder research and exploration of the gaps between what stakeholder’s perceptions of strategies for OHS change. Holistic stakeholder research into OHS needs to involve management, employees, the regulator, unions, and others whose ‘voice’ has to date not been sufficiently heard. This is a central theme that needs to be more widely and vigorously pursued. Widespread publicity and adoption of OHS indicates there is an uptake of OHS policies and practices. However, there is a critical requirement to go beyond regulatory compliance towards aspirational OHS practice complemented by a more reflexive approach to OHS law and a deep infusion of holistic OHS into the culture of the workplace. How this can best be achieved across all industries is an area for further research.

This research identified that some WA workplaces do not appear to embrace the OHS goal of exceeding regulatory requisites. As a consequence, confusion was expressed by both groups as to what is meant by OHS compliance. Perceptions provided by participants on occasion were invariably predicated with ‘I think it means’ as is evident from those participants who envisaged OHS compliance as regulatory/*Legislative*

Compliance only, and those perceptions who viewed compliance as going beyond mere regulatory /*Legislative Compliance*. This critical area of understanding requires more research to establish why there is a dichotomy of comprehension of what it means to be OHS compliant. Resourcing of OHS emerges as a clear issue especially for SMEs. The business case for investment in OHS appears to have been examined and debated but remains unresolved. Advocates of increased expenditure in OHS cite intrinsic benefits of a safe, healthy and productive workforce, and list various cost categories associated with injury and illness. Yet few provide empirical data to support their claims (O'Neill 2014, 6). This research provides an important rationale for organisational investment decisions to include OHS considerations.

While participants from both groups perceive regulation and enforcement as unnecessary red tape, research has confirmed the positive benefits of regulatory OHS inspections (Hananel 2012). Perhaps the regulator should be doing more to fulfil its documented collaborative approach with industry. In essence, participants in this research felt they deserved more direct assistance from the OHS regulator.

The cost benefit of proactive OHS, where the workforce is included in the process of prevention, requires more research. Evidence of the strategic successes of such endeavours needs to be discovered if business decision makers are reluctant to adopt universalistic principles of properly resourcing OHS. More research in this critical area could uncover other examples of exemplary practices. These examples could be used for publication and wide dissemination extended to persuade others to embrace sufficient OHS resourcing with a view to creating a safer, healthier and more productive workplace.

Some participants perceived that a lack of government funding is adversely affecting the ability of government run utilities to meet the required regulatory OHS standards. Other participants viewed government funding to be creating pressures to prevent critical OHS improvements. This finding is disturbing. Governments of all persuasions ought to be setting the OHS example. Existing research in the area of government funding to government owned utilities for OHS could not be located. More research is necessary to identify how serious a lack of government OHS funding to government run utilities is adversely impacting employees' health and safety.

6.5 Limitations of this Research

This research has several limitations that must be acknowledged. One limitation is the possibility of unbalanced representation of contributing stakeholder groups in the sample. The sample consisted of mostly managers and workers from WA workplaces. It could be argued that this is not a balanced reflection of all the stakeholders involved in the OHS paradigm (for example only one union representative). However, there may have been other participants who were likely to have been sympathetic with trade union ideals. Additionally, the study was restricted to Western Australia which has a different, although similar legislative framework to other Australian states.

Despite the assurance of confidentiality and anonymity, the sensitiveness of survey data may have encouraged some participants to withdraw or be less candid in their perceptions. In order to capture a wider and better picture of OHS in the workplace a future study may need to collect more data from a larger and more representative sample.

The application of a qualitative methodology in this research potentially includes some limitations as well as strengths. A key limitation is the interpretive nature of qualitative research. Specifically, in relation to this research a single researcher, with one on one guidance provided by the lead supervisor in the early stages of the analysis, collected the data and conducted the analysis. While the researcher is central to the sense making of data and a clear audit trail of the analysis process was maintained, it is recognised that different researchers may provide different interpretations of data. This limitation was addressed by the process of merging and eliminating categories that emerged from the findings, ensuring that only the most common and analytically important categories were preserved (Bryman and Bell 2015). Further, it is an inherent characteristic of the research design that the data and findings are specifically relevant to the workplace contexts and experiences of the interview participants. A qualitative study of this kind cannot make claims beyond the sample of participants interviewed. Nonetheless, the model provides an analytical approach that can be potentially utilised in other contexts to examine the relevance of the findings from this study in other contexts.

6.6 Ethical Issues

When undertaking qualitative research, ethical conduct involves consideration of both how data collection is conducted, and subsequently analysed data presented, and varies significantly depending on the details and particularities of the situation of the research (Ezzy 2002, 33). Ethical protocols exist where the researchers must weigh the quality of the data they gather against principles such as confidentiality, privacy, and truth-telling (Howe and Eisenhart 1990). None of the participants are referred to by name or position in the thesis, maintaining both privacy and confidentiality within the database. All digital recordings, transcripts and traceable documents have been withheld from people not directly involved in the development or examination of the thesis. The outcome of this research is presented in a format that does indicate the origin of the data, although they are traceable only by the researcher to their original source. In doing so, the confidentiality assurance provided to participants at the commencement of every interview is supported.

After a period of five years after examination of the thesis the digital recordings will be erased to ensure the identity of participants is protected. In the meantime, the Curtin Graduate School of Business will retain the data. Curtin University uses a standard protocol for such research and ethics approval was granted by the University for this research.

6.7 Summary of the Conclusion Chapter

A broad mix of stakeholder/participants was crucial to a study of a complex paradigm like OHS. A thematic analysis was initially used to search for emerging patterns of congruence in the data (Fereday and Muir-Cochrane 2006). The process involves the identification of themes through careful reading and re-examining of the data (Rice and Ezzy, 1999, 258). A form of pattern recognition within the data was adopted, where emerging themes provide the categories for analysis. An inductive approach was then used to:

1. condense extensive and varied raw text data into a brief, summary format;
2. establish clear links between the research objectives and the summary findings derived from the raw data, and
3. finally develop a model representing the underlying structure of experiences or processes which are evident in the raw data.

Once the factors were identified a model representative of the analysis was constructed. The findings were the product of exceptional agreement in perceptions of intent and outcomes by the participants who came from various societal roles and job positions including business owners, managers, supervisors, employees, regulator representatives, union representatives and OHS managers, OHS trainers and advisors. Subject to the positions of the participants in their respective organisations, they were placed into two groups – management and workers. The subsequent analysis and development of the model derived from the data became critical to the presentation of the findings.

Limited literature on reflexive OHS law acknowledges that the capacity of the regulatory state to deal with increasingly complex OHS issues has declined dramatically. Gunningham (2007) argues that there is a limit to the extent to which it is possible to add more and more specific regulatory prescription without increasingly resulting in counterproductive regulatory overload.

Self-organisation requires duty holders to go beyond what is required by OHS regulation. It requires more encouragement for OHS to reach an effective potential. How this encouragement is proffered, and by whom, requires further research as noted above further research that involves key stakeholder groups. This stream of research is too important to be ignored because those conducting a business or undertaking have a primary duty to ensure the health and safety of themselves, their workers, in some cases their contractors, and on occasion the public. While the fines and penalties for breaching OHS requirements are significant, the injury and fatality statistics make it imperative for a holistic approach to compliance to become the norm as opposed to its current level of tacit support. For a holistic perspective to become the norm a culture of acceptance and commitment to go beyond regulatory compliance when necessary is required across workplaces. How OHS stakeholders would respond to the aforementioned challenges and new practices is also worth further academic investigation.

6.8 Finally

The strengths and limitations of this study are presented, along with suggestions for future researchers interested in exploring seminal issues relevant to conceptualising and managing OHS. The resulting model in this thesis provides considerations for future researchers, and direction to those who bear the responsibility for OHS in the workplace.

The rich data collected but not relevant to the construction of the model is available for future research purposes. This data added no value to the major themes that evolved during the on-going data analysis. The major themes met the requirement of ‘objective three’ of this research which was to construct a model that responded to the first two objectives of the research. The analysis of the data continued until the completion of the thesis.

I would like to thank any reader who has taken the time to reach this point. The research process is subordinate to those who endeavour to read, critique and acknowledge the work of others in the academic community.

This researcher hopes that the OHS ‘journey’ towards zero harm may be a little less perilous because of this research.

7 References

- Aalders, Marius, and Ton Wilthagen. 1997. "Moving Beyond Command-and-Control: Reflexivity in the Regulation of Occupational Safety and Health and the Environment." *Law & Policy* 19 (4): 415-443.
- Abrahamson, Eric. 2000. "Change without pain." *Harvard Business Review* 78 (4): 75-81.
- Access Economics (December 2010) Draft Work Health and Safety (WHS) Regulations and Codes of Practices Issues Paper.
Retrieved 20 June, 2012 from:
http://www.safeworkaustralia.gov.au/Legislation/PublicComment/Documents/Model%20work%20health%20and%20safety%20public%20comment%202010/Consultation%20Regulatory%20Impact%20Statement%20public%20comment/Consultation_Regulation_Impact_Statement.pdf
- Agnesi, R, U Fedeli, A Bena, Eleonora Farina, F Sarto, M Veronese, and G Mastrangelo. 2016. "Statutory prevention of work injuries in Italy: an effectiveness evaluation with interrupted time series analysis in a sample of 5000 manufacturing plants from the Veneto region." *Occup Environ Med* 73 (5): 336-341.
- Aickin, Christine, Andrea Shaw, Verna Blewett, Laurie Stiller, and Stephen Cox. 2012. "Addressing the cultural complexity of OHS in the Australian mining industry." *Work* 41 (Supplement 1): 4453-4456.
- Al Bhadily, Mohammed, and Hosie, Peter. 2016. "Australian employee entitlements in the event of insolvency: Is an insurance scheme an effective protective measure?" *Adelaide Law Review Journal*, 37 (1): 247-281.
- Altheide, David L. 1987. "Reflections: Ethnographic content analysis." *Qualitative Sociology* 10 (1): 65-77.
- Appleton, Brian. 2001. "Piper Alpha." *Learning from Accidents*: 196.
- Arocena, Pablo, and Imanol Núñez. 2010. "An empirical analysis of the effectiveness of occupational health and safety management systems in SMEs." *International Small Business Journal* 28 (4): 398-419.
- Audiffren, Thomas, Jean-Marc Rallo, and Franck Guarnieri. 2012. "The contribution of case law to compliance management in Occupational Health and Safety (OHS) in France" *PSAM11 & ESREL 2012*,
- Australian Chamber of Commerce and Industry (ACCI). 2005. Modern Workplaces: Safety Workplaces – An Industry Blueprint for improving OHS in Australia. Retrieved 26 May, 2011 from http://www.acci.asn.au/text_files/review/r123.pdf

- Australian Chamber of Commerce and Industry (ACCI). 2001. Workplace Policy Issue Paper, Industrial Manslaughter and Workplace Safety. Retrieved 20 December, 2011 from http://www.acci.asn.au/wr_issuespaper.htm
- Ayers, Gerard Francis, John F Culvenor, Jim Sillitoe, and Dennis Else. 2013. "Meaningful and effective consultation and the construction industry of Victoria, Australia." *Construction Management and Economics* 31 (6): 542-567.
- Ayres, Ian, and John Braithwaite. 1995. *Responsive regulation: Transcending the deregulation debate*: Oxford University Press on Demand.
- Bahn, Susanne. 2009. "Power and influence: examining the communication pathways that impact on safety in the workplace." *Journal of Occupational Health and Safety, Australia and New Zealand* 25 (3): 213.
- Bailey, Carol A. 2006. *A guide to qualitative field research*: Sage Publications.
- Baldwin, Robert, and Martin Cave. 1999. "Franchising and its Limitations." *Understanding Regulation—Theory, Strategy and Practice*: 257-285.
- Baldwin, Robert, Colin Scott, and Christopher Hood. 1998. *A reader on regulation*: Oxford University Press.
- Barab, Sasha A, Michael K Thomas, Tyler Dodge, Markeda Newell, and Kurt Squire. 2002. "Design ethnography: Building a collaborative agenda for change." *Submitted for publication*.
- Baram, M. 1997. "Shame, blame, and liability: why safety management suffers organizational learning disabilities." *After the event: from accidents to organisational learning*. Oxford, UK: Elsevier.
- Bardach, Eugene, and Robert Allen Kagan. 1982. *Going by the book: The problem of regulatory unreasonableness*: Transaction Publishers.
- Barter, Christine, and Emma Renold. 1999 "The use of vignettes in qualitative research." *Social Research Update* 25 (9): 1-6.
- Bauman, Zygmunt. 1998. *Globalization: The human consequences*: Columbia University Press.
- Becker, Jörg, and Björn Niehaves. 2007. "Epistemological perspectives on IS research: a framework for analysing and systematizing epistemological assumptions." *Information Systems Journal* 17 (2): 197-214.
- Beer, Michael, and Nitin Nohria. 2000. "Cracking the code of change." *HBR's 10 Must Reads on Change*: 88.

- Bell, Charles. 1996. "Time for Business. Report of the Small Business Deregulation Task Force". Department of Industry, Science and Technology, Australian Government Publishing Service, Canberra.
- Bennett, David. 2002. "Health and safety management systems: Liability or asset?" *Journal of Public Health Policy*: 153-171.
- Bergold, Jarg, and Stefan Thomas. 2012. "Participatory research methods: A methodological approach in motion." *Historical Social Research/Historische Sozialforschung*: 191-222.
- Bhadily, Mohammad Al, and Peter Hosie. 2016. "Australian Employee Entitlements in the Event of Insolvency: Is an Insurance Scheme an Effective Protective Measure." *Adel. L. Rev.* 37: 247.
- Biggins, D. 1993. "The social context of legislative reform: Part 1-Nineteenth century origins of health and safety legislation." *Journal of Occupational Health and Safety Australia and New Zealand* 9: 217-217.
- Black, Julia. 2001. "Managing discretion." *Unpublished manuscript, London School of Economics, UK.*
- Blewett, Verna. 2011. "Partnering for OHS. Volume 1: Health and Safety Representatives at Work." University of South Australia Press.
- Bluff, Elizabeth, and Neil Gunningham. 2004. *Principle, process, performance or what? New approaches to OHS standards setting*: Federation Press: Sydney, Australia.
- Bluff, Elizabeth, Neil Gunningham, and Richard Johnstone. 2004. *OHS Regulation for a changing world of work*: Federation Press.
- Bluff, Elizabeth. 2003. "Systematic management of occupational health and safety." National Research Centre for Occupational Health and Safety Regulation.
- Bluff, Elizabeth, and Richard Johnstone. 2004. *The Relationship between 'Reasonably Practicable' and Risk Management Regulation*: National Research Centre for Occupational Health and Safety Regulation.
- Bluff, Elizabeth. 2009. OHS Regulation. "The national review into model OHS laws: A paper examining the 'specified classes' of duty Holders; reasonably practicable and risk management; and access to OHS advice." National Research Centre for Occupational Health and Safety Regulation.
- Bohle, Philip, and Michael Quinlan. 2000. *Managing occupational health and safety: A multidisciplinary approach*: Macmillan Education AU.
- Borys, David. 2001. "Seeing the Wood from the Trees: A systems approach to OH&S management." *Warwick Pearse, Clare Gallagher and Liz Bluff*: 151.

- Bottani, Eleonora, Luigi Monica, and Giuseppe Vignali. 2009. "Safety management systems: Performance differences between adopters and non-adopters." *Safety Science* 47 (2): 155-162.
- Brace, Charlotte L, Alistair GF Gibb, Martyn Pendlebury, and Phillip D Bust. 2010. "How can we prevent construction accidents? Outcomes from a stakeholder consultation: societal and industry-wide influences."
- Braithwaite, John. 2002. *Restorative justice & responsive regulation*: Oxford University Press on Demand.
- Braithwaite, John, and Toni Makkai. 1994. "Trust and compliance*." *Policing and Society: An International Journal* 4 (1): 1-12.
- Brooks, Jacqueline Grennon, and Martin G Brooks. 1999. "In search of understanding: the case for constructivist classroom. Alexandria: Association for Supervision and Curriculum Development, 1999." *The Case for Constructivist Classrooms, Virginia: Ascd Alexandria*.
- Bryman, Alan. 1998. "Quantitative and qualitative research strategies in knowing the social world."
- Bryman, A. 2015. *Social research methods*: Oxford University Press.
- Bryman, Alan, and Emma Bell. 2015. *Business research methods*: Oxford University Press, USA.
- Buchanan, John. 2004. "Paradoxes of significance: Australian casualisation and labour productivity."
- Bushnell, David S. 1990. "Input, process, output: A model for evaluating training." *Training & Development Journal* 44 (3): 41-44.
- Caelli, Kate, Lynne Ray, and Judy Mill. 2003. "'Clear as mud': toward greater clarity in generic qualitative research." *International Journal of Qualitative Methods* 2 (2): 1-13.
- Cameron, Kim S, and Quinn, Rob E. 2005. *Diagnosing and changing organizational culture: Based on the competing values framework*. John Wiley & Sons.
- CCH Australia Limited. 2006. "Planning Occupational Health and Safety: A guide to OHS Risk Management". (7th Ed), CCH Australia Ltd, North Ryde.
- Chhokar, Jagdeep S. 1987. "Safety at the workplace: A behavioural approach." *Int'l Lab. Rev.* 126: 169.
- Christian, Michael S, Jill C Bradley, J Craig Wallace, and Michael J Burke. 2009. "Workplace safety: a meta-analysis of the roles of person and situation factors." *Journal of Applied Psychology* 94 (5): 1103.
- Clarke, Sharon, and Katie Ward. 2006. "The role of leader influence tactics and safety climate in engaging employees' safety participation." *Risk Analysis* 26 (5): 1175-1185.

- Clayton Utz. 2014. WA Government announces release of draft Work Health and Safety Bill, press release, Retrieved 6 July, 2016 from <https://www.claytonutz.com/knowledge/2014/october/wa-government-announces-release-of-draft-work-health-and-safety-bill>
- Cohen, Alexander, Michael J Colligan, Raymond Sinclair, Jerry Newman, and Ronald Schuler. 1998. "Assessing occupational safety and health training." *Cincinnati, OH: National Institutes of Health*: 1-174.
- Commission, Industry. 1995. "Work, health and safety: An inquiry into occupational health and safety." *Canberra: Commonwealth of Australia*: 1-388.
- Cooper, Mark. 2000. "Safety management in the emergency response services." *Risk Management*: 39-49.
- Cooper Ph. D, MD. 2000. "Towards a model of safety culture." *Safety science* 36 (2): 111-136.
- Creighton, Breen, and Peter Rozen. 2007. *Occupational health and safety law in Victoria*: Federation Press.
- Creswell, John W. 1994. "Research design: Quantitative and qualitative approaches." *Thousand Oakes: Sage Publication*.
- Cullen, WD. 2001. 'Office of Rail Regulation: The Ladbroke Grove Rail Inquiry, Part 2 Report.'
- Cullen, W Douglas. "Lord (1990)." *The Public Enquiry into the Piper Alpha Disaster. Department of Energy: HMSO. London*.
- Dalrymple, H, C Redinger, D Dyjack, S Levine, and Z Mansdorf. 1998. "Occupational health and safety management systems: review and analysis of international, national, and regional systems and proposals for a new international document." *International Labour Office, Geneva*.
- Dawson, Daryl Michael, and Brian John Brooks. 1999. *The Esso Longford gas plant accident: report of the Longford Royal Commission*: Government Printer, South Africa.
- Dawson, Sandra. 1988. *Safety at work: The limits of self-regulation*. Vol. 12: CUP Archive.
- Dekker, Sidney WA. 2009. "Just culture: who gets to draw the line?" *Cognition, Technology & Work* 11 (3): 177-185.
- Delahaye, Brian, and Barry Smith. 1987. "Warning—Now You Have to Prove You Have Trained Them." *Asia Pacific Journal of Human Resources* 25 (1): 5-8.
- Denzin, Norman K., and Yvonna S. Lincoln. 2008. *Handbook of critical and indigenous methodologies*. Sage.

- Dhillon, Balbir S. 2010. *Mine safety: a modern approach*: Springer Science & Business Media.
- Dorman, Peter. 2000. "If safety pays, why don't employers invest in it?" *Systematic Occupational Health and Safety Management*: 351-365.
- Drucker, P. 1955. 'The Practice of Management': Heinemann. London.
- Dryson, E. 1993. "Occupational health needs in small industry in New Zealand: preferred sources of information." *Occupational Medicine* 43 (4): 176-179.
- Eakin, Joan M. 1992. "Leaving it up to the workers: sociological perspective on the management of health and safety in small workplaces." *International Journal of Health Services* 22 (4): 689-704.
- European Agency for Safety and Health at Work (EASHW). 2017. "Worker participation in the management of occupational safety and health: qualitative evidence from Esener-2", Retrieved 17 April, 2017 from: https://www.ohsalert.com.au/nl06_news_selected.php?act=2&nav=10&selkey=53678&utm_source=instagram+email&utm_medium=email&utm_campaign=subscriber+email&utm_content=read+more&utm_term=Effective%20OHS%20representation%20in%20decline
- El-Sawalhi, Nabil, David Eaton, and Rifat Rustom. 2007. "Contractor pre-qualification model: State-of-the-art." *International Journal of Project Management* 25 (5): 465-474.
- Ellis, Niki. 2001. *Work and health: management in Australia and New Zealand*: Oxford University Press.
- Eves, David. 2015. 'Two steps forward, one step back, History of Occupational Safety and Health'.
- Ezzy, Douglas. 2002. 'Qualitative analysis: Practice and innovation'. London: Routledge.
- Farrow, Scott, and Hiroshi Hayakawa. 2002. "Investing in safety: An analytical precautionary principle." *Journal of Safety Research* 33 (2): 165-174.
- Fereday, Jennifer, and Eimear Muir-Cochrane. 2006. "Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development." *International Journal of Qualitative Methods* 5 (1): 80-92.
- Fint, Miranda. 2008. "John Holland stamps safety passport." *Inside OHS* (59).
- Fisse, Brent, and John Braithwaite. 1993. *Corporations, crime and accountability*: Cambridge University Press.
- Flin, Rhona. 2003. "'Danger—men at work": Management influence on safety." *Human Factors and Ergonomics in Manufacturing & Service Industries* 13 (4): 261-268.
- Flin, Rhona, Kathryn Mearns, Paul O'Connor, and Robin Bryden. 2000. "Measuring safety climate: identifying the common features." *Safety science* 34 (1): 177-192.

- Fonteyn, Petra N, Diana Olsberg, and Jean A Cross. 1997. "Small business owners' knowledge of their occupational health and safety (OHS) legislative responsibilities." *International Journal of Occupational Safety and Ergonomics* 3 (1-2): 41-57.
- Force, Small Business Deregulation Task. 1996. "Time for Business: Report of the Small Business Deregulation Task Force." *Canberra: Commonwealth of Australia*.
- Fraser, Lindsay. 2007. "Significant developments in occupational health and safety in Australia's construction industry." *International Journal of Occupational and Environmental Health* 13 (1): 12-20.
- Frick, Kaj. 2004. "Too much ambivalence in Australian OHS policies? [Editorial]." *Journal of Occupational Health and Safety, Australia and New Zealand* 20 (5): 395.
- Frick, Kaj. 2011. "Worker influence on voluntary OHS management systems—A review of its ends and means." *Safety Science* 49 (7): 974-987.
- Fritzsche, David J. 1995. "Personal values: Potential keys to ethical decision making." *Journal of Business Ethics* 14 (11): 909-922.
- Gallagher, Clare, and Elsa Underhill. 2012. "Managing work health and safety: recent developments and future directions." *Asia Pacific Journal of Human Resources* 50 (2): 227-244.
- Gallagher, Clare, Elsa Underhill, and Malcolm Rimmer. 2001. "Review of the effectiveness of OHS management systems in securing healthy and safe workplaces." *a report prepared for the National Occupational Health and Safety Commission, March, Victorian University of Technology, Melbourne*.
- Gallagher, Clare, Elsa Underhill, and Malcolm Rimmer. 2003. "Occupational safety and health management systems in Australia: Barriers to success." *Policy and Practice in Health and Safety* 1 (2): 67-81.
- Gallagher, Clare, Pearse, Will, and Bluff, Elizabeth, eds., 2001. *Occupational Health & Safety Management Systems: Proceedings of the First National Conference*. Crown Content.
- Galligan, Denis James. 1990. *Discretionary powers: A legal study of official discretion*: Oxford University Press, USA.
- Garcia, Angela Cora, Alecea I Standlee, Jennifer Bechkoff, and Yan Cui. 2009. "Ethnographic approaches to the internet and computer-mediated communication." *Journal of Contemporary Ethnography* 38 (1): 52-84.
- Genn, Hazel. 1993. "Business responses to the regulation of health and safety in England." *Law & Policy* 15 (3): 219-233.

- Gherardi, Silvia. and Nicolini, Davide. 2000. The organizational learning of safety in communities of practice. *Journal of management Inquiry*, 9(1): 7-18.
- Gill, Paul, Kate Stewart, E Treasure, and B Chadwick. 2008. "Methods of data collection in qualitative research: interviews and focus groups." *British Dental Journal* 204 (6): 291-295.
- Gillies, Val, and Rosalind Edwards. 2005. "Secondary analysis in exploring family and social change: Addressing the issue of context" *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*,
- Gioia, Dennis A, and Evelyn Pitre. 1990. "Multiparadigm perspectives on theory building." *Academy of Management Review* 15 (4): 584-602.
- Goldenhar, Linda. 2016. "What is the difference between safety culture and safety climate, and why is this distinction important?" *Journal of the American Society of Safety Engineers*, (25).
- Goleman, D., 2001. An EI-based theory of performance. The emotionally intelligent workplace: How to select for, measure, and improve emotional intelligence in individuals, groups, and organizations, 1: 27-44.
- Grabosky, Peter N, and John Braithwaite. 1986. *Of manners gentle: Enforcement strategies of Australian business regulatory agencies*. Vol. 1: Oxford University Press Melbourne.
- Granerud, Researcher Lise, and Robson Sør Rocha. 2011. "Organisational learning and continuous improvement of health and safety in certified manufacturers." *Safety Science* 49 (7): 1030-1039.
- Gray, Wayne B, and John M Mendeloff. 2005. "The declining effects of OSHA inspections on manufacturing injuries, 1979–1998." *ILR Review* 58 (4): 571-587.
- Grey, Elizabeth, Stacey Berhardt, Gemma Read, and Raymond Misa. 2011. "Exploring a just culture approach in rail safety regulation" *Proceedings of the 2011 International Railway Safety Conference*: International Union of Railways.
- Gunningham, Neil. 1984. *Safeguarding the worker: job hazards and the role of the law*: Law Book Company.
- Gunningham, Neil. 1987. "Negotiated Non-Compliance: A Case Study of Regulatory Failure." *Law & Policy* 9 (1): 69-95.
- Gunningham, Neil. 1999. "Integrating management systems and occupational health and safety regulation." *Journal of Law and Society*: 192-214.
- Gunningham, Neil. 2005. "Safety, regulation and the Mines Inspectorate: lessons from Western Australia." *Journal of Occupational Health and Safety, Australia and New Zealand* 21 (4): 299.
- Gunningham, Neil. 2007. "Prosecution for OHS offences: deterrent or disincentive." *Sydney L. Rev.* 29:

359.

- Gunningham, Neil. 2007. *Mine safety: law regulation policy*: Federation Press.
- Gunningham, Neil. 2008. "Occupational health and safety, worker participation and the mining industry in a changing world of work." *Economic and Industrial Democracy* 29 (3): 336-361.
- Gunningham, Neil, and Richard Johnstone. 1999. *Regulating workplace safety: systems and sanctions*: Oxford University Press.
- Gunningham, Neil, Robert A Kagan, and Dorothy Thornton. 2004. "Social license and environmental protection: why businesses go beyond compliance." *Law & Social Inquiry* 29 (2): 307-341.
- Gunningham, Neil A. 1997. "Towards effective and efficient enforcement of occupational health and safety regulation: Two paths to enlightenment." *Comp. Lab. L. & Pol'y J.* 19: 547.
- Guthrie, Robert, and Elizabeth Waldeck. 2008. "The liability of corporations, company directors and officers for OSH breaches: a review of the Australian landscape." *Policy and Practice in Health and Safety* 6 (1): 31-54.
- Gyekye, SA. 2006. "Safety Management Perception of Workplace Safety: Perspectives from Miners and Nonminers." *Professional Safety* 51 (7): 34.
- Haines, Fiona. 1997. *Corporate Regulation: Beyond "punish Or Persuade"*: Clarendon Press.
- Hale, Andrew Richard. 1995. "Occupational health and safety professionals and management: identity, marriage, servitude or supervision?" *Safety Science* 20 (2): 233-245.
- Hale, Andrew R. 2000. 'Culture's confusions.' Elsevier.
- Hananel, Sam. 2012. "Safety inspections don't hurt profits". Bloomberg Businessweek, Associated Press, Washington. Retrieved June 2017 from <http://www.businessweek.com/ap/2012-05/D9UQKUUG2.htm>
- Harms-Ringdahl, Lars. 2003. *Safety analysis: principles and practice in occupational safety*: CRC Press.
- Hasle, Peter, Pete Kines, and Lars Peter Andersen. 2009. "Small enterprise owners' accident causation attribution and prevention." *Safety Science* 47 (1): 9-19.
- Hawkins, Keith. 2002. *Law as last resort: Prosecution decision-making in a regulatory agency*: Oxford University Press on Demand.
- Health and Safety Commission (2002) "Enforcement Policy Statement", Health and Safety Executive, London
- Heskett, James L, and John P Kotter. 1992. "Corporate culture and performance." *Business Review. Vol 2*:

83-93.

Higgs, Joy. 1997. *Qualitative research: Discourse on methodologies*: Hampden Press.

Higgs, Joy, and Rosemary, Cant. 1998. "What is qualitative research?" *Writing Qualitative Research*: 1-8.

Hoffmann, Terrence. 1999. "The meanings of competency." *Journal of European Industrial Training* 23 (6): 275-286.

Holmes, Noni, Helen Lingard, Zeynep Yesilyurt, and Fred De Munk. 2000. "An exploratory study of meanings of risk control for long term and acute effect occupational health and safety risks in small business construction firms." *Journal of Safety Research* 30 (4): 251-261.

Hopkins, Andrew. 1993. Approaches to safeguarding the worker. In M. Quinlan (Ed), "Work and Health: The Origins, Management and Regulation of Occupational Illness". South Melbourne. Macmillan Education Australia: 431– 443.

Hopkins, Andrew. 1994. Compliance with what? "British Journal of Criminology", 34(4): 431.

Hopkins, Andrew. 1995. "Making Safety Work – Getting Management Commitment to Occupational Health and Safety". Allen and Unwin, Sydney.

Hopkins, Andrew. 2000 "Lessons from Longford: the Esso gas plant explosion". CCH Australia Ltd, Sydney

Hopkins, Andrew. 2001. *Managing major hazards: the lessons of the Moura mine disaster*: Allen & Unwin.

Hopkins, Andrew. 2002. "Safety culture, mindfulness and safe behaviour: Converging ideas?"

Hopkins, Andrew. 2005. *Safety, culture and risk: The organisational causes of disasters*: CCH Australia.

Hopkins, Andrew. 2005. "The Gretley coal mine disaster: reflections on the finding that mine managers were to blame."

Hopkins, Andrew. 2000. *Lessons from Longford: the Esso gas plant explosion*: CCH Australia limited Sydney.

Hosie, Peter J. 1993. "Human resource managers and training: A peek into the future." *Asia Pacific Journal of Human Resources* 30 (3): 49-66.

Hudson, PTW. 2001. "Safety management and safety culture: the long, hard and winding road." *Occupational health and safety management systems*: 3-32.

Hughes, Julia. 2010. "Restraint and Proliferation in Criminal Law." *Rev. Const. Stud.* 15: 117.

Hutter, Bridget M. 1997. *Compliance: Regulation and environment*: Oxford University Press.

- Industry Commission. 1995. *Work, Health and Safety Inquiry into Occupational Health and Safety*, Report No. 47, Australian Government Publishing Service, Canberra, 1-388.
- International Labour Organisations Guidelines. Retrieved June 2017 from: <http://ilo.org/global/standards/subjects-covered-by-international-labour-standards/occupational-safety-and-health/lang--en/index.htm>
- Jacobi, J. 2012. "The compliance trap-Too much focus on regulations will shortchange your people & profits." *ASSE Professional Safety Journal*.
- Jallon, Romain, Daniel Imbeau, and Nathalie de Marcellis-Warin. 2011. "Development of an indirect-cost calculation model suitable for workplace use." *Journal of Safety Research* 42 (3): 149-164.
- James, Phil, Richard Johnstone, and Michael Quinlan. 2006. "The OHS regulatory challenges posed by agency workers: evidence from Australia." *Employee Relations* 28 (3): 273-289.
- Jamieson, Suzanne, Belinda Reeve, Toni Schofield, and Ronald McCallum. 2010. "OHS prosecutions: Do they deter other companies from offending?"
- Johnston, Janet J, GT Cattledge, and James W Collins. 1993. "The efficacy of training for occupational injury control." *Occupational medicine (Philadelphia, Pa.)* 9 (2): 147-158.
- Johnstone, Richard. 2004. "Occupational Health and Safety Law and Policy". Law Book Company, Sydney.
- Johnstone, Richard. 1999. "Paradigm crossed? The statutory occupational health and safety obligations of the business undertaking." *Australian Journal of Labour Law* 12 (2): 73-112.
- Johnstone, Richard. 2003. "From fiction to fact-rethinking OHS enforcement." open research-repository.anu.edu.au
- Johnstone, Richard. 2004. *Occupational health and safety law and policy*: Law Book Co.
- Johnstone, Richard. 2004. "Rethinking OHS enforcement." *OHS regulation for a changing world of work* 146: 178.
- Johnstone, Richard, and Michael Quinlan. 2006. The OHS regulatory challenges posed by agency workers: evidence from Australia, *Employer Relations*, 28 (3): 273-289.
- Johnstone, Richard. 2008. "'Harmonising Occupational Health and Safety Regulation in Australia: The First Review of the National OHS Review'."
- Johnstone, Richard. 2008. "Harmonising occupational health and safety regulation in Australia: The first report of the national OHS review." *Journal of Applied Law and Policy* (2008): 35-58.
- Johnstone, Richard, Elizabeth Bluff, and Alan Clayton. 2012. *Work Health and Safety Law and Policy*: Thomson Reuters.

- Johnstone, Richard, Michael Quinlan, and Maria McNamara. 2011. "OHS inspectors and psychosocial risk factors: Evidence from Australia." *Safety Science* 49 (4): 547-557.
- Jones, Kevin. 2009. SafetyAtWorkBlog. Retrieved 20 December, 2010 from <https://safetyatworkblog.wordpress.com/2009/03/05/role-of-ohs-inspectors/>
- Kaplan, B, and JA Maxwell. 1994. "Evaluating health care information systems: Methods and applications." *Qualitative Research Methods for Evaluating Computer Information Systems*. JG Anderson, CE Ayden and SJ Jay. Thousand Oaks, Sage.
- Khanzode, Vivek V, Jhareswar Maiti, and Pradip Kumar Ray. 2012. "Occupational injury and accident research: A comprehensive review." *Safety Science* 50 (5): 1355-1367.
- Khazanchi, Deepak, and Bjørn Erik Munkvold. 2003. "On the rhetoric and relevance of IS research paradigms: a conceptual framework and some propositions" *System Sciences, 2003. Proceedings of the 36th Annual Hawaii International Conference on: IEEE*.
- Kitto, Simon C, Janice Chesters, and Carol Grbich. 2008. "Quality in qualitative research." *Medical Journal of Australia* 188 (4): 243.
- Kletz, Trevor A. 1993. *Lessons from disaster: How organizations have no memory and accidents recur*: IChemE.
- Kolieb, Jonathan. 2015. "When to punish, when to persuade and when to reward: strengthening responsive regulation with the regulatory diamond." papers.ssrn.com
- Kotter, John, and Heskett, James. 1992. "Corporate Culture and Performance". New York. The Free Press.
- Kramar, Robin, and Helen De Cieri. 2005. "Human Resource Management in Australia 2E: Strategy, People, and Performance."
- Kvale, Steiner. 2007. *Doing interviews*. (Sage: Los Angeles).
- Lamm, F. 2002. "Occupational health and safety in small businesses." *Occupational health and safety in New Zealand: Contemporary social research*.
- Laurence, David. 2005. "Safety rules and regulations on mine sites—the problem and a solution." *Journal of Safety Research* 36 (1): 39-50.
- Lewis, Phil, Alice Richard, and Michael Corliss. 2014. "Compliance Costs of Regulation for Small Business." *Journal of Business Systems, Governance & Ethics* 9 (2).
- Lingard, Helen. 2013. "Occupational health and safety in the construction industry." *Construction Management and Economics* 31 (6): 505-514.

- Liz, OHS Regulation. 2009. "The national review into model OHS laws: A paper examining the 'specified classes' of duty Holders; reasonably practicable and risk management; and access to OHS advice."
- Lofland, John. 1971. *Analysing social settings*: Wadsworth Pub.
- Loosemore, Martin, and N Andonakis. 2007. "Barriers to implementing OHS reforms–The experiences of small subcontractors in the Australian Construction Industry." *International Journal of Project Management* 25 (6): 579-588.
- Makin, AM, and C Winder. 2008. "A new conceptual framework to improve the application of occupational health and safety management systems." *Safety Science* 46 (6): 935-948.
- Mason, Jennifer. 2002. *Qualitative researching*: Sage.
- Mason, Jennifer. 2002. "Qualitative interviewing: Asking, listening and interpreting." *Qualitative Research in Action*: 225-241.
- Mason, Jennifer. 2006. "Mixing methods in a qualitatively driven way." *Qualitative Research* 6 (1): 9-25.
- Mathews, John. 1985. *Health and safety at work: a trade union safety representative's handbook*.
- Mayhew, C. 1996. 'Making safety work: Getting management commitment to occupational health and safety-Hopkins, A.' LONGMAN AUSTRALIA 95 COVENTRY ST, S MELBOURNE 3205, AUSTRALIA.
- Mayhew, Claire. 2002. "OHS challenges in Australian small businesses: old problems and emerging risks." *Safety Science Monitor* 6 (1): 26-37.
- Mayhew, Claire. 2007. *Australian Master OHS and Environment Guide*: CCH Australia Limited.
- Mayhew, Claire, and Chris L Peterson. 1999. *Occupational health and safety in Australia: industry, public sector and small business*: Allen & Unwin.
- Micheli, Guido, and Enrico Cagno. 2010. Dealing with SMEs as a whole in OHS issues: Warnings from empirical evidence, *Safety Science*, 48: 729–733.
- McCallum, Ron, P Hall QC, A Hatcher, and A Searle. 2004. "Advice in relation to workplace death, occupational health and safety legislation & other matters." *Report to the WorkCover Authority of New South Wales*: 16.
- McCallum, Ron, Schofield, Toni., and Reeve, Belinda. 2010. "Reflections on General Deterrence and OHS Prosecutions", National Research Centre for OHS Regulation, Working Paper 75, ANU.

- McCallum, Ron. Schofield, Toni., and Reeve, Belinda. 2016. "Australian workplace health and safety regulatory approaches to prosecution: Hegemonising compliance". *The Journal of Industrial Relations*, 56(5): 709–729.
- McLain, David L, and Kimberly A Jarrell. 2007. "The perceived compatibility of safety and production expectations in hazardous occupations." *Journal of Safety Research* 38 (3): 299-309.
- Mearns, Kathryn, Rhona Flin, Rachael Gordon, and Mark Fleming. 2001. "Human and organizational factors in offshore safety." *Work & Stress* 15 (2): 144-160.
- Miles, Matthew B, and A Michael Huberman. 1994. *Qualitative data analysis: An expanded sourcebook*: sage.
- Mitchell, R. 2000. "Development of PPIs [positive performance indicators] to monitor performance in the Australian construction industry." *Journal of Occupational Health and Safety, Australia and New Zealand* 16 (4): 325.
- Mooney, Gavin H. 1977. "The valuation of human life." philpapers.org
- Moorcroft, Heather. 2009. "The Perfect Place to Work? Australian Academic Libraries and Unacceptable Behaviour." *Australian Academic & Research Libraries* 40 (3): 206-222.
- Moore, Michael J, and W Kip Viscusi. 1989. "Promoting safety through workers' compensation: The efficacy and net wage costs of injury insurance." *The RAND Journal of Economics*: 499-515.
- Moraru, Roland Iosif, and GB Băbuț. 2012. "On the Culture–Learning–Participation Triad in Occupational Health and Safety Management." *Quality-Access to success* 13: 99-107.
- Neal, D. 1996. "Corporate manslaughter." *Victorian Law Institute Journal* 30 (10): 39-41.
- Norton Rose Lawyers report, directors and officers take heed on new OHS due diligence. Retrieved 19 May, 2010 from:
<http://www.mondaq.com/australia/x/100962/Health+Safety/Directors+and+Officers+Take+Heed+on+n ew+OHS+Due+Diligence+Obligations>
- O'Leary, Zina. 2004. *The essential guide to doing research*: Sage.
- O'Neill, Sharron. 2014. "The Business case for safe, healthy and productive work: implications for resource allocation: procurement, contracting and infrastructure decisions."
- Osterwalder, Alexander. Pigneur, Yves. and Tucci, Christopher. L. 2005. Clarifying business models: Origins, present, and future of the concept. *Communications of the association for Information Systems* 15: 1.
- Palaneeswaran, Ekambaram, and Mohan Kumaraswamy. 2001. "Recent advances and proposed improvements in contractor prequalification methodologies." *Building and Environment* 36 (1): 73-87.

- Paterson, John. 2011. "The significance of regulatory orientation in occupational health and safety offshore." *BC Envtl. Aff. L. Rev.* 38: 369.
- Patton, Michael Quinn. 1990. *Qualitative evaluation and research methods*: SAGE Publications, inc.
- Perrone, Santana. 1995. "Workplace fatalities and the adequacy of prosecution." *Law Context: A Socio-Legal J.* 13: 81.
- Perrow, Charles. 1984. *Normal Accidents: Living with High Risk Technologies*: Princeton University Press.
- Poell, Rob. Chivers, Geoff, Van der Krogt, Ferd and Wildemeersch, Danny. 2000. "Learning-network theory: organizing the dynamic relationships between learning and work". *Management Learning*, 31(1): 25-49.
- Porter, Sam. 2007. "Validity, trustworthiness and rigour: reasserting realism in qualitative research." *Journal of Advanced Nursing* 60 (1): 79-86.
- Punch, Maurice. 1994. "Politics and ethics in qualitative research." *Handbook of qualitative research 2*: 83-98.
- Quinlan, M. 1993. 'The Industrial Relations of Occupational Health and Safety' in M. Quinlan (ed.), *Work and Health, the Origins, Management and Regulations of Occupational Illness.* Macmillan, Melbourne.
- Reason, James. 1990. *Human error*: Cambridge University Press.
- Reason, James. 1995. "A systems approach to organizational error." *Ergonomics* 38 (8): 1708-1721.
- Reason, James. 1998. "Achieving a safe culture: theory and practice." *Work & Stress* 12 (3): 293-306.
- Reason, James. 2000. "Beyond the limitations of safety systems." *Australian Safety News*: 194.
- Reason, James. 2000. "Human error: models and management." *Western Journal of Medicine* 172 (6): 393.
- Reeve, Belinda, Ron McCallum, and Toni Schofield. 2009. "Deterrence and OHS prosecutions: prosecuted employers' responses." *Journal of Occupational Health and Safety, Australia and New Zealand* 25 (4): 263.
- Remenyi, Dan, and Brian Williams. 1998. *Doing research in business and management: an introduction to process and method*: Sage.
- Rice, Pranee Liamputtong, and Douglas Ezzy. 1999. *Qualitative research methods: A health focus*. Vol. 720: Melbourne.

- Rimington, John. Cited in Smith, Tom. 1998. "Robens Revisited: An Examination of Health and Safety Law 25 Years after the Robens Report with Particular Emphasis on the Explosives Industry". Retrieved 18 February, 2013 from <http://www.eig.org.uk/eig2002/documents/robens.pdf>
- Ritter, Mark. 2004. "Ministerial inquiry: Occupational health and safety systems and practices of BHP Billiton Iron Ore and Boodarie Iron sites in Western Australia and related matters." *for Clive Brown MLA, Minister for State Development, Western Australia.*
- Robens, Alfred. 1972. *Safety and Health at Work: Report of the Committee, 1970-72.* Vol. 1: HM Stationery Office.
- Roberts, Karlene H. 1990. "Some characteristics of one type of high reliability organization." *Organization Science* 1 (2): 160-176.
- Robson, Lynda S, Judith A Clarke, Kimberley Cullen, Amber Bielecky, Colette Severin, Philip L Bigelow, Emma Irvin, Anthony Culyer, and Quenby Mahood. 2007. "The effectiveness of occupational health and safety management system interventions: a systematic review." *Safety Science* 45 (3): 329-353.
- Robson, Lynda S, Carol M Stephenson, Paul A Schulte, Benjamin C Amick III, Emma L Irvin, Donald E Eggerth, Stella Chan, Amber R Bielecky, Anna M Wang, and Terri L Heidotting. 2012. "A systematic review of the effectiveness of occupational health and safety training." *Scandinavian Journal of Work, Environment & Health*: 193-208.
- Rune, Todnem. 2005. "Organizational change management: A critical review". *Journal of Change Management*, 5(4), 369-380.
- SafeWork Australia Online Statistics Interactive Workers' Compensation Statistics Database – Report created 08/04/2010. Retrieved 18 December, 2013 from <http://www.safeworkaustralia.gov.au/sites/swa/statistics/workers-compensation-data/pages/compendiumofworkerscompensationstatistics>
- SafeWork Australia's Progress Report (2006–2007) @ Safe Work Australia Online Statistics Interactive Statistics Database. Retrieved 18 December, 2013 from <http://www.safeworkaustralia.gov.au/sites/swa/statistics/pages/statistics>
- SafeWork Australia, Issues Paper. Retrieved 18 February, 2013 from: <http://www.safeworkaustralia.gov.au/sites/swa/model-whs-laws/public-comment/pages/ngm-waterfront-faqs>
- SafeWork Australia, Preliminary estimate work-related fatalities, Work-related death tolls spike report. Retrieved 29 October, 2015 from: <http://www.safeworkaustralia.gov.au/sites/swa/statistics/work-related-fatalities/pages/worker-fatalities>
- Safe Work Australia, **Preliminary estimate** work-related fatalities report. Retrieved 31 March, 2017 from: <http://www.safeworkaustralia.gov.au/sites/swa/statistics/work-related-fatalities/pages/worker-fatalities>

- Sarre, Rick. 2007. "White-Collar Crime and Prosecution for "Industrial Manslaughter" as a Means To Reduce Workplace Deaths." In *International Handbook of White-Collar and Corporate Crime*, 648-662. Springer.
- Sarre, Rick. 2010. "Sentencing those convicted of industrial manslaughter." Australian National University.
- Saunders, Mark NK. 2011. *Research methods for business students, 5/e*: Pearson Education India.
- Savin-Baden, Maggi, and Claire Howell Major. 2013. *Qualitative research: The essential guide to theory and practice*. Routledge.
- Sawacha, Edwin, Shamil Naoum, and Daniel Fong. 1999. "Factors affecting safety performance on construction sites." *International Journal of Project Management* 17 (5): 309-315.
- Schofield, Toni, Belinda Reeve, and Ron McCallum. 2014. "Australian workplace health and safety regulatory approaches to prosecution: Hegemonising compliance." *Journal of Industrial Relations* 56 (5): 709-729.
- Schwandt, Thomas A. 1994. "Constructivist, interpretivist approaches to human inquiry."
- Senge, Peter M. 1997. "The fifth discipline." *Measuring Business Excellence* 1 (3): 46-51.
- Shapiro, Sidney A, and Randy S Rabinowitz. 1997. "Punishment versus cooperation in regulatory enforcement: A case study of OSHA." *Administrative Law Review*: 713-762.
- Sherriff, Barry Noel. 2010. *Understanding the Model Work Health and Safety Act*: CCH Australia Limited.
- Smallman, C, and G John. 2001. "British directors' perspectives on the impact of health and safety on corporate performance." *Safety Science* 38 (3): 227-239.
- Somerville, Margaret. 2005. "'Working' Culture: exploring notions of workplace culture and learning at work." *Pedagogy, Culture and Society* 13 (1): 5-26.
- Sutherland, Edwin Hardin, Gilbert Geis, and Colin Goff. 1983. *White collar crime: The uncut version*. Vol. 58: Yale University Press New Haven, CT.
- Schutz, Alfred. 1962. Collected papers. Volume I. "The Problem of Social Reality". The Hague: Martinus Nijhoff.
- Tellis, Winston M. 1997. "Application of a case study methodology." *The Qualitative Report* 3 (3): 1-19.
- Thommesen, Jacob, and Henning Boje Andersen. 2012. *A Model of Safe Subcontracting*.

- Toohy, John, Kerry Borthwick, and Richard John Archer. 2005. *OH&S in Australia: a Management Guide*: Thomson.
- Tooma, Michael. 2008. *Safety, security, health and environment law*: Federation Press.
- Tooma, Michael. 2009. OHS Alert, Monday, 16 February 2009; Morrison v Glennies Creek Coal Management Pty Ltd and Anor [2006] NSWIR Comm 205.
- Tooma, Michael. 2012. *Due Diligence: Horizontal and Vertical Consultation*, CCH, NSW.
- Tooma, Michael, and Sherriff, Barry. 2010. *Understanding the Model Work Health Act*, CCH Australia Limited, Sydney.
- Trethewy, Ross W. 2003. "OHS PERFORMANCE—IMPROVED INDICATORS FOR CONSTRUCTION CONTRACTORS." *Journal of Construction Research* 4 (01): 17-27.
- Tufford, Lea, and Peter Newman. 2012. "Bracketing in qualitative research." *Qualitative Social Work* 11 (1): 80-96.
- Tweeddale, Mark. 2003. *Managing risk and reliability of process plants*: Gulf Professional Publishing.
- Underhill, Elsa, and Michael Quinlan. 2011. "How precarious employment affects health and safety at work: the case of temporary agency workers." *Relations Industrielles/Industrial Relations*: 397-421.
- Uttal, Bro. 1983. "The corporate culture cultures." *Fortune* 108 (8): 66-72.
- Vecchio-Sadus, Angelica M, and Steven Griffiths. 2004. "Marketing strategies for enhancing safety culture." *Safety Science* 42 (7): 601-619.
- Von Hirsch, Andrew, Anthony E Bottoms, Elizabeth Burney, and Per-Olof Wikstrom. 1999. *Criminal deterrence and sentence severity: An analysis of recent research*: Hart Oxford.
- Wachter, Jan .K. 2009. "Ethics and the environment, safety and health professional. Professional Safety": Journal of the American Society of Safety Engineers, p. 52.
- Wachter, J., and Bird, A. 2010b. "Quantitative aspects of occupational safety health systems" (Chapter 6) Applied quantitative methods for occupational safety and health (preliminary edition) San Diego, CA University Readers. Professional Safety: Journal of the American Society of Safety Engineers.
- Wachter, Jan K. 2011. "Ethics: The absurd yet preferred approach to safety management." *Professional Safety* 56 (6): 50.
- Walters, David. 2001. "Prescription to process: convergence and divergence in health and safety regulation in Europe."

- Walters, David. 2003. "Workplace Arrangements for OHS in the 21st Century."
- Walters, David. 2004. "Workplace arrangements for worker participation in OHS." *OHS regulation for a changing world of work*: 68-93.
- Walters, David, and Felicity Lamm. 2003. *OHS in small organisations: some challenges and ways forward*: National Research Centre for Occupational Health and Safety Regulation.
- Walters, David, Emma Jane Kirsty Wadsworth, Richard Johnstone, and Michael Quinlan. 2015. "A study of the role of workers' representatives in health and safety arrangements in coal mines in Queensland."
- Weick, Karl, and Kathleen Sutcliffe. 2001. "Managing the unexpected: Assuring high performance in an age of uncertainty." *San Francisco: Wiley* 1 (3): 5.
- Wiggins, Mark W, and Catherine Stevens. 2016. *Aviation social science: Research methods in practice*: Routledge.
- Wilks, Tom. 2004. "The use of vignettes in qualitative research into social work values." *Qualitative Social Work* 3 (1): 78-87.
- Wong, Jocelyn Ying Ying, Jason Gray, and Zabihullah Sadiqi. 2015. "Barriers to Good Occupational Health & Safety (OHS) Practices by Small Construction Firms." *Journal of Construction Management* 30 (1): 55-66.
- Woods, David D. 2006. "Essential characteristics of resilience." *Resilience engineering: Concepts and precepts*: 21-34.
- Woods, Peter. 1992. "Symbolic interactionism: Theory and method." *The handbook of qualitative research in education*: 337-404.
- Wright, Michael, Sara Marsden, and Ali Antonelli. 2004. *Building an evidence base for the Health and Safety Commission Strategy to 2010 and beyond: a literature review of interventions to improve health and safety compliance*: HSE Books.
- Yin, Robert K. 2003. 'Case Study Research: Design and Methods.' Thousand Oaks, CA: Sage.
- Zanko, Michael. 2006. "Missing in action: Research on occupational health and safety management in organizations." ro.uow.edu.au
- Zoller, Heather M. 2009. "The social construction of occupational health and safety: barriers to environmental-labor health coalitions." *New Solutions: A Journal of Environmental and Occupational Health Policy* 19 (3): 289-314.

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Appendix A: Consultative Arrangements and the Law

The Occupational Safety and Health Act 1984 (WA) and the Mines Safety and Inspection Act 1994 (WA) contain provisions that require consultative arrangements that are integral to the effective administration of safety and health regimes in the workplace.

The following table sets out a ready reference of these provisions.

Occupational Safety and Health Act 1984	Mines Safety and Inspection Act 1994
Relevant sections of the Act	Relevant Sections of the Act
19 (1)	9 (1)
20 (2)	10(2)(d), (3)
21 (2)	11(1), (2), (3)
21B (2)	11A(l)
22 (1)	14(c),(4)
23 (1), (3), (3a)	15A(3),(4)
23G (3)	15B(2), (3)
23I(3)	15C(4), (5)
23K (2)(b)	15F(2)
24 (1)	21(5)
27	23(l)(b), (2), (3)
30 (1), (2), (3), (3a)	25(1)
30A 1-3	29(l)(b), (d), (2)
30C (3), (4)	31BG(4)
31	31BH(2), (4)
35 (1)	31BM(2)
39 (1), (2)	46(1), (3)
39F	53(l)(b), (c), (d), (e), (t), (g),
40	54(1)
51AD(2), (4) NB. (4) not covered by regulation at this time.	5(1), (2), (3), (3a), (4a), (5)
	55A(2), (3)
	55C(3), (4)
	60(2), (4), (6),
	62(1)
	63(2)(b), (c), (e), (:I), (g)
	64
	66(1), (2)
	67(2)
	67B(2)
	67D(1), (2)
	67B(2), (3)
	68
	72(2a)
	73
	76(l)(b)
	77(2)
	105
	106

Appendix B: WorkSafe WA Collaborative Approach with Industry

WorkSafe WA provide the following mission statement:

WorkSafe WA's collaborative approach with industry retrieved from the WorkSafe WA web site 28 June 2016: employers and the workforce is focused on:

- influencing the commercial environment in Western Australia to ensure the achievement of best safety and health outcomes in the workplace;
- empowering business and community partners to lead in the reduction of workplace hazards and associated risks to health;
- developing a modern, world class regulatory environment;
- enforcing the law; and
- strengthening organisational capacity to assist business operators and workers to manage OSH effectively.

Appendix C: WorkSafe WA Inspection Programme

From the beginning of 2016 until September 2016 WorkSafe WA carried out safety checks including:

- recreational diving and snorkelling industry – 12 January 2016,
- waste and recycling industry – 28 January 2016, construction industry (southern suburbs) – 16 February 2016,
- supermarket industry – 24 February 2016,
- restaurant and café industry – 22 April 2016,
- liquor (pubs and taverns) industry - 07 July 2016,
- takeaway Food industry – 21 July 2016,
- community-based disability and aged care industry 11 August 2016,
- motor vehicle repair industry (vehicle hoists) 15 August 2016,
- furniture retailing industry - 30 August 2016,
- equipment hire and rental industry – 02 September 2016, and
- accommodation industry – 16 September 2016.

The inspection list accessed on the WorkSafe WA web site on 04 October 2016 (<http://www.commerce.wa.gov.au/WorkSafe>).

Appendix D: Occupational Safety and Health Act 1984 - SECT 19

Duties of employers

1. An employer shall, so far as is practicable, provide and maintain a working environment in which the employees of the employer (the employees) are not exposed to hazards and in particular, but without limiting the generality of the foregoing, an employer shall:
 - a) provide and maintain workplaces, plant, and systems of work such that, so far as is practicable, the employees are not exposed to hazards; and
 - b) provide such information, instruction, and training to, and supervision of, the employees as is necessary to enable them to perform their work in such a manner that they are not exposed to hazards; and
 - c) consult and cooperate with safety and health representatives, if any, and other employees at the workplace, regarding occupational safety and health at the workplace; and
 - d) where it is not practicable to avoid the presence of hazards at the workplace, provide the employees with, or otherwise provide for the employees to have, such adequate personal protective clothing and equipment as is practicable to protect them against those hazards, without any cost to the employees; and
 - e) make arrangements for ensuring, so far as is practicable, that —
 - i. the use, cleaning, maintenance, transportation and disposal of plant; and
 - ii. the use, handling, processing, storage, transportation and disposal of substances, at the workplace is carried out in a manner such that the employees are not exposed to hazards.
2. In determining the training required to be provided in accordance with subsection (1)(b) regard shall be had to the functions performed by employees and the capacities in which they are employed.

Appendix E: Research questions put to participants

1. What do you understand OHS compliance to mean?
2. How would you describe the OHS culture of your organisation?
3. What has been your most successful strategy, if any, for encouraging OHS compliance in your workplace – please explain?
4. What factors in or outside of your organisation (e.g. structure, process or outside influences) hinders or encourages compliance with OHS regulation?
5. If you were given the opportunity to offer law makers some advice on the OHS legislative approach, what advice would you provide?

Appendix F: Questions related to the vignette put to Participants

1. Was the employer at fault for not checking the worker's past safety record? Please explain your answer?

2. Should the employer have been any more specific in the induction regarding speed limits for forklifts? Please explain your answer.

3. It was identified during the accident investigation that there was no speed limit sign located at or near where the accident happened. Should this have been an important consideration in determining the worker's future with Protus? Please explain your answer.

4. If the workers position with Protus were terminated would you expect any tribunal to find in favour of the worker? Please explain your answer.

5. Should WorkSafe WA be called to investigate this accident? Please explain your answer.

6. In your opinion is there anything else that the employer could or should have done to avoid the accident?

7. Would your opinion be different if prior to the accident, the worker's supervisor had insisted the worker "get a move on because things are going to be busy today"? Please explain your answer.

Appendix G: Ethics Approval

Ethics approval reference number – GSB-13-10