

**Curtin Graduate School of Business**

**Impact of downsizing, restructuring and knowledge sharing on  
retention of knowledge in organisations: Implications for  
organisational effectiveness.**

**Helen Sitlington**

**This thesis is presented for the Degree of  
Doctor of Philosophy  
of  
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## **Declaration**

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

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

Signature: .....

Date: .....

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## **Abstract**

This research considers the organisational factors and processes that impact on knowledge retention and subsequent perceptions of organisational effectiveness during downsizing/restructuring events. By exploring these relationships, the research seeks to help organisations facing downsizing/restructuring to identify best practices to support employees during the process and achieve positive organisational outcomes.

The thesis presents a detailed review of the literature in the field of downsizing and organisational restructuring, together with knowledge, knowledge sharing and organisational effectiveness. A conceptual framework and hypotheses, informed through the literature and qualitative focus group process, were developed for testing. Data were collected from 81 organisations, drawn from both the private and public sectors.

Analyses enabled detailed consideration of the impact of perceived levels of organisational knowledge on perceptions of post-downsizing/restructuring organisational effectiveness. The significance of relationships between downsizing/restructuring events, both decisions and processes, and knowledge sharing in organisations undergoing downsizing/restructuring were also examined. Findings indicate the need for open and honest relationships between managerial (Decision Makers and Implementers) and non-managerial employees (Affected Employees) in order to achieve successful organisational outcomes.

The impact of knowledge sharing on organisational knowledge was assessed by studying the extent of both formal knowledge sharing and informal networks present in respondent organisations. The direct impact of knowledge sharing on organisational outcomes was also analysed and discussed. Conclusions are reached that both formal knowledge sharing and informal networks have a significant impact not only on perceived levels of organisational knowledge but

also on post-downsizing/restructuring organisational effectiveness. However, different aspects of knowledge sharing appear to be more significant to Decision Makers and Implementers and Affected Employees.

For business, the findings of this research demonstrate a need to concentrate on organisational knowledge during downsizing/restructuring in order to achieve improved outcomes. The findings suggest this can be done through attention to ensuring that intent and interpretation of the decisions and processes involved are open and honest. Assessment of the knowledge present in the organisation and a focus on retention of key individuals with important knowledge is also advisable. Communication of what is planned and inclusion of employees in both planning and implementation were identified as ways in which organisations can do so, thereby promoting distributive and procedural fairness throughout the process.

Formal knowledge sharing strategies arose as being important to achieving improved organisational outcomes, particularly to Decision Makers and Implementers. These strategies included identifying, capturing and storing information in ways that are accessible to employees. Documentation of practices and procedures was also found to be important as was careful planning of the change. Communication, providing training and support to survivors and allowing the necessary time for sharing knowledge were also identified as key strategies. Overall, developing a culture and climate within the organisation that is supportive of knowledge sharing was found to be central to achieving improved organisational effectiveness.

Informal networks were identified by Affected Employees as impacting on both perceived levels of organisational knowledge and, indirectly on organisational outcomes. The research indicates the Decision Makers and Implementers and Affected Employees have different perceptions about the role and importance of informal networks. Those implementing downsizing/restructuring may therefore need to examine the structure and operation of informal networks prior to

downsizing/restructuring to ensure they are adequately supported during the process. Informal networks may also be utilised to assist in bringing about the change.

The findings of this research are important to assist organisations develop best practice approaches to downsizing/restructuring. With increasing acceptance of downsizing/restructuring as a business strategy, this research provides insights into key issues of downsizing/restructuring events and knowledge retention as predictors of improved organisational outcomes.

# CHAPTER ONE

## INTRODUCTION

### 1.0 INTRODUCTION

Over the past 30 years there has been growing interest in the area of organisational downsizing. Once reluctantly undertaken as a short-term reactive response to cash flow crises, unexpected market downturns, changes in competitive position and other internal and external environmental pressures, downsizing has evolved to become a proactive business strategy implemented in both healthy and declining organisations, across a range of industries, in both the public and private sectors, and in organisations of all sizes (Bruton, Keels & Shook 1996).

Whilst this is a relatively new area of research, there is already a significant and growing body of knowledge. In particular, previous research deals with:

- causes for organisations to implement downsizing strategies and the influences on the strategic downsizing approach adopted (Bruton, Keels & Shook 1996);
- mechanisms organisations use to achieve the desired decrease in workforce size (Greenhalgh, Lawrence & Sutton 1988);
- the impact of strategy implementation on those affected by the change (Lee & Corbett 2006; Abraham 2004; Littler & Innes 2003; Cascio, Young & Morris 1997; Cascio 1993);
- impact on the share market and company share price (Cascio 2002; Cascio, Young & Morris 1997; Lee 1997); and
- aspects of subsequent firm performance (Cascio 2002; Kabanoff, Palmer & Brown 2001; Appelbaum et al. 1999; Gregory 1999).

Although concerns are raised about the loss of knowledge resulting from downsizing activities, the need for appropriate skills to be in place in order to achieve intended outcomes and the importance of redesigning (Appelbaum, Patton & Shapiro 2003; Cascio 2002) and rebuilding organisations after

downsizing, relatively little literature deals with how organisations can retain necessary skills and knowledge. Similarly, there is little discussion of how organisations might effectively identify specific position-holders for layoff, yet still maintain organisational knowledge, knowledge sharing or informal networks; all of which are inevitably effected by such major and disruptive change.

The existing research deals primarily with the reported and observed outcomes of downsizing, and impacts on those affected by the change. While there is some speculation about reasons for the reported outcomes, little systematic investigation attempting to explain why these outcomes occur has been undertaken.

## **1.1 DOWNSIZING**

This thesis aims to contribute to the advancement of research on downsizing, restructuring and organisational knowledge by firstly organising the literature from existing research and theory in a conceptual framework. Secondly, propositions about the impact of downsizing/restructuring events and knowledge sharing on perceived levels of organisational knowledge and subsequent organisational effectiveness are developed from the framework and hypothesised relationships examined.

Whilst there is no agreed definition for the term downsizing, a review of the literature reveals key concepts associated with downsizing. These include: the *elimination of jobs*, associated *reduction in personnel*, the *intentional* nature of this action, and action *initiated by the firm* with the intention of *improving performance* in some way. It is in relation to the latter definition that the term is used in this research. This view is consistent with the two key foci connected with downsizing that were identified by Kozlowski and colleagues (1993); that is, purposeful decision and performance improvement.

Other terms commonly used in the downsizing lexicon, and subsequently often considered synonymous with downsizing, are outsourcing, delayering and restructuring. These related terms are perhaps used as euphemisms in



organisations to lessen the impact and fear that 'downsizing' engenders amongst employees.

In contrast to traditional downsizing strategies which eliminate entire functions, business units or branches, *delaying* is a more recent strategy (Littler 2000). In using this strategy, identified layers within the organisational hierarchy, particularly middle management, are removed in order to retain functions but 'thin out' the ranks. Reduced layers are said to improve communication and therefore efficiency by decreasing the organisational hierarchy (Littler 2000).

*Outsourcing*, on the other hand, is defined by Griggs and Hyland (2003:178) as "a form of restructuring that often involves personnel reduction when it is used to replace a function that was once provided internally." The function or activity is still required by the organisation, but is no longer undertaken by organisational employees. This is often achieved by the parent organisation selling or 'outsourcing' the function to an external specialist provider. Areas commonly identified for outsourcing are those activities considered 'non core' such as catering and cleaning services (Griggs & Hyland 2003).

*Restructuring* generally refers to the overall changes made by an organisation in response to various internal and external influences (Carbery & Garavan 2005). This may involve changes to the ways in which the organisation functions at the macro and micro levels. At the macro level this may encompass changes to the markets the organisation services, or the service/product lines offered. At the micro level, restructuring may include changes to internal arrangements through redesigning functions, merging business units and realigning reporting arrangements resulting in changed organisational structures, reporting lines and job/role design.

Whilst downsizing is the primary focus of this research, the inter-changeability of terms within the general workforce and much of the literature is acknowledged, and the terms are used in their broadest senses during the data collection phases of the study. The term 'downsizing/restructuring' will be used in this

research to incorporate the broad concept of change to internal operations of an organisation that may result in decrease in the number of positions and/or employees, regardless of the strategies used to achieve the change. 'Downsizing/restructuring' in this research does not include organisational changes that are part of an overall growth strategy.

## **1.2 BROADER IMPLICATIONS FOR THE RESEARCH**

While there is some uniqueness regarding the circumstances surrounding downsizing due to the often emotive environment in which it occurs, downsizing is in reality labour turnover, albeit up-scaled in numbers and timeframe. Knowledge loss, and the impact on those employees remaining, might therefore be expected to be comparable to that resulting from general employee turnover, especially in organisations where turnover levels are high. The perceptions of the remaining employees about the organisation's effectiveness may also be similarly affected.

Therefore, whilst this research focuses on downsizing and major restructuring, its results may well have broader application in terms of the impact of organisational knowledge dissemination and retention on subsequent organisational effectiveness. This may be particularly relevant in coming years as large numbers of 'baby boomers' depart the workforce, taking with them the knowledge and networks accumulated over their working lives (Parise, Cross & Davenport 2006).

## **1.3 PREVIOUS RESEARCH**

Most of the previous research on downsizing is drawn from organisations in the United States and the United Kingdom. Some research has been conducted in Australia, the most significant being longitudinal studies by Dawkins and Littler (1999; 2001) and case studies undertaken by Griggs and Hyland (2003) and Cross and Travaglione (2004). Dawkins and Littler's (1999; 2001) research focuses particularly on the size and frequency of downsizing and subsequent change in makeup of the workforce, and is drawn from the finance sector.

Griggs and Hyland's (2003) case study relates to the Australian aerospace industry and looks at knowledge retention in this knowledge intensive industry through two episodes of downsizing. This case provides interesting comparisons with the broader organisations involved in the research. Cross and Travaglione (2004) followed a public sector agency through a downsizing process and identified the importance of retaining those employees most valuable to the organisation, rather than wholesale retrenchment, in order to achieve improved organisational outcomes.

The above research primarily considered the impact of downsizing on organisational performance in terms of financial indicators, such as return on investment (Cascio 2002; Cascio, Young & Morris 1997), share price changes (Cascio, Young & Morris 1997; Lee 1997; Worrell, Davidson & Sharma 1991) as well as the impact on innovation, adaptive capacity (Littler & Innes 2003; Littler, Wiesner & Dunford 2003), product development (Gregory 1999) and decision-making processes during situations of labour over-supply (Greenspan 2002; Appelbaum, Everard & Hung 1999; Shaw & Barrett-Power 1996). To date, there appears to be little research linking the impact of downsizing on organisational effectiveness from the perspective of the survivors' perceptions. While the above research considers the external outcomes of organisational performance on products and services it does not focus on the internal mechanisms and dynamics resulting from the interaction of people in organisations. In Human Resource Management terms, how individuals are affected by downsizing and restructuring events and their subsequent perceptions of the organisation are crucial since it is these perceptions that drive the organisation's reputation as an employer of choice.

#### **1.4 ORGANISATIONAL KNOWLEDGE**

Aside from general references to knowledge loss being evident following downsizing and limited references to the breakdown of knowledge sharing mechanisms and informal networks, these aspects of downsizing have been largely unexplored in the downsizing/restructuring context. Griggs and Hyland's

(2003) case study draws attention to knowledge retention in downsizing organisations. These authors discuss how knowledge lost during an earlier downsizing was able to be turned around when the organisation made significant efforts to become a learning organisation in order to build and retain key knowledge. Cross and Travaglione's (2004) study of a downsizing organisation is also relevant; these authors discuss the need for identification and retention of valuable individuals. Whilst knowledge may not be specifically discussed, it is inherent in their focus on 'most valuable' employees.

### **1.5 PERCEPTIONS OF DOWNSIZING/RESTRUCTURING EVENTS**

In examining the perceptions of survivors, it must be recognised that the level of involvement in the change process is likely to colour the perceptions of all involved, particularly those remaining with the organisation. Tourish, Paulsen, Hobman, and Bordia (2004) refer to perceptions of survivors in their study of downsizing in a health care organisation, looking at levels of uncertainty, trust and communicative effectiveness in a downsizing organisation between those with and without managerial responsibility. These perceptions were reported to be lower in the non-managerial groups, indicating the perceptions of those with varying involvement in downsizing may be an area warranting further investigation.

### **1.6 PURPOSE AND OBJECTIVES OF THE RESEARCH**

The purpose of this research is to consider the organisational factors and processes that impact on knowledge retention and subsequent perceptions of organisational effectiveness during downsizing/restructuring events. A conceptual framework is developed to test the relationships between the key factors. By exploring these relationships, the research seeks to help organisations facing downsizing/restructuring to identify best practices to support employees during downsizing/restructuring and achieve positive organisational outcomes.

In response to the gaps identified in the field, particularly in regard to how

organisational knowledge is affected during downsizing/restructuring and subsequent organisational outcomes, the objectives of this research are to identify:

- the impact of downsizing/restructuring events (decisions and processes) on organisational knowledge and organisational effectiveness;
- whether the existence of knowledge sharing (formal knowledge sharing and informal networks) influences perceived levels of organisational knowledge, and subsequent organisational effectiveness; and
- whether perceptions of downsizing/restructuring events, knowledge sharing, perceived levels of organisational knowledge or post-downsizing/restructuring organisational effectiveness vary depending on respondents' roles (Decision Makers and Implementers or Affected Employees) in the process.

#### **1.6.1 Research Questions**

The questions inherent in the objectives of this research are presented below:

- Is there a direct causal link evident between perceived level of organisational knowledge and post-downsizing/restructuring organisational effectiveness?
- Are direct causal links evident between downsizing/restructuring events (decisions and processes) or knowledge sharing, either formal or informal, and post-downsizing/restructuring organisational effectiveness?
- Do downsizing/restructuring events (decisions and processes) have a significant impact on perceived levels of organisational knowledge?
- Does knowledge sharing, formal or informal, influence perceived levels of organisational knowledge?
- Does organisational knowledge mediate the relationship between downsizing/restructuring events and post-downsizing/restructuring organisational effectiveness, or between knowledge sharing and post-downsizing/restructuring organisational effectiveness?

## **1.7 OVERVIEW OF METHODS**

This thesis presents data and analysis related primarily to cross-sectional quantitative research, which included an intermediary qualitative approach. That is, focus groups were initially used to identify dimensions for inclusion in the survey instrument to supplement the literature review and provide an Australian perspective, given the shortage of research in the Australian context. The focus group process also sought to examine the usefulness of an organisational effectiveness measure developed by Cameron, Freeman and Mishra (1991) in previous downsizing research.

Sampling was designed to include a wide range of industries and organisations in both the public and private sectors. The data collection process endeavoured to obtain self-reports from multiple employees within each organisation, representing both Decision Makers and Implementers and Affected Employees, to enable comparison of perceptions between the different groups.

Since the variables being considered in the research were all latent variables and therefore not directly measurable, the data obtained was analysed, primarily by factor analysis, to identify item groupings which represented each of the variables. These item groupings were then used as constructs for testing the paths in the conceptual framework using regression analysis to test hypotheses. Subsequent multiple regression analysis was undertaken to identify whether any mediating effects were evident between the independent and dependent variables that could be attributed to the intervening variable (organisational knowledge).

## **1.8 OVERVIEW OF THESIS STRUCTURE**

This thesis is presented over six Chapters, supplemented by eight Appendices providing further explanation of aspects of the study. Chapter One provides an introduction to the thesis and an overview of the literature and research background. Chapter Two presents literature related to downsizing, as well as organisational knowledge, formal knowledge sharing and informal networks.

The relationship of downsizing/restructuring events and knowledge sharing to other constructs and significant variables in the research are presented in a conceptual framework, providing support for the nine hypotheses present in this research.

Chapter Three provides an overview of the methodology, including the qualitative focus group process undertaken in the first phase of the study, the quantitative survey development and data collection stages. Additional descriptions of these stages are provided in the Appendices. The participating organisations are also described, along with sample sizes and the survey instrument used for collection of the data.

Chapter Four describes the methods used to investigate the factorial structure and relationships in the conceptual framework, and subsequent analysis of the data. Findings are presented for the total data set and for both Successful and Unsuccessful Organisations. Comparisons between Decision Makers and Implementers and Affected Employees are also included. The results of each of the hypotheses tested and further analysis of mediating effects are presented, along with a summary of the findings.

Chapter Five discusses the findings in relation to the hypotheses, including comparison of results between Decision Makers and Implementers and Affected Employees, and Successful and Unsuccessful organisations. The final Chapter Six summarises the key findings and conclusions of the research. The thesis closes with a presentation of the limitations, and recommendations for future research.

## **1.9 CONCLUSION**

This Chapter introduced the thesis with a brief discussion of the background and reasons for conducting this study. It provided an overview of the literature supporting the development of a conceptual framework, the methodology, data collection and analysis. The Chapter concluded with description of the thesis structure.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.0 INTRODUCTION**

The purpose of this Chapter is to present a review of the literature on downsizing and restructuring, together with the areas of knowledge, knowledge sharing and informal networks. The variables under consideration in this research are discussed individually and hypotheses reflecting relationships between the variables are proposed. A conceptual framework forms the basis of the research design and provides the platform for testing of hypotheses.

#### **2.1 DOWNSIZING**

The concept of downsizing has received extensive attention over the past twenty years (cf Appelbaum & Patton 2002; Appelbaum, Patton & Shapiro 2003; Brockner, Wiesenfeld & Martin 1995; Brockner et al. 1997; Burke 2004; Cameron, Freeman & Mishra 1993; Cameron & Smart 1998; Cascio, Young & Morris 1997; Cascio 2002; Freeman & Cameron 1993; Lewin & Johnston 2000; Littler, Wiesner & Dunford 2003; Littler & Innes 2003; McKinley, Sanchez & Schick 1995; McKinley, Zhao & Rust 2000; Spreitzer & Mishra 2002; Worrall & Cooper 2001). Research to date has concentrated on several characteristics of this approach, namely the permanent elimination of jobs and associated reduction in personnel (Cascio 1993; Kee & Turpin 1994; McKinley, Sanchez & Schick 1995; Fisher & White 2000; Hopkins & Hopkins 1999), the planned and intentional nature of the action (Cascio 1993; McKinley, Sanchez & Schick 1995; Hopkins & Hopkins 1999; Tang & Fuller 1995); whether it is part of a strategic decision (Appelbaum, Patton & Shapiro 2003); and where action is initiated by the organisation (Tang & Fuller 1995; Freeman & Cameron 1993) with the intention of improving performance in some way (Freeman & Cameron 1993; Tzafirir et al. 2006).

In their meta-analysis of the literature, Kozlowski and colleagues (1993) identify two key foci of downsizing: purposeful decision and performance improvement.



That is, downsizing is the result of an intentional decision by the organisation to decrease employee numbers, rather than an unplanned consequence of other organisational circumstances. Further, that the decision is taken by the organisation with the intention of improving some aspect of organisational performance as a result of this action. This view is supported by Yu and Park (2006) who have also undertaken a meta-analysis of the more recent literature, drawing similar conclusions. In addition, Australian researchers Cross and Travaglione (2004:275) have defined downsizing as “reduction in size and costs of an organisation and the redesign of the work processes with an intended purpose of regeneration”. It is in this context that the term ‘downsizing’ is used in this research.

The literature presents varying terminology in relation to downsizing. Terms used synonymously with downsizing include delayering, outsourcing and restructuring. Delayering and outsourcing are two of the common mechanisms associated with downsizing, whilst restructuring has broader connotations related to a wider range of change initiatives which may or may not involve job losses.

## **2.2 RESTRUCTURING**

Restructuring generally refers to the overall changes made by an organisation in response to internal and external influences. This may involve changes to the ways in which the organisation functions at both macro and micro levels. Macro-level changes refer to the markets the organisation services or product/service lines offered. At the micro level, examples of changes to internal arrangements include redesigning functions, merging business units and realigning reporting arrangements, resulting in changed organisational structures, reporting lines and job/role design.

Whilst downsizing is one of a range of strategies that may be involved in achieving a new structure, it is also a term closely linked with ‘restructuring’ in the minds of many in the workforce. Anecdotally, some employees in

organisations consider the term 'restructuring' to be a code used by managers for the harsher reality of 'downsizing' resulting in job loss. Thus, while the terms are theoretically distinct, in the practical commercial environment they are often used interchangeably.

This interchange of terms is evident in research on hospital restructuring conducted by Burke and Greenglass (2000), where they use the singular term 'restructuring and downsizing' throughout, indicating the inseparable nature of activities involved in 'recreating' the organisation through major change. De Witte and colleagues (De Witte, Vandoorne & De Cuyper 2005) avoid use of the word 'downsizing' at all, preferring the term 'occupational transitions due to organisational restructuring' to describe the need for outplacement and re-employment resulting from organisational restructuring.

Whilst the primary focus of this research is the effect of downsizing, the terminology 'downsizing/restructuring' has been adopted throughout the data analysis and discussion in order to convey the broadest meaning of the terms.

### **2.3 OVERVIEW**

The remainder of this Chapter provides background information on the recent history of downsizing and restructuring and summarises associated relevant literature in this field. Knowledge and informal networks are defined, and their relevance to the organisation in the context of downsizing/restructuring is discussed. The conceptual framework of the research is then introduced. The importance of the associated decisions and processes is established, followed by a detailed discussion of key aspects of knowledge sharing (the independent variables of the model). The intervening and dependent variables, perceived organisational knowledge and organisational effectiveness, are introduced and their significance to the research explained. The possibility of different perceptions between Decision Makers and Implementers and employees affected by the changes is also discussed and forms an additional focus for the

research. Research hypotheses, developed from the literature review, are presented in relation to the conceptual framework.

## **2.4 BACKGROUND**

Until the 1980s, downsizing/restructuring was generally undertaken in reaction to economic crises, typically affecting blue collar workforces, and often resulting in closure of plants, factories, mines or other facilities in response to reduced demand for products. As an organisational strategy, downsizing/restructuring grew in significance during the late Twentieth Century as a broader organisational business strategy, but also affecting middle management and white collar employees (Littler 2000).

Schraeder, Self and Lindsay (2006) indicate that reasons for the high incidence of downsizing/restructuring include mergers, introduction of new technology and global competition, along with a push towards providing increased value to shareholders, and as strategy to reverse decline in organisational performance. Decreasing overheads, increasing productivity, improved communication and greater entrepreneurship are also cited as drivers towards downsizing/restructuring. Pfeil, Setterberg and O'Rourke (2003) concur, indicating that mergers, acquisitions and divestitures prompt downsizing/restructuring both during difficult economic times and when there is growth in the business cycle.

Research cited by Lee and Corbett (2006) indicates that over a third of US companies downsized every year from 1988 to 1994, and 85% of Fortune 1000 firms decreased staff numbers between 1987 and 1991. Littler's (2000) research shows that in 25,000 organisations surveyed in five Western countries, 48-62% of organisations in each country underwent downsizing/restructuring during the 1990s. Australia reported the highest incidence, with 62% of participating organisations reporting they had undertaken downsizing/restructuring to some extent. Repeated downsizing/restructuring was also common, with delayering and outsourcing, including both involuntary and

voluntary layoffs, frequently used strategies for achieving the required decrease in workforce size.

High levels of downsizing/restructuring also resulted from significant increase in number of mergers and acquisitions during the 1990s, with many organisations initiating downsizing/restructuring to reduce subsequent duplication of functions and streamline operations. Researchers agree that downsizing/restructuring remains a legitimate business strategy, both as a reactive measure during economic crises and as a proactive realignment or refocusing strategy for organisations in meeting long term objectives (Bruton, Keels & Shook 1996). Dawkins and Littler's research (1999; 2001) further suggests that downsizing/restructuring may be cyclical, with the rate showing little indication of slowing. Likewise, Cascio's (2002) research suggests downsizing/restructuring is on the increase after the events of 11 September 2001.

## **2.5 PREVIOUS RESEARCH ON DOWNSIZING**

Despite extensive research and procedural advice available to organisations, empirical evidence suggests relatively poor results for many downsizing/restructuring initiatives (Williams 2004). On the positive side, Yu and Park (2006) report that downsizing allows firms to decrease redundancy and improve efficiency through restructuring and improve productivity and profit through reducing labour costs, others research indicates less optimistic results. However, Cascio, Young and Morris (1997) state that in follow-up studies of organisations two years after announcement of downsizing/restructuring initiatives, the majority of organisations surveyed were trading below the average level of the stock market and, even more significantly, below comparable organisations in their industry (Mitchell & Company, 1991; cited in Cascio 1993). Yu and Park (Yu & Park 2006), Hallock (1998) and Lee (1997) also found negative 'capital market outcomes', that is, lowered share prices following downsizing/restructuring decisions; whilst Abraham (2004) suggests the result of the announcement is dependent on whether it is seen by the market as a proactive or reactive response.

Business surveys conducted by the Wyatt Company and the American Management Association (Cascio 1993) found that:

- only 46% of respondents reported that cuts resulted in the expected decrease in expenses over time;
- less than a third of companies reported anticipated increases in profits;
- only 21% reported satisfactory improvements in shareholder returns;
- four out of five firms (80%) replaced people they had dismissed.

Similarly in Australia, research indicates that only one-third of companies report increased productivity, half report decreased labour costs, and less than 20% report increased labour flexibility following downsizing (Lee & Corbett 2006). The list of unmet targets and expectations goes on, perhaps evidence that many of the results of downsizing/restructuring have not demonstrated the potential improvements that the literature promised or that organisations intended (Kozlowski et al. 1993).

## **2.6 KNOWLEDGE**

Since the 1980s it has been recognised that one of the strategic assets available to organisations is the knowledge of the people working within them (Bollinger & Smith 2001). Both the resource and knowledge-based views of the firm acknowledge the importance of employee skills, knowledge and expertise in achieving sustainable competitive advantage; as such, skills, knowledge and expertise are rare, valuable, inimitable and non-substitutable (Barney 1991; Grant 1996; Teare & Rayner 2002). In the global, knowledge-based economy, advances in technology enable rapid communication, duplication and substitution of ideas making the unique competencies of individuals one of the few differentiators between organisations and, therefore, of paramount importance for organisational success.

Two constructs, tacit knowledge (Polanyi 1967) and explicit knowledge (Grant 1996), are used extensively in organisational theory and in the field of knowledge management to help define and understand the concept of

knowledge. As Western economies in particular move their focus from manufacturing towards knowledge based service industries, greater emphasis on knowledge creation and retention is evident.

The concept of tacit knowledge arose from Polanyi's (1967) observations that "we can know more than we can tell". An example of such intuitive 'knowing' may be the ability to recognise another person's face amongst thousands without being able to easily describe or explain the features by which we are able to do so. This 'tacit-ness' applies to numerous aspects of human knowledge, including many of the skills and abilities utilised in the workplace. In contrast, explicit knowledge is "knowledge that is transmittable in formal, systematic language" (Nonaka 1994:16) and thus unambiguously communicated.

Management theorist Robert Grant (1996) provides a useful explanation of the two forms of knowledge within the organisational context. The first is explicit knowledge, described simply as "knowing about"; for example, facts and figures. The second is tacit knowledge, or "knowing how", such as the ability to 'do' or perform a task. Awareness of these two aspects of knowledge is crucial to understanding knowledge inherent in organisations.

In its tacit form, knowledge is evident in the expertise of individuals and teams, the cultural norms and group understandings which form the basis of organisational values (Snyder & Cummings 1998). Individuals build knowledge through their formal learning, as well as their work and life experiences. Ongoing experiences constantly build and alter individuals' knowledge bases. This individual knowledge is an inherent part of each employee, and leaves the organisation when they depart. In its explicit form, knowledge is codified in the vast electronic and paper records retained by organisations.

Organisational knowledge, according to Snyder (1996, cited in Snyder & Cummings 1998), consists of knowledge and understanding in relation to the organisation, which is shared by its members. This comprises:

- skills – technical, professional and social
- cognition – information, ideas, attitudes, norms and values shared by organisation members, and
- systems – structures, procedures and policies related to performing tasks.

Tacit knowledge, carried by individuals and groups, is neither recorded nor easily shared. It is often context specific and based on actions and a level of involvement by individuals in a situation. It involves technical expertise, as well as cognitive aspects that are not easily recorded or communicated except through observation and experience (Nonaka 1994). The grasping and understanding of an idea or concept through doing or experiencing is also termed as 'hands on' learning. Interactions between individuals result in shared understanding and the transfer of this tacit knowledge within teams and amongst individuals, creating the organisational knowledge base and organisational memory (Gore & Gore 1999).

Explicit knowledge, on the other hand, encompasses recorded or codified material accumulated by organisations over their business history. This material is stored both electronically and physically in the form of records, files, databases and intranets and is also embedded in the practices and procedures developed by an organisation to deal with its daily transactions. Recorded in various forms, explicit knowledge is easily available and can be readily shared and transferred between individuals and across organisations.

Cross and Baird (2000) suggest that both tacit and explicit knowledge are critical to an organisation's ability to solve problems and create new knowledge. This view is supported by Teare and Rayner (2002) who discuss the knowledge-based view of a learning organisation as one that is "skilled at creating, acquiring and transferring knowledge, and at modifying its behaviour to reflect new knowledge and insights". They stress the importance of organisations

using their capabilities to create higher value knowledge in order to improve bottom line results.

Knowledge is primarily absorbed through social interactions; therefore according to Cross and Baird (2000) without opportunities to learn from others, individuals are in danger of intellectual stagnation. These writers consider that organisations must introduce varied mechanisms for retaining knowledge, and suggest practices such as video interviews with experts being made available to staff as a way for tacit knowledge to be captured. Retaining in-house expertise by focussing on retention strategies is also deemed important to ensure retention of key knowledge.

Taking into account the above discussion of the impact of downsizing/restructuring decisions and strategies and the importance of knowledge in the organisational context, this research seeks to identify the impact of the relevance of downsizing/restructuring decisions and processes on perceived levels of organisational knowledge following downsizing/restructuring, and subsequent perceived organisational effectiveness.

## **2.7 KNOWLEDGE SHARING**

Whilst the skills, experience and personal attributes of individuals are crucial in building organisational capacity, both Grant (1996) and Nonaka (1994) also identify the importance of the interaction between individuals in facilitating achievement of organisational outcomes; “firms exist...because they can create conditions under which multiple individuals can integrate their specialist knowledge” (Grant 1996:112; Cross & Baird 2000). This view suggests that superior organisational performance is due to more than simply the combined knowledge and skills of each individual within the organisation. The concept of integration of individual knowledge, or building organisational knowledge that is more than the sum of the parts, is comparable to social capital (Leana & Van Buren 2000) and network theories (Lesser & Prusak 1999; Nahapiet & Ghoshal 1998). The organisational social capital school of thought stresses “the value to



an organisation and its members of the relationships formed for the purpose of engaging in collective action” (Leana & Van Buren 2000:225). This supports the view that the value of individuals to the organisation is not merely their skills, knowledge and expertise but also the intangible nature of the relationships they form in order to engage in the collective action needed to achieve organisational outcomes.

The above resonates with Snyder and Cumming’s (1998) view of organisational knowledge as comprising skills, cognition and systems. Technical and professional skills are primarily sources of individual knowledge. Informal social interactions such as team activities and opportunities for informal networking, as well as support for ongoing learning and development, can be facilitated by the organisation. These strategies result in sharing individual knowledge in the building of organisational knowledge.

Cognition, the development of information, ideas, attitudes, norms and values can also be developed and supported within organisations. Whilst individuals bring their own value systems, ideas and attitudes to the workplace, the organisation plays a role in shaping the organisational culture, which in turn creates the shared understanding aspect of organisational knowledge.

Systems which enable access to knowledge such as manuals, intranets, databases, physical records, storage and retrieval systems, policies, procedures and guidelines (Clarke & Rollo 2001), are provided by the organisation in the form of knowledge management strategies and tools. Structures and processes that support sharing of knowledge between individuals and within groups, such as communication channels, organisational structures and job designs, are part of the essential infrastructure of the organisation.

Realisation of the importance of recording and retaining corporate knowledge within organisations, and the development of information technology tools to support and facilitate storage and access to this knowledge, has led to the growth of ‘knowledge management’ plans and strategies throughout

organisations. The need to store and access information in organisations has long been accepted, but modern information technology has increased the scale and ease with which this can be accomplished (Clarke & Rollo 2001).

Knowledge management tools increase the capacity of organisations to transfer individual knowledge to an explicit, codifiable form with wider accessibility to members of the organisation. This supports increased sharing and transfer of knowledge, thus decreasing the reliance of organisations on key individuals.

Individual knowledge can be shared in many ways, including by teamwork and collaboration with others and codification of explicit knowledge into organisational records. There are numerous ways in which knowledge is shared and many strategies evident in organisations facilitate this sharing and retention of knowledge.

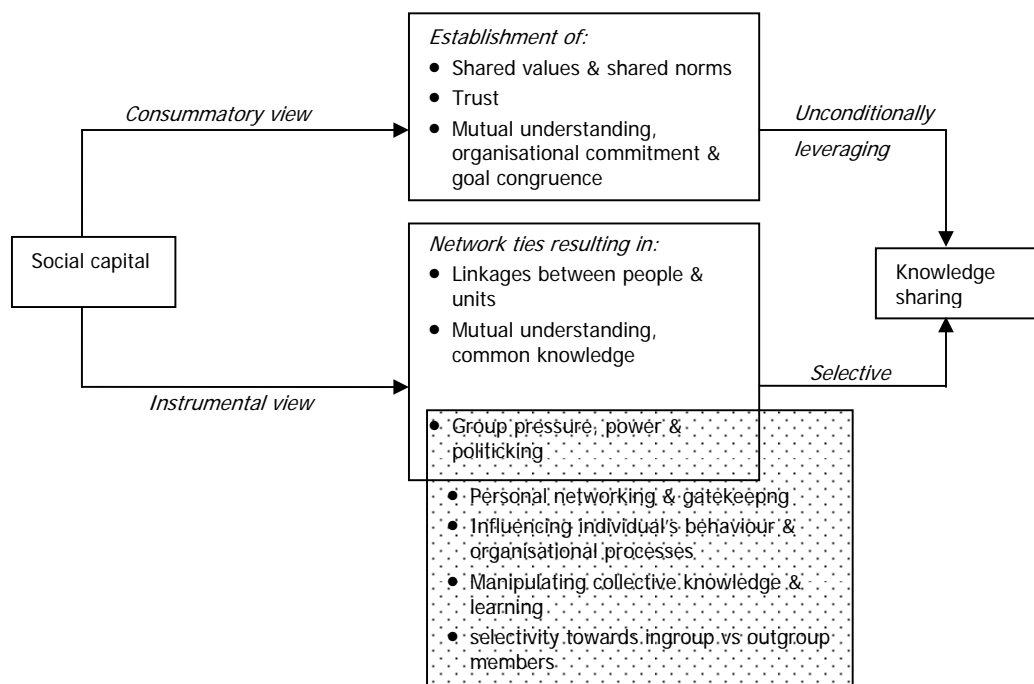
According to Teece and colleagues (1997, cited in Willem & Scarbrough 2006:1343) knowledge sharing is essential to “unlocking the potential performance benefits of knowledge” and thus to improving organisational outcomes. Willem and Scarbrough (2006) outline a range of views from the literature in regard to social capital which they contend enhances knowledge sharing. They focus particularly on Portes’ (1998, cited in Willem & Scarbrough 2006) ‘instrumental’ and ‘consummatory’ views which perceive social capital to be based on reciprocity and group identification respectively. This ‘instrumental’ view suggests social capital results from development of network linkages between people, based on mutual understanding and common knowledge. The ‘consummatory’ view depicts social capital as created through development of shared social norms and socialisation amongst group members.

In relation to knowledge sharing, the ‘consummatory’ view emphasises the value of shared norms and trust between group members, resulting in greater levels of organisational commitment, increased flexibility, cooperation, trust and social identification (Nahapiet & Ghoshal 1998; Tsai & Ghoshal 1998; Leana & Van Buren 2000). Willem and Scarbrough (2006) contrast this with the ‘instrumental’

view, outlining how network ties between people can be beneficial in knowledge sharing, along with the potential for negative effects arising from organisational politics. These authors suggest that some employees may use their network position to mediate the sharing of knowledge, resulting in selective information dissemination; this view is supported in a recent case study analysis by Willem and Scarbrough (2006).

The following Figure 2.1 presents a conceptual overview of the relationship between social capital and knowledge sharing in organisations. It reflects the ‘instrumental’ view associated with beneficial effects of ties between people, as well as potential negative consequences of group pressure and internal politics. In contrast, the ‘consummatory’ is associated with a more positive focus on shared values, understanding and trust resulting in unconditional knowledge sharing.

Figure 2.1 Relationship between social capital and knowledge sharing (Willem & Scarbrough, 2006:1347)



Arthur and Defillipi (1998) also discuss ways of retaining the knowledge inherent in 'knowledge workers' when they leave an organisation. They propose that structuring the organisation on a project basis is one way in which knowledge can be shared and embedded in organisational operations. This approach focuses on knowledge, rather than worker, retention and provides for cross-functional learning, teamwork and knowledge sharing mechanisms. Intrinsic to this approach is the support and encouragement for communities of practice reflected in numerous studies (Cohen & Prusack 2001; Lesser & Everest 2001; Lesser & Prusack 2001; Lesser 2000; Lesser & Prusak 1999).

It may follow that effective retention of knowledge in organisations necessitates an environment that supports sharing and exchange of knowledge. Individuals must have an environment that creates trust, willingness and opportunity to share knowledge, with organisational and job structures facilitating communication and knowledge sharing. Further, in such environments there is the availability of knowledge management systems in place to record, store, access and retrieve knowledge (cf Cross & Baird 2000; DeTienne & Jackson 2001; Gore & Gore 1999; Gregory 1999; Teare & Rayner 2002).

## **2.8 INFORMAL NETWORKS**

Following the research of Walsh and Ungson (1991), Cross and Baird (2000) consider that organisational memory is stored in the relationships employees 'tap into' on an ongoing basis to accomplish work outputs. They highlight that individuals cannot know everything so knowing how to find and apply information efficiently is a more practical and important skill. People rely on their networks for information and obtain advice from trusted and capable colleagues. Time spent interacting on work tasks establishes a sense of reciprocity and trust, which forms the basis of social capital theory (Lesser & Storck 2001). These close working relationships build an understanding of each person's particular knowledge and skills, enabling individuals to learn who to seek out for assistance.

Social network theory (Brass 1995) examines the importance and complexity of interactions between actors in interacting groups and identifies the existence of key individuals in such groups. In particular, individuals termed 'gatekeepers' provide important links between major parts of the network (Brass 1995) and control and mediate the flow of information. This is despite their informal role in the network often bearing little direct relationship to their position in the formal organisational hierarchy or their assigned tasks, role or position. Therefore, social network theory suggests that the importance of individuals to the organisational network may not be fully accounted for on the basis of their job alone. This view becomes particularly relevant when organisations downsize/restructure. In situations of downsizing and restructuring, emphasis on removal of jobs considered no longer necessary may lead to oversight of key informal roles that individuals undertake.

Lesser (2000) also discusses the value of social relationships, particularly in learning organisations. He describes the concept of 'social capital' as consisting of three dimensions: structure of relationships, interpersonal dynamics within the structure, and common context and language. This view is supported by Nahapiet and Ghoshal (1998:243), who define social capital as "the sum of the actual and potential resources embedded within, available through and derived from the network of relationships possessed by an individual or social unit". These researchers also identify the same three dimensions in social relationships.

The 'structure of relationships' dimension (Lesser, 2000; Nahapiet and Ghoshal, 1998) is consistent with that discussed by Brass (1995) in regard to social network theory. The 'interpersonal dynamic' dimension of social capital relates to the value of positive interactions between individuals. Trust (that is, A trusts B, B trusts C therefore A trusts C) and reciprocity, the provision of assistance or advice now, in expectation of a reciprocal favour later, are considered to be crucial in fostering social capital.

The common language and context dimension relates to the way in which members of a network have common interests or share common understanding. Common language facilitates access to people and their information, notwithstanding national language or linguistic community, enabling understanding that arises through shared experiences, including acronyms, terminology and underlying assumptions and subtleties.

## **2.9 KNOWLEDGE AND INFORMAL NETWORK RETENTION DURING DOWNSIZING/RESTRUCTURING**

Research in downsizing/restructuring over the past 20 years, however, has consistently identified organisational and individual issues commonly reported as occurring after downsizing/ restructuring. It is contended that many of these issues are associated with the loss of knowledge and informal networks which occur during downsizing/restructuring. Although much has been written about both knowledge and informal networks in organisations, little attention is paid in the literature to loss of knowledge or informal network breakdown in this context.

Examples of downsizing outcomes which may indicate knowledge loss include the many reports of replacement of individuals or roles by re-hiring, or engagement of consultants (Appelbaum, Everard & Hung 1999; Cascio 1993). Similarly, the reintroduction of ideas and practices, often termed 'reinventing the wheel' (Gregory 1999), is also frequently apparent, as are reports of inability to locate necessary information sources, both physical resources and people (Cascio 1993). These suggest survivors find difficulty in accessing organisational knowledge.

Organisational outcomes suggesting loss of knowledge are also evident in reports of lower productivity levels, inefficiencies, increased errors and falling work quality (Cascio 1993). Additionally, negative feedback from both clients and employees is also often reported (Appelbaum, Patton & Shapiro 2003).

Lack of knowledge and disruption to informal networks may also account for some of the uncertainty experienced by remaining employees ('survivors'),

resulting in decreased job satisfaction, lower motivation and increased voluntary turnover (Appelbaum, Patton & Shapiro 2003; Cameron & Smart 1998; Appelbaum et al. 1997). Increased stress, pressure and burnout are also reportedly experienced by survivors along with a loss of trust in management and colleagues and communication breakdown (Appelbaum, Patton & Shapiro 2003; Cameron & Smart 1998; Cascio 1993). In addition, in the event of decreased social interaction (Kozlowski et al. 1993) there is a need to establish new networks, connections and links with others (Appelbaum et al. 1997; Gregory 1999; Fisher & White 2000). These outcomes may be partially attributable to the breakdown of the informal networks used by employees in their daily activities.

Appelbaum, Patton and Shapiro (2003) stress that failing to take into account interdependencies, the importance of core competencies, retention of skills, and maintenance of institutional memory, is likely to result in negative organisational outcomes from downsizing. Williams (2004) also states that downsizing and restructuring remove individuals' knowledge and experience, and break down key relationships between employees and with external stakeholders. He concurs with the underlying premise of this research, that such a breakdown can have significant impact on organisational 'culture, cohesion and cooperation', as well as placing organisational knowledge at risk.

Following extensive reporting of these problems in the literature, practitioners recommend many 'best practice' approaches to overcome them. The 'best practices' recommended in the literature include ensuring there is ongoing, two way communication with stakeholders (Cameron, Freeman & Mishra 1991; Appelbaum et al. 1997; Appelbaum, Everard & Hung 1999; Kozlowski et al. 1993). Treating people with dignity and respect (Cameron, Freeman & Mishra 1991; Appelbaum et al. 1997; Appelbaum, Everard & Hung 1999) and encouraging staff participation in decision-making and implementation (Cascio 1993; Cameron 1994; Appelbaum et al. 1997) are also recommended. As well as addressing the myriad of problems associated with downsizing/restructuring,

many of these 'best practices' are strongly connected with the retention of knowledge and informal networks in the work environment.

A number of knowledge management strategies are also recommended practices for dealing with downsizing/restructuring. These include preparation and planning of the change initiative (Appelbaum et al. 1997; Appelbaum, Patton & Shapiro 2003; Cameron 1994; Cascio 1993), documentation of policies and procedures (Gore & Gore 1999) and supporting, promoting and facilitating knowledge sharing activities (Cameron, Freeman & Mishra 1991). These recommendations are common in the literature on the management of knowledge (Williams 2004; Walczak 2005), which suggests the need to record knowledge in explicit, codified form, along with supporting and encouraging shared tacit knowledge between individuals. Knowledge sharing and retention is also apparent in recommendations to provide training and development opportunities for staff (Cascio 1993; Cameron 1994; Appelbaum et al. 1997; Appelbaum, Everard & Hung 1999; Kozlowski et al. 1993) and ensure clear definition of roles and responsibilities (Cameron 1994).

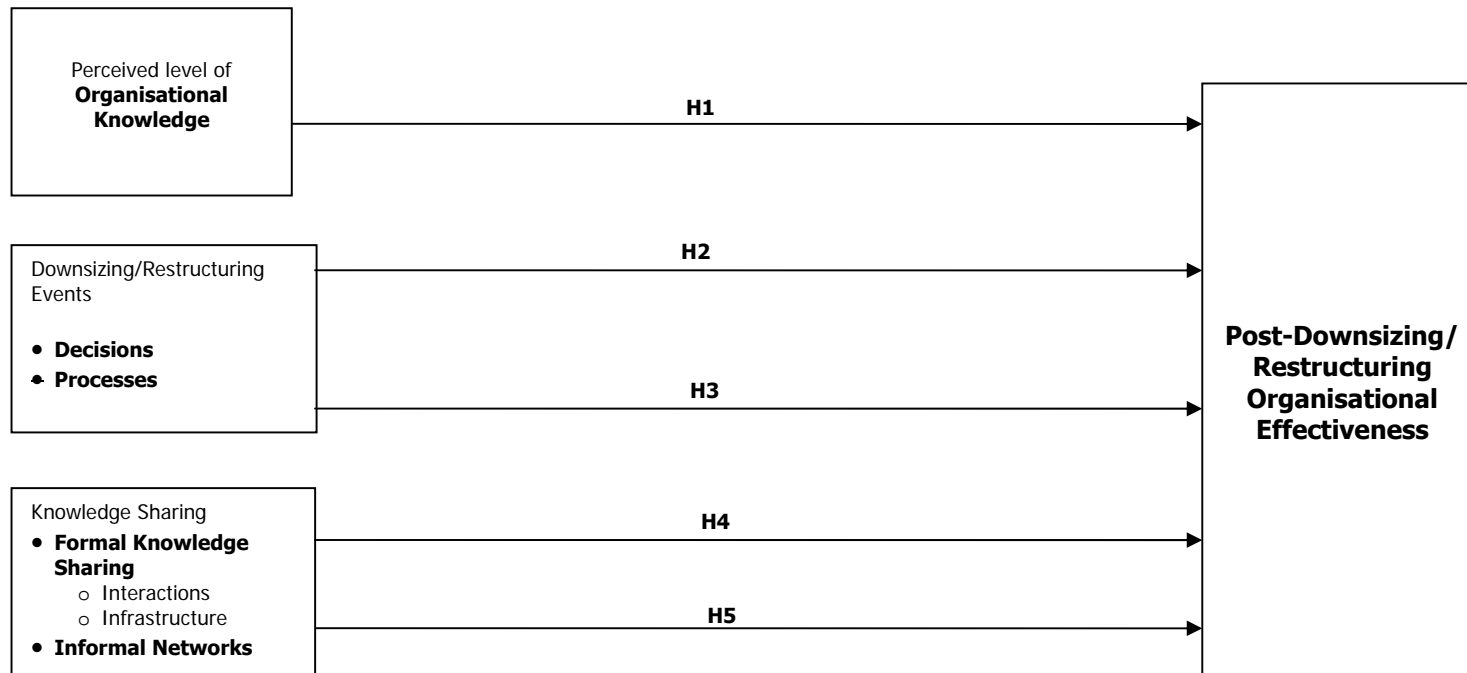
## **2.10 CONCEPTUAL FRAMEWORK FOR THE RESEARCH**

The following section introduces the integrated conceptual framework developed for this research, identifying the key variables and their inter-relationships. The integrated conceptual framework (Figure 2.4) combines a two stage model development process (Figures 2.2 and 2.3).

Initially, '*perceived level of organisational knowledge*', '*perceptions of downsizing/restructuring events*' (perceived relevance of downsizing/restructuring decisions and perceptions of downsizing/restructuring processes) and '*knowledge sharing*' (formal knowledge sharing and informal networks) are examined to identify any direct impact they may have on the dependent variable '*perceived post-downsizing/restructuring organisational effectiveness*'. These relationships are presented in the Stage 1 Model (Figure 2.2).



Figure 2.2: Stage 1 – Direct Impact of Independent Variables on Organisational Effectiveness



The Stage 2 Model (Figure 2.3) examines the influence of *'perceived level of organisational knowledge'* as an intervening variable in the relationship between the independent variables of downsizing/restructuring events (*downsizing/restructuring decisions* and *downsizing/restructuring processes*) and knowledge sharing (*formal knowledge sharing* and *informal networks*), and the dependent variable of *'perceptions of post-downsizing/restructuring organisational effectiveness'*. The independent variables are also hypothesised to influence the intervening variable *'organisational knowledge'*.

The final stage in development of the Model combines Stages 1 and 2 to present an integrated conceptual framework, represented in Figure 2.4. The integrated conceptual framework initially presents the relationship between the independent variables of downsizing/restructuring events (*downsizing/restructuring decisions* and *downsizing/restructuring processes*) and knowledge sharing (*formal knowledge sharing* and *informal networks*) and the intervening variable of *'perceived level of organisational knowledge.'* The framework then depicts the relationship between the independent variables and the dependent variable of *'perceived post-downsizing/restructuring organisational effectiveness'*.

Figure 2.3: Stage 2 – Organisational Knowledge as Intervening Variable

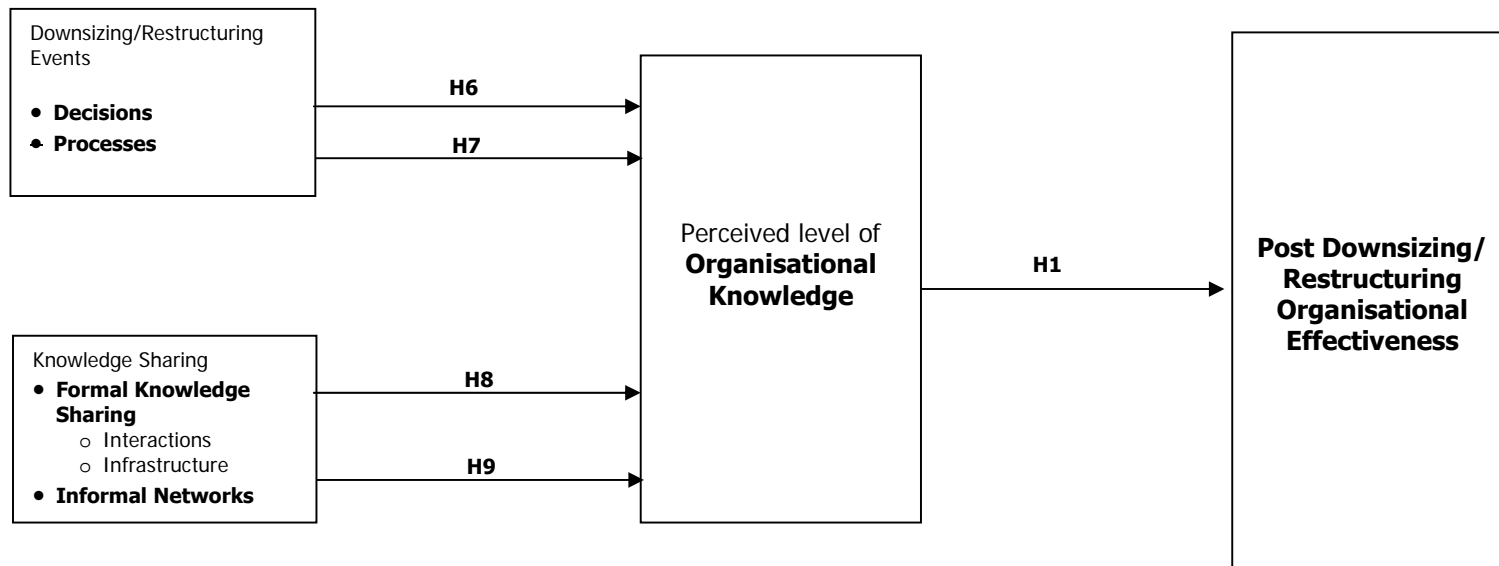
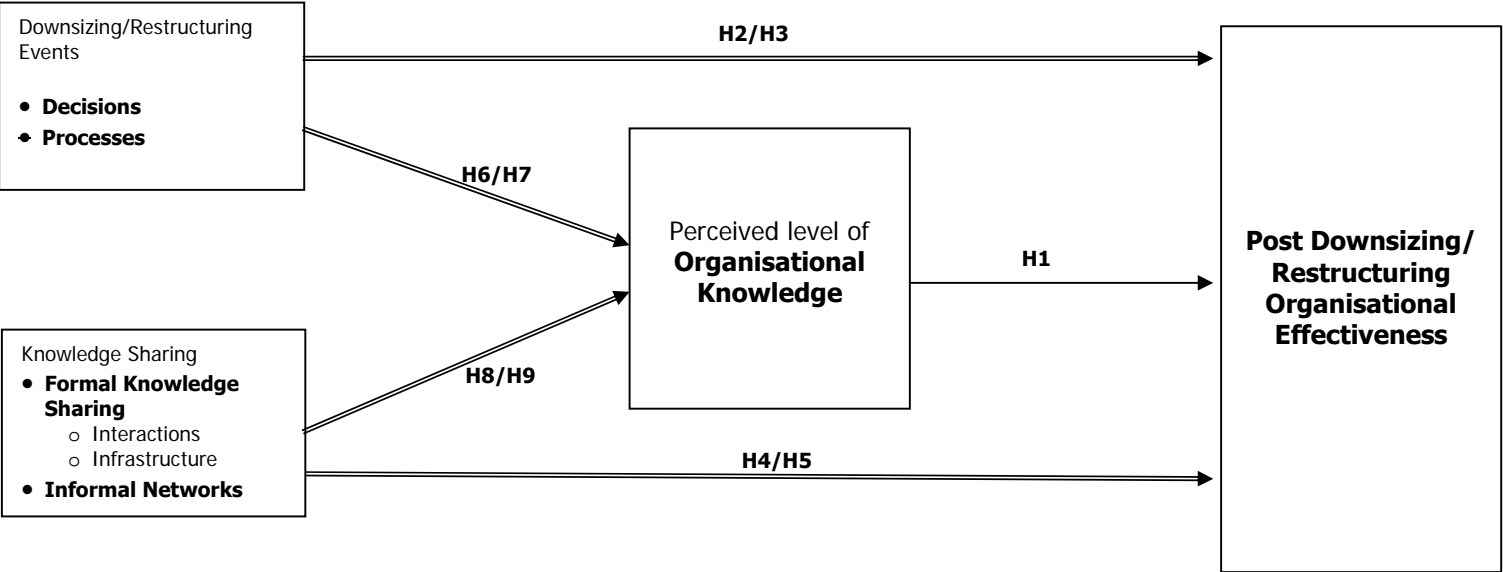


Figure 2.4: Stage 3 – Conceptual Framework



## **2.11 PERCEIVED ORGANISATIONAL KNOWLEDGE**

Organisational knowledge and memory encompasses the shared, accumulated knowledge of individuals within an organisation, both explicit and tacit (cf Nonaka 1994; Grant 1996; Gore & Gore 1999). Walsh and Ungson (1991:58) refer to organisational memory as “mental and structural artefacts that have consequential effects on performance”. They posit that organisational memory, drawn upon in decision-making within organisations, is stored in both tacit and explicit forms across the organisation. They suggest organisational memory includes not only the knowledge and experience of individuals, but is also a function of:

- the culture of the organisation;
- the systems and procedures followed in organisational transactions;
- the structures and implicit expectations of behaviours in particular roles and interactions; and
- the ecology or physical structure of the work environment and resultant message this gives about the organisation and how it operates.

Organisational memory also encompasses support systems, relationships, databases and product feedback (Gore & Gore 1999). Research undertaken by Cross and Baird (2000) suggests that organisational memory resides in:

- the minds of employees;
- the relationships employees tap into on an ongoing basis to accomplish work; and
- repositories, such as computer databases and filing cabinets.

Organisational memory is also embedded in work processes and the products and services that evolve over time, all of which develop to incorporate lessons learned from the organisations' past experience. Drawing on Machlup's (1980, cited in Gregory 1999:169) definition of organisational knowledge as “...understanding, interpreting, distinguishing, being acquainted with, being aware of, being able to explain, being able to demonstrate, and/or being able to perform certain tasks or phenomena”, Gregory (1999) emphasises the key presumption that organisational

knowledge inherently involves familiarity with processes or tasks in the organisational context. Thus, knowledge lost, for example through downsizing/restructuring, requires recreation through organisational learning.

In agreement with Nonaka's (1994) theory of organisational knowledge creation through people, Gregory (1999) also states that individual learning is necessary, but not sufficient, for organisational learning. Individuals must share and transfer their knowledge to other employees for organisational learning to occur, and to facilitate the creation or recreation of organisational knowledge.

A recent exploratory case study analysis undertaken in Australia by Griggs and Hyland (2003) also looks at strategic downsizing/restructuring and learning organisations. The authors discuss the notion that downsizing/restructuring is not only harmful to productivity, as has been reported by Casio (1993; Cascio, Young & Morris 1997) and others (cf Lee & Corbett 2006; Yu & Park 2006; Hallock 1998; Lee 1997; Kozlowski et al. 1993), but also that it damages the organisational learning process. This impacts severely on the organisation's knowledge base and its ability to create knowledge, which is one of its significant competitive advantages. As stated by Drucker (1993:38 cited in Griggs & Hyland 2003:179) "knowledge is the only meaningful resource today".

## **2.12 ORGANISATIONAL EFFECTIVENESS**

One of the primary motivations for organisational downsizing/restructuring is to achieve some form of improved organisational effectiveness (Freeman & Cameron 1993; Littler 2000). It is therefore important to include assessment of participants' perceptions of organisational effectiveness in order to demonstrate whether downsizing/restructuring decisions and processes, levels of organisational knowledge, knowledge sharing and informal networks are relevant considerations for organisations contemplating restructuring/downsizing.

Many of the measures of post-downsizing/restructuring performance which appear in the literature relate to financial indicators, including lower expense

ratios, higher profits, increased return on investment and improved share price (cf Budros 1997; Bruton, Keels & Shook 1996; Cascio, Young & Morris 1997; De Meuse, Vanderheiden & Bergmann 1994; Mentzer 1996; Kabanoff, Palmer & Brown 2001; Worrell, Davidson & Sharma 1991). Organisational performance measures also cover anticipated organisational improvements including decreased overheads, improved internal communications and greater productivity (Cascio 1993). In the management of human resources, however, such measures are not always useful. The perceptions of those who work in an organisation are their reality, regardless of what may appear on balance sheets or share price listings. Therefore, attracting and retaining key employees is largely dependent on their perceptions of the organisation and whether it is an organisation in which they wish to remain and positively contribute.

Few consistent specific measures of post-downsizing/restructuring organisational effectiveness are available in the literature. A set of standards used to measure perceived post-downsizing/restructuring organisational effectiveness was included by Cameron, Freeman and Mishra (1991) in their study of the vehicle manufacturing industry in the United States. Amongst a broad range of measurements, these researchers included a measure of participants' perceptions of their organisation's effectiveness by asking them to compare organisational performance after downsizing/restructuring against the following standards:

- industry average
- performance of best domestic competitor
- performance of best global competitor
- stated goals for current year
- perceived customer expectations.

Through this comparison, the researchers attempted to compare employees' pre-downsizing/restructuring perceptions with post-downsizing/restructuring perceptions of organisational effectiveness irrespective of financial or other tangible measures. These standards provide a starting point for

measurement of participants' perceptions of organisational effectiveness in this research.

For the purposes of this research, any factors identified by participants as affecting their view of the organisation as an 'employer of choice' are included in the 'organisational effectiveness' measure. This includes 'hard' measures, such as financial indicators, as well as 'soft' measures, including organisational culture.

In response to the foregoing discussion of organisational knowledge and organisational effectiveness, it is proposed that organisational knowledge plays an important part in determining organisational effectiveness. The first hypothesis which advances this proposal is:

*Hyp 1. The higher the level of organisational knowledge perceived by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*

## **2.13 DOWNSIZING/RESTRUCTURING EVENTS**

As presented in the conceptual framework, downsizing/restructuring events refers to both the decisions taken by organisations implementing downsizing/restructuring and the processes utilised to introduce the changes.

### **2.13.1 Decisions**

Underpinning organisational downsizing and restructuring are the decisions driving the changes, together with strategies and processes implemented by the organisation to bring about the 'new' organisation. Freeman (1999) developed a model contending that decisions and strategies used by organisations vary widely. They range from those whose primary decision is to downsize radically, and restructure/redesign the organisation in response to this decrease in staff numbers; to those organisations that seek to restructure/redesign the organisation to improve operations, with downsizing being an incidental, rather than key, focus. Therefore, the motivation driving



each scenario is different, as are the experiences and perceptions of those involved.

Freeman's (1999) model highlights varied experiences of workforces and contributes to explanation of different perceptions of downsizing and restructuring. Employees who perceive downsizing to be synonymous with restructuring may do so because they perceive organisational change being driven by requirement or intent to downsize. Freeman (1999) suggests this is a reactive approach to downsizing, a view that is supported by other researchers (Kozlowski et al. 1993; Cameron, Freeman & Mishra 1991).

Those employees, who experienced organisational restructure/redesign that necessitated subsequent downsizing, may have different (more positive) perceptions of restructuring and downsizing to those who have experienced organisational restructure/redesign resulting primarily from an imperative to reduce numbers. Organisational restructure/redesign resulting in subsequent downsizing is put forward by Freeman (1999) as a more strategic approach to downsizing. In this instance, the primary focus is on redesign of the organisation, with downsizing taking place only where it is an appropriate option for producing improvement.

Having identified the need to reduce numbers of employees, organisations are faced with a wide range of methods by which to do so. De Witt (1998) provides a useful overview of downsizing/restructuring strategies that organisations may adopt, depending on the prevailing circumstances. These are broadly termed *retrenchment*, *downscaling* and *downscoping*.

Clearly, decisions made regarding the downsizing/restructuring approach adopted will have a major influence on the skills and knowledge retained as well as resultant perceptions of procedural fairness (Brockner, Tyler & Cooper-Schneider 1992). An approach that removes significant numbers of long-term employees from the organisation, for example, is likely to have a major impact on understanding of corporate history, whilst a strategy that focuses on 'last in first out' may result in loss of current skills and contacts in the industry. On the other hand, in comparison to engaging specific talent

through external recruitment, an approach that relocates existing staff to other parts of the organisation may retain both history and specific skills but may result in less than optimal proficiency in those parts of the organisation.

Teare and Rayner (2002) also identify the lack of research focus on decisions and decision-making processes in their study of outsourcing, a common downsizing/restructuring strategy. In order to ensure retention of knowledge, they suggest the need for further research attention to decision-making processes to create a more strategic, holistic perspective and to guarantee long term benefits are achieved through this strategy.

### **2.13.2 Processes**

Strategies used to achieve the reduction in workforce are also influenced by the nature of the change to be introduced. Downscoping strategies (De Witt 1998) are by definition proactive, and part of a medium to long-term change in strategic direction rather than a response to immediate financial pressure. In this case, time is available to consider the organisation's future needs and achieve the decrease in staff numbers by mechanisms such as natural attrition, reduced hours, internal redeployment, leave without pay and other low impact downsizing strategies. These mechanisms avoid the sudden, radical loss of significant numbers of employees who may possess knowledge and skills that the organisation will continue to need. This view is supported by Bruton, Keels and Shook (1996) who reviewed the downsizing/restructuring activities of Fortune 500 companies. Their research indicates that the most successful downsizing/restructuring initiatives are those where strategic changes act to refocus the organisation on its core competencies and form part of a plan to improve both efficiency and effectiveness. Cascio, Young and Morris (1997) concur, suggesting that downsizing outcomes are more positive when they represent part of an overall strategy rather than an end in itself.

In their review of this area of literature, Taylor and Giannantonio (1993) found that whilst proactive downsizing/restructuring is a major determinant of effectiveness of the strategy, empirical evidence indicates that reactive downsizing/restructuring strategies are nonetheless most commonly

implemented by firms. This may explain the high incidence of negative outcomes relating to downsizing/restructuring initiatives reported in the literature. Further support to this contention is given by Kozlowski and colleagues (1993) who found that, despite compelling evidence in support of the improved effectiveness of a proactive approach to downsizing/restructuring, reactive downsizing/restructuring is the more common method used by organisations in reducing numbers of positions and employees.

The above strongly suggests that a planned, intentional downsizing/restructuring approach is likely to be more beneficial to the organisation over time, as opposed to a 'knee jerk' reaction; the latter being unlikely to result from extensive planning, thoughtful decision-making, consideration of a wide range of issues and implications and consultation with all stakeholders. Of interest to this research is the extent to which those involved in downsizing/restructuring in the participant organisations perceive that the various options and strategies available to reduce the numbers of positions and employees were considered in implementing the change.

It is probable that longer planning and lead times enable the organisation to assess the depth and breadth of skills available to them. This enables organisations to focus on what needs to be retained to enable ongoing effectiveness and future growth, rather than what should be removed. This is supported by the results of a longitudinal study of the UK vehicle manufacturing industry between 1974 and 1994 undertaken by Collins and Harris (1999). The study found that productivity growth was higher in organisations that successfully downsized than those that did not downsize, or who did so unsuccessfully. This study also found that organisations reporting they were unsuccessful at downsizing/restructuring also indicated the lowest rates of productivity growth. The research suggests that, although well implemented downsizing/restructuring strategies can significantly enhance productivity growth, poorly implemented downsizing/restructuring strategies actually diminish performance. It is possible therefore, that the right downsizing/restructuring strategy has the

potential to significantly improve performance. Moreover, a poor downsizing/restructuring strategy appears to have a stronger negative effect, than no action being taken at all.

It seems reasonable to contend that reported poor outcomes in the above studies may be due, at least in part, to poor downsizing/restructuring eliminating not only current costs but also future capacity. Knowledge is a key competitive advantage and differentiator between organisations (Drucker 2002), so knowledge lost through ineffective downsizing/restructuring may impact on the organisation's ability to maintain its current performance levels. In addition, the need to replace knowledge may retard the organisation's capacity for future growth.

Together with the organisational level decision processes, 'on the ground' strategies for reducing staff numbers are also relevant in regard to subsequent perceptions of those involved in the experience. Seminal research undertaken by Greenhalgh, Lawrence and Sutton (1988) found downsizing/restructuring to be a reactive response to an "oversupplied workforce". These writers identified two broad groups of actions utilised by organisations to reduce their workforce numbers, which they term 'redeployment' and 'layoff' strategies.

Redeployment strategies include such initiatives as natural attrition, relocation to other parts of the organisation, decrease in working hours, leave without pay, job sharing and other means by which payroll expenditure is reduced without permanent departure of employees from the organisation. Redeployment strategies may also increase the likelihood of employee well-being and have minimal negative impact on psychological contracts between employer and employee (Greenhalgh, Lawrence & Sutton 1988).

Layoffs, on the other hand, are considered a more 'aggressive' strategy (Greenhalgh, Lawrence & Sutton 1988). Although layoffs may or may not be implemented in conjunction with outplacement support services (such as job search assistance, retraining and advanced notice), they nonetheless result

in employees' departure from the organisation. Termination breaks the psychological contract or mutual obligations and expectations shared by the employer and employee (Guest & Conway, 2002) which is the basis of the employment relationship. This significantly impacts employee well-being (Greenhalgh, Lawrence & Sutton 1988) and may result in decreased morale and trust amongst remaining employees. This in turn may discourage cooperation, goodwill and an atmosphere conducive to knowledge sharing.

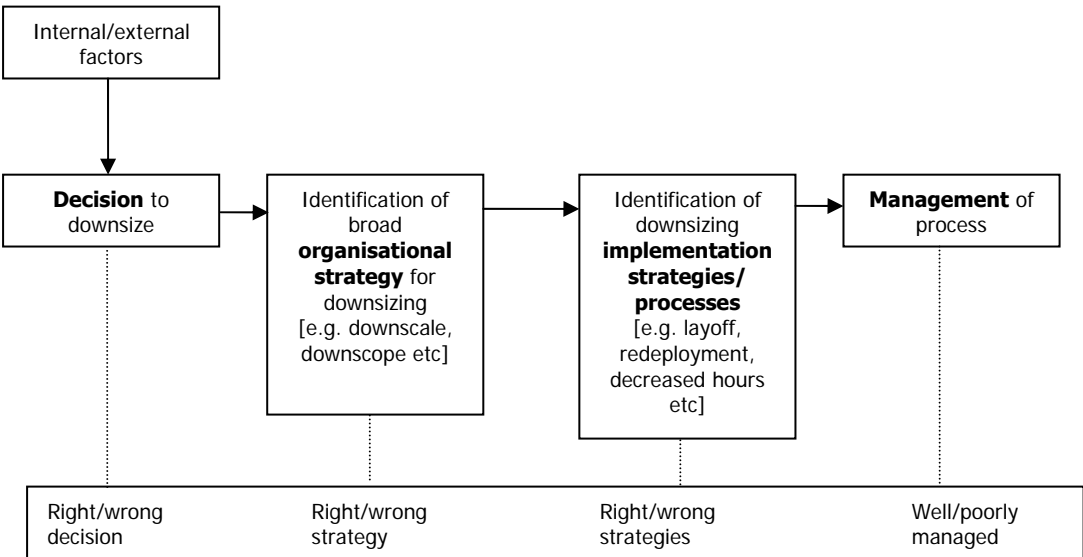
In practice, when implementing a downsizing/restructuring strategy most organisations utilise a range of processes, the appropriateness of which are dependent on factors such as expendable resources for the process, availability of time, organisational characteristics, culture, environmental factors, and intended outcomes of the organisational downsizing/restructuring. Once an organisation has embarked on a downsizing/restructuring path and identified the organisational strategy it will follow to achieve the reduced workforce, organisation-specific implementation processes are devised. These provide guidance on how 'victims' and 'survivors' are to be managed and how information about the downsizing/restructuring initiatives is communicated to the workforce and stakeholders, such as shareholders, stock exchange, suppliers, clients and community.

Extensive research in this area (Tzafrir et al. 2006; Yu & Park 2006; Farrell & Mavondo 2005; McElroy, Morrow & Rude 2001; Leana & Van Buren 2000; Lewin & Johnston 2000; Brockner et al. 1994) identified the importance of implementation strategies in explaining success of a downsizing initiative and subsequent organisational performance. Most research to date, however, focuses on identifying the outcomes of different strategies and processes, with limited focus on why they are effective or predictive of success. This research seeks to examine the impact of decisions and processes on subsequent organisational effectiveness and levels of organisational knowledge in order to both explain and predict their appropriateness in achieving optimal outcomes.

Taylor and Giannantonio's (1993) discussion identifies three crucial aspects to organisational downsizing/restructuring events. The first critical aspect is determining the appropriate organisational strategy. Key to this is whether it is proactive or reactive and whether retrenchment, downscoping or downscaling is to be implemented. Secondly, these authors suggest determination of the processes to be used in order to achieve the required reduction in positions and employees. Reduction methods in addition to layoffs, such as natural attrition, decreasing hours of work and staff redeployment can be considered. The third essential aspect to downsizing/restructuring, Taylor and Giannantonio suggest is management of the actual downsizing/restructuring process. The way in which selected processes are implemented is central to the outcomes achieved. Inappropriate decisions in any of these areas are likely to adversely affect the organisation's future performance. Sound decisions implemented poorly, or well implemented strategies based on inappropriate decisions, may result in negative outcomes for individuals and diminished organisational effectiveness.

Steps in the downsizing/restructuring decision and implementation process, together with identification of points at which each decision may be the right or wrong one, are represented diagrammatically in the following Figure 2.5.

Figure 2.5: Summary of downsizing/restructuring decision/process



Internal and external factors dictate whether the high-level decision to downsize/restructure is the correct one for the organisation. Even where downsizing/restructuring is a suitable decision for the organisation, the implementation strategy selected may be appropriate or inappropriate to organisation, circumstances or environment.

The method of implementation selected to bring about the reduction in numbers may also be appropriate or inappropriate for the organisation. Despite all decisions being appropriate for the organisation, that is, suitable for the circumstances and in line with the organisation's culture, a poorly managed process may nonetheless result in a negative outcome. This view is consistent with that of Cole, Harris and Berneth (2006) who studied the three-way interaction between vision, appropriateness and execution in broader organisational change initiatives, identifying that this interaction was able to predict outcomes such as job satisfaction and turnover intention.

Given the importance of the perceived relevance of downsizing/restructuring decisions and perceptions of downsizing/restructuring processes on the final outcome, the following hypotheses are proposed for testing:

*Hyp 2. The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees, the higher the perceived post-downsizing/restructuring organisational effectiveness.*

*Hyp 3. The more positive the perceptions of downsizing/restructuring processes by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*

## **2.14 FORMAL AND INFORMAL KNOWLEDGE SHARING**

Walczak (2005:330) contends that knowledge management is about "creating a culture that facilitates knowledge sharing". Further, he suggests that organisational culture is comprised of a business strategy, people, work processes and organisational structure. Wang and Ahmed (2003) also

discuss organisational structure, both formal and informal, and its influence on knowledge creation and flow. They further emphasise the importance of the informal structure (that is, networks), in facilitating knowledge sharing, suggesting that mechanistic structures (characterised by formal hierarchies and functional design) are less suited to knowledge sharing than organic organisation structures (characterised by informal relationships and decentralisation).

Mechanistic structures with high levels of functionalism and significant hierarchy have clear tiers, departmental separation and work specialisation. This formal and bureaucratic structure tends towards rigid rules and procedures allowing minimal individual autonomy. Communication is therefore more likely to be formal, resulting in restricted information flow and sharing of knowledge.

The organic structure, being relatively flat and team based with a tendency towards divisional rather than functional arrangement, breaks down barriers and facilitates cross-functional teams and integration of specialised sources of knowledge (Wang & Ahmed 2003). This decentralisation of power and control empowers employees. The greater informality and freedom from rigid rules encourages less formal, face-to-face communication together with greater up and down communication. This encouragement of two way communication and interaction is key to creation and sharing of knowledge (Wang & Ahmed 2003).

The issue of organisational networks and interactions between employees in the workforce in relation to downsizing/restructuring is raised by Fisher and White (2000) in their discussion of the impact of downsizing/restructuring on learning organisations and their future learning capacity. The writers highlight the view that the loss of one individual from an organisation may in effect result in loss of members from a large number of networks. Therefore, the loss of networking relationship magnifies the impact of loss to the organisation.



Edwards' (2000) discussion of downsizing/restructuring as a response to technological discontinuity echoes a similar theme in regard to the impact of the loss of individuals through downsizing. He suggests that in situations where the introduction of new technology has some commonality with previous technology or practices, retraining existing employees in the use of new technology may be a more cost effective option than laying off employees and recruiting a replacement workforce. Edwards argues that employees may have the ability to build on existing knowledge and acquire the necessary skill for utilisation of the new technology. Consistent with social network theory, this may be largely due to employees' ability to access their existing networks in order to facilitate the acquisition of new skills.

Conversely, Edwards (2000) also puts forward the view that if new technology is significantly different from previous technology, there may be a cost involved in the 'un-training' of existing employees, prior to retraining them in the new practices. This, he suggests, may be more costly than laying off employees and recruiting a new workforce unused to the old methods of operation. This view also supports the importance of knowledge and network retention in decision-making, albeit in a negative aspect where their retention may be disadvantageous to the introduction of some changes.

Other authors, such as Cohen and Prusack (2001), mention the necessity of disrupting existing networks as part of the implementation of change initiatives. This lends support to the contention that knowledge and network retention need to be considered in downsizing/restructuring decision-making, even when there is intention to discard outdated or redundant knowledge and/or disrupt problematic or dysfunctional networks.

Griggs and Hyland (2003) also discuss the critical importance of informal networks in the system of knowledge exchange and the negative consequences of network disruption resulting from downsizing. They suggest that managers seeking to maintain competitive advantage by retaining learning capacity must look to the alignment between formal and informal structures in the organisation and the impact of downsizing/restructuring strategies. The authors express the view that

particularly in bureaucratic organisations, organisational learning and memory are formalised in policies, structures and routines and that informal structures correspond closely with formal hierarchy. Therefore network connections are highly visible and less at risk of unintentional disruption resulting from downsizing/restructuring. Conversely, Griggs and Hyland (2003) and Wang and Ahmed (2003) propose that in organisations where there is significant reliance on innovation and greater emphasis on organisational learning, there is likely to be a flatter organisational structure and stronger reliance on networks. This puts these organisations at greater risk from the impact of downsizing/restructuring in relation to learning capacity.

## **2.15 INFORMAL NETWORKS**

Brown and Duguid (1991) first proposed that both working and learning within organisations occurs within informal communities; people work and learn collaboratively within such communities as they constantly form and reform. They argue that formal job descriptions and reliance on espoused practice disguise the ways in which people actually work, as well as how learning and innovation occur. The authors further argued that the above encapsulates the concept of 'communities of practice'. Such communities are thought to emerge as a way of enabling collaborative working and learning to occur in organisations. Researchers suggest that while essential, these communities cannot be 'formally' created through discrete employment agreements or formal work teams. They emerge through common interests and are vulnerable to damage through formal organisational actions such as restructuring, reorganising and downsizing.

Therefore Lesser and colleagues (cf Lesser & Storck 2001; Lesser & Prusak 1999; Lesser 2000; Lesser & Everest 2001; Cohen & Prusack 2001) suggest support for informal networks, or communities of practice, is one method by which organisations harness social capital to organisational advantage. These groups are a valuable organisational asset and can be an effective way to handle unstructured problems and share knowledge outside traditional boundaries. Whilst communities of practice are emergent rather

than formal groupings, they can be supported and nurtured by the organisation as a mechanism to build organisational social capital.

Lesser and Storck (2001) suggest a number of ways in which organisations can build social capital. These include provision of opportunities to bring groups together to share knowledge and expertise and make connections with one another; creating experiences that build trust; allowing time for people to build common contexts and understanding, and providing appropriate technologies to support network formation. Most importantly, according to these researchers, organisations need to focus on building relationships that allow knowledge to flow where it is needed to achieve organisational outcomes. Support for communities of practice can facilitate this, resulting in improved effectiveness, efficiency and innovation.

The disruption to informal networks, which inevitably occurs during major organisational change, is likely to result in reversal of many of these positive impacts. This may be evident by increased learning curves, response times to customers (and resultant increased customer complaints), amounts of 're-work' and 'reinventing the wheel' and, conversely, decreases in the number of new product and service ideas generated (Lesser & Everest 2001).

In response to the foregoing discussion of knowledge sharing (comprising both formal knowledge sharing strategies and informal networks), it is argued that these concepts are closely related and have great importance in determining the effective outcomes of organisational downsizing/restructuring. Hypotheses to be tested in relation to knowledge sharing are therefore:

*Hyp 4. The higher the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*

*Hyp 5. The more informal networks reported by Decision Makers and Implementers and Affected Employees the higher the*

*perceived level of post-downsizing/restructuring organisational effectiveness.*

Further, following previous discussions of organisational knowledge, the relationships between organisational knowledge and both downsizing/restructuring events (comprising downsizing/restructuring decisions and processes) and knowledge sharing (comprising formal knowledge sharing strategies and informal networks) are examined through the following hypotheses:

*Hyp 6. The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

*Hyp 7. The more positive the perceptions of downsizing/restructuring processes by Decision Makers and Implementers and Affected Employees, the higher the perceived level of organisational knowledge.*

*Hyp 8. The greater the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

*Hyp 9. The greater the informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

## **2.16 PERCEPTIONS OF MANAGERS AND EMPLOYEES**

This research also considers the perception of managers and employees involved in downsizing/restructuring, through which they experience different roles and levels of control over the process. Previous research into downsizing focuses broadly on victims and/or survivors (cf Appelbaum et al. 1997; Armstrong-Stassen 2004; Armstrong-Stassen 2005; Brockner et al. 1994; Carbery & Garavan 2005; Roan, Lafferty & Loudoun 2002); the former being those who lose their jobs, and the latter those who remain in the

organisations. Only a few studies have focused on the differences in perceptions between participants. Tourish, Paulsen, Hobman and Bordia (2004) researched differences in perceptions of survivor groups, with and without managerial responsibilities, in their study of uncertainty, trust and communication effectiveness in a health care organisation following downsizing. This research continues examination of the differences in perceptions, if any, between managers and non-managers. In doing so, this research compares perceptions of Decision Makers and Implementers with those of employees affected by the changes, and considers them in light of different roles in the downsizing/restructuring context.

Kets de Vries and Balazs (1997) also identify a group in the downsizing process who they term as 'executioners'. These are people responsible for implementing and managing the changes, including conveying news of job losses to those directly affected and their colleagues. Nirmala and Akhilesh (2006:139) refer to this same group as 'implementers', defined as "...those who implement the process of rightsizing and whose role may encompass either taking the decision to rightsize, or communicating the decision, or formulating strategies to rightsize or all of the above functions". In this research, and in keeping with the definitions of both Kets de Vries and Balazs (1997) and Nirmala and Akhilesh (2006), this group of employees are termed 'Decision Makers and Implementers'. While this group are generally part of the broad category of survivors, their role in decision-making and/or implementation of decisions, sets them apart and may affect their perceptions of the process and its outcomes.

## **2.17 CONCLUSION**

This Chapter has outlined a broad range of previous research on downsizing/restructuring, covering both organisational and environmental factors driving this strategy and reported results of these studies. The Chapter also introduced relevant literature from research into organisational knowledge, formal knowledge sharing and informal networks in order to develop testable hypotheses. A conceptual framework for the research was presented, depicting the independent variables that are proposed to impact

directly on the dependent variable, *perceptions of post-downsizing/restructuring organisational effectiveness*. The conceptual framework also includes an intervening variable, *perceived level of organisational knowledge*, which is proposed to mediate the relationships between the independent and dependent variables. Testable hypotheses, developed from discussion of the literature and incorporating the variables in the conceptual model were put forward for empirical testing through a quantitative field study. The research methods utilised are described in the following Chapter.

## **CHAPTER THREE**

### **METHODOLOGY**

#### **3.0 INTRODUCTION**

Chapter Two reviewed the relevant literature on downsizing/restructuring, organisational knowledge, knowledge sharing and informal networks. Hypotheses were developed to enable the relationship between these variables to be explored. This Chapter provides an overview of the research methodology used in this study. The methodology, or 'procedural framework', within which the study is undertaken is described by Leedy (1989, cited in Remenyi et al. 2005:285) as "an operational framework within which the facts are placed so that their meaning may be seen more clearly." Description of the methods used in the two stages of the research is provided, together with explanation of the research paradigm and questions that constitute a framework for analysis of findings discussed in subsequent chapters. The methods and sampling process used in the study are outlined. The methods of data reduction and analysis are described and followed by an explanation of the construct development and their use in the regression analyses.

#### **3.1 JUSTIFICATION FOR THE METHODOLOGY**

The research question investigated in this study considers the impact of knowledge sharing and downsizing/restructuring decisions and processes on organisational knowledge. It seeks to assess whether the loss of organisational knowledge affects the perceptions of subsequent organisational effectiveness held by those who experienced those changes.

Further, the research examines whether perceptions of downsizing/restructuring decisions and downsizing/restructuring processes, as well as the presence of both formal and informal knowledge sharing in the organisation, significantly impact on perceived organisational effectiveness.

As organisational knowledge, knowledge sharing (comprising formal knowledge sharing and informal networks), downsizing/restructuring decisions and downsizing/restructuring processes are not easily quantified

for measurement, the study was designed in two stages towards data gathering. The first stage consisted of an electronically facilitated focus group process, intended to identify suitable proxies for organisational knowledge, as well as evidence of formal knowledge sharing and informal networks, and reporting strategies for downsizing/restructuring decisions and processes. The focus group process also identified indicators of perceived organisational effectiveness following downsizing/restructuring. This information augmented the constructs identified in the literature and contributed to development of a survey instrument for use in the data collection stage.

### **3.2 RESEARCH PARADIGM**

The ontology for this research is primarily the positivist paradigm, where reality is believed to exist and be apprehendable. As the nature of the data is concrete and factual in nature, the epistemology (or method of knowing) is empirical. Proposed hypotheses are verified through collection and analysis of relevant data. Therefore, as a positivist study, the methodology is quantitative with the aim of predicting the impact of downsizing and major organisational restructuring on organisational knowledge and subsequent organisational effectiveness (Remenyi et al. 2005). The extent of knowledge sharing, both formally and informally through networks, was also measured in order to assess their perceived impact on organisational knowledge and subsequent organisational effectiveness. Further, perceived relevance of decisions taken and implementation processes used were also assessed to gauge their predictive impact, or otherwise, on subsequent organisational effectiveness.

Although primarily a positivist study, this research is supported by an intermediary stage, which is constructivist in nature (Denzin & Lincoln 2000). According to Karami, Rowley and Analoui (2006), the context of the study and research questions addressed should dictate the choice of research method. Further, Karami and colleagues (2006) indicate that a number of authors (cf Hitt et al 1998 and Judge & Zeithami 1992 cited in Karami, Rowley & Analoui 2006) suggest that the integration of quantitative and



qualitative tools in management research is a useful way in which to investigate questions of business operation. These authors conclude that research methodologies in business and management require a balance between qualitative and quantitative methods, and this was conducive to the questions addressed within the context of this study. A qualitative stage was therefore embedded within the research design to identify potential measures and constructs. This interpretive epistemology and qualitative methodology, utilising focus groups, facilitated identification of key dimensions. These dimensions reflected the existence of knowledge and informal networks, and ways in which these may be preserved during periods of significant change. The dimensions identified were combined with items drawn from the literature to develop the survey instrument.

### **3.3 OVERVIEW OF RESEARCH DESIGN**

Cross-sectional data were gathered in this research to examine participants' perceptions of their specific downsizing/restructuring experience at a point in time rather than over an extended timeframe. Data therefore consisted of participants' perceptions of the situation in their organisation, not factual accounts of their experiences. The research design consisted of a two-stage process, culminating in the collection of sufficient data to enable testing of the hypotheses using multiple regression analyses. The first stage consisted of a qualitative focus group process. The second stage was the development of a survey instrument drawn from both the literature and items identified in the focus group process. Both of these stages are further explained in the following sections.

#### **3.3.1 Focus Group Process**

The survey instrument development commenced with the design of a draft questionnaire, developed from the literature, as well as items identified through the focus groups. This section describes the focus group process used to attain this information.

Four focus groups were conducted to achieve two aims. The first aim was to bring together groups of people who had been involved in downsizing in

some capacity to elicit their views on the main aspects of the research questions, that is:

- a) how knowledge loss is evident
- b) how informal network disruption is evident
- c) how individual knowledge can be changed into organisational knowledge
- d) what actions organisations can take to retain knowledge and minimize network disruption during downsizing.

This information supplemented the literature and provided an Australian perspective to the above issues. Analysis of data from the focus groups, combined with items drawn from the literature review, was then incorporated into a 127 item survey instrument.

The second aim of the focus groups was to develop a measure of organisational effectiveness, through verification or otherwise of the measure used by Cameron and colleagues (1991) for the Australian context. The focus groups enabled identification of additional items through which to gauge perceptions of organisational effectiveness after downsizing/restructuring.

The focus group sessions were conducted to explore participants' experiences and perceptions of knowledge and informal networks during downsizing/restructuring using the electronic Group Support System (GSS) facility at the Curtin University Graduate School of Business. The GSS offers several advantages, including anonymity and opportunity to generate high volumes of quality responses in relatively brief 'brainstorming' sessions (Easton, Easton & Belch 2003; Newby, Soutar & Watson 2003; Forrest 1999).

Much of the literature on GSS focus groups stresses the importance of using an independent and experienced facilitator and chauffeur. The quality and volume of ideas generated is enhanced when a skilled facilitator and chauffeur control the process (Griffith et al 1998 cited in Hostager et al. 2003; Tan, Kwok-Kee & Lee-Partridge 1999; Dickson, Partridge & Robinson 1993).

Guided by an agenda based on the research questions and hypotheses, and aided by an independent facilitator, the focus groups provided an efficient means of identifying and gathering different perspectives. Issues and concerns were surfaced as well as possible explanations, and a range of options relating to knowledge and informal network management during downsizing/restructuring were identified. Through the use of the GSS system, the hardware and software of which was managed by a 'chauffeur', the participants brainstormed and organised their ideas. The anonymity of the process enabled participants to focus on relevant issues. Automatic documentation and immediate results were provided by the GSS system, with information from individual terminals and aggregated information able to be displayed through projection facilities, enabling ongoing evaluation and reiteration ('Stratcom - Strategic Decision Support' n.d.).

The agenda was designed to be as open as possible to encourage maximum idea generation. The questions posed to the groups included:

1. How do you know knowledge has been lost in your organisation after downsizing/restructuring?
2. What do you think could be done to stop knowledge being lost from your organisation when you downsize/restructure?
3. How do you know informal networks are affected in your organisation after downsizing/restructuring?
4. What do you think could be done to help retain important informal networks when you downsize/restructure?
5. How do you turn what one person knows into what everyone in the organisation knows?
6. Are there particular management practices or strategies that can help individual knowledge to become organisational knowledge.
7. Organisational effectiveness after downsizing has been measured in the past by comparing the organisation's performance after downsizing against:
  - a. Previous firm performance
  - b. Performance of domestic and global competitors
  - c. Stated goals and

d. Perceived customer expectations

What do you think about these criteria?

8. Are there any other indicators that you think are important signs of a change in the organisation's performance?

Within a timeframe of 1.5-2 hours, the eight questions were posed to each group, using only the GSS brainstorming function. Utilising additional functions for group processes available in the GSS software, such as ranking and voting, would have lengthened sessions to three hours or more, which was impractical and would have greatly limited the number of available participants. Detailed explanation of this focus group process and analysis of results is provided in Appendix 1. A brief summary of the emergent themes which informed the development of the survey instrument is provided below.

### **3.3.2 Emergent Themes Drawn from Focus Group Data**

In response to the first question relating to evidence of knowledge loss after organisations downsize/restructure, four categories of responses (accounting for over 66% of total responses) emerged. These were:

- *Inability to find information sources*; locating people inside the organisation with knowledge/information, records or other pieces of relevant information needed to undertake roles.
- *Uncertainty of role requirements*; both of self and others, along with knowledge of the mission and purpose of the organisation.
- *Inefficiencies* of tasks being undertaken.
- *Time factors*, extra time needed for completion of tasks and evidence of missing deadlines.

Responses to the second question relating to the retention of knowledge provided a further four categories (comprising 70% of total responses):

- *Handover Processes*; ensuring mechanisms for knowledge sharing were in place before staff departed.
- *Documentation Procedures*; for capture and storage of, and access to, knowledge.

- *Preparation and Planning*; of the downsizing/restructuring event, including the aftermath.
- *Communication and Knowledge Sharing*; through encouragement of networking and rewards given for the sharing of knowledge.

Responses to the third question relating to evidence of the loss of informal networks provided five categories (65% of total responses). These were:

- *Social Interaction*; social aspects of work, including attendance at functions and informal discussions and interactions.
- *Inability to Find People/Information*; normally contacted for information, assistance or advice.
- *Inefficiency/Performance Issues*; such as lack of efficient problem solving, decision-making and creativity together with increased industrial activity.
- *Culture Change*; including increased formality and decreased morale, satisfaction and enthusiasm.
- *Altered Networks*; indicated new contacts and alliances being formed.
- *Communication*; such as decreased informal communication and greater focussed on self.

Responses to the fourth question relating to methods to retain informal networks provided a further six categories (comprising 90% of total responses) which included:

- *Formalise/Recognise*; the organisation recognising and valuing the informal networks.
- *Support & Rebuild*; networks by providing organisational support for members and encouraging team work.
- *Social Interaction*; particularly social activities initiated, supported and participated in by management.
- *Plan/Map*; by identifying network participants and their roles prior to downsizing.
- *Communicate/Inform/Educate*; ongoing, informative communication, together with openness and trust to help maintain networks.
- *Involvement*; of network members in the planning process.

Responses to the fifth and sixth questions relating to sharing of knowledge provided four categories (comprising 90% of total responses). These were:

- *Developing a Learning Culture*; by promoting and supporting continuous learning and knowledge sharing.
- *Knowledge Capture & Storage Systems*; a planned, structured approach to downsizing/restructuring, implementation of knowledge management initiatives such as documentation, databases, checklists, procedures and intranets, and a culture that supports formal knowledge retention.
- *Communication*; emphasised regular, ongoing information flow characterised by regular meetings, newsletters, presentations, communication plan/strategy, brainstorming, teams, feedback mechanisms, electronic media, formal and informal networks, briefings, and flyers.
- *Training and Development*; including sound induction, job rotation, multi-skilling, job sharing, succession planning, coaching, mentoring and varied work experiences.

Review of the literature on previous downsizing studies identified one study that provided a useful starting point for development of measures of organisational effectiveness. This was a study conducted by Cameron, Freeman and Mishra (1991) into the vehicle manufacturing industry. Specifically, participants were asked to rate organisational effectiveness or performance by comparing quality improvement (errors or defects) after downsizing against the following standards:

- industry average
- performance of best domestic competitor
- performance of best foreign competitor
- stated goals for current year
- perceived customer expectations.

Researchers then assessed employees' perceptions of improvement in organisational effectiveness after downsizing, regardless of financial or other tangible measures.

The final two questions put to focus groups endeavoured to ascertain whether the measures of post-downsizing organisational effectiveness used by Cameron, Freeman and Mishra (1991) were appropriate for use in the survey instrument for this research. Approximately 88% of the respondents indicated some problems with these measures, primarily that they were insufficient; focusing on 'hard' financial measures without consideration of 'soft' people related indicators.

Eight categories emerged as measures for post-downsizing organisational effectiveness, falling into three broad categories (each comprising 26%-38% of total responses):

- *Employee Reactions*; the behaviours or feelings exhibited by individual employees such as morale, satisfaction and opinions.
- *External Reactions*; behaviours and attitudes exhibited by suppliers, customers, stakeholders and the general public. The overall reputation of the organisation.
- *Organisational Impact*; behaviours or feelings exhibited by the workforce as a whole (or groups within it) and/or changes to the way the organisation operated, such as productivity levels.

These themes formed the basis of the questions included in the survey instrument. Appendix 2 provides a summary of the themes and their sources.

### **3.3.3 Development of Quantitative Instrument**

The second stage in the data collection process involved development of a survey instrument. Subjects who had experienced downsizing or restructuring were identified in participant organisations as 'survivors'. The purpose of this stage was to ask people who had been through recent downsizing or restructuring, questions in a survey designed to tap into their perceptions of organisational knowledge and effectiveness prior and subsequent to the downsizing/restructuring. Details of the sampling methods are described in Sections 3.4 and 3.5.

Since knowledge within organisations is of primary value when it is shared and accessible to others, the extent of various types of knowledge sharing in participant organisations was also investigated. Knowledge sharing encompassed formal knowledge sharing mechanisms, such as interpersonal activities. These included team meetings, training sessions and team work, as well as formal knowledge sharing infrastructure such as intranets, record storage systems, manuals and guidelines. The presence of informal networks was also considered; examples provided by respondents included social interactions, sourcing people with useful information, and level of formality in the organisation.

In order to understand participants' perceptions of the relevance of decision-making, respondents were asked the extent to which they perceived a range of key issues (such as alternatives to layoffs, documentation of procedures, training and handover options) had been taken into consideration during the downsizing/restructuring process. Their perceptions of the actual downsizing/restructuring processes (including planning the process, documentation of procedures, handover and training opportunities) experienced were also canvassed.

Findings from the GSS focus group process were combined with themes identified in the literature review to develop the survey instrument (Appendix 2). Demographic items were included, together with questions which established the role the participant had undertaken in the process (that is, Decision Makers and Implementers or Affected Employee).

Demographic questions used primarily multichotomous closed-ended questions; allowing participants to select from specified options or ranges in regard to age, gender, current position, previous downsizing experience and so on. Open-ended questions were used to obtain specific information on respondents' years of employment with their current organisation and in their current role. This information provided a general overview of the makeup of the sample.



It is possible that major organisational change, with or without intentional downsizing, will impact on the retention of both knowledge and informal networks. Participants were therefore asked to identify whether or not they perceived the restructuring had included downsizing. Although downsizing may theoretically be only one aspect of restructuring, in larger organisations employees may well perceive downsizing to have occurred if their branch or section has been reduced in size, despite the organisation itself considering that no intentional net decrease in overall staff numbers has occurred.

Items relating to the constructs and hypothesis testing consisted of scaled response questions for measurement of attributes of each construct (Frazer & Lawley 2000). Likert scales were used in all cases. The stages for development of the questionnaire included (Frazer & Lawley 2000):

- preparation of the draft questionnaire, utilising the literature review and focus group results as a starting point;
- pre-testing and revision of the questionnaire. The hard copy version of the questionnaire was tested through a pilot group for clarity, structure, layout, ease of completion and timing and revised to include feedback received.
- Development of questionnaire into online format.
- Pre-testing and revision of online questionnaire for clarity, structure, layout, ease of completion and timing in the online format.
- Pilot study results analysed to assess reliability and validity.

Further explanation of the above process is provided in the following Sections.

### **3.3.4 Pilot Study**

A pilot study of the survey instrument was undertaken in July 2004 with 40 MBA students from the Curtin University Graduate School of Business, together with 10 additional test subjects drawn from the Human Resource Management field, to refine the questionnaire and check for construct reliability and face validity. These students and test subjects were chosen for their appropriate work experience and understanding of the concept of downsizing/restructuring and organisational knowledge. After completing the

survey, the test subjects (students and HRM professionals) were invited to give both oral and written feedback on their reactions to the questions, appropriateness of vocabulary and the overall clarity and acceptability of questions. Some modifications were made to the questionnaire as a result of this process. Further description of the questionnaire design process is included in Sections 3.5 and 3.6.

### **3.4 DESCRIPTION OF RESEARCH SETTING**

The on-line (internet) questionnaire was developed using a commercial survey hosting website. Identical questionnaires were created and coded to enable identification of each participant organisation. This was necessary in order to provide feedback of summary data to organisations and comparison of data from Decision Makers and Implementers and Affected Employee groups within organisations. Summary data were then available to be downloaded and transferred to SPSS for analysis.

Initially, companies who had announced to the Stock Exchange that they were undertaking major downsizing/restructuring were to be approached as these were organisations that had undergone such change. However, advice from the Australian Stock Exchange indicated that such announcements were not made with any degree of regularity and therefore would not be indicative of the downsizing/restructuring that had occurred across industry. Direct approaches to organisations were therefore necessary. The largest organisations in the local and national markets were targeted as it was considered that larger organisations were more likely to have undertaken significant formal downsizing/restructuring than smaller organisations and would possibly be more willing to participate.

In order for data to be drawn from a sample representative of a wide range of the broad business community in Australia, data were gathered from organisations which had recently undertaken restructuring. These organisations were identified through information provided by the Chamber of Commerce and Industry (CCI) representing 10 industry groupings and included the five largest national companies and five largest Western Australian companies in each industry category.

Organisations targeted were those rated by CCI as being the largest in their industry. They consisted of organisations with annual revenue between \$A2 million and \$A27 billion, depending on industry, and employing between 15 and 165,000 people. Both public sector organisations, where size was estimated by number of employees, and private sector organisations, where size was determined by revenue were approached, although participation was higher from the Public Sector.

Chief Executive Officers were contacted by mail to obtain their support and authority to invite staff to participate in the data collection. A letter of introduction was sent from the research supervisor introducing the researcher, outlining the research project and requesting the organisation's participation. The correspondence was followed by telephone contact from the researcher to facilitate participation and the data collection process. Where organisations agreed to participate in data collection, the researcher liaised with an organisational representative to arrange distribution of the survey to employees by email or hard copy where requested. Organisational representatives were asked to circulate the survey to all staff, however it was not possible to enforce this request or monitor the number of employees invited. Obtaining the support of organisational representatives was often difficult and most were unwilling to provide additional statistical information about how widely the survey had been distributed. Since retaining their goodwill was essential for survey distribution, response rate information was only available at an organisational level (participation rate).

Whilst this was not ideal for assessment of response rates, it enabled access to a far larger and more diverse range of participants than the more traditional method of requesting one survey per organisation. Requesting a single survey from each organisation, consisting of only one nominated person's perceptions was considered less desirable in assessing perceptions of downsizing/restructuring overall. The method of circulation selected allowed the possibility of a significant number of surveys and therefore alternative perspectives to be obtained.

A list of 119 companies was provided by CCI, along with 67 additional organisations being included from other business community sources. Of the resultant 186 companies approached, 81 organisations agreed to participate (43.5% of those contacted) and 105 declined. Between one and 109 questionnaires were received from each participant organisation, with six organisations providing in excess of twenty-five completed questionnaires. Analyses of the reasons given by the organisational representatives for declining to participate are included in Section 3.9.

The breakdown of participant organisations by industry (Table 3.1) shows a dominance of public administration and 'other' industries represented, demonstrating the greater level of cooperation for this study experienced from the Public compared with the Private Sector.

*Table 3.1 Participant organisations by industry*

<b>Industry</b>	<b>Frequency</b>	<b>Percent</b>	<b>Cumulative %</b>
Agriculture, Forestry & Fishing	3	3.7	3.7
Mining	8	9.9	13.6
Construction	2	2.5	16.1
Manufacturing	3	3.7	19.8
Transport, Communications etc	7	8.64	28.4
Wholesale Trade	3	3.7	32.1
Retail Trade	2	2.5	34.6
Finance, Insurance & Real Estate	6	7.4	42.0
Services	9	11.1	53.1
Public Administration	20	24.7	77.8
Other	18	22.2	100.0
<b>Total</b>	<b>81</b>	<b>100.0</b>	<b>100</b>

### **3.5 MEASURES**

The questionnaire was developed from the literature review and themes that emerged from the qualitative data drawn from the focus group process. The items were constructed to enable examination of perceptions of downsizing/restructuring events, knowledge sharing, levels of organisational knowledge and organisational effectiveness. The process undertaken in developing the survey instrument is discussed below.

The initial questionnaire was tested and modified, resulting in the final questionnaire format consisting of 127 items. The survey instrument was

developed from the focus group process and literature review and consisted of the following question groupings:

*Table 3.2 Survey question groupings*

Items	Question Grouping	Comments
10	Demographic & Background data	
15	Downsizing/Restructuring Decision-Making	Questions prefaced with 'To what extent <u>do you feel</u> the following were taken into consideration in the restructuring decision-making?'
44	Organisational Knowledge Knowledge Sharing – formal Knowledge Sharing - informal networks	Post restructuring perceptions and strategies evident in organisation
56	Organisational Effectiveness	Indicators covering three themes: <ul style="list-style-type: none"> <li>• Employee reactions</li> <li>• External reactions</li> <li>• Organisational impact</li> </ul>
11	Downsizing Processes	Processes evident during restructure
1	General Feedback	Open ended ('anything you would like to add?')

### **3.5.1 Demographic Relationships**

The first section of the questionnaire contained ten items about demographic details (for example, gender, age, industry, current position or role). A number of questions were included as a result of the focus groups' feedback and these provided further contextual background regarding the number of restructures experienced, their recency and whether downsizing had been part of the restructure. These additional items enabled potentially broader analysis of the data as well as identifying the extent of downsizing.

### **3.5.2 Background Information**

Due to perceived sensitivities about the term 'downsizing', it was decided to use the more general term 'restructuring' in the survey instrument. Since the focus of the study was primarily on downsizing, it was therefore necessary to include a question regarding whether or not the restructure had included downsizing, defined in the questionnaire as the 'planned elimination of jobs and reduction in staff numbers'. The number of restructures experienced and time since most recent experience was included to allow for identification of trends which might be apparent based on these factors.

As the study sought to compare differences in perceptions between Decision Makers and Implementers and Affected Employees within organisations, it was necessary to identify the role of each respondent at the time of the downsizing/restructuring. The options provided in the questionnaire enabled respondents to identify as Decision Makers and Implementers and/or Affected Employees.

### **3.5.3 Hypothesised Relationships**

The independent variables contained in the conceptual framework were not directly measurable within organisations, but were assumed to be related to variables that can be measured (Field 2005). The constructs '*perceived relevance of downsizing/restructuring decisions*', '*perceptions of downsizing/restructuring processes*', '*formal knowledge sharing*', '*informal networks*' and '*perceived level of organisational knowledge*' are latent variables (Field 2005). It was therefore necessary to develop measurement items for inclusion in the questionnaire which could be used to develop the constructs. Factor analysis was used to help identify the measurement items that contributed to the various constructs.

The dependent variable, *perceived post-downsizing/restructuring organisational effectiveness*, is also a latent variable. Organisational performance measures are frequently the focus of research attention in business and management research, however, these variables generally consist of a range of 'hard' financial indicators, such as return on investment and share price (Yu & Park 2006; Cascio 2002; Cascio, Young & Morris 1997). Since the focus of this research is on the perceptions of individuals within participant organisations, these measures were not considered appropriate to determine the *effectiveness* with which the organisations were perceived to operate after downsizing/restructuring. In this study, 'soft' indicators, that is those concerned with the psychological effects such as those indicating employee satisfaction, morale and attitudes (Price 2004) were used to measure individuals' *perceptions of post-downsizing/restructuring organisational effectiveness*.

Measures developed from Cameron and colleagues' (1991) study were put to the focus groups to assess the possibility of using them in this research. The focus groups were also asked to identify additional items which might measure effectiveness appropriate within the Australian context. Resultant themes that emerged from the focus group process, together with those drawn from the literature review were incorporated into the questionnaire design and development of survey items.

An open-ended question was also included at the end of the questionnaire to allow participants to express any additional views they wished to share (refer Appendix 3). Description of the analysis method is included in Section 3.9.

### **3.6 DATA COLLECTION**

To enable distribution across a wide range of organisations and to maximise the response rate within each organisation, the questionnaire was designed to be administered in online format. Chief Executive Officers of organisations were contacted by mail to obtain their support and authority to invite staff to participate in data collection. A letter of introduction was sent from the research supervisor introducing the researcher, outlining the research project and requesting the organisation's participation. The correspondence was followed by telephone contact from the researcher to facilitate participation and the data collection process.

The primary internal distribution method was through email which contained an embedded hyperlink to the questionnaire, enabling direct online completion. Discussion of the use of online survey instruments is included in Section 3.6.1.

In order to maximise overall response rate, particularly in those organisations where employees did not have easy access to email/internet, alternate formats were also made available. These consisted primarily of 'e-forms' which were either completed electronically and returned by email or printed, completed manually and returned by mail or facsimile to the researcher. Hard copies were also provided in some instances and returned via reply

paid mail. All questionnaires not completed online by participants were entered into the online database by the researcher.

### **3.6.1 Use of Online Surveys**

In order to access significant numbers of staff within firms on a national basis, the survey was developed into an online format, which was subsequently distributed by email. This method is acknowledged to have numerous advantages, including (Forrest 1999):

- Higher response rates due to completion at respondent's convenience; keyboard/mouse being less tedious than filling out forms; direct approach through email contact; arguments for increased confidentiality of internet surveys over others, which is relevant in this study given the sensitive nature of the issue of downsizing/restructuring in many organisations. Respondents indicate they enjoy the process compared to traditional paper and pencil format surveys (Forrest 1999). This may be attributable to the combination of the relative novelty of the format and the ability to reply at their own convenience.
- Greater accuracy due to reduced human error or information processing mistakes (that is, there is no need to re-enter responses as the results are transferred directly to the analysis software in electronic form).
- More aesthetically pleasing with the use of varied colour schemes, graphics, audio and video aids being available to enhance appeal. In the present study, various colour schemes were tested with colleagues before identifying one which was reported as inoffensive to the test subjects.
- Less expensive in terms of survey deployment costs. Response tabulation and capturing verbatim open-ended responses are also significantly less than the cost of traditional methods. Cost per respondent decreases as number of responses increases.
- Faster turnaround allowing questionnaires to be monitored and information gained instantly, with any problems quickly identified and rectified (Bachmann, Elfink & Vazzana, 1996 cited in Forrest 1999).
- Customised surveys; that is, creation of separate surveys for divisions/branches within organisations, allowing internal comparison of



summary data within organisations. This was of benefit to many larger organisations wishing to compare staff perceptions within different regions or divisions.

Disadvantages identified by (Forrest 1999), included:

- Possible skewing due to self selection. This concern, however, also lies with voluntary completion of hard copy surveys.
- Anonymity of internet users and resultant difficulty in verifying respondents' details online which could present data validity issues. This potential problem is equally likely with hard copy survey use, where it is also difficult to establish if multiple surveys have been submitted by any one respondent.
- Multicultural issues, whilst a valid concern, is are issues equally likely in relation to hard copy as to online surveys in this study.
- Anxiety in divulging information; potential respondents may be apprehensive about giving information online for fear of abuse, such as 'spamming'. In order to overcome this concern, survey hyperlinks were circulated to staff from within the organisations by an authorised internal contact person rather than directly from the researcher.
- Potential lower rate of return due to respondents finding it relatively easy to delete the emailed hyperlink. This is a concern as participants may find it easier to delete an entry than to discard a hard copy survey. However, this is considered to be greatly offset by the increased numbers of surveys able to be circulated electronically.

In summary, the distribution of questionnaires through the internet was considered more advantageous than disadvantageous. Those organisations who preferred to use hard copy questionnaires were easily accommodated, with hard copy and 'e-form' formats made available.

The commercial survey hosting site used was 'surveymonkey.com', subscribed on a commercial basis (monthly fee) including the encryption of data option. The on-line format of the questionnaire was tested for ease of use by a small pilot group of four colleagues drawn from industry. Their feedback was incorporated into modifications of the on-line questionnaire layout and colour scheme.

### **3.7 OPERATIONALISATION OF VARIABLES**

In order to operationalise the variables in the conceptual framework, initial factor analysis was undertaken. The data was reduced to comparable five-point Likert scale groups of items to enable constructs to be developed. The constructs were then tested for reliability and validity in order to ensure stable constructs for regression analysis.

#### **3.7.1 Factor Analysis**

One hundred and twenty seven (127) measurement items (questions 11a to 22k) in the questionnaire were factor analysed to verify that they tapped into the six constructs in the Conceptual Framework (Figure 2.1). As items used in the survey were designed to address the specific variables in the model, factor analysis was not required but was undertaken to confirm that those items designed to measure each construct could be shown to do so. Factor analysis was also utilised to reduce the number of items to those that most strongly measured each construct, by inclusion of those items with the highest factor loadings (0.5 and above).

Factor analysis was undertaken using SPSS software. The initial factor analysis was run with eigenvalue set at  $>1$  and maximum of 25 iterations. This resulted in identification of ten components with eigenvalues  $>2$ . These accounted for 68.313% of total variance. A second factor analysis was then undertaken with eigenvalue set for 10 components and maximum of 25 iterations. The varimax rotated component matrix resulted in six factors after 9 iterations. The six factors consisted of the following number of items:

- Factor 1 – 38 items, 25 of which loaded 0.5 or greater
- Factor 2 – 30 items , 20 of which loaded 0.5 or greater
- Factor 3 – 32 items, 23 of which loaded 0.5 or greater
- Factor 4 – 17 items, 12 of which loaded 0.5 or greater
- Factor 5 – 6 items, 3 of which loaded 0.5 or greater
- Factor 6 – 4 items, 1 of which loaded 0.5 or greater

Factors 5 and 6 did not represent a useable number of items. Factors 2 and 3 were each separated into two constructs.

Items comprising Factor 2 incorporated those which addressed knowledge sharing broadly. Whilst the Factor Analysis did not separate them clearly into formal knowledge sharing and informal networks, reviewing the wording of items enabled separation into formal knowledge sharing and informal networks. Two constructs were therefore created to reflect these two aspects of knowledge sharing.

When reviewing items comprising Factor 3, it was clear that this factor incorporated all questions posed in regard to Downsizing/Restructuring Decisions (Q11a-12g) and Downsizing/Restructuring Processes (Q22a-22k). Since the two sets of questions were designed to address the two aspects of the downsizing/restructuring event and all loaded highly on this factor, they were divided on this basis for separate analysis. Further details of the factor analysis are provided in Appendix 4.

*Downsizing/Restructuring Events.* This factor two comprised 23 items in total; 21 of which addressed the overall decision-making and implementation processes used by organisations in executing downsizing/restructuring strategies. The items were divided to form the two constructs from this factor, representing '*downsizing/restructuring decisions*' (11 items) and '*downsizing/restructuring processes*' (10 items) respectively. Items canvassed perceptions about the decisions made and processes followed in relation to issues such as planning, employee involvement and treatment of remaining and departing employees. The content/subject matter was not the focus, rather the relevance and extent to which participants perceived the issues had been considered during downsizing/restructuring.

*Knowledge Sharing* comprised 20 items, all of which strongly addressed the many strategies by which the organisation shares knowledge amongst its members. The knowledge sharing factor was then divided into two separate constructs: *formal knowledge sharing* and *informal networks*. Examples of the items comprising this factor include communication channels, organisational structures, policy manuals, guidelines, intranets, data bases, social interaction and presence of communities of practice.

*Organisational Knowledge* comprised 25 items. A review of those items loading strongly for this factor identified ten (10) which encompassed the knowledge or 'organisational capital' contained within the organisation, with the remaining 15 items aligning more strongly with different constructs. The ten items that did align with '*organisational knowledge*' were those that addressed the participants' views on the presence of people with expertise and access to necessary information.

*Organisational Effectiveness* consisted of 12 items which clearly loaded onto this construct. Examples of these items include job satisfaction, morale, commitment, trust and alignment with organisational goals.

### **3.7.2 Reliability Testing**

Reliability tests were conducted, using Cronbach's  $\alpha$ , to determine which question groupings most reliably represented each construct. This method involved splitting the data in two and computing the correlation coefficient for each subgroup which were then averaged to compute Cronbach's  $\alpha$ . This is the most common statistical measure of scale reliability (Field 2005).

A small number of items were omitted to maximise reliability (refer Appendix 5). The resultant constructs are summarised in the following table, with strong ratings ( $\alpha$  scores) being evident for all constructs.

Table 3.3 Construct reliability

Construct	Number of Items	$\alpha$
1. Organisational Knowledge	10	<b>0.910</b>
2. Knowledge Sharing		
o Formal Knowledge Sharing	13	<b>0.939</b>
o Informal Networks	7	<b>0.876</b>
3. Downsizing/restructuring Events		
o Downsizing/restructuring decisions	10*	<b>0.920</b>
o Downsizing/restructuring processes	11	<b>0.943</b>
4. Organisational Effectiveness	12	<b>0.956</b>

\* 2 questions were removed after discriminant validity testing, increasing the  $\alpha$  from 0.912

### 3.7.3 Validity Testing

General face validity was assessed through feedback on the format, ease of understanding and relevance of questions in the draft questionnaire obtained from two colleagues and the research supervisor together with the 50 test subjects from the pilot study. Consideration was given to survey design issues such as removing leading questions, combining 'before and after' questions to minimise the total number of questions asked as well as issues related to ease of data analysis (for example, use of age ranges rather than specifying exact age).

To assess the degree to which items differentiated amongst constructs or measured distinct concepts, that is the discriminant validity of the measures; correlations between the measures of those potentially overlapping constructs were examined. According to Igbaria, Guimares & Davis (1995), if the items comprising a construct correlate more highly with each other than with items measuring other constructs in the model, then adequate discriminant validity is evident. Discriminant validity analysis (Gay & Diehl 1992) was undertaken using cross-loading where individual items were correlated with each construct in order to ensure the questions comprising each construct were those most highly correlated with that construct and relatively lowly with the other items (Quaddus & Hofmeyer 2007). The results of this analysis revealed the higher correlations between items comprising each construct and the associated construct and low correlations with other constructs. In the cases where two constructs were created from the same factor (for example, both the *formal knowledge sharing* and *informal networks*

constructs were derived from Factor 2), items also correlated relatively highly with the second construct, although the correlation with other constructs was low. This was not unexpected, given their common factor derivation. In these cases, the higher correlation was with the construct in which they had been included. Table 3.4 summarises the analyses.

An exception was the *downsizing/restructuring decisions* construct; in this case, two items (relating to treatment of redundant employees) were more highly correlated with the *downsizing/restructuring processes* construct than the *downsizing/restructuring decision* construct. These two items (12a and 12b) were therefore removed from the final *downsizing/restructuring decisions* construct. The recalculated reliability score (Cronbach's  $\alpha$ ) was 0.920, which demonstrates high reliability for this construct.

Following these adjustments, firm constructs were created and utilised in the regression analyses to test hypotheses inherent in the conceptual framework. Of the 127 items in the questionnaire, 63 were included in the final constructs following validity and reliability testing.

Table 3.4 Discriminant Validity - Correlations between factors and constructs items:

Factor 1		Factor 3		
	OK			
Q14c	0.675	Q11f	0.693	
Q14d	0.779	Q11g	0.771	
a16	0.719	Q11h	0.731	
b16	0.665	Q12a	0.544	
e16	0.677	Q12b	0.532	
l16	0.676	Q12c	0.760	
m16	0.658	Q12d	0.775	
Q20b	0.629	Q12e	0.684	
Q20c	0.623	Q12f	0.758	
Q20d	0.549	Q12g	0.716	
			DRP	
		Q22a	0.774	
		Q22b	0.798	
		Q22c	0.815	
		Q22d	0.809	
		Q22e	0.766	
		Q22f	0.813	
		Q22g	0.815	
		Q22h	0.801	
		Q22i	0.809	
		Q22j	0.785	
		Q22k	0.780	
Factor 2			Factor 4	
	FKS		OE	
Q13i	0.729		Q17a	0.769
Q13j	0.749		Q17b	0.794
Q14a	0.690		Q17d	0.787
Q14f	0.706		Q17f	0.678
Q14h	0.804		Q17g	0.706
Q15a	0.650		Q17h	0.768
Q15b	0.703		Q17i	0.841
Q15e	0.757		Q18a	0.723
Q15f	0.811		Q18b	0.806
Q15g	0.759		Q18c	0.686
Q15h	0.774		Q18d	0.679
Q15j	0.798		Q21i	0.777
Q15l	0.724			
		IN		
Q13g		0.722		
Q13h		0.780		
Q14b		0.769		
Q14e		0.638		
Q14i		0.767		
Q15i		0.758		
Q21h		0.629		

Key: DRD = downsizing/restructuring decisions  
 DRP = downsizing/restructuring processes  
 FKS = formal knowledge sharing  
 IN = informal networks  
 OK = organisational knowledge  
 OE = organisational effectiveness

### 3.7.4 Data Reduction

In designing responses to questionnaire items, additional responses were included for some item sets following analysis and review of pilot data. Items 11a -12g asked respondents the extent to which they felt each of a series of statements around decision-making had been taken into consideration. As some items related specifically to decisions that were only applicable to downsizing situations (for example, consideration of targeting specific groups for redundancy) those involved in restructuring only were unable to respond. Adding an alternative 'not applicable' response allowed those respondents to continue completion of the survey.

Similarly, as the sample included respondents from both private and public sector organisations, some items relating to the organisational effectiveness measure dealt with perceptions of issues such as company position within the industry, likelihood of takeover and share price. Analysis of pilot data suggested that it was necessary to provide both 'unknown' and 'not applicable' options to differentiate between those who were unable to respond because of lack of knowledge and those, particularly in public sector agencies, where the question was not applicable. Therefore, to support ongoing analysis the decision was made to modify 6 and 7-point Likert scales to 5 point scales, consistent with the remaining items in the questionnaire. Missing items were excluded.

Questions in the range Q13a - Q15m dealing with organisational knowledge and knowledge sharing, included additional response options 'unknown' and 'never present' and therefore consisted of 7-point scales. These were also modified, firstly by replacing 'never present' responses with the 'no change' option. The logic for this substitution was that 'never present' is in fact a variation on the central point of 'no change', in that the item was not present before nor after downsizing/restructuring, so no change was perceived to have occurred. In addition, 'unknown' responses were replaced with the mean. The logic for this substitution was that where 'unknown' was selected, respondents were indicating that the question was applicable to their organisation (and therefore legitimately included in the data set) but that they were not aware of the appropriate rating. By replacing these items with the mean, the ratings were not biased, as the means were calculated without inclusion of the 'unknown' scores and averaged over the identifiable response group. These changes reduced the variables to 5-point scales, consistent with the rest of the survey items.

The 7-point scales that included 'not applicable' and 'unknown' (Q17a - Q21k relating to organisational effectiveness), were reduced to 5-point scales by replacing 'unknown' with the mean and omitting those with 'not applicable' scores. The logic for this was to preserve as much data volume as possible without compromising the data. Where participants selected 'unknown' in



preference to 'not applicable' they were indicating that the question was applicable in their organisation (and therefore legitimately included in the data set) but they were not aware of the appropriate rating. Further, by replacing these items with the mean, the ratings were not biased as the means were calculated without inclusion of either the 'unknown' or 'not applicable' responses but were again averaged over only the identifiable response group.

Questions that were posed in the negative (16a-16f; 16h-16m) were transposed to ensure consistency for the analysis. The questions in ranges Q16a-r and Q22a-k comprised 5-point Likert scales.

### **3.8 DATA ANALYSIS**

This section will present a description and explanation of the methods of analysis used in investigating the relationships between the variables in the conceptual framework.

#### **3.8.1 Method of Analysis**

Data were analysed through linear regression, a statistical technique used to predict the impact that the independent variable(s) had on the dependent variable. This technique involves developing a mathematical equation that describes the relationship between the dependent variable and other (independent) variables which are hypothesised to be related to the dependent variable (Keller & Warrack 1997).

In addition to analysing the direct relationship between the dependent and the variable independent variables, *perceived post-downsizing/restructuring organisational effectiveness*, a number of indirect paths were also analysed. The relationship of each of the independent variables was also analysed against *perceived level of organisational knowledge* in order to ascertain whether *perceived level of organisational knowledge* mediates the relationships between the independent and dependent variables. This section outlines the methods used in the final analysis of data, utilising the constructs created from the raw data in testing the paths in the conceptual framework and testing for mediating effects.

### **3.8.2 Correlations**

Correlation analyses were undertaken between all constructs in the model to identify significant correlations existing between the constructs. Significant correlations between the dependent and independent variables lent support to the use of regression analysis as the next step. A summary of correlations between all variables in the conceptual framework is presented in Appendix 6.

### **3.8.3 Regression Analyses**

The paths between the independent and dependent variables were analysed using multiple linear regression to identify significant relationships existing between the variables presented in the conceptual framework. Multiple regression analyses were also undertaken to identify whether the intervening variable demonstrated a mediating effect on the relationships between the independent and dependent variables.

Analyses were initially undertaken using the full data set to investigate the validity of the proposed hypotheses. Subsequently, the data were separated into Decision Makers and Implementers and Affected Employee groupings and regression analyses again undertaken. Affected Employees made up the greater percentage of respondents (71.5% of the total dataset) in keeping with their predominance in the workforce in comparison with management.

The data were also separated into Successful and Unsuccessful Organisations, each of which was divided into Decision Makers and Implementers and Affected Employees. Affected Employees were again well represented in the Successful (65.7%) and Unsuccessful (81.9%) Organisations. The analyses were then replicated using each of the data sets in order to test the model with each of the participant groupings. Comparisons between the groups and each group against the total data set were then made.

### **3.8.4 Survey Completion Rates**

High partial completion rates were noted during the early stages of data collection. These may have been due in part to technical issues, although the host site advised none were apparent from their site; technical issues may also have arisen at the user end. This was outside the control of the researcher, however it may explain low completion rates for some of the participant organisations; particularly those evident from staff of approximately ten of the organisations who had agreed to participate.

A follow-up letter was therefore sent to the nominated contact people within these ten organisations, raising the concern over response rates and suggesting this may be due to technical difficulties. Hard copies of the questionnaire with reply paid envelopes were included with the letter as an alternative and also to motivate the contact people who had not circulated or actively promoted the request to staff. The options of hard copy, electronic form (e-form) and online versions of the questionnaire were subsequently provided to all participant organisations in an effort to increase response rates by providing as many options as possible.

### **3.8.5 Further analysis**

Analysis by industry was investigated, but the industry breakdown was not sufficiently diverse for this to provide any additional meaningful information. The majority of responses within industry categories came from single organisations and a high number of the total population self selected 'Other' as their industry, giving a strong bias towards this generic category (62.2% of usable questionnaires). Table 3.5 provides an overview of usable questionnaires by industry.

Table 3.5 Survey by industry

Industry	Number of usable questionnaires	% total	% usable
Agriculture, Forestry & Fishing	55	8.5	11.6
Mining	9	1.4	1.9
Construction	14	2.2	3.0
Manufacturing	0	0	0
Transportation, Communications, Electric, Gas & Sanitary Services	11	1.7	2.3
Wholesale Trade	11	1.7	2.3
Retail Trade	2	0.3	0.4
Finance, Insurance & Real Estate	2	0.3	0.4
Services	41	6.3	8.7
Public Administration	34	5.2	7.2
Other	295	45.5	62.2
<b>Total Usable Questionnaires</b>	<b>474</b>	<b>73.1</b>	<b>100</b>
Incomplete questionnaires	174	26.9	-
<b>Total Questionnaires</b>	<b>648</b>	<b>100</b>	<b>-</b>

### 3.8.6 Data Breakdown – Perceived Level of Success

The data were also divided into ‘Successful’ and ‘Unsuccessful’ Organisations. The Likert scale used for items relating to organisational effectiveness provided five alternative responses:

1. A lot worse than before
2. Worse than before
3. About the same as before
4. Slightly better than before
5. A lot better than before

In determining ‘Unsuccessful’ in regard to perceptions of organisational effectiveness subsequent to downsizing/restructuring, the main purpose was to identify those organisations where organisational effectiveness was perceived to have diminished. These were organisations where organisational effectiveness was rated as ‘worse’ or ‘a lot worse’ than before the downsizing/restructuring (1 and 2 on the Likert scale of responses).

It was considered that downsizing/restructuring was ‘Successful’ if organisational effectiveness subsequent to downsizing/restructuring was perceived to be undiminished. That is, if the required restructuring and/or reduction in numbers had been achieved without loss of perceived organisational effectiveness then the process could be considered to be not ‘Unsuccessful’ and therefore ‘Successful’. Hence, ratings of ‘3 - no change’,

'4 - slightly better than before' and '5 - a lot better than before' were included in the designation 'Successful Organisations'.

### Response Rates

Of the 648 cases in the total data set, 158 were missing, leaving a total of 490 usable cases for the organisational effectiveness construct. There were 124 (25.3%) usable cases with organisational effectiveness ratings for the full data set of 3 or more ('successful') with 366 (74.7%) usable cases with organisational effectiveness ratings less than 3 ('unsuccessful').

### Successful Organisations – Participant Role Breakdown

This set consisted of 124 cases (25.3%). One case did not nominate as either Decision Makers and Implementers or Affected Employee and was therefore deleted, leaving 123 cases. It was possible for participants to nominate as both Decision Makers and Implementers and Affected Employee, since Decision Makers and Implementers may also consider themselves to be affected by the changes. Allowing participants to nominate in either or both categories allowed them to provide both perspectives. This multiple nomination meant some participants were included in both sets, resulting in an increased number of total cases.

In the Successful Organisation data set, seventeen (17) respondents nominated as both Decision Makers and Implementers and Affected Employees, with forty eight (48) in total nominating as Decision Makers and Implementers and ninety two (92) in total nominating as Affected Employees.

### Unsuccessful Organisations – Participant Role Breakdown

This set consisted of 366 cases (74.4%). Five cases did not nominate as either Decision Makers and Implementers or Affected Employee and were deleted, leaving 361 cases. Thirty seven (37) nominated as both Decision Makers and Implementers and Affected Employees, with 72 in total nominating as Decision Makers and Implementers and 326 in total nominating as Affected Employees.

### **3.8.7 Non-Participation in Data Collection**

One hundred and eighty-six (186) organisations were approached for data collection, with 81 (43.5%) agreeing to participate and 105 (56.5%) declining. Organisations indicating restructuring was part of a major growth initiative were not included in the study; only those indicating downsizing or stability strategies were included as the primary focus of the study was on downsizing related restructuring.

Of the 105 organisations who declined to participate, 22 (21%) indicated that no recent downsizing/restructuring had been undertaken and another 6 (5.7%) provided feedback that restructuring had resulted in growth rather than downsizing-focussed restructuring. Of the remaining organisations who declined to participate, 17 (16.2%) reported being generally too busy and 10 (9.5%) were involved in other questionnaires. The remaining 50 (47.6%) organisations approached gave non-specific or no reason for declining to participate.

### **3.8.8 Analysis of Open-Ended Responses**

The survey instrument also included a final open-ended item posing the question “do you have anything to add?” (refer Appendix 3) Responses to this question were collated in order to analyse what, if any, key themes emerged.

The comments were categorised into three broad groupings - positive, negative or neutral. Positive comments were those where the general nature of feedback was supportive of the downsizing/restructure. Negative responses were those where feedback suggested the experience had resulted in a negative experience either for the individual personally or in their perception of the organisation. Neutral responses were those where comments were of a general or ‘no comment’ nature or did not express an opinion which indicated support or otherwise for the downsizing/restructuring experience or the organisation. The neutral comments were not analysed further as they did not express any relevant views regarding the events experienced by the respondent. Individual positive and negative comments were analysed to identify emergent themes.

An iterative process of qualitative analysis was undertaken. Each comment within the positive and negative categories was summarised into a word or short descriptor phrase that was indicative of the view or feeling being expressed. Up to three descriptors were identified from each comment. The descriptors were then grouped together and the quantum of each recorded. Where a descriptor arose infrequently the researcher rolled related descriptors into a broader category that encompassed a number of them. Using this iterative process, the descriptor categories were able to be compressed to fourteen negative items and four positive items; each of which represented a sizeable percentage of the total responses. This information was used to augment the statistical findings and to glean possible insights into the general feelings of participants in support of discussion of the hypotheses. The reason for including an open-ended question was to gauge the general mood of respondents about the downsizing/restructuring they had undergone. The themes emerging from these responses are presented in Appendix 7.

### **3.9 CONCLUSION**

This Chapter has provided an overview of the approach taken in undertaking the research. The rationale and methodology for conducting the qualitative focus group sessions, and cross-sectional survey design were outlined, together with explanation of the data collection.

Sampling methods and participant demographics were provided, along with explanation of the creation of constructs for investigation, including data reduction, factor analysis and both reliability and validity testing. The final section of this Chapter explained the analytical method used for both qualitative and quantitative data gathered for this research.

## **CHAPTER FOUR**

### **FINDINGS**

#### **4.0 INTRODUCTION**

This Chapter outlines the sample characteristics and presents the findings of analyses of data collected to test the hypotheses presented in Chapter 2. Results of analyses of the full data set of responses will initially be reported, including results for data separated into 'Decision Makers and Implementers' and 'Affected Employees'. Division of the data into 'Successful' and 'Unsuccessful' organisations, as perceived by respondents, will then be considered. The implications and inferences from these findings will then be fully discussed in the following Discussion Chapter.

Analyses included testing of hypotheses for each data set as well as identification of mediating effects of the intervening variable, *perceived level of organisational knowledge* (organisational knowledge). The Chapter concludes with a summary of the findings across all data sets.

#### **4.1 DESCRIPTION OF SAMPLE CHARACTERISTICS**

The survey respondents consisted of self-nominated employees within the 81 participant organisations. Six hundred and forty eight (648) participants commenced the questionnaire, of which 474 fully completed the questionnaire. All partially and fully completed questionnaires (648) were included in the initial data manipulation to ensure maximum data was considered in creation of the constructs. Missing cases were then excluded pairwise, that is, whilst missing cases were omitted, cases with valid values for other variables were included in the regression analyses.

Ten (10) industries were represented; with participants indicating which industry category they considered was appropriate to their organisation. A category of 'Other' was also available for respondents who did not consider the available choices reflected their industry. This category was selected by a significant number of participants (31.2%) suggesting the industry categories may not have been specific enough for many participants to identify.



Whilst similar numbers of organisations were approached across each of the ten industry groups, 'Trade' (wholesale and retail), 'Mining' and 'Manufacturing' were not well represented in the sample, possibly due to the nature of the work environments not being conducive to completing questionnaires. Aside from the high 'Other' responses, the most significant industry group in the sample is 'Public Administration' where responses numbered over 30% of the sample. Table 4.1 provides an overview of industry distribution.

Table 4.1 Participants by industry

Industry	Responses	Percentage
Agriculture, Forestry & Fishing	78	12.0
Mining	10	1.5
Construction	34	5.2
Manufacturing	11	1.7
Transportation, Communications, Electric, Gas & Sanitary Services	13	2.0
Wholesale Trade	3	0.5
Retail Trade	3	0.5
Finance, Insurance & Real Estate	50	7.7
Services	44	6.8
Public Administration	200	30.9
Other	202	31.2
<b>TOTAL</b>	<b>648</b>	<b>100</b>

Although the questionnaire was open to all employees within the organisations approached, with no intentional request for similar numbers of male and female participants, the breakdown of the sample by gender indicates an even distribution of male and female participants across the sample (50.5% male and 49.5% female respondents). Age of participants shows a normal distribution with a mean in the 36-45 range. Over 80% of the sample is drawn from the 26 to 55 age range, which is broadly indicative of the general working population in Australia (*ABS Catalogue No. 2901.0 - Working Population Profile 2003*). Tables 4.2 and 4.3 summarise this data.

Table 4.2 Participants by gender

Gender		
	Frequency	Percent
Male	327	50.5
Female	321	49.5
Total	648	100.0

Table 4.3 Participants by age range

Age Range		
	Frequency	Percent
under 25	36	5.6
26-35	170	26.2
36-45	203	31.3
46-55	186	28.7
over 55	53	8.2
Total	648	100.0

Participants also selected from position-type categories, with the majority indicating they held 'Managerial', 'Professional' or 'Clerical' positions. This is consistent with the high response rates from the public administration sector (Table 4.4).

Table 4.4 Participants by position in the organisation

Position in Organisation	Responses	Percentage
Manager/supervisor	249	38.4
Professional	159	24.5
Clerical	114	17.6
Trades	0	0
Sales & Service	4	0.6
Technical/Specialist	65	10.0
Labourer	0	0
Other	57	8.8
<b>TOTAL</b>	<b>648</b>	<b>100</b>

Length of service, both within the organisation and in the current position held in the organisation, indicates the vast majority of participants had been in both the position and organisation between one and ten years (refer Tables 4.5 and 4.6).

Table 4.5 Participant length of time in organisation

Time in Organisation	Responses	Percentage
Under 1 year	29	4.5
1 - 10 years	392	60.5
11 – 20 years	125	19.3
over 20 years	98	15.1
Missing	4	0.6
<b>TOTAL</b>	<b>648</b>	<b>100.0</b>

Table 4.6 Participant length of time in position

Time in Position	Responses	Percentage
Under 1 year	60	9.3
1 - 10 years	515	79.5
11 – 20 years	47	7.3
over 20 years	21	3.2
Missing	5	0.7
Total	<b>648</b>	<b>100.0</b>

#### 4.1.1 Downsizing/Restructuring Experience

In order to ascertain the downsizing/restructuring experience, participants were asked to indicate:

- whether downsizing had been part of the restructure,
- the frequency with which downsizing had occurred in the past, and
- the length of time since the last experience.

Participants also were asked to nominate their role in the downsizing/restructure. Since it is possible to undertake a number of different roles in a downsizing/restructure, multiple selections were possible and it was anticipated that some Decision Makers and Implementers would also consider themselves to be Affected Employees, where the outcome of the restructuring/downsizing had resulted in their role being affected. Since some participants identified themselves as both Decision Makers and Implementers and Affected Employees, the total number of cases exceeded the number of survey participants.

Restructuring which included downsizing had been experienced by well over half the sample. Over a third of participants had undergone the experience of downsizing/restructuring only once, and another third had this experience more than three times. The latter is consistent with previous research (Littler 2000) which suggests that organisations that have undergone downsizing once are more likely to do so again. Consistent with this study's focus on recent downsizing, over 70% of respondents had experienced downsizing within the last two years.

*Table 4.7 Downsizing as part of current restructure*

<b>Downsizing/Restructure Experienced</b>		
	Frequency	Percentage
Yes	371	57.2
No	219	33.8
Missing	58	9.0
<b>Total</b>	<b>648</b>	<b>100.0</b>

Table 4.10 Participants by role in the restructure/downsizing

Role in Downsizing/Restructure		
	Frequency	Percentage
Decision Makers and Implementers	141	20.0
Affected Employee	505	71.5
Missing	60	8.5
Total responses	706	100.0
<b>Total participants</b>	<b>648</b>	

#### 4.1.2 Incidence of Downsizing

As indicated in Table 4.7, downsizing was reported by 57.3% of participants. Responses to this question were intended to enable organisations to be separated on this basis for possible subsequent analysis. However, during data collection it became apparent that this was not as clear-cut as anticipated, with participants within the same organisation often answering both in the positive and in the negative. This included respondents from organisations where the organisational representative (questionnaire contact person) indicated downsizing was not the purpose of the restructure. Different perceptions of whether and when downsizing occurred were evident in many participant organisations. This may be due to numbers in respondents' immediate work areas decreasing, despite overall organisational numbers remaining constant. In this situation, participants may perceive downsizing having occurred in the 'micro environment', as opposed to its non-occurrence at the macro or whole-of-organisation level.

Within the thirteen (13) participant organisations with more than 10 respondents (minimum 12; maximum 102), there was considerable variation in respondents' perceptions of whether or not downsizing had occurred as part of the restructuring. Only one of the thirteen organisations showed agreement amongst respondents as to whether downsizing had or had not occurred. This is of interest as it suggests the concept of 'downsizing' may not always be as clear in meaning as the literature assumes (cf Burke 2004; Appelbaum, Patton & Shapiro 2003; Littler & Innes 2003; Littler, Wiesner & Dunford 2003; Appelbaum & Patton 2002; Cascio 2002; Spreitzer & Mishra 2002; Worrall & Cooper 2001; Lewin & Johnston 2000; McKinley, Zhao & Rust 2000; Cameron & Smart 1998; Brockner et al. 1997; Cascio, Young &

Morris 1997; Brockner, Wiesenfeld & Martin 1995; McKinley, Sanchez & Schick 1995; Cameron, Freeman & Mishra 1993; Freeman & Cameron 1993). That is, individual perceptions of downsizing may not always reflect the corporate view. Researchers investigating downsizing may therefore need to consider this in designing their studies.

*Table 4.11 Reported incidence of downsizing by organisation with >10 respondents*

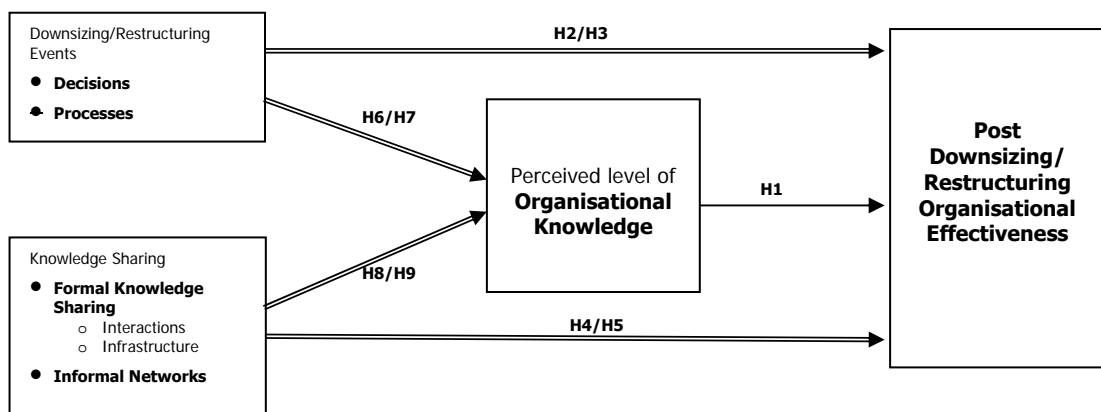
Total Responses	Downsizing		No Downsizing		Agreement between staff?
		%		%	
102	79	77.45	23	22.55	No
93	66	70.97	27	29.03	No
48	17	35.42	31	64.58	No
44	25	56.82	19	43.18	No
35	7	20.00	28	80.00	No
32	30	93.75	2	6.25	No
28	13	46.43	15	53.57	No
20	16	80.00	4	20.00	No
19	2	10.53	17	89.47	No
16	9	56.25	7	43.75	No
13	9	69.23	4	30.77	No
12	8	66.67	4	33.33	No
12	12	100.00	0	0.00	Yes

## 4.2 ANALYSIS OF FULL DATA SET

Analyses of the full data set of all respondents (including both Decision Makers and Implementers and Affected Employees) were undertaken to test the hypothesised relationships, presented in the integrated conceptual framework (represented in Figure 4.1). All variables in the framework were significantly correlated (Appendix 6), inferring the existence of linear relationships, and appropriateness of regression analysis for examination of hypotheses. High correlation between some variables, such as formal knowledge sharing and informal networks, may be attributable to their loading on one construct in the factor analysis. However, multiple regression showed tolerances that were generally greater than 0.2, with corresponding VIF scores generally below 5, indicating the degree of multicollinearity to be within acceptable parameters (Field 2005). Collinearity diagnostics and residual analysis also proved to be within acceptable limits and is presented in Appendix 8. A significance level of 0.05 was used in all regression analyses.

The research was designed to test the impact of downsizing/restructuring events and knowledge sharing on the dependent variable of post-downsizing/restructuring organisational effectiveness. The term 'variable' is used in the following sections to indicate the constructs developed from the literature and identified through factor analysis, as discussed in Chapter 3. The paths identified in the conceptual framework (Figure 4.1) were tested using regression analysis.

Figure 4.1 Conceptual Framework



The analysis examined whether organisational knowledge was associated with higher perceptions of post-downsizing/restructuring organisational effectiveness (organisational effectiveness), as proposed in Hypothesis 1. Due to the acknowledged importance of organisational knowledge to organisational outcomes in the literature (cf Drucker 2000; Nonaka 1994), it was proposed that organisational knowledge would mediate between downsizing/restructuring events (downsizing/restructuring decisions and processes) and organisational effectiveness. Similarly, a mediating effect of organisational knowledge between knowledge sharing (formal knowledge sharing and informal networks) and organisational effectiveness was also investigated.

#### 4.2.1 Hypothesis Testing – Full Dataset

In order to test the first set of hypotheses (Hypotheses 1 to 5) in the Stage 1 Model (Figure 2.2), multiple regression analysis was undertaken regressing the dependent variable (organisational effectiveness) on the intervening

variable (organisational knowledge) together with the full set of downsizing/restructuring events (downsizing/restructuring decisions and processes) and knowledge sharing (formal knowledge sharing and informal networks) variables.

- Hyp 1. The higher the level of organisational knowledge perceived by Decision Makers and Implementers and Affected Employees, the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 2. The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees, the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 3. The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees, the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 4. The higher the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees, the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*
- Hyp 5. The more informal networks reported by Decision Makers and Implementers and Affected Employees, the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*

Organisational knowledge was found to have a significant positive impact on organisational effectiveness (Hypothesis 1) ( $t= 7.59$ ;  $p<.000$ ). Neither downsizing/restructuring decisions (Hypothesis 2) nor formal knowledge sharing (Hypothesis 4) was found to significantly predict organisational effectiveness. However, both downsizing/restructuring processes (Hypothesis 3) ( $t=4.387$ ;  $p< .000$ ) and informal networks (Hypothesis 5) ( $t=5.112$ ;  $p<000$ ) provided significant positive relationships with organisational effectiveness, suggesting that both of these variables explain some variance in organisational effectiveness. The following Table 4.12 summarises the results of the regression analysis of Hypotheses 1 to 5 for the full data set.

*Table 4.12 Regression Analysis Full Dataset- Organisational Effectiveness on Independent and Intervening Variables*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	.381	.050	.332	7.592	.000
2	Decisions	.026	.038	.029	.683	ns
3	Processes	.195	.044	.202	4.387	.000
4	Formal Knowledge Sharing	.063	.069	.055	.917	ns
5	Informal Networks	.369	.072	.312	5.112	.000

Further analyses were undertaken with the intervening variable, organisational knowledge, regressed on both the downsizing/restructuring event and knowledge sharing variables (Hypotheses 6 to 9).

- Hyp 6. *The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*
- Hyp 7. *The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*
- Hyp 8. *The greater the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*
- Hyp 9. *The greater the informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

Downsizing/restructuring decisions was not found to significantly affect organisational knowledge (Hypothesis 6), although the remaining variables were significantly and positively related to organisational knowledge. Table 4.13 summarises the results of these analyses.

*Table 4.13 Regression Analysis Full Dataset - Organisational Knowledge on Independent Variables*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	.040	.035	.052	1.137	ns
7	Processes	.239	.039	.283	6.074	.000
8	Formal Knowledge Sharing	.240	.062	.238	3.844	.000
9	Informal Networks	.339	.065	.329	5.254	.000

#### **4.2.2 Hypothesis Testing – Full Dataset Decision Makers and Implementers and Affected Employees**

The full data set was divided into two subsets, Decision Makers and Implementers and Affected Employees. This analysis provided opportunity to identify similarities and differences in relationships (Hypotheses 1 to 9) through comparison of the two groups.

- Hyp 1. *The higher the level of organisational knowledge perceived by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 2. *The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 3. *The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*



- Hyp 4. *The higher the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*
- Hyp 5. *The more informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*
- Hyp 6. *The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*
- Hyp 7. *The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*
- Hyp 8. *The greater the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*
- Hyp 9. *The greater the informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

Results for the Affected Employees in relation to Hypotheses 1, 3, 5, 7, 8 and 9 indicated positive, significant support. Analysis of data from Decision Makers and Implementers showed similar results, with the exception of Hypotheses 3, 4 and 5. That is, amongst Decision Makers and Implementers, downsizing/restructuring processes (Hypotheses 3) and informal networks (Hypotheses 5) were not shown to significantly impact on organisational effectiveness. Further, Decision Makers and Implementers indicated a significant positive relationship between formal knowledge sharing and organisational effectiveness (Hypotheses 4) ( $t=2.704$ ;  $p < .000$ ). Neither data set showed support for Hypotheses 2 or 6, indicating that downsizing/restructuring decisions was not a significant determinant of either organisational effectiveness or organisational knowledge. Tables 4.14 and 4.15 summarise the results of hypothesis testing for Affected Employees in regard to Hypotheses 1 to 5 and Hypotheses 6 to 9 respectively.

*Table 4.14 Regression Analysis Full Dataset- Organisational Effectiveness on Independent and Intervening Variables – Affected Employees*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	.393	.053	.352	7.430	.000
2	Decisions	.063	.042	.072	1.485	ns
3	Processes	.141	.048	.148	2.949	.003
4	Formal Knowledge Sharing	-.030	.073	-.026	-.411	ns
5	Informal Networks	.441	.076	.381	5.830	.000

*Table 4.15 Regression Analysis Full Dataset- Organisational Knowledge on Independent Variables – Affected Employees*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	.036	.040	.046	.901	ns
7	Processes	.242	.043	.285	5.577	.000
8	Formal Knowledge Sharing	.248	.067	.243	3.674	.000
9	Informal Networks	.338	.070	.326	4.848	.000

Tables 4.16 and 4.17 summarise the results of hypothesis testing for Decision Makers and Implementers in regard to Hypotheses 1 to 5 and Hypotheses 6 to 9 respectively.

*Table 4.16 Regression Analysis Full Dataset- Organisational Effectiveness on Independent and Intervening Variables – Decision Makers and Implementers*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	.457	.111	.379	4.102	.000
2	Decisions	-.079	.076	-.078	-1.040	ns
3	Processes	.168	.096	.164	1.744	ns
4	Formal Knowledge Sharing	.394	.146	.334	2.704	.008
5	Informal Networks	.130	.151	.105	.861	ns

*Table 4.17 Regression Analysis Full Dataset- Organisational Knowledge on Independent Variables – Decision Makers and Implementers*

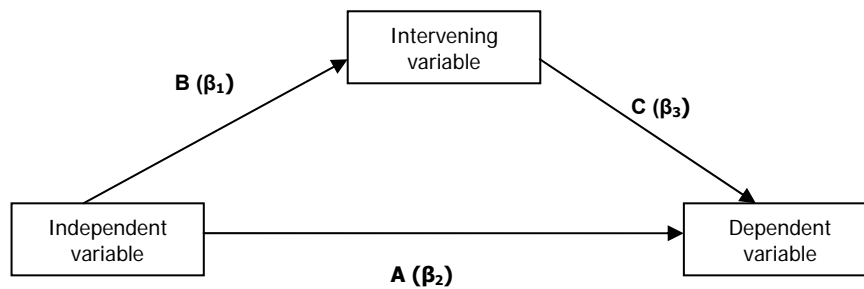
Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	.003	.064	.003	.040	ns
7	Processes	.246	.078	.288	3.155	.002
8	Formal Knowledge Sharing	.328	.119	.335	2.765	.007
9	Informal Networks	.294	.124	.286	2.377	.019

### 4.2.3 Mediation Testing – Full Dataset

Mediating effects of the intervening variable on the relationship between the independent and dependent variables were tested using the 3-step procedure introduced by Baron and Hay (1989) and further developed by Grapetine (2000). This procedure involves first regressing the intervening variable (step 1) and then the dependent variable (step 2) on the full set of independent variables, followed by a final step (step 3) where the dependent variable is regressed on both the intervening variable and the full set of independent variables.

Step 1 demonstrates whether the independent variables firstly have a significant relationship with the intervening variable and, in step 2, with the dependent variable. Mediation, where the impact of the intervening variable explains some or all of the independent variable's effect on the dependent variable, cannot be present if either of these relationships is not significant.

Step 3 combines these regressions to identify whether the impact of any of the independent variables on the dependent (*organisational effectiveness*) remains significant in the presence of the intervening variable (*organisational knowledge*) and can therefore be attributed (partially or fully) to its mediating effect.



*Figure 4.2 Mediation Relationship*

Thus, to test for a mediating effect (Baron and Kenny 1986; Grapetine, 2000) it must first be established that all paths are significant and positive. If the coefficient (beta  $\beta_1$ ) in the multiple regression analysis is positive and greater for path C than path A, then this indicates that more of the resultant change in the dependent variable is explained by the intervening variable than by the independent variable. Conversely, should the independent variable coefficient for path A ( $\beta_2$ ) be greater than the intervening variable coefficient for path C ( $\beta_3$ ) then the direct path A ( $\beta_2$ ) explains more of the resultant change in the dependent variable than the indirect path C ( $\beta_3$ ). A partial mediating effect can be concluded where the beta coefficient ( $\beta_3$ ) for path C is greater than the beta coefficient ( $\beta_2$ ) for path A. Where the beta coefficient ( $\beta_2$ ) for path A is reduced to zero, total or 'perfect' mediation is evident. The implications of this and the resultant conclusions are discussed in more detail in Chapter 5.

In this study, no mediation is evident when the intervening variable (*organisational knowledge*) does not have a significant effect on the dependent variable (Hypothesis 1) or when there is an absence of significant relationships between any of the independent variables and the intervening variable (Hypotheses 6 to 9). Partial mediation is evident when an

independent variable has a significant effect on both intervening (organisational knowledge) and dependent (organisational effectiveness) variables in steps 1 and 3. Perfect mediation occurs when an independent variable has a significant effect on the intervening variable (organisational knowledge) in step 1 but not on the dependent variable (organisational effectiveness) in step 3.

Since Hypotheses 2 and 6 were not supported in any of the data sets examined (full data set and separation of Decision Makers and Implementers or Affected Employees), no mediation by organisational knowledge was present in regard to downsizing/restructuring decisions. Some degree of mediation was evident, however, between the independent variables of downsizing/restructuring processes, formal knowledge sharing and informal networks in the full data set, and Decision Makers and Implementers and Affected Employees data sets. Formal knowledge sharing was perfectly mediated in the full data set and amongst Affected Employees; whereas downsizing/restructuring processes and informal networks were perfectly mediated by organisational knowledge amongst Decision Makers and Implementers. Coefficients from mediation testing for these three data sets, including the type of mediation evident in each case, are presented in Table 4.18.

From the above it is apparent that no mediation by organisational knowledge was evident in the relationship between downsizing/restructuring decisions and organisational effectiveness amongst any of the data sets. However, the relationships between the other independent variables (downsizing/restructuring processes, formal knowledge sharing and informal networks) and organisational effectiveness were mediated by organisational knowledge in all cases.

Table 4.18 Mediation Analysis - Full Dataset and subsets

Full Data Set				
Variable	Dependent Variable			Interpretation
	Step 1 OK <sup>1</sup>	Step 2 OE <sup>2</sup>	Step 3 OE	
Decisions	ns	ns	ns	No mediation
Processes	0.283	0.296	0.202	Partial mediation
Formal Knowledge Sharing	0.238	0.134	ns	Perfect mediation
Informal Networks	0.329	0.422	0.312	Partial mediation
Organisational Knowledge			0.332	<i>Significance essential for any mediation</i>
Decision Makers and Implementers				
Variable	Dependent Variable			Interpretation
	Step 1 OK	Step 2 OE	Step 3 OE	
Decisions	ns	ns	ns	No mediation
Processes	0.288	0.274	ns	Perfect mediation
Formal Knowledge Sharing	0.335	0.461	0.334	Partial mediation
Informal Networks	0.286	ns	ns	Perfect mediation
Organisational Knowledge			0.379	<i>Significance essential for any mediation</i>
Affected Employees				
Variable	Dependent Variable			Interpretation
	Step 1 OK	Step 2 OE	Step 3 OE	
Decisions	ns	ns	ns	No mediation
Processes	0.285	0.249	0.148	Partial mediation
Formal Knowledge Sharing	0.243	ns	ns	Perfect mediation
Informal Networks	0.326	0.496	0.381	Partial mediation
Organisational Knowledge			0.352	<i>Significance essential for any mediation</i>

<sup>1</sup> OK = Organisational Knowledge

<sup>2</sup> OE = Organisational Effectiveness

#### 4.2.4 Conclusions – Analyses of Full Data Set

Analysis of the full data set together with the Decision Makers and Implementers and Affected Employees showed support for Hypotheses 1, 7, 8 and 9 across all sets, with Hypotheses 2 and 6 proving insignificant in all populations. This indicated downsizing/restructuring decisions was not a significant predictor of either organisational knowledge or organisational effectiveness, although organisational knowledge was found to significantly impact on organisational effectiveness. The final full data set model, excluding the independent variable of downsizing/restructuring decisions, resulted in an R-square (Coefficient of Determination) value of 0.682 and proved to be significant at the 5% significance level (refer Appendix 8 for the model summary and ANOVA analysis).

Downsizing/restructuring processes, and both knowledge sharing variables of formal knowledge sharing and informal networks, were significant predictors

of organisational knowledge in the full data set, and subsets of Decision Makers and Implementers and Affected Employees. However, these three variables showed some differences between the datasets in their capacity to predict organisational effectiveness. For the full data set and Affected Employees subset, processes and informal networks were significantly related to organisational effectiveness, whilst formal knowledge sharing was not. Conversely, amongst the Decision Makers and Implementers downsizing/restructuring processes and informal networks did not significantly impact on organisational effectiveness, whilst formal knowledge sharing was found to significantly affect this dependent variable. Table 4.19 shows the comparison of results for Hypotheses 1 to 5 for the full data set, together with Decision Makers and Implementers and Affected Employees subsets.

*Table 4.19 Comparison of Hypotheses 1-5 Full Data Set and Subsets*

Hypothesis	Independent Variable	Full Data Set			Dependent Variable
		Total <sup>1</sup>	DM <sup>2</sup>	AE <sup>3</sup>	
1	Organisational Knowledge	✓ <sup>4</sup>	✓	✓	Organisational Effectiveness
2	Decisions	ns <sup>5</sup>	ns	ns	
3	Processes	✓	ns	✓	
4	Formal Knowledge Sharing	ns	✓	ns	
5	Informal Networks	✓	ns	✓	

1 - Total respondents in data set      2 - Decision Makers & Implementers in data set  
 3 - Affected Employees in data set      4 - Hypothesis supported      5 - Hypothesis not supported

Table 4.20 shows the comparison of results for Hypotheses 6 to 9 for the full data set, together with Decision Makers and Implementers and Affected Employees.

*Table 4.20 Comparison of Hypotheses 6-9 Full Data Set and Subsets*

Hypothesis	Independent Variable	Full Data Set			Dependent Variable
		Total	DM	AE	
6	Decisions	ns	ns	ns	Organisational Knowledge
7	Processes	✓	✓	✓	
8	Formal Knowledge Sharing	✓	✓	✓	
9	Informal Networks	✓	✓	✓	

With the exception of downsizing/restructuring decisions, organisational knowledge was shown to mediate the relationship between the independent variables and organisational effectiveness, either partially or fully (perfect).

### **4.3 FURTHER ANALYSIS - COMPARISON OF SUCCESSFUL AND UNSUCCESSFUL ORGANISATIONS**

The dependent variable of organisational effectiveness was used as the basis for separating data into 'Successful' and 'Unsuccessful' organisations. Organisational effectiveness scores of 3 or above on the adjusted five-point Likert scale items in the questionnaire indicated these organisations were rated as 'unchanged' or 'better than before' by participants, and were therefore treated as 'successful'. Data from respondents indicating scores below 3 (that is, they perceived their organisation to be less effective than before the downsizing/restructuring), were labelled 'unsuccessful'.

Comparative analyses between 'Successful' and 'Unsuccessful' organisations were undertaken, as well as between Decision Makers and Implementers and Affected Employees in each group, in relation to the hypotheses.

The following section presents the findings of hypothesis testing for the Successful Organisations data, following by the results of mediation testing for this data set. Subsequent sections present the hypothesis and mediation outcomes for Successful Organisation Decision Makers and Implementers and Affected Employees. A comparison between these groups is then provided.

#### **4.3.1 Results in Successful Organisations**

As with the full data set including all organisations surveyed, multiple regression analysis was undertaken for the Successful Organisation subset regressing the dependent variable (organisational effectiveness) on the intervening variable (organisational knowledge) together with the full set of downsizing/restructuring event (downsizing/restructuring decisions and processes) and knowledge sharing (formal knowledge sharing and informal networks) variables.

Amongst Successful Organisations organisational knowledge was not found to have a significant positive impact on organisational effectiveness, indicating that Hypothesis 1 was not supported. Further,

downsizing/restructuring decisions (Hypothesis 2), downsizing/restructuring processes (Hypothesis 3) and informal networks (Hypothesis 5) did not significantly predict organisational effectiveness. The only variable which showed a significant and positive relationship with organisational effectiveness was formal knowledge sharing (Hypothesis 4), which provided explanation of some variance in the former variable ( $t=2.703$ ,  $p<.01$ ).

- Hyp 1. *The higher the level of organisational knowledge perceived by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 2. *The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 3. *The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 4. *The higher the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*
- Hyp 5. *The more informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*

The following Table 4.21 summarises the results of the regression analysis for Hypotheses 1 to 5.

*Table 4.21 Regression Analysis Full Dataset - Organisational Effectiveness on Independent and Intervening Variables - Successful Organisations*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	.053	.094	.055	.560	ns
2	Decisions	-.038	.058	-.071	-.659	ns
3	Processes	.029	.085	.040	.347	ns
4	Formal Knowledge Sharing	.340	.126	.381	2.703	.008
5	Informal Networks	.225	.136	.223	1.653	ns

Further analyses showed that neither downsizing/restructuring decisions (Hypothesis 6), nor processes (Hypothesis 7), nor formal knowledge sharing (Hypothesis 8) significantly affected organisational knowledge. However, on the contrary, informal networks (Hypothesis 9) ( $t=2.538$ ;  $p<.05$ ) was found to significantly and positively impact on organisational knowledge.



- Hyp 6. The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 7. The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 8. The greater the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 9. The greater the informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.

Table 4.22 summarises the results of these analyses.

*Table 4.22 Regression Analysis Full Dataset - Organisational Knowledge on Independent Variables – Successful Organisations*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	.059	.058	.104	1.021	ns
7	Processes	.072	.085	.094	.847	ns
8	Formal Knowledge Sharing	.220	.125	.235	1.768	ns
9	Informal Networks	.337	.133	.319	2.538	.013

### **4.3.2 Results in Successful Organisations - Decision Makers and Implementers and Affected Employees**

Results for Decision Makers and Implementers and Affected Employees provided no support for Hypotheses 1, 2, 3, 6, 7 and 8. This indicated that neither organisational knowledge, nor downsizing/restructuring decisions nor processes had a significant impact on organisational effectiveness amongst either Decision Makers and Implementers or Affected Employees in Successful Organisations nor did downsizing/restructuring decisions or processes impact on organisational knowledge, amongst these subsets.

The knowledge sharing variables showed some variation between Decision Makers and Implementers and Affected Employees in Successful Organisations. In analysis of Decision Makers and Implementers data, formal knowledge sharing provided a significant and positive affect on organisational effectiveness (Hypothesis 4) ( $t=2.682$ ;  $p<.05$ ); whilst informal networks (Hypothesis 5) did not. Opposite results were found in the Affected Employees subset in Successful Organisations: formal knowledge sharing showed an insignificant relationship with organisational effectiveness

(Hypothesis 4) and informal networks (Hypothesis 5) provided a significant and positive relationship ( $t=2.997$ ;  $p<.005$ ).

- Hyp 1. *The higher the level of organisational knowledge perceived by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 2. *The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 3. *The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 4. *The higher the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*
- Hyp 5. *The more informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*

Table 4.23 summarises the results of hypothesis testing for Hypotheses 1 to 5 in regard to Decision Makers and Implementers.

*Table 4.23 Regression Analysis Successful Organisations - Organisational Effectiveness on Independent and Intervening Variables – Decision Makers and Implementers*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	.329	.169	.314	1.943	ns
2	Decisions	-.091	.103	-.152	-.879	ns
3	Processes	.052	.157	.062	.331	ns
4	Formal Knowledge Sharing	.514	.192	.554	2.682	.010
5	Informal Networks	-.099	.228	-.092	-.433	ns

Table 4.24 summarises the results of hypothesis testing for Hypotheses 1 to 5 in regard to Affected Employees.

*Table 4.24 Regression Analysis Successful Organisations - Organisational Effectiveness on Independent and Intervening Variables – Affected Employees*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	-.015	.108	-.016	-.136	ns
2	Decisions	-.017	.066	-.031	-.251	ns
3	Processes	.040	.096	.055	.423	ns
4	Formal Knowledge Sharing	.155	.145	.170	1.070	ns
5	Informal Networks	.471	.157	.466	2.997	.004

Additionally, informal networks (Hypothesis 9) had a significant and positive impact on organisational knowledge amongst Affected Employees ( $t=2.640$ ;

$p < .05$ ). This relationship, however, was not supported by the Decision Makers and Implementers subset.

Hyp 6. *The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

Hyp 7. *The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

Hyp 8. *The greater the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

Hyp 9. *The greater the informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.*

Table 4.25 presents a summary of the results of hypothesis testing for Hypotheses 6 to 9 in regard to Decision Makers and Implementers.

*Table 4.25 Regression Analysis Successful Organisations - Organisational Knowledge on Independent Variables – Decision Makers and Implementers*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	.083	.093	.147	.895	ns
7	Processes	.041	.143	.051	.286	ns
8	Formal Knowledge Sharing	.183	.172	.207	1.062	ns
9	Informal Networks	.396	.198	.388	1.998	ns

Table 4.26 summarises the results of hypothesis testing for Affected Employees in regard to Hypotheses 6 to 9.

*Table 4.26 Regression Analysis Successful Organisations - Organisational Knowledge on Independent Variables – Affected Employees*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	.052	.068	.089	.767	ns
7	Processes	.114	.098	.143	1.159	ns
8	Formal Knowledge Sharing	.183	.149	.184	1.233	ns
9	Informal Networks	.411	.156	.374	2.640	.010

### 4.3.3 Mediation Testing in Successful Organisations

In order to investigate potential mediation by the intervening variable of organisational knowledge, it is necessary for this variable to have a significant impact on the dependent variable of organisational effectiveness. Hypothesis 1 was not found to be significant for any of the Successful Organisation data sets in relation to both Decision Makers and Implementers and Affected Employees. This means that organisational knowledge did not significantly affect organisational effectiveness amongst any of the

Successful Organisation populations. Mediation testing was therefore not applicable in these cases.

#### 4.3.4 Conclusions – Analyses of Successful Organisations

Few of the hypotheses were supported in data drawn from Successful Organisations. Organisational knowledge was not found to significantly affect organisational effectiveness (Hypothesis 1) in regard to any of the groups of respondents. Nor was there a significant relationship between the downsizing/restructuring event variables of decisions and processes and organisational effectiveness (Hypotheses 2 and 3). The downsizing/restructuring event variables also failed to demonstrate any significant impact on organisational knowledge (Hypotheses 6 and 7).

Formal knowledge sharing significantly impacted on organisational effectiveness within Successful Organisations. However, while data from Decision Makers and Implementers indicated a positive relationship between formal knowledge sharing and organisational effectiveness, this was not the case for Affected Employees. In the case of informal networks, this variable significantly impacted on both organisational effectiveness and organisational knowledge for Affected Employees, but did not significantly impact on either variable for Decision Makers and Implementers.

Tables 4.27 and 4.28 show the comparison of results, for Hypotheses 1 to 5 and 6 to 9 respectively, for the full data set and subsets of Decision Makers and Implementers and Affected Employees within Successful Organisations.

*Table 4.27 Comparison of Hypotheses 1-5 Successful Organisation Data Sets*

Hypothesis	Independent Variable	Successful Organisations			Dependent Variable
		Total	DM	AE	
1	Organisational Knowledge	ns	ns	ns	Organisational Effectiveness
2	Decisions	ns	ns	ns	
3	Processes	ns	ns	ns	
4	Formal Knowledge Sharing	✓	✓	ns	
5	Informal Networks	ns	ns	✓	

Table 4.28 Comparison of Hypotheses 6-9 Successful Organisation Data Sets

Hypothesis	Independent Variable	Successful Organisations			Dependent Variable
		Total	DM	AE	
6	Decisions	ns	ns	ns	Organisational Knowledge
7	Processes	ns	ns	ns	
8	Formal Knowledge Sharing	ns	ns	ns	
9	Informal Networks	✓	ns	✓	

The absence of a significant relationship between organisational knowledge and organisational effectiveness indicates that no mediation by the former variable is present in the Successful Organisation data set.

#### 4.3.5 Results in Unsuccessful Organisations

In the initial analyses of the data for Unsuccessful Organisations, the dependent variable of organisational effectiveness was regressed on the full set of independent variables and intervening variable of organisational knowledge. Organisational knowledge (Hypothesis 1) ( $t=6.272$ ;  $p<.000$ ), downsizing/ restructuring processes (Hypothesis 3) ( $t=3.019$ ;  $p<.005$ ) and informal networks (Hypothesis 5) ( $t=4.259$ ;  $p<.000$ ) showed significant and positive relationships with organisational effectiveness. Neither downsizing/restructuring decisions (Hypothesis 2) nor formal knowledge sharing (Hypothesis 4), however, was found to significantly predict organisational effectiveness.

- Hyp 1. The higher the level of organisational knowledge perceived by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 2. The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 3. The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.*
- Hyp 4. The higher the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*
- Hyp 5. The more informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.*

Table 4.29 summarises the results of the regression analysis for Hypotheses 1 to 5 for Unsuccessful Organisations.

*Table 4.29 Regression Analysis Unsuccessful Organisations - Organisational Effectiveness on Independent and Intervening Variables*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	.300	.048	.332	6.272	.000
2	Decisions	.049	.038	.073	1.298	ns
3	Processes	.126	.042	.173	3.019	.003
4	Formal Knowledge Sharing	-.045	.065	-.050	-.697	ns
5	Informal Networks	.289	.068	.316	4.259	.000

When the intervening variable, organisational knowledge was regressed on both the downsizing/restructuring event and knowledge sharing variables (Hypotheses 6 to 9), the relationship between downsizing/restructuring decisions and organisational knowledge (Hypothesis 6) was not found to be significant. The remaining variables however, were significantly positively related to organisational knowledge.

- Hyp 6. The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 7. The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 8. The greater the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 9. The greater the informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.

Table 4.30 summarises the results of these analyses.

*Table 4.30 Regression Analysis Unsuccessful Organisations - Organisational Knowledge on Independent Variables*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	.034	.042	.046	.809	ns
7	Processes	.232	.045	.287	5.161	.000
8	Formal Knowledge Sharing	.225	.071	.226	3.158	.002
9	Informal Networks	.279	.074	.276	3.764	.000

#### **4.3.6 Results in Unsuccessful Organisations: Decision Makers and Implementers and Affected Employees**

The findings of the regression analyses of data drawn from Decision Makers and Implementers showed that only Hypotheses 1, 7 and 8 were supported.

This indicates that whilst organisational knowledge explained a significant proportion of the variance in organisational effectiveness (Hypothesis 1) ( $t=2.844, p<.01$ ), this did not occur for any of the four independent variables of decisions, processes, formal knowledge sharing and informal networks (Hypotheses 2, 3, 4 and 5).

- Hyp 1. The higher the level of organisational knowledge perceived by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.
- Hyp 2. The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.
- Hyp 3. The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived post-downsizing/restructuring organisational effectiveness.
- Hyp 4. The higher the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.
- Hyp 5. The more informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of post-downsizing/restructuring organisational effectiveness.

Table 4.31 summarises the results of hypothesis testing for Decision Makers and Implementers in regard to Hypotheses 1 to 5.

*Table 4.31 Regression Analysis Unsuccessful Organisations - Organisational Effectiveness on Independent and Intervening Variables – Decision Makers and Implementers*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	.338	.119	.370	2.844	.006
2	Decisions	.004	.085	.006	.052	ns
3	Processes	.106	.099	.143	1.063	ns
4	Formal Knowledge Sharing	.274	.161	.295	1.704	ns
5	Informal Networks	-.004	.161	-.004	-.026	ns

Overall results of hypothesis testing for Affected Employees showed support for Hypotheses 1, 3, 5, 7, 8 and 9. No support was found for the relationship between downsizing/restructuring decisions and organisational knowledge (Hypothesis 2) nor organisational effectiveness (Hypothesis 6). Additionally, the variance in organisational effectiveness could not be explained by formal knowledge sharing (Hypothesis 4) amongst Affected Employees. Table 4.32

summarises the results of hypothesis testing for Affected Employees in regard to Hypotheses 1 to 5.

*Table 4.32 Regression Analysis Unsuccessful Organisations - Organisational Effectiveness on Independent and Intervening Variables – Affected Employees*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
1	Organisational Knowledge	.314	.050	.347	6.263	.000
2	Decisions	.056	.042	.082	1.342	ns
3	Processes	.099	.045	.138	2.232	.026
4	Formal Knowledge Sharing	-.106	.067	-.119	-1.575	ns
5	Informal Networks	.350	.070	.388	4.971	.000

Data from both Decision Makers and Implementers and Affected Employees provided no support for Hypothesis 6, indicating that downsizing/restructuring decisions did not significantly impact on organisation knowledge. Downsizing/restructuring processes (Hypothesis 7) ( $t=2.674$ ,  $p<.01$ ) and formal knowledge sharing (Hypothesis 8) ( $t=2.385$ ,  $p<.05$ ), however, did significantly impact on organisation knowledge. The relationship between informal networks and organisational knowledge (Hypotheses 9) was also supported for Affected Employees ( $t=3.497$ ,  $p<.05$ ), but not by Decision Makers and Implementers.

- Hyp 6. The greater the perceived relevance of downsizing/restructuring decisions to Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 7. The more positive the perceptions of downsizing/restructuring processes reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 8. The greater the formal knowledge sharing reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.
- Hyp 9. The greater the informal networks reported by Decision Makers and Implementers and Affected Employees the higher the perceived level of organisational knowledge.

Tables 4.33 and 4.34 summarise the results of hypothesis testing in regard to Hypotheses 6 to 9 for Decision Makers and Implementers and Affected Employees respectively.

*Table 4.33 Regression Analysis Unsuccessful Organisations - Organisational Knowledge on Independent Variables – Decision Makers and Implementers*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	-.001	.087	-.001	-.009	ns
7	Processes	.259	.097	.321	2.674	.009
8	Formal Knowledge Sharing	.378	.158	.371	2.385	.020
9	Informal Networks	.163	.164	.154	.995	ns



*Table 4.34 Regression Analysis Unsuccessful Organisations - Organisational Knowledge on Independent Variables – Affected Employees*

Hypothesis	Variable	$\beta$	Std. Error	Std $\beta$	t	p
6	Decisions	.016	.047	.021	.344	ns
7	Processes	.235	.048	.295	4.846	.000
8	Formal Knowledge Sharing	.230	.075	.234	3.072	.002
9	Informal Networks	.273	.078	.274	3.497	.001

### **4.3.7 Mediation Testing in Unsuccessful Organisations**

Downsizing/restructuring decisions did not significantly impact organisational effectiveness (Hypothesis 2) or organisational knowledge (Hypothesis 6) for either Decision Makers and Implementers or Affected Employees in Unsuccessful Organisations. Therefore no mediation was present in regard to downsizing/restructuring decisions.

Some degree of mediation by organisational knowledge was evident in the relationships between downsizing/restructuring processes, formal knowledge sharing and informal networks and the dependent variable of organisational effectiveness in data drawn from Unsuccessful Organisations, and amongst the Affected Employees subset. Organisational knowledge was found to be a perfect mediator between formal knowledge sharing and organisational effectiveness, with partial mediation between downsizing/restructuring processes and organisational effectiveness and informal networks and organisational effectiveness.

For Decision Makers and Implementers, perfect mediation by organisational knowledge was evident between downsizing/restructuring processes and organisational effectiveness and between formal knowledge sharing and organisational effectiveness. However, no mediation by organisational knowledge was found in the relationship between informal networks and organisational effectiveness. Coefficients from mediation testing for the Unsuccessful Organisation data sets, including the type of mediation evident in each case, are presented in Table 4.35.

Table 4.35 Mediation Analysis Unsuccessful Organisations and subsets

Unsuccessful Organisations				
Variable	Dependent Variable			Interpretation
	Step 1 OK <sup>1</sup>	Step 2 OE <sup>2</sup>	Step 3 OE	
Decisions	ns	ns	ns	No mediation
Processes	0.287	0.268	0.173	Partial mediation
Formal Knowledge Sharing	0.226	ns	ns	Perfect mediation
Informal Networks	0.276	0.408	0.316	Partial mediation
Organisational Knowledge			0.332	<i>Significance essential for any mediation</i>
Decision Makers and Implementers				
Variable	Dependent Variable			Interpretation
	Step 1 OK	Step 2 OE	Step 3 OE	
Decisions	ns	ns	ns	No mediation
Processes	0.321	ns	ns	Perfect mediation
Formal Knowledge Sharing	0.371	0.432	ns	Perfect mediation
Informal Networks	ns	ns	ns	No mediation
Organisational Knowledge			0.370	<i>Significance essential for any mediation</i>
Affected Employees				
Variable	Dependent Variable			Interpretation
	Step 1 OK	Step 2 OE	Step 3 OE	
Decisions	ns	ns	ns	No mediation
Processes	0.295	0.240	0.138	Partial mediation
Formal Knowledge Sharing	0.234	ns	ns	Perfect mediation
Informal Networks	0.274	0.483	0.388	Partial mediation
Organisational Knowledge			0.347	<i>Significance essential for any mediation</i>

<sup>1</sup> OK = Organisational Knowledge

<sup>2</sup> OE = Organisational Effectiveness

#### 4.3.8 Conclusions – Analyses of Unsuccessful Organisations

Analysis of Unsuccessful Organisations, including both Decision Makers and Implementers and Affected Employees provide significant support for Hypotheses 1, 7 and 8, but not for Hypotheses 2, 4 and 6. That is, organisational knowledge was a significant predictor of organisational effectiveness and both downsizing/restructuring processes and formal knowledge sharing significantly predicted variance in organisational knowledge. However, downsizing/restructuring decisions and formal knowledge sharing were not significant predictors of organisational effectiveness, nor was downsizing/restructuring decisions significantly related to organisational knowledge. Organisational knowledge, however, was found to have a significant impact on organisational effectiveness.

Hypotheses 3 and 5 were supported in data gathered from Affected Employees in Unsuccessful Organisations, indicating downsizing/restructuring processes and informal networks were significant predictors of organisational effectiveness in this sample. Affected Employees in

Unsuccessful Organisations provided support for a significant relationship between informal networks and organisational knowledge (Hypothesis 9). However, none of these three relationships were significant amongst data drawn from Decision Makers and Implementers in Unsuccessful Organisations. Tables 4.36 and 4.37 show the comparison of results for Hypotheses 1 to 5 and Hypotheses 6 to 9 respectively, for both Decision Makers and Implementers and Affected Employees in Unsuccessful Organisations.

*Table 4.36 Comparison of Hypotheses 1-5 Unsuccessful Organisations*

Hypothesis	Independent Variable	Unsuccessful Organisations			Dependent Variable
		Total	DM	AE	
1	Organisational Knowledge	✓	✓	✓	Organisational Effectiveness
2	Decisions	ns	ns	ns	
3	Processes	✓	ns	✓	
4	Formal Knowledge Sharing	ns	ns	ns	
5	Informal Networks	✓	ns	✓	

*Table 4.37 Comparison of Hypotheses 6-9 Unsuccessful Organisation Data Sets*

Hypothesis	Independent Variable	Full Data Set			Dependent Variable
		Total	DM	AE	
6	Decisions	ns	ns	ns	Organisational Knowledge
7	Processes	✓	✓	✓	
8	Formal Knowledge Sharing	✓	✓	✓	
9	Informal Networks	✓	ns	✓	

Organisational knowledge was shown to mediate the relationship between the independent variables and organisational effectiveness, either partially or fully (perfect mediation) in Unsuccessful Organisations with two exceptions. Firstly, downsizing/restructuring decisions did not have a significant impact on either the intervening variable of organisational knowledge, or dependent variable of organisational effectiveness. It was therefore not mediated by organisational knowledge. Secondly, there was an absence of mediating effect by organisational knowledge on the relationship between informal networks and organisational effectiveness for Decision Makers and Implementers in Unsuccessful Organisations.

#### **4.4 SUMMARY OF FINDINGS ACROSS ALL DATA SETS**

The findings of the analyses were similar between the full data set and Unsuccessful Organisations. The hypothesised relationships between organisational knowledge and post-downsizing organisational effectiveness were supported by analyses of the full data set and in both the Decision Makers and Implementers and Affected Employees subsets. This was also the case in regard to Unsuccessful Organisations. Testing of the relationships between organisational effectiveness, and both downsizing-restructuring processes and informal networks, also showed support for the hypotheses for the full data set and for the Affected Employees subset. The same results were found for the data set of Unsuccessful Organisations, and for the Affected Employees subset of Unsuccessful Organisations.

Contrary to this, testing of the relationships between organisational effectiveness and both downsizing/restructuring processes and informal networks were not supported for the Decision Makers and Implementers subset of either the full data set or Unsuccessful Organisations. Further, for Decision Makers and Implementers, the relationships between organisational effectiveness and formal knowledge sharing showed support for the hypothesis for the Decision Makers and Implementers subset of the full data set.

Hypothesised relationships between organisational knowledge and each of the independent variables of downsizing/restructuring processes, formal knowledge sharing and informal networks were supported by analyses of the full data set, as well as both the Decision Makers and Implementers and Affected Employees subsets. Similar findings were evident in Unsuccessful Organisations with the exception of the relationship between informal networks and organisational knowledge, which was not supported in the Decision Makers and Implementers subset of Unsuccessful Organisations. Table 4.38 summarises the results and compares them across the full data set, Successful and Unsuccessful Organisations, as well as each subset of Decision Makers and Implementers and Affected Employees.

The variable of downsizing/restructuring decisions was not found to have a significant impact on either organisational knowledge or organisational effectiveness in any of the data sets; the relationship between this independent variable and organisational effectiveness was therefore not mediated by organisational knowledge. Additionally, since Hypothesis 1 was not supported for Successful Organisations, no mediation was present in any of these data sets.

Organisational knowledge was, however, shown to mediate the relationship between the independent variables of downsizing/restructuring processes, formal knowledge sharing and informal networks, and organisational effectiveness. Full or partial mediation was evident amongst all respondents in the full data set and the Affected Employees subset, and in Unsuccessful Organisations. Similar findings were produced in regard to Decision Makers and Implementers with the exception of informal networks, which was not mediated for this group. Table 4.39 summarises the outcome of mediation testing for all datasets across all populations.

#### **4.5 CONCLUSION**

The following Chapter will discuss the findings presented in this Chapter, with emphasis on differences identified between Decision Makers and Implementers and Affected Employees and responses from those in what were deemed to be Successful and Unsuccessful Organisations. Consideration will be given to the implications of the findings for organisations intending to implement downsizing and restructuring.

Table 4.38 Summary of Hypothesis Testing Across All Data Sets

Hypothesis	Independent Variable	Full Data Set			Successful Organisations			Unsuccessful Organisations			Dependent Variable
		All	DMI	AE	All	DMI	AE	All	DMI	AE	
1	Organisational Knowledge	✓ <sup>1</sup>	✓	✓	ns <sup>2</sup>	ns	ns	✓	✓	✓	Organisational Effectiveness
2	Decisions	ns	ns	ns	ns	ns	ns	ns	ns	ns	
3	Processes	✓	ns	✓	ns	ns	ns	✓	ns	✓	
4	Formal Knowledge Sharing	ns	✓	ns	✓	✓	ns	ns	ns	ns	
5	Informal Networks	✓	ns	✓	ns	ns	✓	✓	ns	✓	
Hypothesis	Independent Variable	Full Data Set			Successful Organisations			Unsuccessful Organisations			Dependent Variable
6	Decisions	ns	ns	ns	ns	ns	ns	ns	ns	ns	Organisational Knowledge
7	Processes	✓	✓	✓	ns	ns	ns	✓	✓	✓	
8	Formal Knowledge Sharing	✓	✓	✓	ns	ns	ns	✓	✓	✓	
9	Informal Networks	✓	✓	✓	✓	ns	✓	✓	ns	✓	

<sup>1</sup> Relationship between independent and dependent variables found to be significant

<sup>2</sup> Relationship between independent and dependent variables found not to be significant

This Table summarises the results of hypothesis testing in regard to the full dataset and the subsets of Decision Makers and Implementers and Affected Employees, indicating whether each hypothesis tested was found to be significant or not significant. The Table also provides these results divided into 'Successful' and 'Unsuccessful' organisations, with subsets of Decision Makers and Implementers and Affected Employees presented for each.

Table 4.39 Summary of Mediation Testing Across All Data Sets

	Analysis:  Population:	Mediating effect of Organisational Knowledge on relationship between Independent Variables & the Dependent Variable (Organisational Effectiveness)			
		Downsizing/ Restructuring Decisions	Downsizing/ Restructuring Processes	Formal Knowledge Sharing	Informal Networks
All Organisations	All Organisations	No <sup>1</sup>	Partial <sup>2</sup>	Perfect <sup>3</sup>	Partial
	All Organisations - Decision Makers and Implementers	No	Perfect	Partial	Perfect
	All Organisations - Affected Employees	No	Partial	Perfect	Partial
Successful Organisations	All Successful Organisations	No	No	No	No
	Successful Organisations – Decision Makers and Implementers	No	No	No	No
	Successful Organisations – Affected Employees	No	No	No	No
Unsuccessful Organisations	All Unsuccessful Organisations	No	Partial	Perfect	Partial
	Unsuccessful Organisations – Decision Makers and Implementers	No	Perfect	Perfect	No
	Unsuccessful Organisations – Affected Employees	No	Partial	Perfect	Partial

1 - Organisational knowledge not found to mediate the relationship between independent variable and organisational effectiveness

3 - Organisational knowledge found to perfectly mediate the relationship between independent variable and organisational effectiveness

2 - Organisational knowledge found to partially mediate the relationship between independent variable and organisational effectiveness

This Table summarises the mediation testing results and compares them across all datasets (All Organisations, Successful Organisations and Unsuccessful Organisations) as well as the subsets of Decision Makers and Implementers and Affected Employees. The Table is divided into three horizontal blocks presenting firstly the mediation testing results for the full dataset, divided into subsets of Decision Makers and Implementers and Affected Employees. The second horizontal block presents the mediation testing results for the total Successful Organisation dataset, together with subsets of Decision Makers and Implementers and Affected Employees. The final horizontal block presents the mediation testing results for the total Unsuccessful Organisation dataset, as well as subsets of Decision Makers and Implementers and Affected Employees.

## **CHAPTER FIVE**

### **DISCUSSION**

#### **5.0 INTRODUCTION**

This research evaluates the impact of downsizing and restructuring on perceptions of post-downsizing/restructuring organisational effectiveness. It further examines whether this impact can be explained by the way in which implementation of these changes affects the perception of knowledge present in organisations. In this Chapter, the major findings of the research, drawn from descriptive statistics and structural relationships, are presented. The discussion around findings is structured with initial consideration of the outcomes of the research hypotheses in regard to the full data set of all respondents together with respondents in Unsuccessful Organisations, since the results for these groups were identical. The findings drawn from data relating to Successful Organisations will also be considered. The analysis of hypotheses, from the perspective of both Decision Makers and Implementers and Affected Employees will be compared along with comparison between the Successful and Unsuccessful Organisations. The outcomes of the mediation testing will then be discussed and compared for all datasets. The Chapter concludes with a summary of the discussion and key findings.

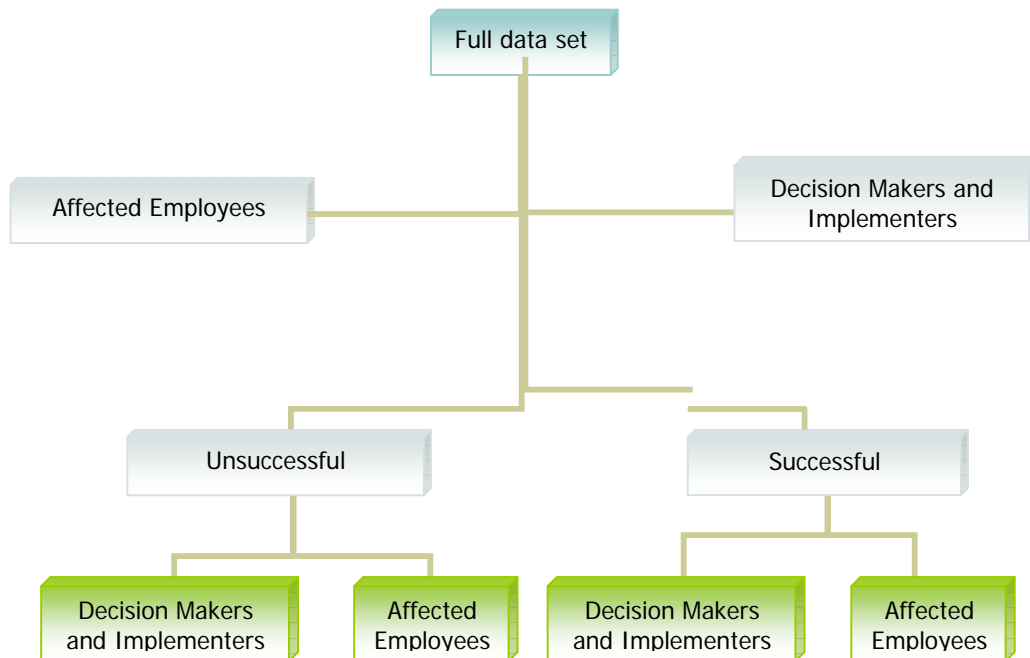
#### **5.1 PURPOSE OF AND FRAMEWORK FOR EXPLANATION OF ANALYSES**

Data obtained from respondents were initially analysed using the full data set, which was then separated into Decision Makers and Implementers and Affected Employees groupings. The database was also separated into 'Successful' and 'Unsuccessful' organisations, based on respondents' reporting of perceived improvement or deterioration of organisational effectiveness. Each of the Successful and Unsuccessful Organisation data sets was further divided into Decision Makers and Implementers' and Affected Employees' responses. Resultant subsets of data enabled comparisons based on roles in the downsizing/restructuring, as well as respondents who reported improvement/no change (Successful) following the downsizing/restructuring and those who



reported subsequent deterioration (Unsuccessful).

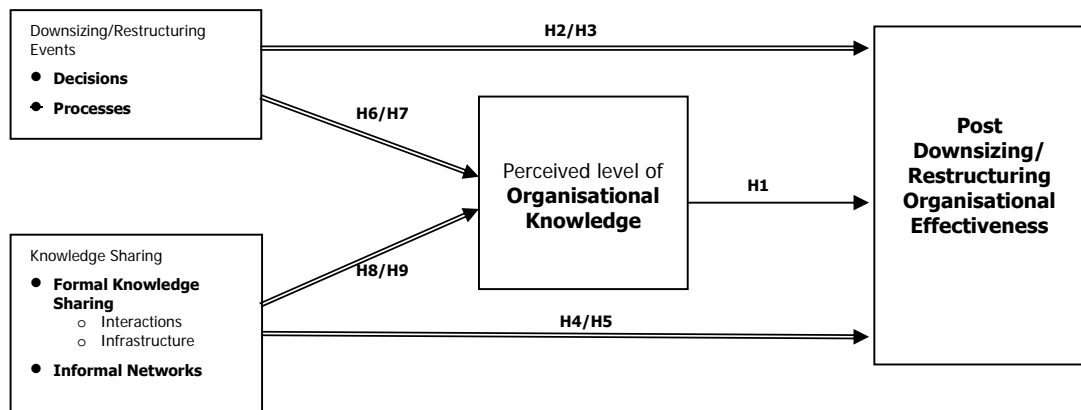
Figure 5.1 Breakdown of data sets for testing and comparison



The research sought to identify the impact of downsizing/restructuring events and knowledge sharing on the knowledge perceived to be present in organisations and subsequent perceptions of organisational effectiveness.

A conceptual framework was developed to test relationships between variables through hypotheses presented in Chapter Two (replicated in Figure 5.2 below). Analyses were undertaken on data collected from employees of Australian organisations across a broad range of industries that had recently experienced organisational downsizing or restructuring. Analyses were carried out through factor analysis for identification of constructs, followed by Pearson's correlation, and regression analyses to test hypotheses.

Figure 5.2 Conceptual Framework

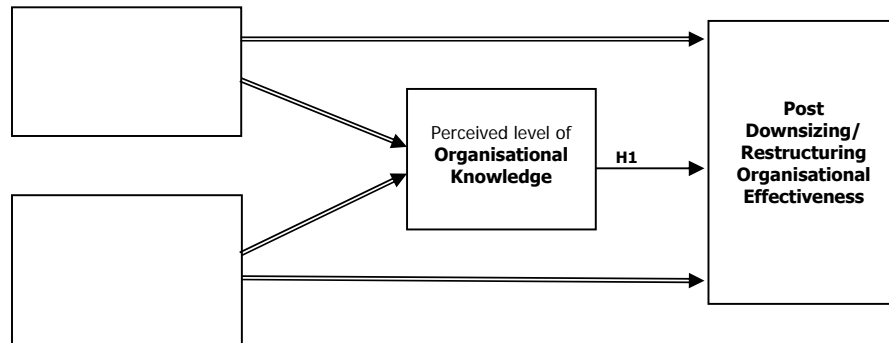


Organisational knowledge is a crucial part of how organisations achieve outcomes in terms of their efficiency, and effectiveness and knowledge sharing mechanisms, particularly informal networks, were proposed to be a key aspect of how this knowledge is mobilised. The effectiveness and efficiency of an organisation translates into both external outcomes such as financial returns to shareholders and investors, delivery of services to clients and support to the national economy, as well as internal outcomes in terms of attraction and retention of the best talent to enable future growth and prosperity. Possible mediation of the variable organisational knowledge in the relationship between independent and dependent variables was therefore also examined.

## 5.2 ORGANISATIONAL KNOWLEDGE AND ORGANISATIONAL EFFECTIVENESS

The research initially sought to demonstrate the importance of retention of organisational knowledge in achieving effective post-downsizing/restructuring organisational outcomes. Testing of data drawn from the full data set, and those of Decision Makers and Implementers and Affected Employees in the Unsuccessful Organisations supported this hypothesis, substantiating the contention that organisational knowledge is a significant determinant of organisational effectiveness.

Figure 5.3: Hypothesis 1: Organisational Knowledge – Organisational Effectiveness



Initial testing of this hypothesis was important, establishing whether changes to perceived levels of organisational knowledge (organisational knowledge) resulted in corresponding changes in perceptions of post-downsizing/restructuring organisational effectiveness (organisational effectiveness) was necessary in order to examine the relationship between the independent variables and organisational knowledge. This hypothesis was supported for the full data set (all respondents) and Unsuccessful Organisations. However, organisational knowledge did not prove to be a significant determinant of organisational effectiveness in Successful Organisations, a somewhat unexpected and counter-intuitive finding.

Examination of the definition of ‘Successful’ may provide some explanation for the above finding. ‘Success’ was defined as stability or improvement in perceived organisational effectiveness after downsizing/restructuring. The hypothesis therefore implies that increased organisational effectiveness results from increased organisational knowledge, and correspondingly that decreased organisational knowledge leads to a decrease in organisational effectiveness, defined as ‘Unsuccessful’.

Support for the relationship between organisational knowledge and organisational effectiveness in Unsuccessful Organisations clearly indicates that knowledge loss results in a negative organisational outcome. Lack of such

support in Successful Organisations may indicate that whilst losing knowledge has a negative outcome, increasing knowledge is not essential for a positive outcome in relation to post-downsizing/restructuring organisational effectiveness to be achieved. It may be for the latter group that knowledge retention rather than increased knowledge is the important goal. Since downsizing/restructuring rarely has the intention of increasing knowledge, this is a logical finding and serves to reinforce the importance of retaining knowledge in order to achieve a 'successful' organisational outcome.

Where support for Hypothesis 1 was found, a change in organisational knowledge resulted in a corresponding change in perceptions of organisational effectiveness after downsizing/restructuring. This positive relationship is consistent with the Australian case study undertaken by Griggs and Hyland (2003) that reported on a specific knowledge organisation operating in the aerospace industry. Faced with a second downsizing, that company recognised how previous downsizing resulted in not only the loss of employees, but also knowledge, skills and expertise. As part of the latter downsizing strategy, the company implemented a range of actions specifically designed to *maintain* knowledge and learning capacity. The initiatives used by the aerospace company closely resembled those developed through the focus group process for the present study, and examined in the survey stage. These included the introduction of team-based structures, flexible work teams and other deliberate steps intended to create a learning organisation. Multi-skilling by means of team initiatives and broadening skills through a postgraduate learning program enhanced and expanded the skills of the workforce (Griggs & Hyland 2003), thus *retaining* essential organisational knowledge.

A focus of Griggs and Hyland's (2003) study was to develop competencies to improve employability and enhance intra-organisational teamwork. Documentation of information to ensure knowledge transfer and improvement of vertical and horizontal communication within and between all areas of the company were crucial aspects of the strategy. Additional areas identified in

Griggs and Hyland's (2003) research, and the focus group study in this research, were steps to improve culture, increase employee knowledge of the business as a whole, organisational redesign to support the changed operations and formalise benchmarking and best practice initiatives. Statistical support for Hypothesis 1 is consistent with Griggs and Hyland's (2003) findings. Such initiatives result in more positive organisational outcomes, with the company in the Griggs and Hyland (2003:182) study indicating their current competitive advantage is "the knowledge and skills of its workforce".

Support for the hypothesised relationship between organisational knowledge and organisational effectiveness (Hypothesis 1) in the total data set is also consistent with a significant body of business strategy literature, which strongly supports the link between organisational knowledge and achievement of organisational outcomes (cf Drucker 2002; Gregory 1999; Grant 1996; Nonaka 1994; Barney 1991). In particular, Barney (1991) highlights the 'resource based view' that a firm's competitive advantage is driven by its embedded knowledge and skills. This view contends that human resources contribute to competitive advantage through satisfying the criteria of being rare, valuable, non-substitutable and inimitable and that firms' success is achieved through acquisition, development and utilisation of these resources. This is attributable to individual and collective knowledge possessed by these 'human' resources. This research adds further support to this literature, as well as addressing the negative impact of knowledge loss on organisational outcomes.

Emphasis on the importance of organisational knowledge to organisational effectiveness in this research also lends support to Lado and Wilson's (1994) contentions in their 'competency based perspective' which extends the resource based view by suggesting that four key competencies possessed by firms are crucial to sustainable competitive advantage. Inherent in these competencies are the 'unique skills, abilities and knowledge' of people within the organisation in achieving organisational outcomes and goals.

Linking organisational knowledge with overall organisational performance is consistent with Nonaka's (1994:14) 'knowledge based view' of the firm, which describes organisations as knowledge systems, emphasising the importance of knowledge creation through the interaction of individuals and a "continuous dialogue between tacit and explicit knowledge". Grant (1996:109) and Drucker (2000) also conceptualise the firm as 'an institution for integrating knowledge', stating that knowledge is a key driver for the achievement of organisational outcomes. This is particularly relevant in view of increasing emphasis on knowledge organisations (Lesser 2000) whose major output is the knowledge and expertise of their employees, required for the purpose of problem-solving for its clients.

This research focused on the link between organisational knowledge and organisational effectiveness following downsizing/restructuring. Support for the organisational knowledge-organisational effectiveness link in this context builds on earlier findings of Cross and Travaglione (2004), whose case study analysis of downsizing in an Australian organisation concluded that managers undertaking downsizing should emphasise retention of those employees most valuable to the organisation, rather than wholesale retrenchment, if 'visible improvements' are to be achieved. That study suggested a link between those individuals retained and subsequent organisational performance, measured, as in this research, through employee perceptions rather than conventional financial indicators of performance.

Whilst previous studies such as those undertaken by Cross and Travaglione (2004), Williams (2004) and Appelbaum, Patton and Shapiro (2003) have suggested a link between organisational knowledge and organisational effectiveness, this research firmly establishes such a link through the findings.

In Unsuccessful Organisations the findings indicate loss of organisational knowledge results in lower perceptions of organisational effectiveness. As one respondent stated in response to the open ended survey question:

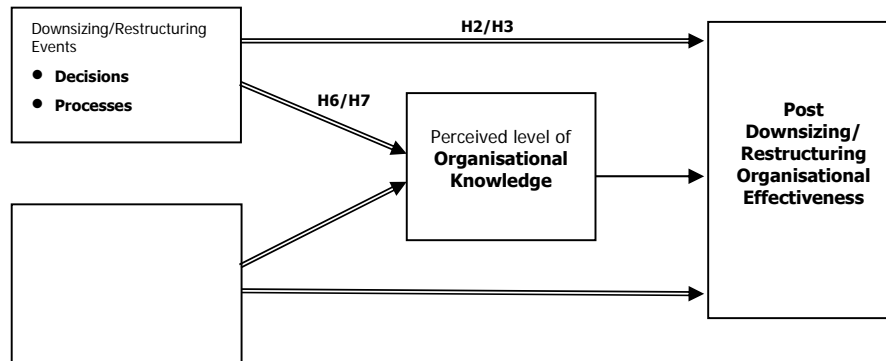
*“...There has been no effort made to retain persons who hold extensive corporate memories that could assist the organisation in the future...”*

For business, this finding highlights the crucial importance of retention of organisational knowledge during and after downsizing/restructuring in order to avoid negative impacts, as well as facilitate subsequent organisational effectiveness. It is likely that this is exacerbated by Bedeian and Armenakis's (1998) 'cesspool syndrome' phenomenon, reflecting a tendency for high calibre employees to leave declining organisations, resulting in 'brain-drain', which is heightened by subsequent promotion of lower performing employees to key roles. The impact of the rise of lower calibre managers is two-fold. Firstly, their perceived ineptitude may deter more talented candidates from applying for positions. Secondly, the newly promoted managers may be reluctant to engage those they perceive to be of higher calibre than themselves. These are key considerations in explaining the tendency for organisations to experience difficulty in rebuilding following downsizing or restructuring.

### **5.3 DOWNSIZING/RESTRUCTURING EVENTS**

The following discussion describes the importance of the relationships between downsizing/restructuring events (decisions and processes) and both organisational effectiveness and organisational knowledge. Hypotheses 2 and 3 examined whether employees' perceptions of the relevance of downsizing/restructuring decisions made by organisations, and the downsizing/restructuring processes followed in their implementation, significantly impact on organisational effectiveness. Hypotheses 6 and 7 examine their respective impacts on organisational knowledge.

Figure 5.4: Impact of Downsizing/Restructuring Decisions (Hypotheses 2 & 6) and Processes (Hypotheses 3 & 7) on Organisational Effectiveness and Organisational Knowledge;



### 5.3.1 Downsizing/Restructuring Decisions

Neither of the hypotheses involving downsizing/restructuring decisions was supported, indicating that downsizing/restructuring decisions was not a significant predictor of organisational effectiveness or of organisational knowledge. This finding was common across all data sets and amongst both Decision Makers and Implementers and Affected Employees.

The downsizing/restructuring decisions examined in the research related to decision-making about knowledge retention. The results suggest that their perceived relevance is unimportant in determining organisational outcomes; however, previous research suggests this is not the case. In particular, Greenhalgh, Lawrence and Sutton (1988) propose that decision-making factors, such as the context and background of the downsizing/restructure event, the impact the decisions have on survivors and their subsequent behaviours, and decisions regarding methods for retaining crucial knowledge are all areas for consideration in downsizing/restructuring. Whilst apparently insignificant in predicting organisational outcomes in this research, it may be that since downsizing/restructuring decisions are only an indication of intended actions (as opposed to processes which are the events experienced by the participants), respondents' perceptions of their intent and motivation have been derived from their downsizing/restructuring experiences. This may account for the lack of support for hypotheses involving decisions, whereas there was significant



support in the corresponding hypotheses relating to downsizing/restructuring processes.

The views of Greenhalgh, Lawrence and Sutton (1988), Koslowski and colleagues (1993), Taylor and Giannantonio (1993), Lee (1997) and Smeltzer and Zener (1992) indicate that decisions regarding the method, timing and delivery of the announcement of the intention to downsize or restructure are crucial aspects of the strategy. Participants may find it difficult, however, to separate decisions from processes since those not involved in decision-making can only interpret the decision through subsequent actions (processes) they experience.

Previous research into decision-making indicates that the decisions taken by an organisation have effects on survivors other than just the retention of knowledge. As one survey participant stated:

*“...Management make the decisions and employees just have to fall in line.... As a result employees now have to take on excessive workloads and are extremely unmotivated and bitter towards the organisation.”*

The consequences of decisions may include effects on employee commitment levels (Armstrong-Stassen 2004) and the overall psychological contract (Littler, Wiesner & Dunford 2003; Leana & Van Buren 2000). Gregory (1999) also discusses the demotivating impact of understaffing following downsizing. She draws together post-downsizing behaviours reported in research undertaken by both Cascio, Brockner and colleagues (cf Gregory 1999; Brockner et al. 1994; Cascio 1993; Brockner et al. 1987). The researchers describe how individual self-esteem combined with perceived threat of job loss impacts on motivation of workers after downsizing. The above research suggests that decisions regarding which individuals to retain may have a significant effect on survivors' responses to downsizing/restructuring and therefore their individual performance, in turn contributing to the perception of overall organisational

effectiveness. Given the attention in the literature to the significant relationship between decisions and organisational outcomes, the lack of support for this hypothesis is somewhat surprising but can perhaps be explained by the inability of many respondents to separate decisions from processes during downsizing/restructuring.

Cole, Harris and Bernerth (2006) discuss vision, appropriateness and execution of change and the impact these variables have on employees' responses to change, focusing in particular on job satisfaction, organisational commitment, turnover intention and role ambiguity as measures of the effectiveness of the change. As stated by one respondent:

*“The restructure was more a matter of being told as opposed to being involved. It was considered by all staff to be flawed and that remains the view now that it is in place.”*

In their study, Cole and colleagues (2006) did not separate decision-making from implementation of the change, instead examining all aspects of the change collectively. As indicated above, separation of decisions and processes may not be easily achieved. Any direct impact of downsizing/restructuring decisions on organisational effectiveness may therefore be a result of the ways in which these decisions, in terms of vision, appropriateness and execution, were interpreted and perceived by those affected.

*“We were involved in the process, however we were not listened to and Management just did their own thing, shafted the workers and now they have a very bitter and twisted lot of workers who do not trust them and who will not go out of their way to help Management....”*

Organisational decision-makers may therefore need to consider how decisions in regard to downsizing/restructuring may be perceived by employees and why; that is, is there potential for employees to perceive differences between managerial espoused and actual motivation behind downsizing/restructuring

strategies. Organisations recognising this may avoid negative perceptions and achieve a more successful outcome for such strategies.

### **5.3.2 Downsizing/Restructuring Processes**

Results of analyses showed that the relationship between downsizing/restructuring processes and organisational effectiveness (Hypothesis 3) was supported for the full data set and Unsuccessful Organisations and for the Affected Employees subset in each. Where processes were viewed positively, corresponding increases in perceptions of organisational effectiveness were apparent to the majority of respondents. Amongst Decision Makers and Implementers and all respondents in Successful Organisations this was not the case, with no support for Hypothesis 3 evident in either the Decision Makers and Implementers or Affected Employees data sets.

Previous studies, for example Lee and Corbett (2006), Schraeder, Self and Lindsay (2006), Mishra and Spreitzer (1998) and Brockner (cf 1997; 1995), suggest that perceptions of justice and operation of the psychological contract increase perceived organisational effectiveness. This may be attributable to the perceived integrity with which the processes are viewed by employees, which in turn may lead to improved perceptions of organisational effectiveness. It is therefore likely that processes impact on subsequent organisational effectiveness through their affect on employee attitudes, behaviour and subsequent performance. Explanations for the impact of downsizing/restructuring processes found in the literature (cf Tzafrir et al. 2006; Yu & Park 2006; Farrell & Mavondo 2005; McElroy, Morrow & Rude 2001; Leana & Van Buren 2000; Lewin & Johnston 2000; Freeman 1999; Cascio, Young & Morris 1997; Bruton, Keels & Shook 1996; Brockner, Wiesenfeld & Martin 1995) relate primarily to the reactions of affected employees, drawn from their experience, and their views on the organisation's subsequent performance. The findings in relation to Hypothesis 3 support the contention that the way in which downsizing/restructuring is implemented has a direct impact on organisational outcomes.

As with decisions, the difference between Successful and Unsuccessful Organisations may indicate that poor perceptions of downsizing/restructuring processes have a negative impact on organisational effectiveness. However, improved organisational effectiveness does not require positive perceptions of the processes; rather negative perceptions should be avoided. The general environment of Successful Organisations may be one where clearly communicated, transparent and open processes are expected and good practices may be the norm. Again this indicates that improved perceptions are not necessary for a positive organisational outcome, but the absence of clarity and transparency may result in a negative outcome. Poor processes must therefore be avoided if effective downsizing/restructuring outcomes are to be achieved.

The lack of support for Hypothesis 3 in Successful Organisations, and amongst Decision Makers and Implementers in all data sets, suggests that the processes experienced may be of less significance to Decision Makers and Implementers than to the general organisational population. The reason for this has been partly explained in regard to Successful Organisations; however, why downsizing/restructuring processes were not a significant predictor of organisational effectiveness amongst Decision Makers and Implementers in the full data set and Unsuccessful Organisations also requires some attention. It is possible that Decision Makers and Implementers, being privy to the decision-making and involved in the implementation process, may have more understanding of and confidence in the processes utilised. Therefore their judgements about organisational effectiveness may be based on factors other than their perceptions of the downsizing/restructuring process. They may focus more on perceived results of the processes in terms of organisational outcomes, particularly tangible financial measures such as improvements in productivity or share price.

The relationship between downsizing/restructuring processes and organisational knowledge (Hypothesis 7) was supported by data from respondents in the full data set, as well as those in Unsuccessful Organisations. It was not, however, found to be significant amongst any respondents in Successful Organisations.

Explanations for the impact of downsizing/restructuring processes found in the literature relate primarily to the reactions of affected individuals to their experiences, and their views on the organisation's subsequent performance. They do not specifically consider the more fundamental knowledge and skill losses that occur as postulated in the hypotheses, nor the impact of changes on people, networks and work processes that result from downsizing/restructuring. Research findings in relation to Hypothesis 7 demonstrated a significant positive relationship between downsizing/restructuring processes and the intervening variable organisational knowledge amongst the majority of respondents. This supports the contention that the way in which downsizing/restructuring occurs may have a direct impact on organisational knowledge in these organisations.

As with discussion of previous hypotheses, significance of the relationship between downsizing/restructuring processes and organisational knowledge in Unsuccessful Organisations and lack of such significance in Successful Organisations again suggests that processes which result in knowledge loss have a detrimental impact on organisational knowledge and subsequent negative affect on organisational effectiveness. However, in Successful Organisations, while processes are not necessarily attributed to improved levels of organisational knowledge, their absence may result in perceived loss of organisational knowledge, and subsequent organisational effectiveness. Avoiding knowledge loss therefore appears to be the essential element.

The findings suggest that organisations planning downsizing/restructuring need to ensure the processes they utilise promote retention of knowledge within the organisation. The ways in which this may be achieved vary; examples include retaining key employees or allowing time and resources, such as information

systems technology and databases, to facilitate conversion of tacit knowledge to explicit knowledge, through documentation and training. Other processes canvassed include communication to check for understanding of why decisions are made, engaging employees in the downsizing/restructuring process and building a supportive culture which recognises the need for and benefit of change. The findings suggest that the way in which employees interpret downsizing/restructuring events has a direct impact on outcomes, implying that consideration of employees' potential reactions to these events may also be relevant. A high degree of honesty, transparency and openness in management of the processes may go a long way to ensuring subsequent positive attitudes and behaviours. Such integrity in process may support maintenance of both job satisfaction and organisational commitment, necessary ingredients in the achievement of improved organisational effectiveness. The lack of significance found in Successful Organisations in regard to this hypothesis may indicate that these strategies and sound management practices may already be in place prior to downsizing/restructuring occurring in these organisations.

Support for the hypothesised relationship between downsizing/restructuring processes and organisational knowledge in the full data set and Unsuccessful Organisations corroborates previous studies such as those discussed by Schraeder, Self and Lindsay (2006), Littler and Innes (2003), Wingate, Thornton, McIntyre and Frame (2003) and Leonard (1999, cited in Schraeder, Self & Lindsay 2006). These authors explain the importance of employee retention, based on maintenance of relevant knowledge, skills and abilities, as well as the impact on perceptions of procedural justice.

Hamel's (1994:32) assertion that competencies are "inadvertently surrendered" or "thrown out with the bathwater" because top management are not fully aware of their importance is also supported, since many of these core competencies reside in individuals, through their knowledge, skills and network connections. Specifically identifying employees for retention and layoff is therefore crucial for

the retention of knowledge and subsequent post-downsizing/restructuring organisational effectiveness.

Kozlowski, Chao, Smith and Hedlund (1993:306) state that the goal of proactive downsizing is “to ensure...configuration of core competencies, individual capabilities and sentiments needed to fulfil the organization mission”; whilst in reactive downsizing, little attention is paid to retention of core competencies. Since empirical evidence (cf Bruton, Keels & Shook 1996; Kozlowski et al. 1993) demonstrates that reactive downsizing is the more prevalent approach, this may explain the lack of attention paid by managers to how decisions are made concerning retention of core competencies, especially those decisions regarding employees targeted to leave the organisation. It may simply be that the more common, reactive downsizing approach does not lend itself to contemplation of this level of detailed planning.

The questionnaire used in this research included items relating to whether respondents perceived roles were replaced, through rehiring employees previously ‘let go’ or through the use of consultants. High incidences of skill replacement has been reported in business surveys (cited in Cascio 1993) and empirical research (cf Cascio 2002; Cascio 1993; Kozlowski et al. 1993) indicating rehiring and skill replacement may be some of the reasons why anticipated economic benefits are not achieved through downsizing initiatives. The findings reflect Gregory’s (1999) view that those who leave, the ‘victims’, possess unique knowledge, comprised of technical expertise, industry specific knowledge and shared corporate memory. These employees are also key players in information networks. Therefore, considerable importance needs to be placed on the staff to be retained and those released from employment in a downsizing/restructuring situation. Both parties are significant determinants of organisational knowledge and subsequent organisational effectiveness.

The perceptions of those who work in an organisation are their reality. Attracting and retaining key employees is largely dependent on the employees’ perceptions of the organisation as being one in which they wish to work and

contribute. Employees' perceptions of downsizing/restructuring processes are key to their subsequent perceptions of the organisation. The importance of open communication and honest processes that focus on retaining knowledge are important to achievement of a successful outcome. Despite the lack of support amongst respondents in Successful Organisations, the overall findings in this study that downsizing/restructuring processes significantly affect both organisational knowledge and organisational effectiveness indicates that the processes utilised in the downsizing/restructuring are important considerations.

#### **5.4 KNOWLEDGE SHARING, ORGANISATIONAL EFFECTIVENESS AND ORGANISATIONAL KNOWLEDGE**

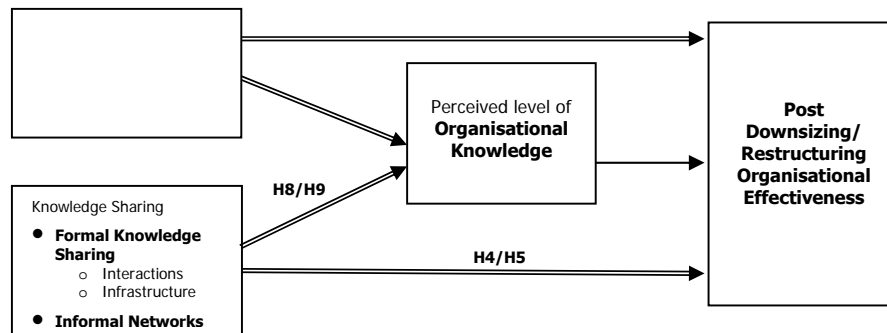
The purpose of knowledge sharing is to increase knowledge held within the organisation, both tacit and explicit. This research postulated that knowledge might be shared both formally, through activities and structures implemented by the organisation and informally, and networks of individuals operating within and across the organisation. It was further proposed that sharing knowledge would significantly impact on both organisational effectiveness (Hypotheses 4 and 5) and organisational knowledge (Hypotheses 8 and 9).

This study provided support for the contention that formal knowledge sharing (Hypothesis 4) has a significant impact on organisational effectiveness in the Decision Makers and Implementers' subsets of the full data set and Successful Organisations. This was not supported, however, in relation to data from the remaining data sets, including Affected Employees and all respondents in Unsuccessful Organisations.

Conversely, there was considerable support for the role of informal networks in improving organisational effectiveness (Hypothesis 5) in data from the full data set, including Affected Employees and respondents in Unsuccessful Organisations. Nevertheless, the Decision Makers and Implementers' subsets did not support this contention.



Figure 5.5: Impact of Formal Knowledge Sharing (Hypotheses 4 & 8) and Informal Networks (Hypotheses 5 & 9) on Organisational Effectiveness and Organisational Knowledge



Support was provided for the relationship between formal knowledge sharing and organisational knowledge (Hypothesis 8) within the full data sets, including Decision Makers and Implementers and Affected Employees, and all respondents in Unsuccessful Organisations, demonstrating that increased formal knowledge sharing results in increased organisational knowledge. The hypothesis was not supported by respondents in Successful Organisations, suggesting that for those organisations increasing formal knowledge sharing mechanisms does not result in significantly increased perceptions of organisational knowledge. This may once again indicate that in Successful Organisations, such strategies are already in place and part of a culture and climate that contributes to their success.

The importance of informal networks was also examined in this research. Informal networks were demonstrated to have a significant and positive impact on organisational knowledge amongst all data sets, indicating broad support for Hypothesis 9 in the full data set, as well as Affected Employees in both Successful and Unsuccessful Organisations. There was one exception; Hypothesis 9 was not supported by Decision Makers and Implementers in either Successful or Unsuccessful Organisations. This difference in perceptions of informal networks between Decision Makers and Implementers and Affected Employees suggests that the role and purpose of networks differs. This will be further discussed in section 5.4.2.

#### **5.4.1 Knowledge Sharing**

Knowledge sharing includes a wide range of strategies, divided into formal knowledge sharing and informal networks for the purposes of this research. Formal mechanisms put in place by organisations to facilitate knowledge sharing include: 'personal interactions' such as formal communication, meetings and training sessions; 'structural mechanisms', encompassing organisation hierarchy and job designs that facilitate knowledge exchange; and technological supports for retention of knowledge and development of corporate memory.

Respondents to the research were asked to indicate the degree to which a number of formal knowledge sharing strategies were evident in their organisations. These strategies included formal communication channels, access to people with knowledge, support and encouragement for 'expert groups' and both organisational and job structures designed to facilitate learning and application of skills. Information sharing activities such as team meetings, seminars, presentations, guest speakers and debriefing were included in order to gauge the extent of knowledge sharing perceived by respondents to be present in their organisations after downsizing/restructuring. Further items in the survey related to technological support. Participants were asked to identify such support and comment on the extent of use of technology such as collaborative software, email, intra/internet, chat rooms and video conferencing as mechanisms to enable sharing of information and ideas. Respondents were also asked to indicate perceived accessibility and effectiveness of storage and retrieval systems.

A significant relationship between formal knowledge sharing and organisational effectiveness was found amongst Decision Makers and Implementers, both in the full data set and in Successful Organisations. This relationship was not supported, however, amongst Affected Employees or respondents in Unsuccessful Organisations. These findings may be attributable to Successful Organisations having a culture and climate where effective formal knowledge sharing is in place. The presence of formal knowledge sharing strategies in

organisations may suggest a culture that values knowledge. Additionally, for knowledge sharing to occur, a culture of trust is required (Willem & Scarbrough 2006). This climate of value for individual knowledge, and by extension for individuals themselves, along with trust and support for knowledge sharing, may result in a culture that directly contributes to improved organisational effectiveness. This culture and climate may be more prevalent in Successful Organisations and particularly evident to Decision Makers and Implementers due to their greater involvement in managing and overseeing organisational operations.

Conversely, in Unsuccessful Organisations less evidence of knowledge sharing strategies may indicate a culture and climate not conducive to improved organisational outcomes. It may also be indicative of an attitude towards knowledge that is not supportive of knowledge sharing. A climate where knowledge is not apparently valued may not give rise to a culture that values individuals, creates trust or supports knowledge sharing. This may directly contribute to negative perceptions of organisational effectiveness.

The importance of formal knowledge sharing, especially for Decision Makers and Implementers, may also be the result of feeling included, trusted and valued which may lead to more satisfied, committed and happier employees. This may indicate that formal knowledge sharing strategies support a culture of trust and valuing of individuals, over and above their intended purpose of disseminating knowledge through the organisation.

Formal knowledge sharing activities canvassed in the study included formal team meetings, presentations, training sessions and support for expert groups such as communities of practice. Each of these activities also provides a forum for informal networking between colleagues, which in turn contributes to organisational effectiveness. Therefore, another possible explanation for the direct effect of formal knowledge sharing on organisational effectiveness is that the former supports or increases informal networking, although this relationship

was not directly investigated in this study. The impact of informal networks is discussed further in the following section.

The presence of formal knowledge sharing in organisations supports a positive, 'best practice' culture and climate represented in the physical and organisational structures (Walsh & Ungson 1991) which may be conducive to improved organisational effectiveness. The strong support for the relationship the relationship between formal knowledge sharing and organisational effectiveness (Hypothesis 4) amongst Decision Makers and Implementers suggests this group may be more aware of formal knowledge sharing activities than Affected Employees. This may reflect a tendency for Decision Makers and Implementers to place more emphasis on formal knowledge sharing strategies during downsizing/restructuring than other aspects of the downsizing/restructuring that may be of more concern to Affected Employees. This finding suggests that those planning downsizing/restructuring should be cognisant of the difference in relevance of formal knowledge sharing across the workforce when implementing these changes.

Since formal knowledge sharing strategies are implemented to increase organisational knowledge through effective sharing and storage, support for Hypothesis 8 was anticipated. Formal knowledge sharing clearly has the intention of building and maintaining the organisational knowledge of individuals, and contributes to transformations within the organisation. Organisational knowledge is increased through individuals gaining and embedding knowledge through various formal knowledge sharing activities and processes. This may provide some explanation for the support for Hypothesis 8 found in the study within the full data set, including Decision Makers and Implementers and Affected Employees subsets, and respondents in Unsuccessful Organisations. In Successful Organisations formal knowledge sharing mechanisms may already be in place, contributing to the perceived success in terms of organisational effectiveness. That is, the presence of such strategies is a 'given' and therefore do not need to be increased to achieve positive outcomes; hence

the lack of support for this hypothesis in Successful Organisations.

#### **5.4.2 Informal Networks**

Informal networks were hypothesised to be significantly related to organisational knowledge (Hypothesis 9). In accordance with theories on networks and social capital (cf Lesser 2000; Nahapiet & Ghoshal 1998; Brass 1995), it was also considered likely that informal networks have a direct impact on the way in which people work together to achieve outcomes and subsequent perceptions of organisational effectiveness (Hypothesis 5). The findings of this research demonstrated that for Affected Employees in both Successful and Unsuccessful Organisations the presence of informal networks resulted in increased organisational knowledge and organisational effectiveness. These results, however, were not shared by Decision Makers and Implementers in Successful or Unsuccessful Organisations.

As a catalyst for sharing knowledge in organisations, one style of informal network is Brown and Duguid's (1991) 'communities of practice'. Such 'communities' are thought to facilitate the informal sharing of knowledge between organisational employees and positively impact on organisational performance in a number of important ways (Lesser & Everest 2001; Lesser 2000). By providing opportunities for knowledge sharing, communities of practice decrease the learning curve for new employees through strategies discussed below, ensuring they are productive more quickly, with subsequent benefit to the organisation. The findings in this study support this relationship, establishing that informal networks facilitate knowledge sharing amongst Affected Employees and, in doing so, increase organisational knowledge.

Communities of practice also serve as a mechanism for developing mentoring relationships, which are another important informal way in which new employees learn about the organisation and their role within it (Brown & Duguid 1991). Rapid response to customer needs and inquiries are possible by employees accessing shared knowledge and subject matter expertise. Through their

involvement in the community of practice, members become aware of where formal and informal knowledge resides, enabling them to react to client needs more efficiently.

Likewise, new ideas for products and services are generated through the pursuit of common interests between community members (cf Lesser 2000; Lesser & Prusak 1999). Informal communities provide an opportunity for sharing knowledge resulting in reduced re-work and preventing 'reinventing wheels' by enabling employees to access shared organisational memory. Further, the sharing of ideas, experiences and perspectives between those with common interests may facilitate innovation for development of new products and services (Lesser & Everest 2001). This can clearly result in improved organisational effectiveness (Hypothesis 5), supporting the contention that sufficient knowledge and access to necessary network connections may be important in 'getting the job done', in keeping with the tenets of social capital and network theories (cf Lesser 2000; Nahapiet & Ghoshal 1998; Brass 1995). Further, social network theory (Brass 1995) suggests the function of informal networks may enhance job satisfaction, productivity, trust and well being (cf Appelbaum, Patton & Shapiro 2003; Cascio 2002; Littler 2000; Appelbaum, Close & Klasa 1999; Gregory 1999; Kozlowski et al. 1993), whilst a support function may enable work to be done more effectively (cf Lesser & Everest 2001; Leana & Van Buren 2000; Lesser 2000).

The significance of informal networks in regard to organisational knowledge and organisational effectiveness (Hypotheses 5 and 9) was not apparent in regard to Decision Makers and Implementers in either Successful or Unsuccessful Organisations. This suggests that, for this group, informal networks are not crucial for increasing organisational knowledge or improving organisational effectiveness. This same group however, indicated that formal knowledge sharing was significant in determining both organisational knowledge and organisational effectiveness.

### **5.4.3 Implications of Knowledge Sharing**

For Decision Makers and Implementers, formal knowledge sharing was the aspect of knowledge sharing that was significant in regard to both organisational knowledge and organisational effectiveness, with informal networks serving a less important role. The opposite was the case for Affected Employees, where the significant aspect of knowledge sharing was informal networks.

Decision Makers and Implementers may possibly view informal networks fulfilling a social purpose, as suggested by Brown and Duguid (1991) and others (cf Lesser 2000), but not a crucial knowledge dissemination function. If informal networks are viewed as social rather than operational, this may also explain why they were also not found to be a significant determinant of post-downsizing/restructuring organisational effectiveness for Decision Makers and Implementers.

The findings regarding formal knowledge sharing and informal networks show that each has greater significance to one group than to the other. It is therefore important for those implementing downsizing/restructuring to be aware of this difference and ensure adequate attention is paid to support and retention of informal networks for Affected Employees whilst also ensuring formal knowledge sharing mechanisms are maintained, for Decision Makers and Implementers.

Organisations should also consider the mechanisms utilised to enable knowledge sharing to occur when undergoing downsizing/restructuring. Attention needs to be given to organisational structure, climate and culture (Widen-Wulff & Ginman 2004) in order to strengthen the sharing of knowledge for improved organisational outcomes. Formal knowledge sharing may be implemented for its stated purpose of knowledge dissemination; however, it may also contribute to an environment and climate conducive to effective organisational outcomes.

For most respondents, the increased presence of informal networks resulted in increased organisational knowledge, as well as perceived organisational effectiveness, supporting Brown and Duguid's (1991) concept of communities of practice, social capital and network theories (cf Lesser, 2000; Nahapiet & Ghosal, 1998; Brass, 1995). Organisations contemplating downsizing/restructuring therefore need to be aware of the existence of informal networks within and across the organisation. Managers should be cognisant of the importance of informal networks in knowledge dissemination and retention to the general organisational population. Such understanding may determine the direct support they provide to employees in achieving outcomes through access to sources of tacit knowledge, through assistance, advice, mentoring and other informal support mechanisms. Many of the changes in employee attitudes and behaviour reported in the downsizing literature are considered to result from changes in group dynamics and levels of trust. Whilst this is undoubtedly true, the loss of knowledge and breakdown of informal networks which occur as a result of downsizing/restructuring may also explain some or all of the symptoms of 'survivor syndrome' (cf Appelbaum et al. 1997). Organisations should therefore consider ensuring informal networks, especially communities of practice, are supported with time and resources being made available to employees in promoting an environment and culture that recognise the value of the networks.

It is also advisable for organisations undertaking downsizing/restructuring to ensure jobs and roles are clearly defined and understood. Brown and Duguid (1991) contend that outlining roles in a set of simple tasks represented in a job description is insufficient. The level of understanding of a role that is required to undertake it effectively is not always appreciated. Content of job descriptions need to go further than task lists, but rather reflect the complexity of context, depicted through both formal and informal networks, within which job occupants achieve their performance outcomes. Such understanding encompasses the ad hoc decision-making, networking and context variables inherent in a role that are not reflected in a job description.



Organisations implementing downsizing/restructuring may also be well advised to ensure formal knowledge sharing strategies are in place prior to any downsizing/restructuring occurring, in order to help develop a culture and climate conducive to improved organisational outcomes.

## **5.5 SUMMARY OF HYPOTHESIS TESTING**

The findings of the research provide little support for hypotheses relating to the impact of downsizing/restructuring decisions. This suggests that decisions are not perceived to be as important an aspect of downsizing/restructuring events to respondents as are the processes. The general support for corresponding hypotheses regarding downsizing/restructuring processes, together with the extensive literature in this field, indicates the translation of decisions into actual processes experienced by those undergoing downsizing/restructuring may be of greater importance in determining organisational outcomes.

Overall, the testing of the remaining hypotheses provided different findings between Successful and Unsuccessful Organisations. The findings suggest that strong processes and knowledge sharing mechanisms are already present in Successful Organisations and are perceived to remain the same after downsizing/restructuring. However, the absence of sound processes and knowledge sharing mechanisms (formal and informal) may be predictive of poor organisational outcomes. .

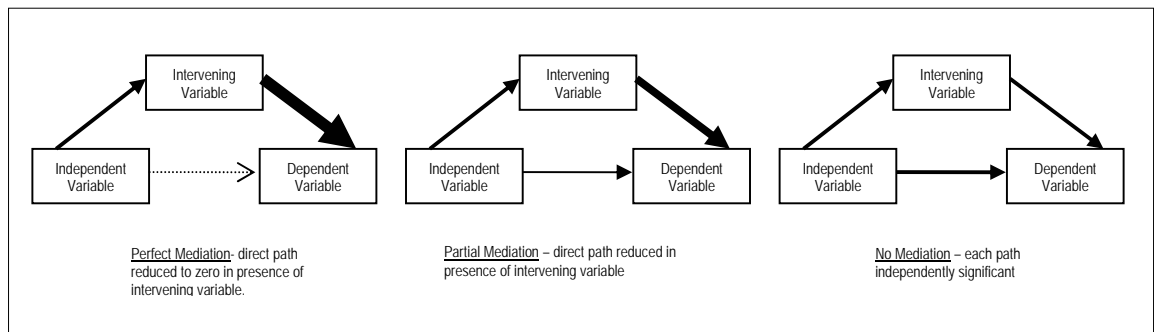
## **5.6 MEDIATING EFFECT OF ORGANISATIONAL KNOWLEDGE**

As outline in the previous Chapter, for mediation to be evident it is necessary for the intervening variable (organisational knowledge) to have a significant affect on the dependent variable (organisational effectiveness). This relationship is the subject of Hypothesis 1 and was supported for the full data set, and both Decision Makers and Implementers and Affected Employee in Unsuccessful Organisations. In Successful Organisations however, Hypothesis 1 was not supported indicating no mediation of any of the independent variables by organisational knowledge was evident in these organisations.

### 5.6.1 Mediation Testing

Tests for mediation effects, the types of which are presented in Figure 5.6, may find that either 'perfect' or 'partial' mediation is present, or that no mediation is evident. Perfect mediation occurs if changes in the dependent variable are due solely to the effects of the intervening variable; that is, in the presence of the intervening variable the impact of the independent variable ceases to be significant. Partial mediation is said to occur if changes in the dependent variable are attributable partially to the intervening and partially to the independent variable so that the resultant impact on the dependent variable is the combined effect of both variables. The theory and testing processes for mediation were discussed in Chapter 4.

Figure 5.6 Types of Mediation



The independent variables of downsizing/restructuring processes, formal knowledge sharing and informal networks were explored due to their significant impact on organisational knowledge. The independent variable of downsizing/restructuring processes examined the extent to which organisations implemented strategies to retain knowledge, formal knowledge sharing identified respondents' perceptions of the amount of formal knowledge sharing perceived to occur in their organisation and informal networks compared perceptions of presence of informal networks during and after the downsizing/restructuring. In this study, no significant relationships were found in relation to downsizing/restructuring decisions.

Multiple regression analyses were conducted to identify whether organisational knowledge had a mediating effect between each independent variable and organisational effectiveness. If organisational knowledge was found to mediate (perfectly or partially) the relationship between the independent variable and dependent variable, the apparent direct relationship could be attributed to this mediation. If mediation was not evident, then explanations already proposed for the direct effects on organisational effectiveness in the previous discussion may hold. Table 5.1 provides a summary of all mediation testing results, with detailed analysis of findings provided in Chapter 4.

The table is divided into three horizontal blocks presenting first the findings for the full data set ('All Organisations'), divided also into Decision Makers and Implementers and Affected Employee subsets. The second horizontal block presents the findings for the total Successful Organisation dataset, together with its Decision Makers and Implementers and Affected Employee subsets. The final horizontal block presents the findings for the total Unsuccessful Organisation dataset as well as its Decision Makers and Implementers and Affected Employee subsets. The columns indicate the outcomes of the mediation testing for each independent variable.

The presence of mediation supported the research premise that the effect of any independent variable on the dependent variable was attributable to their impact on organisational knowledge. Absence of any mediating effect suggested that where the independent variable had a significant effect on organisational knowledge it also had an unrelated significant effect on organisational effectiveness.

Table 5.1 Summary of Mediation Testing Across All Data Sets

	Analysis:  Population:	Mediating effect of Organisational Knowledge on relationship between Independent Variables & the Dependent Variable (Organisational Effectiveness)			
		Downsizing/ Restructuring Decisions	Downsizing/ Restructuring Processes	Formal Knowledge Sharing	Informal Networks
All Organisations	All Organisations	None	Partial	Perfect	Partial
	All Organisations - Decision Makers and Implementers	None	Perfect	Partial	Perfect
	All Organisations - Affected Employees	None	Partial	Perfect	Partial
Successful Organisations	All Successful Organisations	None	None	None	None
	Successful Organisations – Decision Makers and Implementers	None	None	None	None
	Successful Organisations – Affected Employees	None	None	None	None
Unsuccessful Organisations	All Unsuccessful Organisations	None	Partial	Perfect	Partial
	Unsuccessful Organisations – Decision Makers and Implementers	None	Perfect	Perfect	None
	Unsuccessful Organisations – Affected Employees	None	Partial	Perfect	Partial

### 5.6.2 Mediation Outcomes

A degree of mediation was evident in all cases within the full data set and the majority of cases in Unsuccessful Organisations, the exception being in regard to informal networks amongst Decision Makers and Implementers. This indicates that the impact of downsizing/restructuring processes, formal knowledge sharing and informal networks on organisational effectiveness was at least partly due to their effects on organisational knowledge. The presence of mediation by organisational knowledge in those organisations where organisational effectiveness was reduced after downsizing/restructuring (Unsuccessful Organisations), and its absence in Successful Organisations,

supports the view that knowledge loss is a significant issue in downsizing/restructuring as suggested by previous researchers (cf Cross & Travaglione 2004; Gregory 1999).

#### Downsizing/Restructuring Processes

The mediation evident amongst respondents in the full data set, and both Decision Makers and Implementers and Affected Employees in Unsuccessful Organisations, indicates that whilst downsizing/restructuring processes had a significant direct impact on organisational effectiveness, this was also attributable to the impact of processes on organisational knowledge. The predominantly partial mediation suggested that whilst processes did have an effect on organisational knowledge, a direct effect on organisational effectiveness was also apparent. The latter relationship may be attributable to the way in which the processes were perceived regarding procedural fairness, trust in management and the messages interpreted from the decisions and resultant actions experienced.

This finding supports the views of Armstrong-Stassen (2004) and Brockner and colleagues (cf 2000, 1995, 1994), who found that low perceptions of procedural justice by both victims and survivors resulted in adverse individual reactions to the downsizing, and subsequently to the organisation. Conversely, where organisations demonstrated they valued and cared about the welfare of employees, those employees responded more positively to the downsizing/restructuring than where such organisational support was not present. Thus, perceptions of the effectiveness of the organisation may be enhanced where organisational support is evident in implementation processes inherent in downsizing/restructuring.

#### Formal Knowledge Sharing

The predominance of perfect mediation evident amongst respondents in the total data set and in Unsuccessful Organisations indicates that the impact of formal knowledge sharing on organisational effectiveness is largely attributable

to its impact on organisational knowledge. The mediation of formal knowledge sharing by organisational knowledge in Unsuccessful Organisations suggests that less evidence of formal knowledge sharing results in lower levels of organisational knowledge. The perceived lack of knowledge sharing strategies may imply a negative, unsupportive culture and climate, not conducive to improved organisational outcomes.

The findings indicate only partial mediation in regard to Decision Makers and Implementers in Unsuccessful Organisations, which may indicate that for this group formal knowledge sharing is not only about retaining organisational knowledge but also directly impacts on organisational outcomes. As discussed previously, it is possible that formal knowledge sharing may be indicative of organisational culture and climate. The nature of this culture and climate appears to be important in determining the success of organisational outcomes. Research in the area of knowledge creation and knowledge sharing (Aramburu, Saenz & Rivera 2006), as well as perceptions of organisational climate and culture (Parker et al. 2003; Wooldridge & Minsky 2002), suggests this may be attributable to the effects of organisational culture and climate on individuals' perceptions of the organisation and their subsequent work performance.

Lack of support for formal knowledge sharing and a culture and climate engendered by limited formal knowledge sharing opportunities, may explain decreased perceptions of organisational effectiveness in Unsuccessful Organisations, where reduced formal knowledge sharing is reported. The absence of formal knowledge sharing activities may signal to employees a culture and climate, and perhaps even expectations of their behaviour, not conducive to improved organisational effectiveness. Organisations implementing downsizing/restructuring may be well advised to ensure formal knowledge sharing strategies are in place prior to any downsizing/restructuring occurring, in order to help develop a culture and climate which is conducive to improved organisational outcomes.

### Informal Networks

Mediation of informal networks by organisational knowledge was evident in regard to all respondents in the total data set and in Unsuccessful Organisations with the exception of Decision Makers and Implementers in the Unsuccessful Organisations. No mediation was evident for this group since no significant relationship between informal networks and either organisational effectiveness or organisational knowledge was found.

In the majority of cases the variable of informal networks was perfectly or partially mediated by organisational knowledge, indicating that its impact on organisational effectiveness was attributable to some extent to its affect on organisational knowledge. This suggests that informal networks served to build and retain knowledge as well as directly affecting organisational outcomes. Brown and Duguid's (1991) communities of practice, together with social capital (Leana & Van Buren 2000) and network theories (Lesser & Prusak 1999; Nahapiet & Ghoshal 1998), put forward the importance of informal interactions between people in both sharing of knowledge and achievement of outcomes. Further explanation in support of this proposal is found in the research of Fisher and White (2000) and Gregory (1999). The former researchers use the social network frame to discuss the impact of downsizing, particularly in learning organisations. Fisher and White (2000) state that the effects of downsizing are related exponentially to the size of the network. That is, the loss of 10% of employees may result in a significantly greater loss in organisational learning capacity, since each of those employees is involved in multiple networks within the organisation. They consider that, given the emphasis placed in business strategy literature on the importance of developing, building and protecting organisational core competencies, this is a key issue for consideration in any downsizing initiative. These authors stress the need to consider both formal and informal networks in decisions about specific 'targets' of layoffs by mapping these networks and establishing the 'key players' in them.

Gregory (1999) focuses primarily on the importance of networks and knowledge loss through downsizing on subsequent product development. The impact on product development provides a useful measure of organisational effectiveness subsequent to downsizing, albeit limited to production environments. She also discusses the need for both formal and informal communication channels to be recreated, and highlights the loss of product champions through the downsizing process. Product champions, she suggests, are often replaced with less knowledgeable managers lacking the networks necessary to ensure product development proceeds effectively. This network breakdown through downsizing and restructuring may also help explain the findings of this study.

For Decision Makers and Implementers in Unsuccessful Organisations, informal networks did not have a significant knowledge building and dissemination role as it did with other groups, nor did it significantly impact on organisational effectiveness. The absence of any significant impact of informal networks for this group is contrary to the views expressed by social capital and network theorists (Leana & van Buren; Lesser, 2000; Brass, 1995) that workers achieve organisational outcomes by access to others through social interaction and informal networks. Therefore, for Decision Makers and Implementers in both Successful and Unsuccessful Organisations, informal networks may be of little consequence or primarily serve social and support roles rather than contributing to organisational knowledge or effectiveness. As discussed previously formal knowledge sharing strategies, for this group, may be the preferred knowledge dissemination mechanisms.

The difference in perceptions of Decision Makers and Implementers and Affected Employees suggests informal networks may play an important role as a channel for knowledge dissemination for the latter, whilst they may be unimportant for the former. Due to their position in the organisational hierarchy, Decision Makers and Implementers may have other mechanisms for gaining and disseminating knowledge. Affected Employees, however, may require their



networks, in the form of communities of practice or other informal groups, to access necessary information and achieve necessary outcomes.

Those planning and implementing downsizing/restructuring could easily overlook the importance of informal networks to Affected Employees, with resultant impact on organisational outcomes. It may therefore be advisable for informal networks to be investigated, and mapped as suggested by Fisher and White (2000), as part of any downsizing/restructuring implementation process.

## **5.7 CONCLUSION**

This Chapter presented a discussion of the major findings of the research drawn from the descriptive statistics and structural relationships identified through data analysis presented in Chapter Four. Key findings in relation to the impact of each of the independent variables were provided together with recommendations to improve organisational outcomes of restructuring/downsizing for those organisations planning these strategies.

### Downsizing/Restructuring Events

The findings of the research showed little support for hypotheses relating to downsizing/restructuring decisions, suggesting that decisions are not perceived by respondents to be an important aspect of downsizing/restructuring events. The general support for corresponding hypotheses regarding downsizing/restructuring processes, however, suggests that *processes* resulting from decisions may be of greater importance to those undergoing downsizing/restructuring in determining perceptions of subsequent organisational effectiveness.

Since the findings demonstrate that downsizing/restructuring decisions are not a key determinant of outcomes, it appears the processes that organisations adopt are the determinants of perceived success or otherwise of downsizing/restructuring strategies. How downsizing/restructuring events are experienced may be the result of both decisions taken and the translation of those decisions into processes which respondents experience. Future research

separating decisions and processes may provide further insights into this aspect of successful downsizing/restructuring. However, it is clear that in regard to improved organisational outcomes through downsizing/restructuring events, the processes implemented should promote knowledge retention together with a positive climate and culture through honest and transparent strategies for which decision-makers are held accountable.

### Knowledge Sharing

Knowledge sharing, through both formal strategies and informal networks, was generally found to increase organisational knowledge and contribute to organisational effectiveness, with the exception of data drawn from those in Successful Organisations.

From the point of view of Decision Makers and Implementers, formal knowledge sharing was the main determinant of organisational effectiveness with informal networks predicting organisational effectiveness for Affected Employees. This finding suggests that informal networks are perceived in a different light by the two groups, which may result in management underestimating the importance of informal networks to their employees whilst over-estimating the value of formal knowledge sharing.

For Decision Makers and Implementers, informal networks may be seen to fulfil a social purpose but not a crucial knowledge dissemination function. If informal networks are viewed as social rather than operational, this may explain why they were not found to be significant determinants of organisational effectiveness for Decision Makers and Implementers. Organisations contemplating downsizing/restructuring need to be aware of the existence of informal networks within and across the organisation. Managers should be cognisant of the importance of informal networks to employees. This awareness may determine the direct support they provide to employees, such as assistance, advice, mentoring and other informal support mechanisms. Organisations should also consider ensuring informal networks, especially communities of practice, are supported

by allowing time and providing resources for employees to participate in informal networking activities and creating an environment and culture that recognises their value.

The findings also suggest that the mechanisms utilised to enable knowledge sharing to occur should be considered by organisations undergoing downsizing/restructuring. Organisations need to pay attention to organisational structure, climate and culture in order to strengthen the sharing of knowledge if they are to achieve improved organisational outcomes. This might include designing flatter organisational structures that avoid a 'silo' mentality, where knowledge is owned within a branch or division. Encouraging and rewarding knowledge sharing so that employees do not feel sharing their knowledge will decrease their power or influence within the organisation, should also be supported. Further, developing an overall culture that supports teamwork and alignment with organisational goals, so that sharing of knowledge is seen to contribute to organisational outcomes, may optimise gains in the downsizing/restructuring environment.

#### Successful and Unsuccessful Organisations

The hypotheses were mainly supported in Unsuccessful Organisations and largely unsupported in Successful Organisations. The difference in findings between Successful and Unsuccessful Organisations suggests that good processes and knowledge sharing mechanisms may already be present in Successful Organisations and serve to support successful outcomes. However, the absence of sound processes and knowledge sharing mechanisms (formal and informal) may result in poor organisational outcomes.

The results of the mediation analysis also provide consideration for businesses undergoing downsizing/restructuring, particularly in relation to Successful and Unsuccessful Organisations. In Successful Organisations no mediation was evident, suggesting *increasing* knowledge is not necessary for successful outcomes to be achieved. The findings for Unsuccessful Organisations were that

organisational knowledge mediated the relationships between the independent variables of downsizing/restructuring processes and knowledge sharing and organisational effectiveness in most cases. This highlighted the importance of knowledge retention in determining organisational outcomes after downsizing/restructuring. The loss of organisational knowledge may explain much of the perceived poor organisational outcomes reported in Unsuccessful Organisations, as proposed in the hypotheses.

The apparent lack of support for most of the hypotheses in Successful Organisations, both in regard to downsizing/restructuring events and knowledge sharing, may indicate that in these organisations, sound processes and both formal and informal knowledge sharing mechanisms are already in place. The presence of such systems may facilitate improved organisational outcomes from downsizing/restructuring and contribute to a positive organisational culture and climate, often associated with superior organisational performance.

The final Chapter further considers the practical implications for business resulting from this research together with discussion of the limitations of the study and implications for future research. The Chapter will also consider how the research contributes to the existing literature in the field and concludes with a final summary of the thesis.

## **CHAPTER SIX**

### **CONCLUSION**

#### **6.0 INTRODUCTION**

This thesis evaluated the impact of downsizing/restructuring events and knowledge sharing on perceived levels of organisational knowledge and perceptions of post-downsizing/restructuring organisational effectiveness in respondent organisations. Through investigating downsizing/restructuring events, the thesis examined the impact of decisions taken by organisations undergoing downsizing/restructuring as well as the practices they implement during the downsizing/restructuring process. The impact of knowledge sharing was assessed by studying the extent of formal knowledge sharing and informal networks present in respondent organisations.

Chapter One introduced the thesis with a brief discussion of the background and reasons for conducting the study together with an overview of the methodology, data collection and analysis. Chapter Two described the conceptual framework and reviewed the literature, culminating in development of the hypotheses for investigation. Chapter Three presented the methodology used in the two phases of the research together with an explanation of the research paradigm and research questions. The Chapter also outlined the sampling process, methods of data reduction and analysis, and explained the construct development and their use in the analysis.

Chapter Four presented the findings of the data analyses for the full data set and the data divided into 'Successful' and 'Unsuccessful' organisations. All data sets were also divided into 'Decision Makers and Implementers' and 'Affected Employees'. Comparisons were made between these sets in order to identify what differences may be attributed to the differing roles of participants in the downsizing/restructuring, together with differences also identified between Successful and Unsuccessful organisations. Correlation and multiple regression analyses were used, including testing for mediation between variables to explore

if the intervening variable (organisational knowledge) mediated relationships between the independent and dependent variables. In Chapter Five the major findings were discussed, explanations proposed and implications identified.

This Chapter summarises the practical implications for business resulting from this research. Limitations of the study and shortcomings in the research methodology are identified and discussed, together with implications for future research. This Chapter also considers how the research contributes to existing literature in the field and concludes with a final summary of the thesis.

## **6.1 SIGNIFICANCE AND IMPLICATIONS FOR BUSINESS**

Previous research into downsizing and restructuring has been undertaken in recent years, much of which indicates poor results associated with downsizing/restructuring in many instances (Yu & Park 2006; Williams 2004; Cascio, Young & Morris 1997; Cascio 1993; Kozlowski et al. 1993). This is despite numerous clear arguments in favour of the potential effectiveness of downsizing/restructuring strategies (Bruton, Keels & Shook 1996). To date the research has focused primarily on organisational performance outcomes from two main perspectives:

- the appropriateness of the strategic business decision to undertake downsizing/restructuring; that is when downsizing/restructuring *is* and *is not* the best course of action for the organisation (Bruton, Keels & Shook 1996), and
- the impact of the downsizing/restructuring implementation process on subsequent employee behaviour and performance (cf Brockner, Wiesenfeld & Martin 1995; Cameron, Freeman & Mishra 1991; Brockner et al. 1987).

This study considered other aspects of downsizing and restructuring; that is, the impact of perceptions about downsizing/restructuring events (decisions and processes) and knowledge sharing (formal knowledge sharing and informal networks) on the perceived level of organisational knowledge and their effect on

perceptions of subsequent organisational effectiveness. The research questions posed first canvassed whether a direct causal link is evident between perceived level of organisational knowledge and post-downsizing/restructuring organisational effectiveness.

Retention of knowledge is essential to achievement of organisational outcomes (cf Drucker 2000; Gregory 1999; Grant 1996; Nonaka 1994; Barney 1991). If infrastructure, practices and knowledge management approaches that support knowledge retention are established, improved organisational outcomes can be achieved from downsizing/restructuring. The findings show that whilst organisational knowledge can be used as a predictor of organisational effectiveness in general, in Successful Organisations this is not the case. This suggests that knowledge loss has a negative impact on organisations; but it is the retention of knowledge, rather than its increase that is necessary for improved outcomes to be achieved. Organisations considering downsizing/restructuring should therefore consider the culture and climate of the organisation in regard to mechanisms for knowledge retention and how knowledge can be retained, within their implementation strategies.

In examining whether direct causal links are evident between post-downsizing/restructuring organisational effectiveness and either downsizing/restructuring events (decisions and processes) or knowledge sharing, formal or informal, the study demonstrated mixed results. Downsizing/restructuring processes and informal networks both showed a direct causal link with subsequent organisational effectiveness whilst downsizing/restructuring decisions and formal knowledge sharing did not.

The findings suggest that those instigating downsizing or restructuring in organisations need to be cognisant of the impact of such initiatives on employees and seek to ensure the experience is as constructive as possible. This may be realised by building a positive climate and culture through honest and transparent strategies for which decision-makers are held accountable.

This parallels previously reported views (cf Kozlowski et al 1993; Taylor and Giannantonio (1993)) that more positive outcomes are associated with proactive rather than reactive downsizing. Further, downsizing is more effective when it is part of a planned and intentional strategy responding to the change, rather than the driving force behind it (Freeman, 1999). Inherent in proactive approaches are time to plan the process, as well as communicating openly with staff and involving them in the decision-making as canvassed in the survey instrument. Time is also required for employees to prepare for the change and make necessary arrangements such as documenting procedures and handing over tasks. Support strategies, such as counselling to assist employees deal with the changes, together with training in new skills required for changed roles, and redesign of jobs and systems are also important in ensuring a positive experience for employees and maximising knowledge retention.

Informal networks were found to have a direct impact on organisational effectiveness which supports previous findings (Leana & Van Buren 2000) Lesser & Prusack 1999; Nahapiet & Ghoshal 1998) about the important role of informal networks in the achievement of organisational goals. For management within organisations, this suggests the need to support and encourage informal networks through providing time and resources and developing a culture that recognises the value of such networks. This is particularly important during times of change and when employees are likely to be exiting the organisation or moving to new roles without access to networks previously in place.

The study demonstrated the significant impact of downsizing/restructuring processes (though not decisions) and knowledge sharing, formal and informal, on organisational knowledge. Enhancement of each of these was shown to improve levels of organisational knowledge. Considering the previous finding of the importance of organisational knowledge to improved organisational effectiveness, the final research question examined whether the significance of downsizing/restructuring events (decisions and processes) or knowledge sharing, either formal or informal, on organisational effectiveness can be



explained by their effect on organisational knowledge. That is, are the relationships between downsizing/restructuring events or knowledge sharing and organisational effectiveness mediated by organisational knowledge?

With the exception of downsizing/restructuring decisions, all relationships were mediated by organisational knowledge. This indicates that in order to achieve improved organisational effectiveness after downsizing/restructuring, organisations need to ensure the maintenance of organisational knowledge. The processes followed should take account of how organisational knowledge will be affected and promote knowledge retention. Further, knowledge sharing strategies for support of same are important considerations. This research suggests that the issue of how knowledge is shared may be a source of potential failure in this regard by organisations. Decision Makers and Implementers indicated knowledge sharing through formal mechanisms was essential to improved perceptions of organisational knowledge and subsequent organisational effectiveness. Thus, this group are likely to concentrate on formal knowledge sharing processes such as information systems for capture, storage and access of information (Gore & Gore, 1999), formal communication channels, briefings and meetings. It is not suggested that these actions lack benefit; however, the findings for the Affected Employee groups indicate that informal networks are of significant importance in obtaining necessary knowledge. Therefore, steps need to be taken to support these networks before, during and after the transition if knowledge is to be effectively shared across all organisational levels. This can be achieved in part through activities similar to those that build a culture and climate of trust, openness and accountability, found to be important in achieving improved organisational effectiveness after downsizing/restructuring.

## **6.2 LIMITATIONS**

As with any research project, issues came to light through the course of the study which imposed some limitations. These related to sample and nature and scope of questions.

### **6.2.1 Sample**

Although every attempt was made to obtain data from a cross-section of industries, the sample was largely representative of organisations in the public sector and in 'white collar' industries, which were more willing to participate than industries such as retail and construction. A broader and more representative sample of industries would have enabled some cross-industry comparisons which may have demonstrated industry based trends or confirmed greater 'generalisability' of the findings.

Since the study relied on self-nomination of respondents within participant organisations, the number of responses received varied from one to over 100 per organisation. This resulted in disproportionate representation from some organisations within the full data set. This could have been overcome by specifying a restricted number of respondents per organisation; however, doing so would likely have reduced the number of respondents per organisation which would have decreased the total sample size. Nonetheless, by obtaining as many different views as possible from within each organisation, particularly from both Decision Makers and Implementers and Affected Employees, greater depth within organisations was possible. The data was enriched by organisations being represented by multiple respondents compared with the general one response per organisation used in many studies.

The sample also showed prevalence of Affected Employees, with this group representing over 70% of the sample. Although apparently disproportionate, this is reflective of the general structure within organisations where Decision Makers and Implementers make up significantly less numbers in an organisation than general employees. To overcome any potential bias this may have created, the analysis divided data into Decision Makers and Implementers and Affected Employees for separate analysis and comparison, both in the total data set and in Successful and Unsuccessful Organisations.

The emotive nature of downsizing/restructuring experiences for many employees may have meant that self-selection resulted in a bias towards those with strong, potentially negative feelings about the downsizing/restructure, as opposed to those with more positive responses. This bias was evident in the qualitative feedback comments provided in response to the concluding open-ended question in the survey. While there were a greater number of respondents from Unsuccessful Organisations in the sample, there were sufficient Successful Organisations for the data to be statistically analysed.

Use of primarily electronic data collection may also have influenced the sample to some extent, biasing it towards those with computer literacy and access to technology. This issue was discussed in Chapter 3 and considered to be outweighed by the wider access within participant organisations that it enabled compared with more traditional paper-based surveys.

### **6.2.2 Nature and Scope of Questions**

Respondents' perceptions were sought in the design of the survey items, even though these are interpretive and therefore not 'fact'. However, the research sought to establish perceptions of post-downsizing/restructuring organisational effectiveness through utilisation of 'soft' rather than financial or economic indicators of organisational performance. Respondents' perceptions were therefore relevant. From a Human Resource Management perspective, use of soft measures to establish perceptions of organisational effectiveness gave an indication of the organisations' reputation with their internal labour market. This reputation in turn contributes to organisations' reputation as employers of choice.

In analysing the data, it became apparent that formal knowledge sharing may serve additional purposes than simply knowledge dissemination. Formal knowledge sharing may have a role in shaping organisational culture and climate. Formal knowledge sharing activities may also provide opportunities for informal networking. Future research may benefit from inclusion of further

organisational context variables. For example, consideration of items addressing perceptions of organisational culture and purpose of formal knowledge sharing may provide opportunity to test the impact of formal knowledge sharing on culture and climate and on development and maintenance of informal networks.

In this research, no support was found for hypotheses regarding the relevance of decision-making, either in regard to perceived levels of organisational knowledge or organisational effectiveness. The study did not, however, distinguish between those making, and those implementing, decisions. Examination of perceptions of those making decisions regarding downsizing/restructuring, those implementing the decisions, as well as those whose job roles are impacted by the decisions would lead to further insight into the importance of decision-making and implementation processes. If the responses of those making decisions had been accessible, a direct relationship between downsizing/restructuring decisions and both organisational knowledge and organisational effectiveness may have been evident for this group, providing further support for the literature on organisational decision-making referred to in the Discussion.

The differences found between the perceptions of Decision Makers and Implementers and Affected Employees in regard to knowledge sharing suggests that further investigation of the specific nature of the formal knowledge sharing and informal networking activities would have been informative. Survey items canvassed these areas in general terms however did not explore the specific format of the formal knowledge sharing strategies or operation of the informal networks. More detailed understanding of what constitutes knowledge sharing may have enabled further analysis and explanation of the different findings provided by Decision Makers and Implementers and Affected Employees in this research.

As outlined in Chapter 3, the focus of this study was on organisations that had undergone recent downsizing, or restructuring to maintain stability. The relationship between organisational knowledge and organisational effectiveness in Successful Organisations was not found to be significant, indicating that an increase in organisational knowledge was not necessary for increased perception of organisational effectiveness. Future research would benefit from extending the study to organisations implementing growth strategies; that is, to examine if the relationship between organisational knowledge and organisational effectiveness is significant in organisations seeking to expand rather than contract their business. Such research would identify whether increasing organisational knowledge is necessary to bring about improved organisational effectiveness in this climate.

### **6.3 IMPLICATIONS FOR FUTURE RESEARCH**

The initial focus of the study was on organisational knowledge and informal networks. During the focus group process, aspects of formal knowledge sharing emerged and were included in the conceptual framework, survey development, analysis and discussion of the findings. Given the significant direct impact of formal knowledge sharing on organisational outcomes found amongst Decision Makers and Implementers in Successful Organisations, further research into the concept of 'formal knowledge sharing' and its possible organisational impact in addition to its knowledge dissemination function is warranted and would be of interest to those involved in implementation of knowledge sharing strategies.

Additionally, evident differences in perceived importance and operation of informal networks between Decision Makers and Implementers and Affected Employees warrants further investigation. Such research may contribute to understanding why these differences occur and how best to manage and support informal networks within organisations.

There was indication by employees within some organisations that downsizing had occurred as part of the restructuring. Whilst this perception was not

reported by their colleagues and such response was unexpected, it does reflect the complexity of this research area. As discussed in Chapter 2, there is no agreed definition of the term 'downsizing' and it is often used interchangeably with 'restructuring' and other related terms. Whilst in research and academic writing this can be defined, its practical meaning in industry is less clear.

Organisations that consider they are not undertaking downsizing, that is, their intention is not to reduce their workforce, may overlook the need to manage the process carefully and anticipate some of the employee reactions described by Appelbaum and colleagues (1997) as 'survivor syndrome'. Failure to anticipate and plan for these responses by employees may leave organisations with unexpected fall-out from their restructuring activities.

In the course of analysis, the importance of culture and climate became apparent. It was suggested that organisational structure conducive to knowledge sharing, as suggested by Wang and Ahmed (2003), may also help to explain some of the impact of formal knowledge sharing on organisational effectiveness. This may provide another useful area of further research.

Discussion of the relationship between formal knowledge sharing and organisational effectiveness suggested that formal knowledge sharing activities may also provide an opportunity for informal networking. By bringing employees together, these activities may foster development of communities of practice, with subsequent positive impact on organisational outcomes. Investigation of the nature and operation of both formal knowledge sharing and informal networks within organisations is also a further area of research in this field.

A significant number of studies on both knowledge sharing (cf Janz & Prasarnphanich 2003) and informal networks (cf Lesser 2000) were uncovered in researching this topic; however, little comparison between formal and informal knowledge sharing (cf Willem, Buelens & Scarborough 2006) was found. Further research into and comparison between formal and informal knowledge sharing

methods may also be informative and provide guidance for organisations in management of knowledge during downsizing/restructuring.

The findings of this research also suggest that decisions, at least in regard to downsizing/restructuring, have little relevance to those affected by them. Rather, the processes by which they are implemented are important to those who witness the outcomes of those decisions. The general support for hypotheses involving downsizing/restructuring processes and lack of support for those involving downsizing/restructuring decisions indicates that it is the translation of words (decisions) into actions (processes) that is of greatest relevance to the workforce. Further research into the relationship between decisions and the subsequent actions that result from them may be of relevance to organisational decision-makers.

#### **6.4 CONTRIBUTION**

Whilst the findings of this study are important in regard to management of downsizing/restructuring, such events are examples of turnover, albeit intentional, organisationally generated and often large scale. With an ageing population and imminent exit of large numbers of 'baby boomers' from the workforce, the issues regarding knowledge retention and formal and informal knowledge sharing have wider relevance to achievement of organisational outcomes.

Parise, Cross and Davenport (2006) point out that the knowledge loss that occurs when people depart from an organisation is not just loss of the information they hold, but also their contacts and those they collaborate with to achieve different outcomes. They highlight a number of examples of major companies who are grappling with the implications of significant knowledge loss through retirement of experienced managers. The current study adds to this field of investigation.

As well as departure from the workforce, knowledge loss is also associated with changing workforce demographics and the increased mobility of the workforce

as a whole compared with previous periods (Parise, Cross & Davenport 2006). The increased movement of employees between organisations, locations and careers has implications for organisations in regard to knowledge retention and support for maintenance of informal networks and corporate memory. The current study provided insights into formal knowledge sharing and the operation and impact of informal networks both as mechanisms for knowledge dissemination and also as integral aspects of the organisational culture and climate, contributing to overall organisational outcomes. It demonstrated the existence of significant differences in perceived importance of formal knowledge sharing and informal networks between those in managerial and decision-making roles and the general organisational population which may influence the ways in which knowledge is managed and retained, with subsequent impact on organisational outcomes.

This study also furthers the field of organisational and business research by distinguishing between managerial decisions and processes and highlighting how the two terms may not support each other. This study has shown that decisions may have little meaning until they are operationalised into actions within the organisation.

This research is one of few studies into downsizing and restructuring that examines both multiple organisations and multiple respondents within each participant organisation, across a wide range of industries and sectors. Previous studies have either conducted in-depth case study analysis of one or a small number of organisations (cf Cross & Travaglione 2004; Griggs & Hyland 2003); or, where multiple organisations have been included, these have often focused on specific industries, often with a single representative opinion from each organisation included (cf Burke 2004; Dawkins & Littler 2001; 1999; Collins & Harris 1999). Other research, particularly regarding survivor responses to downsizing, has been experimental in nature (cf Brockner et al. 2000; Brockner et al. 1997; Brockner et al. 1987; Brockner et al. 1986).



This study provides both a wide and deep cross section of organisations and their employees, across a broad range of industries. This combination of both breadth and depth enriches the findings and their applicability to the general workforce.

## **6.5 CONCLUSION**

This thesis presented a detailed review of the literature in the field of downsizing and organisational restructuring, together with knowledge, knowledge sharing and organisational effectiveness. A conceptual framework and hypotheses were developed for testing and the thesis described the methodology and findings of the comprehensive study undertaken. The thesis provided a detailed analysis of the impact of perceived levels of organisational knowledge on perceptions of post-downsizing/restructuring organisational effectiveness. The impact of the downsizing/restructuring events, both decisions and processes, and knowledge sharing on organisations undergoing downsizing/restructuring were also examined. Analysis of downsizing/restructuring decisions and processes indicated the need for these to be open and honest in order to achieve successful organisational outcomes.

The impact of knowledge sharing on organisational knowledge was assessed by studying the extent of both formal knowledge sharing and informal networks present in respondent organisations. The direct impact of knowledge sharing on organisational outcomes was also analysed and discussed. It was concluded that both formal knowledge sharing and informal networks have a significant impact not only on perceived levels of organisational knowledge but also on post-downsizing/restructuring organisational effectiveness. However, different aspects of knowledge sharing appear to be more significant to managerial and non-managerial employees.

For business, the findings of this study demonstrate a need to concentrate on organisational knowledge during downsizing/restructuring in order to achieve improved outcomes. The findings suggest this can be done through attention to

ensuring that intent and interpretation of the decisions and processes involved are open and honest. Assessment of the knowledge present in the organisation and a focus on retention of key individuals with important knowledge is also advisable. Communication of what is planned and inclusion of employees in both planning and implementation were identified as ways in which organisations can do so, thereby promoting distributive and procedural fairness throughout the process.

Formal knowledge sharing strategies arose as being important to achieving improved organisational outcomes, particularly to Decision Makers and Implementers. These strategies included identifying, capturing and storing information in ways that are accessible to employees. Documentation of practices and procedures was also found to be important as was careful planning of the change. Communication, providing training and support to survivors and allowing the necessary time for sharing knowledge were also identified as key strategies. Overall, developing a culture and climate within the organisation that is supportive of knowledge sharing was found to be central to achieving improved organisational effectiveness.

Informal networks were identified by Affected Employees as impacting on both perceived levels of organisational knowledge and, indirectly on organisational outcomes. The research indicates the Decision Makers and Implementers and Affected Employees have different perceptions about the role and importance of informal networks. Those implementing downsizing/restructuring may therefore need to examine the structure and operation of informal networks prior to downsizing/restructuring to ensure they are adequately supported during the process. Informal networks may also be utilised to assist in bringing about the change.

Organisational knowledge was found, in most instances, to mediate the relationship between the independent variables of downsizing/restructuring processes, formal knowledge sharing and informal networks and organisational

effectiveness. These results demonstrate the importance of knowledge retention in downsizing/restructuring. Perceptions between Decision Makers and Implementers and Affected Employees were found to be similar in regard to downsizing/restructuring events; however, formal and informal aspects of knowledge sharing were shown to be differently perceived by Decision Makers and Implementers and Affected Employees.

The findings of this research are important to assist organisations develop best practice approaches to downsizing/restructuring. With increasing acceptance of downsizing/restructuring as a business strategy, this research provides insights into key issues of knowledge retention as predictors of improved organisational outcomes. The findings also have relevance to organisations experiencing high turnover. Such turnover is likely to increase as mobility levels increase and the 'baby boomer' generation reaches retirement. The need to consider the implementation of downsizing/restructuring strategies, subsequent implications for knowledge retention and sharing, and their impact on organisational effectiveness will likely retain prominence in the organisational behaviour research agenda for a considerable period of time to come.

## REFERENCES

- Abraham, S. E. 2004, 'Layoff announcements and employee guarantee announcements. How do shareholders respond?' *International Journal of Manpower*, [Electronic], vol. 25, no. 8, pp. 729-740, Available: Emerald [2006, 18 December].
- ABS Catalogue No. 2901.0 - Working Population Profile 2003*, Australian Bureau of Statistics.
- Appelbaum, S. H., Close, T. G. & Klasa, S. 1999, 'Downsizing: an examination of some successes and more failures'. *Management Decision*, [Electronic], vol. 37, no. 5, pp. 424-436, Available: ProQuest [2003, 9 June].
- Appelbaum, S. H., Delage, C., Labib, N. & Gault, G. 1997, 'The Survivor Syndrome: aftermath of downsizing'. *Career Development International*, [Electronic], vol. 2, no. 6, pp. 278-291, Available: ProQuest [2003, 7 August].
- Appelbaum, S. H., Everard, A. & Hung, L. T. S. 1999, 'Strategic downsizing: critical success factors'. *Management Decision*, [Electronic], vol. 37, no. 7, pp. 535-552, Available: ProQuest [2003, 9 June].
- Appelbaum, S. H., Lavigne-Schmidt, S., Peytchev, M. & Shapiro, B. 1999, 'Downsizing: measuring the costs of failure'. *The Journal of Management Development*, [Electronic], vol. 18, no. 5, pp. 436-463, Available: ProQuest [2003, 9 June].
- Appelbaum, S. H. & Patton, E. 2002, 'Downsizing the university: bonne chance!' *The International Journal of Educational Management*, vol. 16, no. 3, pp. 126-136.
- Appelbaum, S. H., Patton, E. & Shapiro, B. 2003, 'The early retirement incentive program: a downsizing strategy', *Journal of European Industrial Training*, vol. 27, no. 1, pp. 22-35.

- Aramburu, N., Saenz, J. & Rivera, O. 2006, 'Fostering innovation and knowledge creation: the role of management context'. *Journal of Knowledge Management*, [Electronic], vol. 10, no. 3, pp. 157-168, Available: Emerald [2006, 18 December].
- Armstrong-Stassen, M. 2004, 'The Influence of Prior Commitment on the Reactions of Layoff Survivors to Organizational Downsizing', *Journal of Occupational Health Psychology*, vol. 9, no. 1, pp. 46-60.
- Armstrong-Stassen, M. 2005, 'Coping with Downsizing: A Comparison of Executive-Level and Middle Managers', *International Journal of Stress Management*, vol. 12, no. 2, pp. 117-141.
- Arthur, M. & Defillippi, R. 1998, 'Live and Let Learn: A project-based approach', *Management*, pp. 60-65.
- Barney, J. 1991, 'Firm Resources and Sustained Competitive Advantage', *Journal of Management*, vol. 17, no. 1, pp. 99-120.
- Bedeian, A. G. & Armenakis, A. 1998, 'The cesspool syndrome: How dreck floats to the top of declining organisations', *Academy of Management Executive*, vol. 12, no. 1, pp. 58-67.
- Bollinger, A. S. & Smith, R. D. 2001, 'Managing organizational knowledge as a strategic asset'. *Journal of Knowledge Management*, [Electronic], vol. 5, no. 1, p. 8, Available: ProQuest [2003, 14 October].
- Brass, D. J. 1995, 'A social network perspective on human resources management', *Research in Personnel and Human Resource Management*, vol. 13, pp. 39-79.
- Brockner, J., Chen, Y.-R., Mannix, E. A., Leung, K. & Skarlicki, D. P. 2000, 'Culture and Procedural Fairness: When the Effects of What You Do Depend on How You Do It'. *Administrative Science Quarterly*, [Electronic], vol. 45, pp. 138-159, Available: ProQuest [2003, 25 March].

- Brockner, J., Greenberg, J., Brockner, A., Bortz, J., Davy, J. & Carter, C. 1986, 'Layoffs, Equity Theory, and Work Performance: Further Evidence of the Impact of Survivor Guilt', *Academy of Management Journal*, vol. 29, no. 2, pp. 373-384.
- Brockner, J., Grover, S., Reed, T., DeWitt, R.-L. & O'Malley, M. 1987, 'Survivors' Reactions to Layoffs: We Get by with a Little Help for Our Friends'. *Administrative Science Quarterly*, [Electronic], vol. 32, pp. 526-541, Available: ProQuest [2003, 25 March].
- Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin, C. & Bies, R. J. 1994, 'Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss'. *Academy of Management Journal*, [Electronic], vol. 37, no. 2, pp. 397-410, Available: Expanded Academic ASAP [2002, 11 November].
- Brockner, J., Siegel, P. A., Daly, J., Tyler, T. R. & Martin, C. 1997, 'When Trust Matters: The Moderating Effect of Outcome Favourability'. *Administrative Science Quarterly*, [Electronic], vol. 42, pp. 558-583, Available: ProQuest [2003, 25 March].
- Brockner, J., Tyler, T. R. & Cooper-Schneider, R. 1992, 'The influence of prior commitment to an institution on reactions to perceived unfairness: the higher they are, the harder they fall (Process and Outcome: Perspectives on the Distribution of Rewards in Organizations'. *Administrative Science Quarterly*, [Electronic], vol. 37, no. 2, pp. 241-262, Available: Expanded Academic ASAP [2002, 11 November].
- Brockner, J., Wiesenfeld, B. M. & Martin, C. 1995, 'Decision Frame, Procedural Justice, and Survivors' Reactions to Job Layoffs', *Organizational Behaviour and Human Decision Processes*, vol. 63, no. 1, pp. 59-68.
- Brown, J. S. & Duguid, P. 1991, 'Organizational learning and communities of practice: Toward a unified view of working, learning and innovation'. *Organization Science*, [Electronic], vol. 2, no. 1, pp. 40-57, Available: <http://www2.parc.com/ops/members/brown/papers/orglearning.html> [2003, 3 September].

- Bruton, G. D., Keels, J. K. & Shook, C. L. 1996, 'Downsizing the firm: Answering the strategic questions', *Academy of Management Executive*, vol. 10, no. 2, pp. 38-45.
- Budros, A. 1997, 'The new capitalism and organizational rationality: the adoption of downsizing programs, 1979 -1994'. *Social Forces*, [Electronic], vol. 76, no. 1, pp. 229-251, Available: Expanded Academic ASAP [2002, 18 November].
- Burke, R. J. 2004, 'Implementation of Hospital Restructuring and Nursing Staff Perceptions of Hospital Functioning', *Journal of Health Organization and Management*, vol. 18, no. 4/5, pp. 279-289.
- Burke, R. J. & Greenglass, E. R. 2000, 'Organizational Restructuring: Identifying Effective Hospital Downsizing Processes', in *The Organization in Crisis*, eds. Burke, R. J. & Cooper, C. L., Blackwell, Oxford.
- Cameron, K. S. 1994, 'Strategies for Successful Organizational Downsizing', *Human Resource Management*, vol. 33, no. 2, pp. 189-211.
- Cameron, K. S., Freeman, S. J. & Mishra, A. K. 1991, 'Best Practices in White-Collar Downsizing: Managing Contradictions'. *Academy of Management Executive*, [Electronic], vol. 5, no. 3, p. 57+, Available: ProQuest [2002, 19 November].
- Cameron, K. S., Freeman, S. J. & Mishra, A. K. 1993, 'Downsizing and Redesigning Organizations', in *Organizational Change and Redesign*, eds. Huber, G. P. & Glick, W. H., Oxford University Press, New York, pp. 19-63.
- Cameron, K. S. & Smart, J. 1998, 'Maintaining Effectiveness Amid Downsizing and Decline in Institutions of Higher Education', *Research in Higher Education*, vol. 39, no. 1, pp. 65-86.
- Carbery, R. & Garavan, T. N. 2005, 'Organisational restructuring and downsizing: issues related to learning, training and employability of

survivors', *Journal of European Industrial Training*, vol. 29, no. 6, pp. 488-522.

Cascio, W. F. 1993, 'Downsizing: what do we know? What have we learned?' *Academy of Management Executive*, [Electronic], vol. 7, no. 1, pp. 95-105, Available: Expanded Academic ASAP [2002, 11 November].

Cascio, W. F. 2002, 'Strategies for Responsible Restructuring', *Academy of Management Executive*, vol. 16, no. 3, pp. 80-91.

Cascio, W. F., Young, C. E. & Morris, J. R. 1997, 'Financial Consequences of Employment-Change Decisions in Major US Corporations', *Academy of Management Journal*, vol. 40, no. 5, pp. 1175-1189.

Clarke, T. & Rollo, C. 2001, 'Capitalising Knowledge: Corporate Knowledge Management Investments', *Creativity and Innovation Management*, vol. 10, no. 3, pp. 177-188.

Cohen, D. & Prusack, L. 2001, *In Good Company: How Social Capital Makes Organizations Work*, Harvard Business School Press, Boston, Massachusetts.

Cole, M., Harris, S. & Bernerth, J. 2006, 'Exploring the implications of vision, appropriateness, and execution of organizational change'. *Leadership and Organization Development Journal*, [Electronic], vol. 27, no. 6, pp. 352-367, Available: Emerald [2006, 18 December].

Collins, A. & Harris, R. I. D. 1999, 'Downsizing and Productivity: The Case of UK Motor Vehicle Manufacturing 1974-1994'. *Managerial and Decision Economics*, [Electronic], vol. 20, pp. 281-290, Available: Wiley Interscience [2002, 23 October].

Cross, B. & Travaglione, A. 2004, 'The times they are a-changing: who will stay and who will go in a downsizing organization?' *Personnel Review*, [Electronic], vol. 33, no. 3, pp. 275-290, 18 December].



- Cross, R. & Baird, L. 2000, 'Technology is Not Enough: Improving Performance by Building Organizational Memory', *Sloan Management Review*, pp. 69-78.
- Dawkins, P. & Littler, C. R. 2001, *Downsizing: Is it working for Australia?*, Melbourne Institute of Applied Economic and Social Research, Melbourne.
- Dawkins, P., Littler, C. R., Valenzuela, R. & Jensen, B. 1999, *The Contours of Restructuring & Downsizing in Australia*, Melbourne Institute of Applied Economic and Social Research, Melbourne.
- De Meuse, K. P., Vanderheiden, P. A. & Bergmann, T. J. 1994, 'Announced Layoffs: Their Effect on Corporate Financial Performance', *Human Resource Management*, vol. 33, no. 4, pp. 509-530.
- De Witt, R.-L. 1998, 'Firm, Industry and Strategy Influences on Choice of Downsizing Approach', *Strategic Management Journal*, vol. 19, pp. 59-79.
- De Witte, H., Vandoorne, R. V. & De Cuyper, N. 2005, 'Outplacement and re-employment measures during organizational restructuring in Belgium'. *Journal of European Industrial Training*, [Electronic], vol. 29, no. 2, pp. 148-164, Available: Emerald [2006, 18 December].
- Denzin, N. K. & Lincoln, Y. S. (eds.) 2000, *Handbook of Qualitative Research*, Sage, Thousand Oaks, CA.
- DeTienne, K. B. & Jackson, L. A. 2001, 'Knowledge Management: Understanding theory and developing strategy'. *Competitiveness Review*, [Electronic], vol. 11, no. 1, pp. 1-11, 30 June].
- Dickson, G. W., Partridge, J.-E. L. & Robinson, L. H. 1993, 'Exploring modes of facilitative support for GDSS technology'. *MIS Quarterly*, [Electronic], vol. 17, no. 2, p. 173+, Available: ABI [2002, 23 July].
- Drucker, P. 2000, 'Knowledge Work', *Executive Excellence*, vol. 17, no. 4, pp. 11-12.

- Drucker, P. 2002, 'Knowledge Work', *Executive Excellence*, vol. 19, no. 10, p. 12.
- Easton, G., Easton, A. & Belch, M. 2003, 'An experimental investigation of electronic focus groups', *Information & Management*, vol. 40, pp. 717-727.
- Edwards, J. C. 2000, 'Technology discontinuity and workforce size: An argument for selective downsizing'. *International Journal of Organizational Analysis*, [Electronic], vol. 8, no. 3, pp. 290-308, Available: ProQuest [2002, 23 October].
- Farrell, M. A. & Mavondo, F. 2005, 'The effects of downsizing-redesign strategies on business performance: Evidence from Australia', *Asia Pacific Journal of Human Resources*, vol. 43, no. 1, pp. 98-116.
- Field, A. 2005, *Discovering Statistics Using SPSS*, 2nd edn, Sage Publications, London.
- Fisher, S. R. & White, M. A. 2000, 'Downsizing in a learning organization: Are there hidden costs?' *Academy of Management Review*, [Electronic], vol. 25, no. 1, pp. 244-251, Available: ProQuest [2002, 16 October].
- Forrest, E. 1999, *Internet Marketing Research*, McGraw-Hill, Sydney.
- Frazer, L. & Lawley, M. 2000, *Questionnaire design and administration*, John Wiley & Sons, Brisbane.
- Freeman, S. J. 1999, 'The Gestalt of Organizational Downsizing: Downsizing Strategies as Packages of Change', *Human Relations*, vol. 52, no. 12, pp. 1505-1541.
- Freeman, S. J. & Cameron, K. S. 1993, 'Organizational Downsizing: A Convergence and Reorientation Framework', *Organization Science*, vol. 4, no. 1, pp. 10-29.

- Gay, L. R. & Diehl, P. L. 1992, 'Research Methods for Business and Management', Macmillan, New York.
- Gore, C. & Gore, E. 1999, 'Knowledge management: the way forward'. *Total Quality Management*, [Electronic], vol. 10, no. 4/5, pp. 554-560, Available: ProQuest [2003, 30 June].
- Grant, R. M. 1996, 'Toward a knowledge-based theory of the firm', *Strategic Management Journal*, vol. 17, pp. 109-122.
- Greenhalgh, L., Lawrence, A. T. & Sutton, R. I. 1988, 'Determinants of Work Force Reduction Strategies in Declining Organizations', *Academy of Management Review*, vol. 13, no. 2, pp. 241-254.
- Greenspan, D. S. 2002, 'Downsizing with Dignity', *Employment Relations Today*, no. Autumn, pp. 39-48.
- Gregory, J. 1999, 'Encouraging Organizational Learning Through Pay after a Corporate Downsizing', *M@n@gement*, vol. 2, no. 3, pp. 163-181.
- Griggs, H. E. & Hyland, P. 2003, 'Strategic Downsizing and Learning Organisations'. *Journal of European Industrial Training*, [Electronic], vol. 27, no. 2-4, pp. 177-187, Available: ABI/Inform [2005, 6 January].
- Hallock, K. F. 1998, 'Layoffs, top executive pay, and firm performance', *The American Economic Review*, vol. 88, no. 4, pp. 71-723.
- Hamel, G. 1994, 'The concept of core competency', in *Competence-based competition*, eds. Hamel, G. & Heene, A., John Wiley and Sons, New York, pp. 11-33.
- Hopkins, W. E. & Hopkins, S. A. 1999, 'The ethics of downsizing: Perception of rights and responsibilities'. *Journal of Business Ethics*, [Electronic], vol. 18, no. 2, pp. 145-156, Available: ProQuest [2002, 23 October].

- Hostager, T. J., Lester, S. W., Ready, K. J. & Bergmann, M. 2003, 'Matching Facilitator Style and Agenda Structure in Group Support Systems: Effects on Participant Satisfaction and Group Output Quality'. *Information Resources Management Journal*, [Electronic], vol. 16, no. 2, pp. 56-72, Available: ProQuest [2007, 4 June].
- Igbaria, M., Guimaraes, T. & Davis, G. B. 1995, 'Testing the Determinants of Microcomputer Usage via a Structural Equation Model', *Journal of Management of Information Systems*, vol. 11, no. 4, pp. 87-114.
- Janz, B. D. & Prasarnphanich, P. 2003, 'Understanding the Antecedents of Effective Knowledge Management: The Importance of a Knowledge-Centred Culture'. *Decision Sciences*, [Electronic], vol. 34, no. 2, pp. 351-384, Available: ProQuest [2007, 8 April].
- Kabanoff, B., Palmer, I. & Brown, S. 2001, *Financial Consequences of Downsizing and the role of Managerial Attention*, Australian Centre in Strategic Management & the School of Management Queensland University of Technology, Brisbane, WP50.
- Karami, A., Rowley, J. & Analoui, F. 2006, 'Research and Knowledge Building in Management Studies: An Analysis of Methodological Preferences'. *International Journal of Management*, [Electronic], vol. 23, no. 1, pp. 43-52, Available: ProQuest [2007, 6 June].
- Kee, R. & Turpin, R. 1994, 'Linear programming as a decision aid for downsizing'. *Journal of Managerial Issues*, [Electronic], vol. 6, no. 2, pp. 241-255, Available: Expanded Academic ASAP [2002, 11 November].
- Keller, G. & Warrack, B. 1997, *Statistics for Management Economics*, 4 edn, Duxbury Press, Belmont CA.
- Kets de Vries, M. F. & Balazs, K. 1997, 'The Downside of Downsizing'. *Human Relations*, [Electronic], vol. 50, no. 1, pp. 11-50, Available: ProQuest [2003, 1 April].

- Kozlowski, S. W., Chao, G. T., Smith, E. M. & Hedlund, J. 1993, 'Organizational Downsizing: Strategies, Interventions, and Research Implications', *International Review of Industrial and Organizational Psychology*, vol. 8, pp. 263-332.
- Lado, A. A. & Wilson, M. C. 1994, 'Human Resource Systems and Sustained Competitive Advantage: A Competency-Based Perspective', *Academy of Management Review*, vol. 19, no. 4, pp. 699-727.
- Leana, C. R. & Van Buren, H. J. 2000, 'Eroding Organizational Social Capital among US firms: The Price of Job Instability', in *The Organization in Crisis*, eds. Burke, R. J. & Cooper, C. L., Blackwell, Oxford.
- Lee, J. & Corbett, J. M. 2006, 'The impact of downsizing on employees' affective commitment'. *Journal of Managerial Psychology*, [Electronic], vol. 21, no. 3, pp. 176-199, Available: Emerald [2006, 18 December].
- Lee, P. M. 1997, 'A Comparative Analysis of Layoff Announcements and Stock Price Reactions in the United States and Japan', *Strategic Management Journal*, vol. 18, pp. 879-894.
- Lesser, E. 2000, 'Leveraging Social Capital in Organizations', in *Knowledge and Social Capital: Foundations and Applications*, ed. Lesser, E., Butterworth Heinemann, Boston.
- Lesser, E. & Everest, K. 2001, 'Using Communities of Practice to Manage Intellectual Capital', *Ivey Business Journal*, pp. 37-41.
- Lesser, E. & Prusak, L. 2001, 'Preserving Knowledge in an Uncertain World'. *MIT Sloan Management Review*, [Electronic], vol. 43, no. 1, pp. 101-103, Available: InfoTrac [2003, 26 June].
- Lesser, E. & Prusak, L. 1999, 'Communities of Practice, Social Capital and Organizational Knowledge'. *Information Systems Review*, [Electronic], vol. 1, no. 1, pp. 3-9, Available: <http://www.foundationknowledge.com/library/readings/IBM%20Whitepaper.htm> [2003, 28 August].

- Lesser, E. & Storck, J. 2001, 'Communities of practice and organizational performance'. *IBM Systems Journal*, [Electronic], vol. 40, no. 4, pp. 831-841, Available: ProQuest [2003, 11 September].
- Lewin, J. E. & Johnston, W. J. 2000, 'The Impact of Downsizing and Restructuring on Organizational Competitiveness', *Competitiveness Review*, vol. 10, no. 1, pp. 45-55.
- Littler, C. 2000, 'Comparing the Downsizing Experience of Three Countries: A Restructuring Cycle?' in *The Organization in Crisis*, eds. Burke, R. J. & Cooper, C. L., Blackwell, Oxford.
- Littler, C. & Innes, P. 2003, 'Downsizing and deknowledging the firm', *Work, Employment and Society*, vol. 17, no. 1, pp. 73-100.
- Littler, C., Wiesner, R. & Dunford, R. 2003, 'The Dynamics of Delaying: Changing Management Structures in Three Countries', *Journal of Management Studies*, vol. 40, no. 2, pp. 225-256.
- McElroy, J., Morrow, P. & Rude, S. 2001, 'Turnover and Organizational Performance: A Comparative Analysis of the Effects of Voluntary, Involuntary, and Reduction-in-Force Turnover', *Journal of Applied Psychology*, vol. 86, no. 6, pp. 1294-1299.
- McKinley, W., Sanchez, C. M. & Schick, A. G. 1995, 'Organizational downsizing: Constraining, cloning, learning', *Academy of Management Executive*, vol. 9, no. 3, pp. 32-42.
- McKinley, W., Zhao, J. & Rust, K. G. 2000, 'A Sociocognitive Interpretation of Organizational Downsizing', *Academy of Management Review*, vol. 25, no. 1, pp. 227-243.
- Mentzer, M. S. 1996, 'Corporate Downsizing and Profitability in Canada'. *Canadian Journal of Administrative Sciences*, [Electronic], vol. 13, no. 3, pp. 237-250, Available: ProQuest [2003, 1 April].

- Mishra, A. K. & Spreitzer, G. M. 1998, 'Explaining How Survivors Respond to Downsizing: The Roles of Trust, Empowerment, Justice and Work Redesign', *Academy of Management Review*, vol. 23, no. 3, pp. 567-588.
- Nahapiet, J. & Ghoshal, S. 1998, 'Social Capital, Intellectual Capital, and the Organizational Advantage', *Academy of Management Review*, vol. 23, no. 2, pp. 242-266.
- Newby, R., Soutar, G. N. & Watson, J. 2003, 'Comparing Traditional Focus Groups with a Group Support Systems (GSS) Approach for Use in SME Research', *International Small Business Journal*, vol. 21, no. 4, pp. 421-433.
- Nirmala, M. C. & Akhilesh, K. B. 2006, 'An attempt to redefine organizational justice: in the rightsizing environment'. *Journal of Organizational Change*, [Electronic], vol. 19, no. 2, pp. 136-153, Available: Emerald [2006, 18 December].
- Nonaka, I. 1994, 'A Dynamic Theory of Organizational Knowledge Creation', *Organization Science*, vol. 5, no. 1, pp. 14-37.
- Parise, S., Cross, R. & Davenport, T. H. 2006, 'Strategies for Preventing a Knowledge-Loss Crisis', *Sloan Management Review*, vol. 47, no. 4, pp. 31-38.
- Parker, C. P., Blates, B. B., Young, S. A., Huff, J. W., Altmann, R. A., Lacost, H. A. & Roberts, J. E. 2003, 'Relationship between psychological climate perceptions and work outcomes: a meta-analytic review'. *Journal of Organizational Behaviour*, [Electronic], vol. 24, no. 4, pp. 389-416, Available: ProQuest [2007, 8 April].
- Pfeil, M., Setterberg, A. & O'Rourke, J. 2003, 'The art of downsizing: communicating layoffs to key stakeholders'. *Journal of Communication Management*, [Electronic], vol. 8, no. 2, pp. 130-141, Available: Emerald [2006, 18 December].

- Polanyi, M. 1967, *The Tacit Dimension*, Doubleday & Company Inc, Garden City, New York.
- Price, A. 2004, *Human Resource Management in a Business Context*, 2 edn, Thomson Learning, London.
- Quaddus, M. A. & Hofmeyer, G. 2007, 'An investigation into the factors influencing the adoption of B2B trading exchanges in small business', *European Journal of Information Systems*, vol. 16, pp. 202-215.
- Remenyi, D., Williams, B., Money, A. & Swartz, E. 2005, *Doing Research in Business Management: An Introduction to Process and Method*, Sage, London.
- Roan, A., Lafferty, G. & Loudoun, R. 2002, 'Survivors and Victims: a Case Study or Organisational Restructuring in the Public Health Sector', *New Zealand Journal of Industrial Relations*, vol. 27, no. 2, pp. 151-168.
- Schraeder, M., Self, D. & Lindsay, D. 2006, 'Performance appraisals as a selection criterion in downsizing'. *Managerial Law*, [Electronic], vol. 48, no. 5, p. 2006, Available: Emerald [2006, 18 December].
- Shaw, J. B. & Barrett-Power, E. 1996, 'Managing Labour Oversupply Situations: Decision-making Processes in Australian Organizations', *Asia Pacific Journal of Human Resources*, vol. 34, no. 1, pp. 1-25.
- Smeltzer, L. R. & Zener, M. F. 1992, 'Development of a model for announcing major layoffs'. *Group and Organization Management*, [Electronic], vol. 17, no. 4, pp. 446-473, Available: Expanded Academic ASAP [2002, 11 November].
- Snyder, W. M. & Cummings, T. G. 1998, 'Organization learning disorders: Conceptual model and intervention hypotheses'. *Human Relations*, [Electronic], vol. 51, no. 7, pp. 873-985, Available: ProQuest [2002, June].



- Spreitzer, G. M. & Mishra, A. K. 2002, 'To stay or to go: voluntary survivor turnover following an organizational downsizing'. *Journal of Organizational Behaviour*, [Electronic], vol. 23, pp. 707-729, Available: Wiley Interscience [2002, 23 October].
- 'Stratcom - Strategic Decision Support'n.d, Curtin University of Technology.
- Tan, B., Kwok-Kee, W. & Lee-Partridge, J.-E. 1999, 'Effects of facilitation and leadership on meeting outcomes in a group support system environment'. *European Journal of Information Systems*, [Electronic], vol. 8, pp. 233-346, Available: ProQuest [2007, 4 June].
- Tang, T. L. P. & Fuller, R. M. 1995, 'Corporate Downsizing: what managers can do to lessen the negative effects of layoffs'. *SAM Advanced Management Journal*, [Electronic], vol. 60, no. 4, Available: Expanded Academic ASAP [2002, 22 October].
- Taylor, M. S. & Giannantonio, C. M. 1993, 'Forming, adapting and terminating the employment relationship: a review of the literature from individual, organizational, & interactionist perspective'. *Journal of Management*, [Electronic], vol. 19, no. 2, pp. 461-516, Available: Expanded Academic ASAP [2002, 11 November].
- Teare, R. & Rayner, C. 2002, 'Capturing organizational learning'. *International Journal of Contemporary Hospitality Management*, [Electronic], vol. 14, no. 7, pp. 354-360, Available: Emerald [2006, 18 December].
- Tourish, D., Paulsen, N., Hobman, E. & Bordia, P. 2004, 'The Downsides of Downsizing: Communication processes and information needs in the aftermath of a workforce reduction strategy'. *Management Communication Quarterly*, [Electronic], vol. 17, no. 4, pp. 485-516, Available: Proquest ABI/Inform [2005, 3 August].
- Tsai, W. & Ghoshal, S. 1998, 'Social Capital and Value Creation: The Role of Intrafirm Networks', *Academy of Management Journal*, vol. 41, no. 4, pp. 464-476.

- Tzafrir, S., Mano-Negrin, R., Harel, G. & Rom-Nage, D. 2006, 'Downsizing and the impact of job counselling and retraining on effective employee responses'. *Career Development International*, [Electronic], vol. 11, no. 2, pp. 125-144, Available: Emerald [2006, 18 December].
- Walczak, S. 2005, 'Organizational knowledge management structure'. *The Learning Organization*, [Electronic], vol. 12, no. 4, pp. 330-339, Available: Emerald [2006, 18 December].
- Walsh, J. P. & Ungson, G. R. 1991, 'Organizational Memory', *Academy of Management Review*, vol. 16, no. 1, pp. 57-91.
- Wang, C. L. & Ahmed, P. K. 2003, 'Structure and structural dimensions for knowledge-based organizations', *Measuring Business Excellence*, vol. 7, no. 1, pp. 51-62.
- Widen-Wulff, G. & Ginman, M. 2004, 'Explaining knowledge sharing in organizations through the dimensions of social capital'. *Journal of Information Science*, [Electronic], vol. 30, no. 5, pp. 448-458, Available: Sage Journals On-Line [2007, 13 July].
- Willem, A., Buelens, M. & Scarborough, H. 2006, 'The role of inter-unit coordination mechanisms in knowledge sharing: a case study of British MCN'. *Journal of Information Science*, [Electronic], vol. 32, no. 6, pp. 539-561, Available: ProQuest [2007, March].
- Willem, A. & Scarbrough, H. 2006, 'Social Capital and political bias in knowledge sharing: An exploratory study'. *Human Relations*, [Electronic], vol. 59, no. 10, pp. 1343-1370, Available: Sage Journals Online [2007, 15 June].
- Williams, S. M. 2004, 'Downsizing - intellectual capital performance anorexia or enhancement?' *The Learning Organization*, [Electronic], vol. 11, no. 4/5, pp. 368-379, Available: Emerald [2006, 18 December].
- Wingate, P. H., Thornton, G. C., McIntyre, K. S. & Frame, J. H. 2003, 'Organizational Downsizing and Age Discrimination Litigation: The

Influence of Personnel Practices and Statistical Evidence on Litigation Outcomes', *Law and Human Behaviour*, vol. 27, no. 1, pp. 87-108.

Wooldridge, B. R. & Minsky, B. D. 2002, 'The role of climate and socialization in developing interfunctional coordination'. *The Learning Organization*, [Electronic], vol. 9, no. 1, pp. 29-38, Available: ProQuest [2007, 8 April].

Worrall, L. & Cooper, C. L. 2001, 'Management skills development: a perspective on current issues and setting future agenda', *Leadership and Organization Development Journal*, vol. 22, no. 1, pp. 34-39.

Worrell, D. L., Davidson, W. N. & Sharma, V. M. 1991, 'Layoff Announcements and Stockholder Wealth', *Academy of Management Journal*, vol. 34, no. 3, pp. 662-678.

Yu, G.-C. & Park, J.-S. 2006, 'The effect of downsizing on the financial performance and employee productivity of Korean firms'. *International Journal of Manpower*, [Electronic], vol. 27, no. 3, pp. 230-350, Available: Emerald [2006, 18 December].

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

## APPENDICES

## **Appendix 1 - FOCUS GROUP RESULTS**

### **A1.0 INTRODUCTION**

The following outlines the qualitative focus group process undertaken in the first stage of the research. The methodology for this phase of the study is described including development of focus group questions, details of the sample group and analysis of focus group data, concluding with the key themes which emerged and were used as the basis for design of the final survey instrument used for data collection.

### **A1.1 FOCUS GROUP PROCESS**

Four focus groups were conducted: two for Decision Makers/Managers (DM) and two for Affected Employees (AE) groups. Two focus groups were held for each category; one of each scheduled during the day and one of each scheduled during the evening, in order to accommodate as many of the participants as possible.

The Graduate School of Business StratCom laboratory was used for conducting sessions. This facility allowed for eight individual participants per session. This number were booked into each of the groups, although some participants were unable to attend at the last minute, resulting in three groups of 6 and one group of seven, twenty five (25) participants in all comprising thirteen Decision Makers/Managers and twelve Affected Employees.

### **A1.2 PARTICIPANTS**

Focus groups included 40% male and 60% female participants, comprising 52% Decision Makers/Managers 48% and Affected Employees. The median age range was 36-45 with participants averaging just over 21 (21.26) years in the workforce and approximately 6.5 (6.53) years in their present organisation. The participants had been involved in downsizing/restructuring an average of just over three times (3.28) per participant. The following tables summarise the gender breakdown of focus groups:

Table A1.1: Focus Groups – Gender Breakdown

Gender:	All Groups		Focus Grp 1		Focus Grp 2		Focus Grp 3		Focus Grp 4	
	No.	%	No.	%	No.	%	No.	%	No.	%
Male	10	40	0	0	2	33.33	4	66.67	4	57.14
Female	15	60	6	100	4	66.67	2	33.33	3	42.86
Total	25	100	6		6		6		7	

Table A1.2: Focus Groups – Gender Breakdown by DM/AE Grouping

Gender:	All Groups		AE (Gp 1+3)		DM (Gp2+4)	
	No.	%	No.	% Total	No.	% Total
Male	10	40	4	16	6	24
Female	15	60	8	32	7	28
Total	25	100	12	48	13	52

A number of participants had been involved in downsizing/restructuring in more than one capacity, the overall breakdown of roles being:

Table A1.3: Focus Groups Participant Role in Downsizing/Restructuring

Role in downsizing:	No.	%
Decision maker	11	31.43
Survivor	14	40.00
Victim	7	20.00
Supplier/client	1	2.86
Other	2	5.71
Total	35	

All focus group participants were currently engaged in white-collar employment; professional, administrative or managerial.

### A1.3 ANALYSIS

Having obtained text files of the four groups' responses to each of the eight questions, the responses to each question were manually coded in order to identify the themes which emerged. Coding was done for each question by group and the themes and the number of responses under each theme were entered into spreadsheets. Total number of responses per theme for each group, for the total data set and for each group type (Decision Makers/Managers or Affected Employee) was recorded along with the corresponding percentage breakdowns.

A comparison between Decision Makers/Managers and Affected Employees themes and frequencies of response was therefore possible as well as aggregate responses per theme for the full data set. Comparisons between the group types were included in order to identify if any differences in perceptions were evident between the groups in any of the emergent areas.

#### **A1.4 FOCUS GROUP FINDINGS**

Participants were asked to respond to eight questions regarding organisational knowledge, informal networks, knowledge sharing and organisational effectiveness. These are outlined below, the participants' responses discussed and the resultant themes identified.

##### A1.4.1 Evidence of Knowledge Loss (Question 1)

In order to ascertain indicators of knowledge being lost during downsizing/restructuring, the first question asked participants to indicate how they know that knowledge has been lost after downsizing/restructuring. Four categories emerged, comprising over 66% of the total responses. These were:

- Inability to find information sources. This dimension revolved around difficulties experienced in locating people with knowledge/information, records or other pieces of relevant information needed to undertake roles. People with knowledge no longer worked with the organisation and there was a perceived lack of adequate skills available.
- Uncertainty related to being unsure of their own role requirements, the roles of others and the mission/purpose of organisation. A general loss of confidence.
- Inefficiencies revolved around awareness that tasks were being done inefficiently and/or erroneously ie either done wrongly, not done as well as possible or not completed.
- Time factors related to extra time taken to complete tasks, missing deadlines and other evidence of time management issues. This appeared to be linked with 'inefficiencies' but the specific comments were different enough to warrant a separate category.

With the exception of 'uncertainty', the categories showed similar frequency with both Decision Makers/Managers and Affected Employees groups. Uncertainty, however, was more than twice as frequent with Affected Employees groups as with Decision Makers/Managers groups, indicating that uncertainty was a greater an issue for employees than managers. It is worth noting, however, that the total of these responses comprised only 10.92% (or 13 of the 119) responses.

Additional categories of 'people return/replaced' and 'ideas return/repetition' comprised a combined total of 11% of the responses. Although identified as separate categories, these were related and are both reported in the downsizing/restructuring literature as occurring following downsizing/restructuring (Appelbaum, Close & Klasa 1999; Gregory 1999, Casio 1993).

Some of the other smaller categories were related to, and could possibly be amalgamated with, the four main categories indicating an even more substantial percentage of responses falling into these broad areas.

#### A1.4.2 Retain Knowledge (Question 2)

In order to identify strategies that may be present in organisations which minimise or prevent the loss of knowledge, the second question followed on by asking participants to indicate how knowledge loss might be prevented during downsizing/restructuring. Four categories comprised 70% of the total responses:

- Handover Processes linked with both communication/sharing and planning. It involved ensuring mechanisms for knowledge sharing were in place before staff departed. Transitional arrangements for departing staff were to be retained in some way (eg part time for a period, remaining until others were trained etc) to assist with smooth transition were mentioned.
- Documentation Procedures. This dimension revolved around knowledge management; documentation, processes for capture, storage, and access.



- Preparation & Planning was largely about planning the downsizing/restructuring and dealing with the aftermath (awareness of the likely impact). This linked with knowledge management in regard to planning ways to capture and store knowledge before people leave. It included identifying who, what and how to handover and allowing time for this to occur. Also, access to departing staff after they had left, as an information resource.
- Communication & Knowledge Sharing revolved around encouraging/supporting networking, knowledge sharing, valuing knowledge, rewarding knowledge sharing and keeping people informed.

Frequencies were similar between Decision Makers/Managers and Affected Employees groups with a greater emphasis on communication and knowledge sharing by Decision Makers/Managers. Role definition was also raised relatively frequently by the Affected Employees group. This has a logical link with the relatively high rating of 'uncertainty' evident in responses to question one.

#### A1.4.3 Evidence informal networks affected (Question 3)

Similarly to the first two questions, the third and fourth questions asked participants to indicate how they knew that informal networks had been affected after downsizing/restructuring and what steps could be taken to minimise this. These questions assisted in establishing indicators of network breakdown and strategies for their prevention. Five categories made up approximately 65% of responses:

- Social Interaction revolved around the social aspect of work; lower attendance at functions, fewer people in cafeterias and other non-essential places/activities. Less chatter/laughter/fun. Less informal discussions were cited.
- Inability to find people/information indicated people who were normally contacted for information, assistance or advice, were no longer available or accessible.
- Inefficiency/Performance Issues suggested things not working smoothly, the 'shadow system' not effective, problem solving taking longer, poorer

decision-making, less creativity/idea generation. Generally less respect and confidence. Increased disciplinary and industrial activity, absenteeism and stress.

- Culture change related to increased formality between people, less chatter/laughter/fun between people. Also decreased morale, satisfaction, enthusiasm. There was some indication that this may be transitional or a readjustment eg altered power bases, status quo change, and shift in group dynamics. There was also mention of rumours, uncertainty, and need for realignment.
- Altered Networks related to making new contacts and alliances, different mixes of people working in groups, approaches to or from people not previously considered within the network.
- Communication. This category generally related to the drop in informal communication about what was going on (including rumours, gossip), less assistance from others, people more focussed on their own situation. Also some mention of improved communication due to decreased layers and complexity in the organisation with loss of significant numbers of staff.

Inability to source information/people comprised 12.5% of Affected Employees responses but considerably less of Decision Makers/Managers responses (5%). This may indicate managers have greater access to information in organisations whereas employee groups access information via their networks. On the other hand trust issues comprised approximately 11% of Decision Makers/Managers responses but less than 3% Affected Employees. This may suggest Decision Makers/Managers groups tend to trust what they hear through their networks, so that when these are affected they have less confidence/trust in what they hear or less confidence that they are fully informed. This may indicate Decision Makers/Managers groups trust and possibly rely on the informal information flow/shadow organisation more than do Affected Employees groups.

Affected Employees groups identified inefficiencies/performance issues more frequently than the Decision Makers/Managers group as indicating informal networks had been affected by downsizing/restructuring. This suggests Affected Employees groups may rely more heavily on their networks to assist in 'getting things done' efficiently than the Decision Makers/Managers group.

Greater numbers of the Decision Makers/Managers groups indicated culture changes were evidence of networks being affected, although both groups' responses in this category were relatively high.

Overall, there was a much wider spread of categories indicating networks have been affected by downsizing/restructuring than for the questions regarding evidence of knowledge loss. This indicates there may be many ways in which networks operate within organisations and are affected by change.

#### A1.4.4 Methods for retaining informal networks (Question 4)

As with evidence of informal network breakdown, responses regarding how informal networks might be retained during downsizing/restructuring also fell into a number of categories. The following six categories comprised almost 90% of responses:

- Formalise/Recognise related to the organisation recognising and valuing the informal networks, either by making them formal networks or formally recognising their existence/accomplishments.
- Support & Rebuild indicated employees and management taking proactive steps to rebuild networks, support members and encourage team work.
- Social Interaction revolved around the social aspects of work between employees, but particularly management, initiating, supporting and participating in social interactions and functions, both within and between departments/sections.

- Plan/Map involved identifying network participants and roles prior to downsizing/restructuring so they could be retained and/or emulated. Also, planning to minimise the disruption of networks.
- Communicate/Inform/Educate indicated that good, ongoing, informative communication about what was going on was believed to result in retaining/rebuilding networks. These responses suggested that openness and trust help to keep networks intact. There was also some suggestion of educating survivors that it is 'OK' to maintain and utilise networks, including with those leaving the organisation.
- Involvement of networks and their members in the planning process and in ongoing communication.

Again, the much wider spread of categories suggested network retention was affected in a variety of ways. Some major discrepancies between Affected Employees and Decision Makers/Managers groups were noted, particularly regarding 'formalising/recognising' the networks. This rated almost 20% of Affected Employees responses indicating Affected Employees groups considered recognition of networks by the organisation was a major mechanism for network retention. However, less than 8% of Decision Makers/Managers groups suggested this action. Affected Employees groups clearly considered that legitimising informal networks was a way to keep them going.

This discrepancy between the groups may indicate that non-managerial staff believe their informal interactions are not valued and/or may be seen as time wasting by management and therefore require recognition or acknowledgement to help maintain them. Management groups may consider networks and 'networking' are legitimate activities and therefore do not require formal recognition for their maintenance.

Both groups suggested the need for 'educating/communicating/informing' and also 'involving people' in order to retain networks; that is, providing information to and getting input from network members. Similarly, both rated 'supporting/rebuilding' highly. This supports the view that both recognising,

involving and informing network members were considered vital in preserving informal networks.

Of interest was the low importance placed by either group on retaining key people in order to retain networks. This implied that networks were seen to an extent as being independent of the individuals comprising them.

Social interaction was rated highly by both groups as a way of retaining networks. This was closely related to supporting and rebuilding since by definition networks are informal and therefore exist in a more social environment than other aspects of work.

#### A1.4.5 Individual to Organisational knowledge (Q5) and (Q6)

Two questions were posed regarding how individual knowledge could become organisational knowledge (knowledge sharing). In both cases, in the vicinity of 90% of responses fell into four key categories:

- Developing a Learning Culture revolved around promoting and supporting continuous learning and knowledge sharing. This included suggestions of incentives and rewards, also management leading by example to create this culture and an 'open door' policy to break down barriers between departments and levels. A positive environment with provision of opportunities for knowledge sharing.
- Knowledge Capture & Storage Systems revolved around knowledge management initiatives and a planned, structured approach. Documentation, databases, checklists, procedures, intranets, knowledge flows, accessibility, a culture that supports maintaining good records and access to information. Knowledge Management was seen as a key deliverable, incorporating feedback loops for information sharing, knowledge committees, effective exit procedures to capture information and information technology support for knowledge management strategies.

- Communication emphasised regular, ongoing information flow characterised by regular meetings, newsletters, presentations, communication plan/strategy, brainstorming, teams, feedback mechanisms, electronic media, formal and informal networks, briefings, and flyers. The emphasis was on sharing knowledge through communicating it with others. Also, the use of focus groups, project teams and union representatives to facilitate communication were raised. Encouraging staff input and participation (that is, two way communication) was also suggested.
- Training and Development through a range of strategies including sound induction processes, job rotation, multi-skilling, job sharing, succession planning, coaching, mentoring and varied work experiences as well as training in how to locate and access information and how to share knowledge were all included in this item. Ongoing knowledge acquisition and sharing opportunities were recommended, right from new employee commencement.

There was a great deal of consistency between Decision Makers/Managers and Affected Employees and the strategies described are very consistent with the literature (cf Brown & Duguid 1991; Willem & Scarbrough 2006). Decision Makers/Managers indicated slightly greater emphasis on formal knowledge management strategies, however, this is not surprising given management roles are more concerned with developing and implementing knowledge management strategies than are employees.

The other category represented by both groups was 'time to share' knowledge. This may perhaps be considered as part of developing a learning culture since it could be argued to be part of what defines a learning culture.

The only other category represented as a means for turning individual into organisational knowledge was 'job structure'. This category was raised by the Affected Employees only and only for the first of the two questions. This may suggest that employees observe that how roles are designed is a way in which

knowledge is shared but do not considered it as a proactive strategy to bring about knowledge sharing. This strategy for knowledge sharing does, however, appear in the literature (Brown & Duguid 1991).

#### A1.4.6 Support for the proposed Organisational Effectiveness standards (Q7a)

The final questions posed to the focus groups endeavoured to ascertain whether the measures of post-downsizing/restructuring organisational effectiveness used by Cameron, Freeman and Mishra (1991) were appropriate for use in the survey instrument for this research.

In that study, respondents were asked to compare their organisation's current performance with:

- a. industry average
- b. performance of best domestic competitor
- c. performance of best global competitor
- d. stated goals for current year
- e. perceived customer expectations

The focus groups were asked firstly their opinion of the measures used by Cameron and his colleagues (1991) and then what measures they considered appropriate to ascertain post-downsizing/restructuring organisational effectiveness. The purpose of these questions was to validate and possibly expand these measures in the Australian context.

Surprisingly, 88% of responses identified some problems with the measures used in Cameron and colleagues' (1991) study, and this was consistent across both the Decision Makers/Managers and Affected Employees groups. Responses suggested these measures on their own were insufficient, often noting they focused only on the 'hard' financial indicators rather than the 'soft' people related indicators. Comments indicated:

- a lack of 'soft' measures,
- making unlike comparisons,
- inapplicable to public or not for profit sectors,

- short term time frames,
- requiring assumptions and
- generally insufficient to measure post downsizing/restructuring organisational effectiveness.

#### A1.4.7 Suggested indicators/measures for organisational effectiveness (Q7b)

Eight categories emerged as measures for post downsizing/restructuring organisational effectiveness. These fell into three broad groupings (each comprised between 26% and 38% of total responses):

- Employee Reactions described the behaviours or feelings exhibited by individual employees
- External reactions related to feelings or behaviours exhibited by those outside the organisation eg suppliers, customers, general public, stakeholders
- Organisational Impact related to behaviours or feelings exhibited by the workforce as a whole (or groups within it) and/or changes to the way the organisation operated.

Within these broad groupings, all eight of the identified categories were well represented. However, three categories (one from each grouping) represented over half the responses. These were:

- Morale, Satisfaction, Opinions (feelings) – 14.88% of total responses
- Reputation – 20.24% of total responses
- Business Outcomes (productivity) – 17.86% of total responses

Decision Makers/Managers and Affected Employees group results were similar, the biggest discrepancy being in regard to 'business outcomes'. This suggested that management groups focused more on the business outcomes (eg productivity) of downsizing/restructuring whilst employee groups put less emphasis on this and more on employee and external stake holder's feelings and behaviours in assessing organisational effectiveness. Hence, the measures used in Cameron and colleagues' (1991) study were seen to only partially



assess participants' perceptions of post downsizing/restructuring organisational effectiveness.

Supporting this view was the apparent discrepancy between the groups in the 'organisational changes' category, with Affected Employees group responses including more than twice as many organisational change issues as the Decision Makers/Managers groups. This may indicate that real and perceived organisational changes were more conspicuous and/or relevant to employees than managers, who may have been more focused on bottom line outcomes of the downsizing/restructuring.

Similarly, Affected Employees group responses included almost twice as many in the 'retention/turnover' category as Decision Makers/Managers groups. This may suggest they noticed or were more directly affected by the voluntary turnover of colleagues after the downsizing/restructuring.

Overall, there was little discrepancy apparent between the groups in their responses in the two major categories of 'employee reactions' and 'external reactions'. Both appeared to consider the reactions of employees and external stakeholders to be measures of organisational effectiveness.

The slightly greater discrepancy between the groups in relation to 'organisational impact' reflected a greater emphasis on the importance of business outcomes (productivity issues) by the Decision Makers/Managers groups. This supports a greater consciousness by management groups of bottom line and financial indicators and of employee groups on internal organisational and 'people' indicators.

## **A1.5 CONCLUSION**

The items emerged through the focus group process were used in the development of a survey instrument comprising 126 items (excluding demographic data). These themes were incorporated with those which arose

from the literature review in order to develop a broad set of questions to address each of the constructs in the conceptual framework.

The themes developed in the survey questions and their source, either literature or focus group, are discussed in Appendix 2, as part of the description of development of the survey instrument.

## Appendix 2 - SURVEY THEMES

The questionnaire was developed from the focus group findings combined with key themes raised through the literature review. These themes and their sources are summarised in the following table:

Focus Group Theme	Explanation of Themes	Literature Source
<b>Knowledge</b>		
Inability to find information sources	<ul style="list-style-type: none"> <li>• Difficulties experienced in locating people with knowledge/information, records or other pieces of relevant information needed to undertake roles. People with knowledge no longer working with the organisation</li> <li>• Perceived lack of adequate skills available</li> </ul>	Cascio 1993 Lesser & Prusack (01) Bedeian & Armenakis (98)
Uncertainty	<ul style="list-style-type: none"> <li>• Unsure of role requirements, roles of others and mission/purpose of organisation.</li> <li>• General loss of confidence.</li> </ul>	Appelbaum 2003; 1997 Cameron 1998; 1994
Inefficiencies	<ul style="list-style-type: none"> <li>• Awareness tasks being done inefficiently and/or erroneously ie either done wrongly, not done as well as possible or not completed.</li> </ul>	Cascio 1993 Cameron, Freeman & Mishra (1993)
Time factors	<ul style="list-style-type: none"> <li>• Extra time taken to complete tasks,</li> <li>• missing deadlines and other evidence of time management issues</li> <li>• Linked with 'inefficiencies' but the specific comments were different enough to warrant a separate category</li> </ul>	Appelbaum 2003 Cascio 1993 Cameron 1994 Appelbaum 1997 Lesser & Prusack (01)
Handover Processes	<ul style="list-style-type: none"> <li>• Linked with communication/sharing and planning</li> <li>• Involved ensuring mechanisms for knowledge sharing in place before staff departed.</li> <li>• Transitional arrangements for departing staff to be retained in some way (eg part time for a period, remaining until others were trained etc) to assist with smooth transition were mentioned</li> </ul>	Cameron, Freeman and Mishra 1991
Documentation Procedures	<ul style="list-style-type: none"> <li>• Knowledge management – documentation, processes for capture, storage, and access</li> </ul>	Gore & Gore 1999
Preparation & Planning	<ul style="list-style-type: none"> <li>• Planning the downsizing and dealing with the aftermath (awareness of the likely impact).</li> <li>• Linked with knowledge management - planning ways to capture and store knowledge before people leave.</li> <li>• Included identifying who, what and how to handover</li> <li>• Allowing time for handover to occur and access to departing staff after they left</li> </ul>	Appelbaum 2003 Appelbaum 1997 Appelbaum, Henson & Knee 1999 Appelbaum, Everard & Hung (1999) Cascio 1993 Cameron 1994 Lesser & Prusack (01)

Communication & Knowledge Sharing	<ul style="list-style-type: none"> <li>Encouraging/supporting networking, knowledge sharing, valuing knowledge, rewarding knowledge sharing and keeping people informed</li> </ul>	Cameron Freeman and Mishra 1991 Cameron and Smart 1998 Appelbaum 1997 Appelbaum, Henson & Knee 1999 Koslowski 1993 Lesser & Prusack 1999;2001 Lesser & Everest Appelbaum, Everard & Hung (1999) Appelbaum, Patton & Shapiro (2003)
Social Interaction	<ul style="list-style-type: none"> <li>Social aspect of work – lower attendance at functions, fewer people in cafeterias and other non-essential places/activities.</li> <li>Less chatter/laughter/fun.</li> <li>Less informal discussions</li> </ul>	Koslowski 1993
Inability to find people/information	<ul style="list-style-type: none"> <li>People who were normally contacted for information, assistance or advice, no longer available or accessible</li> </ul>	Cascio 1993 Lesser & Prusack (01)
Inefficiency/ Performance Issues	<ul style="list-style-type: none"> <li>Things not working smoothly,</li> <li>'shadow system' not effective,</li> <li>Problem solving taking longer,</li> <li>Poorer decision making,</li> <li>Less creativity/idea generation.</li> <li>Less respect and confidence.</li> <li>Increased disciplinary and industrial activity, absenteeism and stress</li> </ul>	Cascio 1993 Lesser & Prusack (01) Lesser & Everest Littler 2003 Cameron, Freeman & Mishra (1993) Leana & Van Buren
Culture change	<ul style="list-style-type: none"> <li>Increased formality between people,</li> <li>Less chatter/laughter/fun between people</li> <li>Decreased morale, satisfaction, enthusiasm.</li> <li>May be transitional or a readjustment eg altered power bases, status quo change, and shift in group dynamics.</li> <li>Rumours, uncertainty, need for realignment</li> </ul>	Littler 2000 Cascio 2002, 1993 Appelbaum, Close & Klasa (1999) Appelbaum, Patton & Shapiro (2003)
<b>Networks</b>		
Altered Networks	<ul style="list-style-type: none"> <li>Making new contacts and alliances,</li> <li>Different mixes of people working in groups,</li> <li>Approaches to or from people not previously considered within the network</li> </ul>	Appelbaum 97 Gregory 1999 Fisher & White 2000 Appelbaum Delage, Labib & Gault (1997)

Communication	<ul style="list-style-type: none"> <li>• Drop in informal communication about what was going on (including rumours, gossip)</li> <li>• Less assistance from others,</li> <li>• People more focussed on their own situation</li> <li>• Improved communication due to decreased layers and complexity in the organisation due to loss of significant numbers of staff</li> </ul>	<p>Cascio 1993, 2002  Appelbaum 2003  Appelbaum, Henson &amp; Knee 1999  Appelbaum Delage, Labib &amp; Gault (1997)  Cameron &amp; Smart 1998  Cameron, Freeman &amp; Mishra (1993)  Cameron and Smart 1998  Lesser &amp; Everest  Krackhardt</p>
Formalise/Recognise networks	<ul style="list-style-type: none"> <li>• Organisation recognising and valuing the informal networks either by making them formal networks or formally recognising their existence/accomplishments</li> </ul>	<p>Lesser &amp; Storck 2001  Cross, Nohria &amp; Parker  Cross &amp; Baird (2000)</p>
Support & Rebuild	<ul style="list-style-type: none"> <li>• Employees and management taking proactive steps to rebuild networks</li> <li>• Support members</li> <li>• Encourage team work</li> </ul>	<p>Brown and Duguid 1991  Lesser &amp; Storck 2001  Leana &amp; Van Buren  Willem &amp; Scarbrough</p>
Social Interaction	<ul style="list-style-type: none"> <li>• Social aspects of work between employees</li> <li>• Particularly management initiating, supporting and participating in social interactions and functions - within and between departments/sections</li> </ul>	<p>Lesser &amp; Storck 2001  Kozlowski  Leana &amp; Van Buren</p>
Plan/Map	<ul style="list-style-type: none"> <li>• Identifying network participants and roles prior to downsizing so they could be retained and/or emulated</li> <li>• Planning to minimise the disruption of networks</li> </ul>	<p>Brass  Cross, Nohria &amp; Parker  Krackhardt</p>
Communicate/ Inform/ Educate	<ul style="list-style-type: none"> <li>• Good, ongoing, informative communication about what was going on</li> <li>• Openness and trust help to keep networks in tact</li> <li>• Educating survivors that it is 'OK' to maintain and utilise networks, including with those leaving the organisation</li> </ul>	<p>Willem &amp; Scarbrough  Lesser &amp; Storck 2001  Lesser &amp; Prusack 2001  Cameron and Smart 1998  Cascio 2002</p>
Involvement of networks	<ul style="list-style-type: none"> <li>• Network members involved in planning process</li> <li>• Ongoing communication</li> </ul>	<p>Cascio 1993, 2002  Cameron, Freeman and Mishra 1991  Cameron 1994  Appelbaum 1997  Cross &amp; Baird (2000)</p>
Developing a Learning Culture	<ul style="list-style-type: none"> <li>• Promoting and supporting continuous learning and knowledge sharing</li> <li>• Incentives and rewards</li> <li>• Management leading by example to create this culture and an 'open door' policy to break down barriers between departments and levels</li> <li>• Positive environment with opportunities for knowledge sharing</li> </ul>	<p>Drucker?  Senge 1990; 1997  Lesser &amp; Prusack 2001  Willem, Buelens &amp; Scarbrough</p>

Knowledge Capture & Storage Systems	<ul style="list-style-type: none"> <li>• Knowledge management initiatives</li> <li>• Planned, structured approach</li> <li>• Documentation, databases, checklists, procedures, intranets, knowledge flows, accessibility, a culture that supports maintaining good records and access to information.</li> <li>• Knowledge Management a key deliverable - feedback loops, knowledge committees, effective exit procedures, IT support for KM strategies</li> </ul>	Cross & Baird (2000) Walsh & Ungson
Communication	<ul style="list-style-type: none"> <li>• Regular, ongoing information flow</li> <li>• Regular meetings, newsletters, presentations, communication plan/strategy, brainstorming, teams, feedback mechanisms, electronic media, formal and informal networks, briefings, and flyers</li> <li>• Sharing knowledge through communicating it with others</li> <li>• Focus groups, project teams &amp; union representatives to facilitate communication</li> <li>• Encourage staff input &amp; participation</li> </ul>	Willem, Buelens & Scarbrough Leana & Van Buren Brown & Duguid 1991 Lesser & Storck 2001 Wieden & Wulff Cameron and Smart 1998 Appelbaum, Henson & Knee 1999 Appelbaum, Everard & Hung (1999) Cascio 2002
Training & Development	<ul style="list-style-type: none"> <li>• Sound induction processes</li> <li>• Job rotation</li> <li>• Multi-skilling</li> <li>• Job sharing</li> <li>• Succession planning</li> <li>• Coaching, mentoring</li> <li>• Varied work experiences</li> <li>• Training how to locate &amp; access information</li> <li>• Training how to share knowledge</li> </ul>	Lesser & Storck 2001 Lesser & Prusack 2001 Lesser & Everest Alveras & Frigeri (1987) Tzafrir et al Carbery & Garavan Appelbaum Delage, Labib & Gault (1997) Appelbaum, Henson & Knee 1999 Appelbaum, Everard & Hung (1999) Appelbaum, Close & Klasa (1999) Appelbaum, Lavigne-Schmidt, Peytchev & Shapiro (1999) Appelbaum, Patton & Shapiro (2003)

## Appendix 3 - QUESTIONNAIRE

### 1. PERCEPTIONS OF ORGANISATIONAL RESTRUCTURING

Thank you for agreeing to participate in this survey. This questionnaire has been designed to learn your views about the restructuring your organisation has undertaken in the last few years.

Please be assured that the answers you provide will be treated with the strictest confidence - your name is not required. The reporting procedure will be in statistical terms only, without reference to individuals, or easily identifiable groups of staff members.

The questionnaire focuses on your perceptions of your organisation after restructuring compared with before it took place. Since the questionnaire is looking for your own perceptions there aren't any right or wrong answers. Generally it's best to answer with the first response you think is appropriate rather than spending a lot of time thinking about each option.

The questionnaire should take about 15 minutes to complete. If you have any questions, please don't hesitate to contact me by email on [Helen.Sitlington@cbs.curtin.edu.au](mailto:Helen.Sitlington@cbs.curtin.edu.au) or phone: 0419 005548. Please note participation in the survey is voluntary and you can exit the survey at any time by clicking on the 'exit this survey' icon.

Thankyou

Helen Sitlington

Doctoral Student  
Graduate School of Business  
Curtin University

*Researcher: Helen Sitlington Ph: 0419 005548 Email: [helen.sitlington@cbs.curtin.edu.au](mailto:helen.sitlington@cbs.curtin.edu.au)*

*Supervisor: Dr Verena Marshall Ph: 08 9266 3236 Email: [v.marshall@gsb.curtin.edu.au](mailto:v.marshall@gsb.curtin.edu.au)*

*This study has been approved by the Curtin University Human Research Ethics Committee (Approval HR 3/2004). If needed, verification of approval can be obtained either by writing to Curtin University Human Research Ethics Committee c/- Office of Research and Development, Curtin University of Technology, GPO Box U1987 Perth, 6845 or by telephoning 9266 2784*

*Should participants wish to make a complaint on ethical grounds, they should contact the HREC Secretary (details as above)*

## 2. Demographic information

### 1. Gender

Male                  Female

### 2. Age

Under 25                  26-35                  36-45                  46-55                  Over 55

### 3. Industry you currently work in

- Agriculture, Forestry & Fishing
- Mining
- Construction
- Manufacturing
- Transportation, Communications, Electric, Gas & Sanitary Services
- Wholesale Trade
- Retail Trade
- Finance, Insurance & Real Estate
- Services
- Public Administration
- Other (please specify)

### 4. Current position/role

- Manager/supervisor
- Professional
- Clerical
- Trades
- Sales & service
- Technical/Specialist
- Labourer
- Other (please specify)

### 5. Number of years in current position/role

### 6. Number of years in organisation

## 3. Your Role in Recent Restructuring

### 7. My role in the most recent restructuring in my organisation was...

- a) I was part of the management team who decided on the restructuring strategy for the organisation
- b) I was a manager who made decisions about implementing the restructure (eg positions to be abolished; employees to be made redundant; redesign jobs; transfer employees etc)
- c) I was a manager in a section/department that was not directly affected by the restructuring
- d) I was an employee in a section/department that was not directly affected by the restructuring



- e) My job was abolished as a result of restructuring
- f) My job changed significantly as a result of restructuring
- g) My job did not change significantly as a result of restructuring
- h) Jobs in my section were abolished but mine was retained with little change
- i) Jobs in my section were abolished but mine was retained with fairly major changes

**8. Did the restructure include any downsizing (ie planned elimination of jobs & reduction in staff numbers)?**

- Yes
- No

**9. How many restructures have you experienced with your current employer?**

- One
- Two
- Three or more

**10. When did the most recent restructure take place?**

- less than 2 years ago
- 2-3 years ago
- more than 3 years ago

**4. Decision Making**

**11. To what extent do you feel the following were taken into consideration in the restructuring decision making?**

	Not Considered	Barely considered	Considered to some extent	Considered	Strongly considered	N/A
▪ a) Targeting specific groups for redundancy (eg by age, gender, length of service)						
▪ b) Time for those leaving to complete projects, handover their work etc.						
▪ c) Time for those leaving to document processes & procedures						
▪ d) Letting people nominate themselves to leave instead of management telling them they were no longer needed						
▪ e) Asking departing employees to record handover information, provide consulting services, return to train those taking over etc						
▪ f) Providing supports like team building, counseling services etc for those remaining						
▪ g) Redesigning jobs or work processes to help people staying with the organisation						
▪ h) Training people staying with the organisation to help them with their new roles						

**12. To what extent do you feel the following were taken into consideration in the restructuring decision making?**

	Not Considered	Barely considered	Considered to some extent	Considered	Strongly considered	N/A
▪ a) Transferring redundant employees to other sections of the organisation or to a subsidiary/parent company						
▪ b) Avoiding making people redundant through decreasing people's hours, offering people leave without pay, job sharing, part time work etc.						
▪ c) Open communication - employees & other stakeholders understood the changes, could ask questions & make suggestions						
▪ d) Ways to retain the informal networks within the organisation that help people get things done						
▪ e) Ways to retain informal networks outside the organisation (eg with suppliers, customers, clients, industry contacts, professional contacts etc)						
▪ f) Impact of restructuring on work teams						
▪ g) Retaining mentors, project champions, other 'key' employees						

## 5. Perceptions AFTER Restructuring

13. Compared with before restructuring, to what extent was each of the following present in your organisation AFTER restructuring?

	Never present	A lot less now than before	Slightly less now than before	About the same now as before	Slightly more now than before	A lot more now than before	Unknown
▪ a) Opportunities for skill training							
▪ b) Team building activities							
▪ c) Opportunities for promotion							
▪ d) Groups with expert knowledge							
▪ e) Informal networks between people in the organisation							
▪ f) Opportunities for networking with peers & colleagues in the organisation							
▪ g) Opportunities for networking with peers & colleagues outside the organisation (suppliers, clients, customers etc)							
▪ h) Support for developing & using networks to get work done efficiently							
▪ i) Open communication channels between different sections of the organisation							
▪ j) Open communication channels between management & staff within the organisation							

**14. Compared with before restructuring, to what extent was each of the following present in your organisation AFTER restructuring?**

	Never present	A lot less now than before	Slightly less now than before	About the same now as before	Slightly more now than before	A lot more now than before	Unknown
▪ a) Common understanding of the goals & purpose of the organisation							
▪ b) High degree of cooperation between people & sections							
▪ c) Project champions to support & raise the profile of projects & activities							
▪ d) People with expert knowledge who were available & accessible							
▪ e) People willing to share knowledge							
▪ f) Time for people to share their knowledge							
▪ g) Important information readily accessible							
▪ h) Effective work teams							
▪ i) Opportunities for team work							
▪ j) Mentors							
▪ k) Satisfactory levels of trust within the organisation							

**6. Knowledge sharing**

**15. Compared with before restructuring, knowledge sharing in my organisation NOW involves...**

	Never present	A lot less now than before	Slightly less now than before	About the same now as before	Slightly more now than before	A lot more now than before	Unknown
▪ a) Support & encouragement for expert groups							
▪ b) Information sharing activities like team meetings, seminars, presentations, guest speakers, debriefing etc							
▪ c) Use of technology like collaborative software, email, intranet/internet chat rooms, video conferencing etc to enable easy sharing of information/ideas							
▪ d) Effective & accessible storage & retrieval systems like filing systems, databases, registers of important information/contacts etc							
▪ e) Structures & job designs that facilitated learning & application of skills							
▪ f) Open communication channels throughout the organisation							
▪ g) Access to people with knowledge & decision making ability							
▪ h) Working in teams & project groups							
▪ i) Encouragement for networking activities							

- j) Opportunities for individual & team learning & development
- k) Succession planning & other career development strategies
- l) A culture that encourages trust & knowledge sharing
- m) People assume "knowledge is power" so knowledge is often withheld

## 7. Perceptions SINCE restructuring

### 16. SINCE restructuring (in regard to myself &/or colleagues) I notice....

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
▪ a) There's a shortage of 'experts' to call on					
▪ b) It's difficult to source information that I need to do my job					
▪ c) There's insufficient time to get my work done as well as I want to.					
▪ d) There's increased voluntary turnover (people choose to leave after restructure)					
▪ e) People have less confidence in their ability to do the jobs expected of them					
▪ f) There's lots of 'reinventing the wheel' (re-introducing ideas we've had before)					
▪ g) People who were made redundant & left have been reemployed, replaced or came back as consultants					
▪ h) Jobs that were made redundant still need to be done					
▪ i) Lower job satisfaction					
▪ j) Decreased level of trust in management &/or colleagues					
▪ k) Decreased productivity					
▪ l) A decrease in the quality of work					
▪ m) More inefficiencies & errors occurring					
▪ n) There's a positive change in the culture of the organisation					
▪ o) Greater levels of friendship & social interactions within the organisation					
▪ p) Employees forming new contact networks					
▪ q) People seem less certain of their roles &/or the organisation's direction					
▪ r) There are fewer support networks in place					

### 17. Compared to before restructuring, how would you generally rate the following within your section (or the whole organisation) NOW?

	Unknown	A lot lower than before	Slightly lower than before	About the same as before	Slightly higher than before	A lot higher than before	Not applicable
▪ a) Employee morale							
▪ b) Level of job satisfaction							
▪ c) Employee stress levels							
▪ d) Employee's commitment to the organisation							
▪ e) Amounts of sick leave (or other time off) being taken							

- f) Willingness to embrace changes
- g) Agreement with company goals
- h) Level of trust
- i) Enthusiasm
- j) Voluntary turnover (ie people leaving by choice after the restructure)

**18. Compared to before restructuring, how would you generally rate the following within your section (or the whole organisation) NOW?**

	Unknown	A lot worse than before	Slightly worse than before	About the same as before	Slightly better than before	A lot better than before	N/A
▪ a) General feelings about the restructuring							
▪ b) Attitude toward the organisation							
▪ c) Management stability							
▪ d) Opinion of management							
▪ e) Ability to retain key staff							

**8. Perceptions SINCE restructuring**

**19. What are your general perceptions of the following NOW compared with before restructuring?**

	Unknown	A lot worse than before	Slightly worse than before	About the same as before	Slightly better than before	A lot better than before	N/A
▪ a) Level of response to advertisements for jobs in the organisation							
▪ b) Public image (ie company reputation/community standing/integrity in the market place)							
▪ c) Ability to attract top candidates for jobs							
▪ d) Likelihood of being taken over by another company							
▪ e) Popularity of your organisation to people outside as somewhere they would like to work							
▪ f) Share price							
▪ g) Customer/client satisfaction levels							
▪ h) Number of customer/client complaints							
▪ i) Overall size of the workforce (numbers of employees)							
▪ j) Use of contractors, consultants etc							
▪ k) Executive salary levels							
▪ l) Accident levels &/or workers compensation claims							

**20. What are your general perceptions of the following NOW compared with before restructuring?**

	Unknown	A lot worse than before	Slightly worse than before	About the same as before	Slightly better than before	A lot better than before	N/A
▪ a) Level of industrial disputation &/or union activity							
▪ b) Level of overall organisational							

knowledge
▪ c) Level of technical expertise in the organisation
▪ d) Level of corporate memory/history
▪ e) Ability to identify threats & opportunities
▪ f) Focus on core business & key functions (ie 'eyes on the ball')
▪ g) Likelihood of further downsizing
▪ h) Productivity levels
▪ i) Turnaround times for key activities or projects
▪ j) Performance - meeting Key Performance Indicator targets
▪ k) Overall organisational results
▪ l) Product/service quality

**21. What are your general perceptions of the following NOW compared with before restructuring?**

	A lot worse than before	Slightly worse than before	About the same as before	Slightly better than before	A lot better than before	N/A
▪ a) Likelihood of coming in on budget						
▪ b) Results of benchmarking against competitors						
▪ c) Likelihood of company survival						
▪ d) Achievement of stated company goals & mission						
▪ e) Attitude of suppliers towards the organisation						
▪ f) Ability to attract new customers/clients						
▪ g) Ability to retain existing customers/clients						
▪ h) Organisational ability to respond quickly to external changes						
▪ i) Organisational culture						
▪ j) Company position within industry						
▪ k) Efficiency of processes						

**22. In my opinion, my organisation...**

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
▪ a) Carefully planned how the restructuring would be implemented					
▪ b) Ensured work practices & procedures were well documented before restructuring					
▪ c) Effectively communicated how the changes would be implemented & how people would be affected					
▪ d) Ensured there was adequate handover between employees who were departing & those remaining					
▪ e) Involved employees in the restructuring process					
▪ f) Identified & supported key informal networks (ie those required to get the job done)					
▪ g) Developed a culture that encourages ongoing learning & sharing of knowledge & information					
▪ h) Identified, captured & stored necessary					

information before key people left

- i) Allowed people time to share information
- j) Provided adequate training for those employees remaining with the company after restructuring
- k) Sees employees as assets to be developed rather than costs

**23. Is there anything you would like to add?**

## **9. Thanks!**

THANK YOU FOR YOUR PARTICIPATION. If you would like to be included in a draw to WIN a double pass to the movies, fill in the section below with your contact details before **DATE**. Participation in the draw is completely voluntary - the contact details you provide to enter will only be used for the draw and will not be included in the data being analysed.

**24. Please include your contact details in the box below if you would like to be included in the draw to win a free double movie pass.**

## Appendix 4 - Factor Analysis

Question	Factor 1	Factor 2	Factor 3	Factor 4
14c Compared with before restructuring, to what extent were project champions to support & raise the profile of projects & activities present in your organisation AFTER restructuring?	0.559			
14d Compared with before restructuring, to what extent were people with expert knowledge who were available & accessible present in your organisation AFTER restructuring?	0.528			
a16 SINCE restructuring (in regard to myself &/or colleagues) I notice... There's a shortage of 'experts' to call on.	0.664			
b16 SINCE restructuring (in regard to myself &/or colleagues) I notice.... It's difficult to source information that I need to do my job	0.595			
e16 SINCE restructuring (in regard to myself &/or colleagues) I notice.... People have less confidence in their ability to do the jobs expected of them	0.527			
l16 SINCE restructuring (in regard to myself &/or colleagues) I notice.... A decrease in the quality of work	0.585			
m16 SINCE restructuring (in regard to myself &/or colleagues) I notice.... More inefficiencies & errors occurring	0.629			
19b What are your general perceptions of Public image (ie company reputation/community standing/integrity in the market place) NOW compared with before restructuring?	0.631			
19c What are your general perceptions of Ability to attract top candidates for jobs NOW compared with before restructuring?	0.535			
19e What are your general perceptions of Popularity of your organisation to people outside as somewhere they would like to work NOW compared with before restructuring?	0.712			
19f What are your general perceptions of Share price NOW compared with before restructuring?	0.624			
20b What are your general perceptions of Level of overall organisational knowledge NOW compared with before restructuring?	0.681			
20c What are your general perceptions of Level of technical expertise in the organisation NOW compared with before restructuring?	0.651			
20d What are your general perceptions of Level of corporate memory/history NOW compared with before restructuring?	0.590			
20h What are your general perceptions of Productivity levels NOW compared with before restructuring?	0.653			
20j What are your general perceptions of Performance - meeting Key Performance Indicator targets NOW compared with before restructuring?	0.617			
20k What are your general perceptions of Overall organisational results NOW compared with before restructuring?	0.668			
20l What are your general perceptions of Product/service quality NOW compared with before restructuring?	0.522			
21a What are your general perceptions of Likelihood of coming in on budget NOW compared with before restructuring?	0.505			
21b What are your general perceptions of Results of benchmarking against competitors NOW compared with before restructuring?	0.700			
21d What are your general perceptions of Achievement of stated company goals & mission NOW compared with before restructuring?	0.579			
21e What are your general perceptions of Attitude of suppliers towards the organisation NOW compared with before restructuring?	0.684			
21f What are your general perceptions of Ability to attract new customers/clients NOW compared with before restructuring?	0.542			



21g What are your general perceptions of Ability to retain existing customers/clients NOW compared with before restructuring?	0.681			
21j What are your general perceptions of Company position within industry NOW compared with before restructuring?	0.657			
13g Compared with before restructuring, to what extent was opportunities for networking with peers & colleagues outside the organisation (suppliers, clients, customers etc) present in your organisation AFTER restructuring?		0.621		
13h Compared with before restructuring, to what extent was support for developing & using networks to get work done efficiently present in your organisation AFTER restructuring?		0.639		
13i Compared with before restructuring, to what extent was open communication channels between different sections of the organisation present in your organisation AFTER restructuring?		0.566		
13j Compared with before restructuring, to what extent was open communication channels between management & staff within the organisation present in your organisation AFTER restructuring?		0.628		
14a Compared with before restructuring, to what extent was common understanding of the goals & purpose of the organisation present in your organisation AFTER restructuring?		0.660		
14b Compared with before restructuring, to what extent was high degree of cooperation between people & sections present in your organisation AFTER restructuring?		0.684		
14f Compared with before restructuring, to what extent was time for people to share their knowledge present in your organisation AFTER restructuring?		0.545		
14h Compared with before restructuring, to what extent was effective work teams present in your organisation AFTER restructuring?		0.655		
14i Compared with before restructuring, to what extent was opportunities for team work present in your organisation AFTER restructuring?		0.694		
15a Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... support & encouragement for expert groups		0.697		
15b Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... information sharing activities like team meetings, seminars, presentations, guest speakers, debriefing etc		0.656		
15e Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... structures & job designs that facilitated learning & application of skills		0.676		
15f Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... open communication channels throughout the organisation		0.705		
15g Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... access to people with knowledge & decision making ability		0.639		
15h Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... working in teams & project groups		0.652		
15i Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... encouragement for networking activities		0.741		
15j Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... opportunities for individual & team learning & development		0.605		
15l Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... a culture that encouraged trust & knowledge sharing		0.543		
21k What are your general perceptions of Efficiency of processes NOW compared with before restructuring?		0.574		
14e Compared with before restructuring, to what extent was people willing to share knowledge present in your organisation AFTER restructuring?		0.512		

11c To what extent <u>do you feel</u> Time for those leaving to document processes & procedures were taken into consideration in the restructuring decision making?			0.587	
11e To what extent <u>do you feel</u> Asking departing employees to record handover information, provide consulting services, return to train those taking over etc were taken into consideration in the restructuring decision making?			0.581	
11f To what extent <u>do you feel</u> Providing supports like team building, counseling services for those remaining etc were taken into consideration in the restructuring decision making?			0.534	
11g To what extent <u>do you feel</u> Redesigning jobs or work processes to help people staying with the organisation were taken into consideration in the restructuring decision making?			0.627	
11h To what extent <u>do you feel</u> Training people staying with the organisation to help them with their new roles were taken into consideration in the restructuring decision making?			0.632	
12a To what extent <u>do you feel</u> Transferring redundant employees to other sections of the organisation or to a subsidiary/parent company were taken into consideration in the restructuring decision making?			0.618	
12b To what extent <u>do you feel</u> Avoiding making people redundant through decreasing people's hours, offering people leave without pay, job sharing, part time work etc. were taken into consideration in the restructuring decision making?			0.536	
12c To what extent <u>do you feel</u> Open communication - employees & other stakeholders understood the changes, could ask questions & make suggestions were taken into consideration in the restructuring decision making?			0.612	
12d To what extent <u>do you feel</u> Ways to retain the informal networks within the organisation that help people get things done were taken into consideration in the restructuring decision making?			0.657	
12e To what extent <u>do you feel</u> Ways to retain informal networks outside the organisation (eg with suppliers, customers, clients, industry contacts, professional contacts etc) were taken into consideration in the restructuring decision making?			0.655	
12f To what extent <u>do you feel</u> Impact of restructuring on work teams were taken into consideration in the restructuring decision making?			0.623	
12g To what extent <u>do you feel</u> Retaining mentors, project champions, other 'key' employees were taken into consideration in the restructuring decision making?			0.629	
22a In my opinion, my organisation... carefully planned how the restructuring would be implemented			0.607	
22b In my opinion, my organisation... ensured work practices & procedures were well documented before restructuring			0.681	
22c In my opinion, my organisation... effectively communicated how the changes would be implemented & how people would be affected			0.678	
22d In my opinion, my organisation... ensured there was adequate handover between employees who were departing & those remaining			0.672	
22e In my opinion, my organisation... involved employees in the restructuring process			0.660	
22f In my opinion, my organisation... identified & supported key informal networks (ie those required to get the job done)			0.751	
22g In my opinion, my organisation... developed a culture that encourages ongoing learning & sharing of knowledge & information			0.642	
22h In my opinion, my organisation... identified, captured & stored necessary information before key people left			0.755	
22i In my opinion, my organisation... allowed people time to share information			0.747	
22j In my opinion, my organisation... provided adequate training for those employees remaining with the company after restructuring			0.630	

f16 SINCE restructuring (in regard to myself &/or colleagues) I notice.... There's lots of 'reinventing the wheel' (re-introducing ideas we've had before)			0.538	
14e Compared with before restructuring, to what extent was people willing to share knowledge present in your organisation AFTER restructuring?				0.597
17a Compared to before restructuring, how would you generally rate Employee morale within your section (or the whole organisation) NOW?				0.682
17b Compared to before restructuring, how would you generally rate Level of job satisfaction within your section (or the whole organisation) NOW?				0.600
17d Compared to before restructuring, how would you generally rate Employee's commitment to the organisation within your section (or the whole organisation) NOW?				0.554
17f Compared to before restructuring, how would you generally rate Willingness to embrace changes within your section (or the whole organisation) NOW?				0.577
17g Compared to before restructuring, how would you generally rate Agreement with company goals within your section (or the whole organisation) NOW?				0.546
17h Compared to before restructuring, how would you generally rate Level of trust within your section (or the whole organisation) NOW?				0.653
17i Compared to before restructuring, how would you generally rate Enthusiasm within your section (or the whole organisation) NOW?				0.517
18a Compared to before restructuring, how would you generally rate General feelings about the restructuring within your section (or the whole organisation) NOW?				0.585
18b Compared to before restructuring, how would you generally rate Attitude toward the organisation within your section (or the whole organisation) NOW?				0.608
18c Compared to before restructuring, how would you generally rate Management stability within your section (or the whole organisation) NOW?				0.515
18d Compared to before restructuring, how would you generally rate Opinion of management within your section (or the whole organisation) NOW?				0.631
19a What are your general perceptions of Level of response to advertisements for jobs in the organisation NOW compared with before restructuring?				0.502

## Appendix 5 - CONSTRUCT QUESTIONS AND RELIABILITY

Construct	Questions included	$\alpha$
Organisational Knowledge	<p>14c Compared with before restructuring, to what extent were project champions to support &amp; raise the profile of projects &amp; activities present in your organisation AFTER restructuring?</p> <p>14d Compared with before restructuring, to what extent were people with expert knowledge who were available &amp; accessible present in your organisation AFTER restructuring?</p> <p>a16 SINCE restructuring (in regard to myself &amp;/or colleagues) I notice... There's a shortage of 'experts' to call on.</p> <p>b16 SINCE restructuring (in regard to myself &amp;/or colleagues) I notice.... It's difficult to source information that I need to do my job</p> <p>e16 SINCE restructuring (in regard to myself &amp;/or colleagues) I notice.... People have less confidence in their ability to do the jobs expected of them</p> <p>l16 SINCE restructuring (in regard to myself &amp;/or colleagues) I notice.... A decrease in the quality of work</p> <p>m16 SINCE restructuring (in regard to myself &amp;/or colleagues) I notice.... More inefficiencies &amp; errors occurring</p> <p>20b What are your general perceptions of Level of overall organisational knowledge NOW compared with before restructuring?</p> <p>20c What are your general perceptions of Level of technical expertise in the organisation NOW compared with before restructuring?</p> <p>20d What are your general perceptions of Level of corporate memory/history NOW compared with before restructuring?</p>	<b>0.910</b>
Formal Knowledge Sharing	<p>13i Compared with before restructuring, to what extent was open communication channels between different sections of the organisation present in your organisation AFTER restructuring?</p> <p>13j Compared with before restructuring, to what extent was open communication channels between management &amp; staff within the organisation present in your organisation AFTER restructuring?</p> <p>14a Compared with before restructuring, to what extent was common understanding of the goals &amp; purpose of the organisation present in your organisation AFTER restructuring?</p> <p>14f Compared with before restructuring, to what extent was time for people to share their knowledge present in your organisation AFTER restructuring?</p> <p>14h Compared with before restructuring, to what extent was effective work teams present in your organisation AFTER restructuring?</p> <p>15a Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... support &amp; encouragement for expert groups</p> <p>15b Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... information sharing activities like team meetings, seminars, presentations, guest speakers, debriefing etc</p> <p>15e Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... structures &amp; job designs that facilitated learning &amp; application of skills</p> <p>15f Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... open communication channels throughout the organisation</p> <p>15g Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... access to people with knowledge &amp; decision making ability</p> <p>15h Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... working in teams &amp; project groups</p> <p>15j Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... opportunities for individual &amp; team learning &amp; development</p> <p>15l Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... a culture that encouraged trust &amp; knowledge sharing</p>	<b>0.939</b>

Informal Networks	<p>13g Compared with before restructuring, to what extent was opportunities for networking with peers &amp; colleagues outside the organisation (suppliers, clients, customers etc) present in your organisation AFTER restructuring?</p> <p>13h Compared with before restructuring, to what extent was support for developing &amp; using networks to get work done efficiently present in your organisation AFTER restructuring?</p> <p>14b Compared with before restructuring, to what extent was high degree of cooperation between people &amp; sections present in your organisation AFTER restructuring?</p> <p>14e Compared with before restructuring, to what extent was people willing to share knowledge present in your organisation AFTER restructuring?</p> <p>14i Compared with before restructuring, to what extent was opportunities for team work present in your organisation AFTER restructuring?</p> <p>15i Compared with before restructuring, knowledge sharing in my organisation NOW includes/involves... encouragement for networking activities</p> <p>21h What are your general perceptions of Organisational ability to respond quickly to external changes NOW compared with before restructuring?</p>	0.876
Downsizing/ Restructuring Decisions	<p>11c To what extent <u>do you feel</u> Time for those leaving to document processes &amp; procedures were taken into consideration in the restructuring decision making?</p> <p>11e To what extent <u>do you feel</u> Asking departing employees to record handover information, provide consulting services, return to train those taking over etc were taken into consideration in the restructuring decision making?</p> <p>11f To what extent <u>do you feel</u> Providing supports like team building, counseling services for those remaining etc were taken into consideration in the restructuring decision making?</p> <p>11g To what extent <u>do you feel</u> Redesigning jobs or work processes to help people staying with the organisation were taken into consideration in the restructuring decision making?</p> <p>11h To what extent <u>do you feel</u> Training people staying with the organisation to help them with their new roles were taken into consideration in the restructuring decision making?</p> <p>12a To what extent <u>do you feel</u> Transferring redundant employees to other sections of the organisation or to a subsidiary/parent company were taken into consideration in the restructuring decision making?</p> <p>12b To what extent <u>do you feel</u> Avoiding making people redundant through decreasing people's hours, offering people leave without pay, job sharing, part time work etc. were taken into consideration in the restructuring decision making?</p> <p>12c To what extent <u>do you feel</u> Open communication - employees &amp; other stakeholders understood the changes, could ask questions &amp; make suggestions were taken into consideration in the restructuring decision making?</p> <p>12d To what extent <u>do you feel</u> Ways to retain the informal networks within the organisation that help people get things done were taken into consideration in the restructuring decision making?</p> <p>12e To what extent <u>do you feel</u> Ways to retain informal networks outside the organisation (eg with suppliers, customers, clients, industry contacts, professional contacts etc) were taken into consideration in the restructuring decision making?</p> <p>12f To what extent <u>do you feel</u> Impact of restructuring on work teams were taken into consideration in the restructuring decision making?</p> <p>12g To what extent <u>do you feel</u> Retaining mentors, project champions, other 'key' employees were taken into consideration in the restructuring decision making?</p>	<p>0.912</p> <p>0.920 [achieved following discriminant validity testing and removal of 12 a&amp;b]</p>
Downsizing/ Restructuring Processes	<p>22a In my opinion, my organisation... carefully planned how the restructuring would be implemented</p> <p>22b In my opinion, my organisation... ensured work practices &amp; procedures were well documented before restructuring</p> <p>22c In my opinion, my organisation... effectively communicated how the changes would be implemented &amp; how people would be affected</p> <p>22d In my opinion, my organisation... ensured there was adequate handover between employees who were departing &amp; those remaining</p> <p>22e In my opinion, my organisation... involved employees in the restructuring process</p> <p>22f In my opinion, my organisation... identified &amp; supported key informal networks (ie those required to get the job done)</p>	0.943

	<p>22g In my opinion, my organisation... developed a culture that encourages ongoing learning &amp; sharing of knowledge &amp; information</p> <p>22h In my opinion, my organisation... identified, captured &amp; stored necessary information before key people left</p> <p>22i In my opinion, my organisation... allowed people time to share information</p> <p>22j In my opinion, my organisation... provided adequate training for those employees remaining with the company after restructuring</p> <p>22k In my opinion, my organisation... Sees employees as assets to be developed rather than costs</p>	
<p>Organisational Effectiveness</p>	<p>17a Compared to before restructuring, how would you generally rate Employee morale within your section (or the whole organisation) NOW?</p> <p>17b Compared to before restructuring, how would you generally rate Level of job satisfaction within your section (or the whole organisation) NOW?</p> <p>17d Compared to before restructuring, how would you generally rate Employee's commitment to the organisation within your section (or the whole organisation) NOW?</p> <p>17f Compared to before restructuring, how would you generally rate willingness to embrace changes within your section (or the whole organisation) NOW?</p> <p>17g Compared to before restructuring, how would you generally rate agreement with company goals within your section (or the whole organisation) NOW?</p> <p>17h Compared to before restructuring, how would you generally rate Level of trust within your section (or the whole organisation) NOW?</p> <p>17i Compared to before restructuring, how would you generally rate enthusiasm within your section (or the whole organisation) NOW?</p> <p>18a Compared to before restructuring, how would you generally rate general feelings about the restructuring within your section (or the whole organisation) NOW?</p> <p>18b Compared to before restructuring, how would you generally rate attitude toward the organisation within your section (or the whole organisation) NOW?</p> <p>18c Compared to before restructuring, how would you generally rate management stability within your section (or the whole organisation) NOW?</p> <p>21i What are your general perceptions of Organisational culture NOW compared with before restructuring?</p>	<p><b>0.956</b></p>

## Appendix 6 - PEARSON CORRELATIONS OF VARIABLES

Tables A6.1 to A6.3 present the results of correlation analysis of variables for the full data set and both Decision Makers/Managers and Affected Employees subsets.

*Table A6.1: Correlation of Variables - Full Data Set*

<b>Correlations</b>	Downsizing/ Restructuring decisions	Downsizing/ Restructuring processes	Formal Knowledge sharing	Informal networks	Organisational effectiveness	Organisational knowledge
Downsizing/ restructuring decisions	1 522					
Downsizing/ restructuring processes	.781** .000 476	1 483				
Formal Knowledge sharing	.587** .000 508	.632** .000 482	1 515			
Informal networks	.608** .000 507	.619** .000 481	.818** .000 514	1 514		
Organisational effectiveness	.621** .000 485	.682** .000 479	.731** .000 490	.756** .000 489	1 493	
Organisational knowledge	.604** .000 508	.681** .000 482	.746** .000 514	.752** .000 514	.770** .000 490	1 515

\*\* Correlation is significant at the 0.01 level (2-tailed).

In dealing with missing values pairwise deletion was implemented in all analyses.

*Table A6.2: Correlation of Variables – Decision Makers/Managers Data Set*

<b>Correlations</b>	Downsizing/ restructuring decisions	Downsizing/ restructuring processes	Formal Knowledge sharing	Informal networks	Organisational effectiveness	Organisational knowledge
Downsizing/ restructuring decisions	1 129					
Downsizing/ restructuring processes	.757** .000 119	1 120				
Formal Knowledge sharing	.641** .000 126	.780** .000 119	1 126			
Informal networks	.661** .000 126	.770** .000 119	.902** .000 126	1 126		
Organisational effectiveness	.582** .000 120	.739** .000 119	.811** .000 120	.789** .000 120	1 120	
Organisational knowledge	.607** .000 126	.772** .000 119	.819** .000 126	.801** .000 126	.813** .000 120	1 126

\*\* Correlation is significant at the 0.01 level (2-tailed).

Table A6.3: Correlation of Variables – Affected Employees Data Set

Correlations	Downsizing/ restructuring decisions	Downsizing/ restructuring processes	Formal Knowledge sharing	Informal networks	Organisational effectiveness	Organisational knowledge
Downsizing/ restructuring decisions	1 441					
Downsizing/ restructuring processes	.781** .000 405	1 411				
Formal Knowledge sharing	.561** .000 430	.579** .000 411	1 437			
Informal networks	.590** .000 430	.576** .000 411	.881** .000 437	1 437		
Organisational effectiveness	.610** .000 413	.637** .000 408	.698** .000 418	.748** .000 418	1 418	
Organisational knowledge	.589** .000 430	.649** .000 411	.726** .000 437	.742** .000 437	.758** .000 418	1 437

\*\* Correlation is significant at the 0.01 level (2-tailed).

All variables were significantly correlated with the dependent variables, confirming statistical support for linear relationships between the independent and each dependent variable. Note the relatively high correlation between *informal networks* and *formal knowledge sharing*. This may be attributable to both these constructs being extracted from factor two, 'knowledge sharing'. Similarly, high correlations between *downsizing/restructuring decisions* and *downsizing/restructuring processes* may be due to both being extracted from factor three, 'downsizing/restructuring events'. The correlation analysis alerted the researcher to the possible masking effects of Multi-collinearity (Field, 2006). Given the high correlations between some of the independent variables, Multi-collinearity may result in significant relationships appearing insignificant when tested concurrently (Tabachnic & Fidell, 2007).



## Appendix 7 - ANALYSIS OF RESPONSES TO OPEN-ENDED QUESTION

### A7.0 INTRODUCTION

The analysis of the comments received in response to the final qualitative question “do you have anything to add?” identified the general feelings expressed by respondents. Of the 648 surveys received, 159 (24.5%) contained a response to this question. The comments were categorised as positive, negative or neutral. Positive comments were those where the general nature of the feedback was supportive of the downsizing/restructuring. Negative responses were those where the feedback suggested the experience had resulted in a negative experience either for the individual themselves or in their perception of the organisation. Neutral responses were those where comments were of a general or ‘no comment’ nature or did not express an opinion which indicated support or otherwise for the downsizing/restructuring experience or the organisation. The neutral comments were not analysed further as they did not express any relevant views regarding the events experienced by the respondent. Individual positive and negative comments were analysed to emerge general themes.

Approximately 14% of the total sample provided optional qualitative feedback. Table A9.1 summarises the number and category of responses obtained. Of the comments provided, 59.1% indicated negative feelings towards the downsizing/restructuring or the organisation, with only 5% indicating the outcome had been positive.

*Table A7.1: Numbers of Qualitative Responses*

<b>Comment</b>	<b>Number</b>	<b>Percentage of total</b>
Negative	94	59.1
Positive	8	5.0
Neutral	57	35.9
<b>Total</b>	159	100

Whilst this indicates generally poor experiences, it must be borne in mind that over 75% of participants did not elect to make any comments, which may

indicate a degree of tacit support for the downsizing/restructuring. Conversely, the 25% may be indicative of a general trend in response patterns. It is not possible to make a definitive assessment from the data available.

Overall, relatively negative responses were anticipated since participants self-selected to respond to the survey. Self-selection suggests those with strong feelings about their experience are the most likely to respond. Whilst strong positive feelings are likely to be easily expressed in the workplace, negative feelings may not be as easily aired, making a confidential survey a potentially attractive avenue for expressing discontent.

Despite these provisos, the tone of respondents' comments is overwhelmingly negative. Further data collection and qualitative analysis would be required in order to make any further comments or recommendations in this regard.

## **A7.2 NEGATIVE RESPONSE THEMES**

Table A7.2 summarises the negative themes emerged through the qualitative analysis phase. Whilst a number of categories represent fairly low numbers of responses, three categories each represent between 11 and 23% of responses.

*Table A7.2: Negative Response Themes*

<b>Theme</b>	<b>Number</b>	<b>Percentage of total</b>
Decreased Productivity	4	2.1
Lack of clarity/direction	4	2.1
Stress & anxiety	4	2.1
Poor Planning	5	2.7
Increased workload	6	3.2
Knowledge/people lost or rehired	6	3.2
Poor treatment (inequity, bullying)	6	3.2
Overall dissatisfaction/disappointed, resigned to outcome	9	4.8
Lack of communication	12	6.4
Loss of trust/confidence &/or other issues relating to ethical behaviour in organisation	14	7.5
Targets not met, decreased quality or standards	16	8.5
Lack of consultation	22	11.7
Poor implementation process	37	19.7
Experience left a 'bad taste'	43	22.9
<b>Total</b>	<b>188</b>	<b>100</b>

The negative responses were strongly focussed around lack of consultation, poor implementation processes and experiences that left a general 'bad taste' in the mouths of respondents. These categories comprised over half the responses received and are best illustrated using examples of some of the more evocative comments received from respondents:

Lack of consultation

*"The lack of consultation added to the complete disinterest over what would actually happen to those actually delivering the product was astounding."*

*"The restructure was a fait accompli before it started. It went through the motions of consulting people but paid no attention to anyone's thoughts and concerns. It was a whitewash and left a bad taste in my mouth."*

*"The restructure was more a matter of being told as opposed to being involved. It was considered by all staff to be flawed and that remains the view now that it is in place."*

*"The decision to not inform staff of their future I saw as deplorable. The whole section found out via the radio. This was both demoralising and bewildering. There was no trust given to any employee either senior or junior. I still hate the minister that made the decision as my job/career is now less interesting now come to a grinding halt and I now wait for the next restructure to give me redundancy so I can get on with my life."*

*"Management make the decisions and employees just have to fall in line. The level of communication was a disgrace. Access to the information was a disgrace. Most restructures I have been involved in have been purely cost saving exercises without any consideration to procedures, job alignments, and employee satisfaction and morale. As a result employees now have to take on excessive workloads and are extremely unmotivated and bitter towards the organisation."*

*"We were involved in the process, however we were not listened to and Management just did their own thing, shafted the workers and now they have a very bitter and twisted lot of workers who do not trust them and who will not go out of their way to help Management. They may have saved a few dollars in the restructure but they halved production."*

### Poor processes

*"Re-structure has to date failed to provide the direction required for the organisation to move forward...."*

*"The organisation pulls the wool over the communities (sic) eyes .....They just pretend to be a well organised band of people and really it is very disjointed. People are only making changes to get a promotion."*

*"....There has been minimal effort to deal with problems identified during the first two phases prior to proceeding with the third and final stage. The complete lack of interest and/or concern for the welfare of individuals and the organisation as a whole has been astounding..."*

*"...There has been no effort made to retain persons who hold extensive corporate memories that could assist the organisation in the future and a marked loss of expertise in the complete range of daily activities undertaken by employees. The planning, communication and implementation have been conducted poorly and have demoralised remaining staff to a great extent..."*

*"...There has been a significant loss of career opportunities and devaluing of skills and expertise. What more can one say other than the restructuring exercise has been less than appropriately managed to meet current and future needs of the organisation."*

*"There seemed to be little support from management to assist staff with the transition once the new structure was in place. There was a lot of in-*

*house bickering between the new units over who was responsible for certain processes eg 'that is NOT our job that is yours' v 'no it isn't - you should be doing that'. Also important processes were forgotten or not thought about in process mapping exercises and gaps appeared."*

*"Some decisions seemed to have been made in a vacuum."*

*"It is my perception that senior management anticipated a degree of resistance to the restructure and decided to adopt a fairly secretive approach. At the latter end of the process, the corporate executive tried to lift its game by arranging job functions to be documented, etc., but it was all 'too little, too late' and indeed, was perceived by many as a cynical move to try and make the Functional Review look like a modern, well-planned restructuring exercise. In my opinion, those planning and managing the restructure were not expert or knowledgeable enough to make a good job of it."*

*"Well intentioned, not effective in practice."*

*"The whole restructure was conducted in the most diabolical manner; methodology used to justify restructure was badly researched and written..."*

#### Bad taste

*"Completely disgusted with the organisation and only stay because they continue to pay me."*

*"I have never experienced such a negative work experience before. ....The euphemisms change but the negative human cost remains the same."*

*"Good case study of how not to treat employees who don't wear a uniform when uniforms run the show."*

*“This process is depressing!”*

*“We were shafted.”*

*“I used to enjoy my work but now I am looking for another job and hope to get out as soon as possible”*

*“My organisation's restructure was a disaster and the people who are left are still reeling from its impact. I will be made redundant yet my job and the jobs that I have picked up still need to be done.”*

### **A7.3 POSITIVE RESPONSE THEMES**

Table A7.3 summarises the positive themes that emerged through the analysis of the qualitative data. Whilst the percentage responses for each category are quite high (11-33%), there were only a small number of positive responses identified.

*Table A7.3: Positive Response Themes*

<b>Theme</b>	<b>Number</b>	<b>Percentage of total</b>
Improved accountability	1	11.1
Mixed outcomes – both positive & negative	2	22.2
Evolving outcome – process still occurring	3	33.3
Improved organisational management	3	33.3
<b>Total</b>	<b>9</b>	<b>100</b>

The positive themes that emerged did not demonstrate the same degree of passion as the negative ones. Whilst rated as positive they were generally conservatively stated, with considerably less strength of conviction expressed in the comments given. Some examples are provided to demonstrate the difference in emphasis of these responses:

#### Improved management

*“...too many restructures in our organisation, tend to revert back to the way they were. Management is a little better because of new MD not as a result of the restructure. Concerned that there is a lot of change”*

*“The initial stage of the restructure and downsizing involved the pre existing State Manager whose management style was based on a 'Fear Paradime' who subsequently resigned when The executive recognised the true negative impact he was having on the business and the defection of key personnel during the restructure. Upon his replacement a significant improvement in morale and direction has occurred. “*

#### Mixed results

*“Re-structuring was fairly positive to one or two but not the rest of the department depending on the unit that you moved to following the re-structuring.”*

#### Evolving

*“The restructure began at the end of last year following a report prepared by an external consultant. The restructure is only just coming into effect; therefore it's difficult to assess a lot of these impacts. There was a restructure 12 months earlier, and the result of this was very bad on the team. I'd suggest they have learned from this, and made sure this restructure was a positive as possible.”*

*“I personally see the restructure as a smooth transition and changes have not resulted in radical upheavals. The whole process was well communicated to staff.”*

### **A7.4 QUALITATIVE ANALYSIS CONCLUSIONS**

There is no direct linkage between the qualitative survey item and the hypotheses proposed for this study. Thus, the findings do not establish specific relationships between any of the variables and are therefore not included in the body of the thesis. The intention in including this question was to gauge the general mood of respondents about the downsizing/restructuring they had undergone.

The findings presented must be viewed in light of the various stipulations previously mentioned and cannot therefore be anything more than indicative measures of the general views of participants. However, the relative strength of feeling expressed in the negative comments submitted indicates the potentially divisive nature of downsizing/restructuring processes and reinforces the importance to business of the way in which they are undertaken.

In particular, the results suggest the importance participants place on the implementation process in terms of degree of consultation as well as other practices which may 'leave a bad taste' in the mouths of employees.

Little indication of widespread positive reaction to the downsizing/restructuring experience was evident. Business should therefore be cognisant of the potential for negative fallout and attempt to implement downsizing/restructuring in such a way as to ensure the workforce remains engaged and supportive if they are to avoid some of the more extreme responses evident from the examples provided.



## Appendix 8 - COLLINEARITY DIAGNOSTICS AND RESIDUAL ANALYSIS FOR THE FULL DATA SET

Multi-collinearity poses a threat to the viability of the results of regression analysis and it is necessary to conduct collinearity diagnostics to assess its possible presence and impact it might have on the regression model.

Table A7.1 below provides the Variance Inflation Factor (VIF) and corresponding Tolerance values for the regression model for the full data set. The statistics clearly indicate that the VIF and Tolerance values are all within the acceptable levels (i.e. the largest VIF having to be less than 10 and the Tolerance having to be less than 0.1 (Myers 1990; Bowerman & O'Connell 1990 cited in Field 2005).

*Table A8.1: Coefficients and Collinearity Statistics*

### Coefficients<sup>a</sup>

Model	Unstandardised Coefficients		Standardised Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-.406	.091		-4.476	.000		
Downsizing/Restructuring Decisions	.026	.038	.029	.683	.495	.366	2.731
Downsizing/Restructuring Processes	.195	.044	.202	4.387	.000	.322	3.103
Formal Knowledge Sharing	.063	.069	.055	.917	.360	.191	5.232
Informal Networks	.369	.072	.312	5.112	.000	.182	5.483
Organisational Knowledge	.381	.050	.332	7.592	.000	.355	2.814

a Dependent Variable: Organisational Effectiveness

Additional diagnostics were conducted to further detect the presence of collinearity. Table A8.2 provides a summary of the Eigenvalues and the variance proportions associated with these values.

Table A8.2: Collinearity Diagnostics

**Collinearity Diagnostics<sup>a</sup>**

Model 1 Dimension	Eigenvalue	Condition Index	Variance Proportions					
			Constant	Downsizing/ Restructuring Decisions	Downsizing/ Restructuring Processes	Formal Knowledge Sharing	Informal Networks	Organisational Knowledge
1	5.822	1.000	.00	.00	.00	.00	.00	.00
2	.081	8.476	.24	.20	.11	.01	.01	.00
3	.042	11.770	.74	.09	.01	.06	.04	.04
4	.027	14.629	.00	.62	.63	.01	.03	.08
5	.020	17.097	.01	.07	.23	.08	.03	.87
6	.007	28.206	.00	.03	.02	.84	.89	.01

a Dependent Variable: Final Mean Organisational Effectiveness (total)

Note that the predictors Formal Knowledge Sharing and Informal Networks record high proportions for the low Eigenvalue on Dimension 6 in the model which indicates that there is a potential link between these two predictors. Similarly, downsizing/restructuring decisions and processes record high proportions for the Eigenvalue on Dimension 4 in the model. There are several ways of dealing with this situation in a regression model (Field 2005:263). The aim of this study was to gain insights on factors that impact on Organisational Effectiveness hence the discussion around the model and the analysis of the intervening variable analysis were conducted on both these predictors. In adopting this stance we acknowledge the potential for unreliability of the model. Analysis on the model excluding each of these individually and independently did not adversely impact on the findings discussed in Chapter 4. Additional analysis on a reduced model (excluding downsizing/restructuring decisions) also proved not to adversely impact on the findings reported in Chapter 4.

Table A8.3 and Figures A8.4 to A8.6 contain the analysis of the residuals for the full data set model and clearly indicates that the model assumptions were met. The Durbin-Watson statistic for residual independence (Autocorrelation) proved acceptable and recorded a value of 1.92.

Table A8.3: Residuals Statistics

Residuals Statistics <sup>a</sup>					
	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	.6406	4.1601	2.3274	.70841	473
Residual	-1.35851	2.16172	.00000	.48379	473
Std. Predicted Value	-2.381	2.587	.000	1.000	473
Std. Residual	-2.793	4.445	.000	.995	473

a. Dependent Variable: Final Mean Organisational Effectiveness (total)

Figure A8.4: Histogram of Standardised residuals

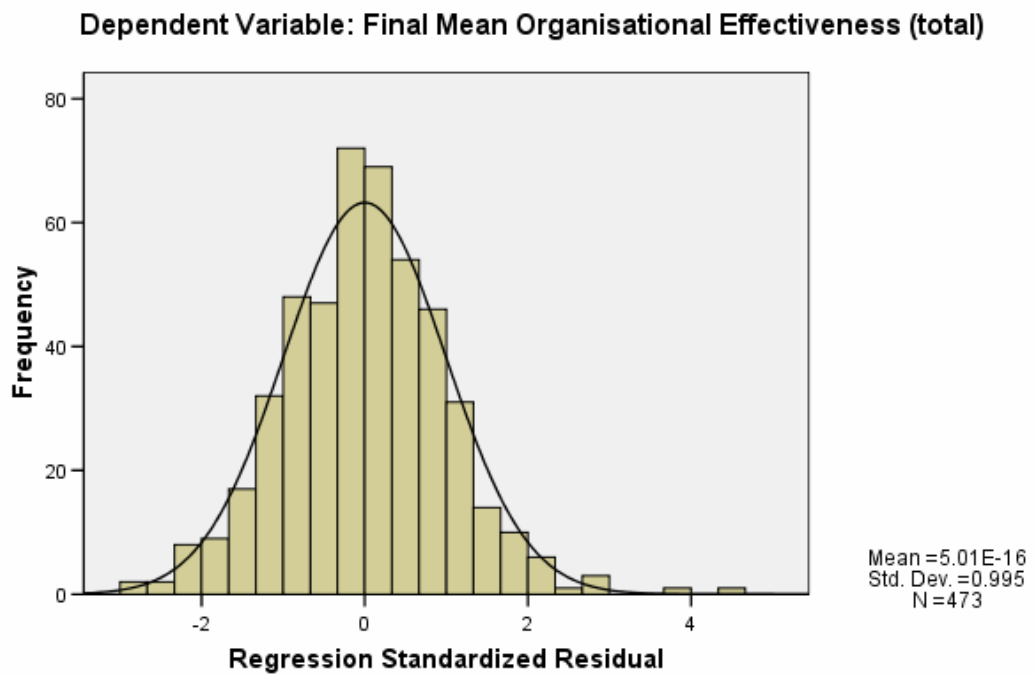


Figure A8.5: Normal P-P Plot of Regression Standardised Residual

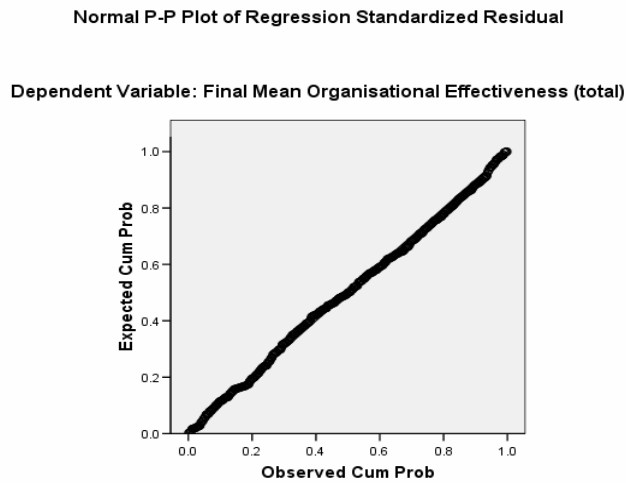
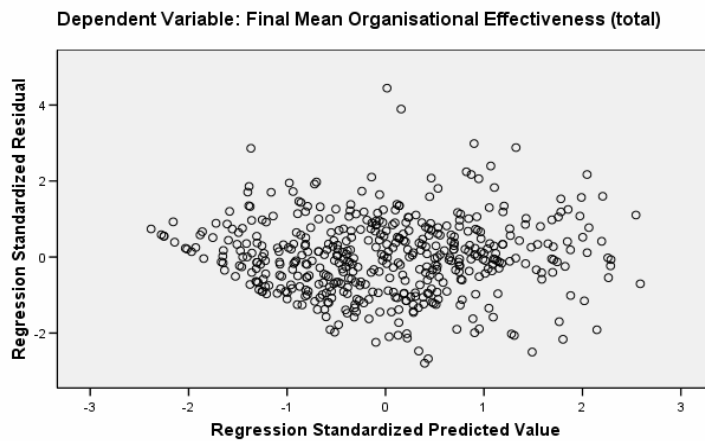


Figure A8.6: Scatterplot of Standardised Residual Against Standardised Predicted Values.



The plot of the standardized Residual against the standardized predicted values indicate that the assumptions of linearity and homoscedasticity have been met.

The above diagnostics were conducted for each of the sub analysis reported in the findings and proved to be within the required limits.

### Cross Validation of the Model

The R-square of 0.682, which represents the amount of variance in the outcome explained by the model in the full data set, is presented in the table below with the corresponding ANOVA analysis. This model includes the independent variables downsizing/restructuring processes, formal knowledge sharing, informal networks and organisational knowledge. In assessing the accuracy of the model if applied across different samples it is noted that the Adjusted R-square value of 0.679 is very similar to the R-square value of 0.682 providing evidence that the cross-validity of the model is good.

Table A8.4: Model Summary

Model Summary					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.826	0.682	0.679	0.48670	1.920

- a. Predictors: (Constant), Downsizing/restructuring processes, Informal Networks, Organisational Knowledge, Formal Knowledge Sharing  
 b. Dependent Variable: Organisational Effectiveness

Table A8.5: Model Summary

ANOVA						
Model		Sum of Square	df	Mean Square	F	Sig
1	Regression	239.845	4	59.961	253.128	0.000 <sup>a</sup>
	Residual	112.045	473	0.237		
	Total	351.890	477			

- a. Predictors: (Constant), Downsizing/restructuring processes, Informal Networks, Organisational Knowledge, Formal Knowledge Sharing  
 b. Dependent Variable: Organisational Effectiveness