## High-Involvement Work Systems: Their Effect on Employee Turnover and Organisational Performance in New Zealand Organisations

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Organisations can create a competitive advantage through the way they design their human resource systems. High involvement work systems are considered to be a way to increase organisational performance and decrease employee turnover. However, the components involved are difficult and complex to define, and the synergy amongst the different components hard to evaluate. The literature suggests that the research is not uniform in its approach, and most research does not clearly define the variables involved or agree on the expected results of such systems.

This research looks at high involvement work systems in the New Zealand organisational context, and relating these systems to employee turnover and organisational performance. The results of the study suggest that there does not appears to be a relationship between high involvement work systems, and employee turnover and organisational performance; but high involvement systems may contribute to increased labour productivity in New Zealand organisations.

**Keywords:** High Involvement Work Systems, High Performance Work Practices Employee Turnover, Organisational Performance, Labour Productivity, New Zealand Organisations

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## **Chapter 1: Introduction**

#### 1.1 Background

With the increasing acknowledgement of people as an organisation's best asset (Guy, 2003; Rodgers & Ferketish, 2005), there is a desire to find ways to increase employee contribution to the organisation while better understanding how effective human resource systems operate. If an organisation can recruit and retain the right employees, develop them through training and skill acquisition, then this knowledge can be used as a competitive advantage to drive the organisation forward (Guy, 2003). The difficulty is how best to develop a system that will allow for this type of symbiotic relationship between employee and organisation.

High involvement work systems (HIWS) allow for more input from employees and allow organisations to optimise their innate abilities more efficiently and effectively (Rodgers & Ferketish, 2005). Through employee participation, organisations should be able to develop a better insight into how they are functioning, and potentially, where improvements could be made to benefit both the organisation and the employees (Guy, 2003).

If HIWS increase organisational performance and also decrease employee turnover this can provide both financial benefits and organisational stability. Decreased turnover allows an organisation to retain collective knowledge that may be lost to the organisation and gained by competitors. It also decreases the amount of finance required for recruitment and training while providing and attractive culture to potential employees who wish to have job security (Rodgers & Ferketish, 2005; Way, 2002).

However, there is also very little consensus as to what constitutes 'HIWS', and limited research on how they function in the New Zealand context. The only previous research (Guthrie, 2001) looked at how HIWS function in New Zealand, without clearly defining what this system is and only focused on organisations with 100 or more employees. Guthrie (2001, p. 187) concluded "turnover is adversely associated

with productivity when use of these practices is high and, conversely, turnover is positively associated with productivity when use of these practices is low".

#### 1.1 Research Problem

HIWS are complex and difficult to precisely define. Many authors (Lawler, 1986; MacDuffie, 1995; Osterman, 1994) disagree on precisely what components these systems contain, and how these components interrelate. Other authors (Appelbaum, Bailey, Berg, & Kalleberg, 2000; Godard, 2004; Kaufman, 2003; Wood & De Menezes, 1998) disagree about what the concept should be called. The term 'high performance' is used by some authors (Appelbaum et al., 2000; Boslie & van der Wiele, 2002; Edwards & Wright, 2001) to reflect what they feel is the impact that these systems have on the organisation and on organisational performance. Others (Gollan & Davis, 1999; Guerrero & Barraud-Didier, 2004; Lawler, 1986) prefer to use the term 'high involvement' to reflect their view that the systems are fundamentally about involving employees in the running of the organisation. Other authors (Addison, 2005; Hardy & Leiba-O'Sullivan, 1998; Klein, 1984; Riordan, Vandenberg, & Richardson, 2005) describe employee involvement and empowerment of employees within an organisation in a similar way to high involvement or high performance organisations. In the present thesis, HIWS will be defined as using four dimensions of power, information, rewards and knowledge (Ciavarella, 2003).

Within the New Zealand context, there has been little research done to establish the extent to which HIWS are used in organisations (Guthrie, 2001). If New Zealand organisations are using HIWS, are they having an impact on their overall performance and does the use of these systems decrease the employee turnover within the organisation? These are two key questions this research will address.

Previous research on HIWS looked at the impact the systems had on performance (Lloyd, 2000; Rodgers & Ferketish, 2005; Way, 2002), but did not look at how many organisations use HIWS, and whether having a more extensive HIWS with more components has a greater impact on performance than a system with fewer components. Additionally, previous research (Guthrie, 2001; Osterman, 1994;

Tesluk, Vance, & Mathieu, 1999) did not adequately describe what the key elements of high involvement organisations were, or show whether these key elements appeared to have an effect on performance.

There are also some contradictory findings about whether HIWS do enhance performance in organisations. Many authors (Appelbaum et al., 2000; Godard & Delaney, 2000; Lloyd, 2000; Way, 2002) cite HIWS as improving turnover and organisational performance, while others (Pil & MacDuffie, 1996) state that they preferred the concept was called 'high involvement' rather than 'high performance' because of a lack of economic evidence. While this could be partly explained by the difficulty in measuring economic performance (e.g., does one measure success over three months, a year, or three years?) it still raises the question of the extent of the impact of HIWS.

Much of the research (Appelbaum et al., 2000; Godard & Delaney, 2000; Lloyd, 2000; Way, 2002) already conducted has reported there to be a positive impact on both employee turnover (a decrease) and organisational turnover (an increase) through the use of high involvement or high performance work systems. However, the research is not uniform in its approach, and most research does not clearly define the variables involved. Hence, it is apparent that more research needs to be conducted to determine the number of HIWS variables New Zealand organisations use, and the effect they have on organisation performance and employee turnover. Part of the research described in this thesis aims to address the latter part of this problem by investigating the impact of HIWS on organisational performance, particularly employee turnover.

#### **1.3** Purpose of the Research

The purpose of this study is to gauge the percentage of organisations using HIWS components in New Zealand, and the number of components that the organisations are using, specifically, the number of key HIWS being utilised (teams, training, and suggestion systems). Where HIWS in the organisations studied were used, an aim of

this research was to examine their effect on organisational performance and employee turnover.

#### 1.4 Contribution to Knowledge

It is presumed that what is good for the firm it is also good for workers (Barney, 1991). If an organisation is performing well, employees often benefit from better equipment, improved working environment and potentially more developmental opportunities through an increased training budget (Harmon et al., 2003). This may also be true in part because if the firm is operating at a profitable level they are also able to offer job security and other extrinsic benefits. It is still unclear whether these increased benefits actually make employees perform better, or be more likely to remain with the organisation.

To date, multivariate research either focuses on whether HIWS have positive implications for the organisation's performance in general (Huselid, 1995; Ichniowski, Kochan, Levine, Olsen, & Strauss, 1996; MacDuffie, 1995), or examines conditions that appear most conducive to their diffusion throughout the organisation (Gittleman, Horrigan, & Joyce, 1998; Osterman, 1994; Pil & MacDuffie, 1996). Little research, excepting that done by Guthrie (2001), within the New Zealand organisational environment has focused on how these systems affect organisational performance and employee turnover and therefore more is needed to further our understanding of the influence of HWIS in New Zealand.

HIWS would appear to benefit all participants if the system is implemented correctly. This may include the personnel being matched and trained for their new responsibilities, a culture of trust and sustained management support for the process (MacDuffie, 1995). If both employee and management benefit from HIWS, it is expected that employees would wish to remain with the organisation and work to help to organisation succeed (Guy, 2003; Way, 2002).

It is theorised a HIWS should include key practices such as participation and training, and that organisations need "higher order" employment practices, such as

remuneration and decision-making, to support the system because without these the practices are likely to deteriorate to the point where they are no longer beneficial to the organisation (Kochan, 2000).

To summarise, this aim of this research is to study a random sample of organisations of differing sizes throughout New Zealand to determine the level of HWIS components being used, and relate these practices to organisational performance and employee turnover.

#### 1.5 Thesis Overview

This research has been divided into six chapters outlined below:

Chapter 1, this chapter, describes the research problem and contribution to knowledge that this research aims to fulfil.

Chapter 2 discusses and reviews the relevant literature pertaining to HIWS. HIWS are examined under their various definitions and key components are identified. These components are used to find the best model to examine HIWS in New Zealand, which is used to structure this research.

Chapter 3 describes the research methodology used in the study. Also discussed is the development of the survey instrument, sampling methodology and sampling frame.

Chapter 4 presents the empirical findings from the data and the data analysis.

Chapter 5 discusses the implications of the research and findings and how this relates to the current research in the area of HIWS.

Chapter 6 covers the limitations of the research as well as discussing future research directions.

### **Chapter 2: Literature Review**

#### 2.1 Chapter Overview

This chapter reviews the literature relevant to high involvement work systems (HIWS). Although there are studies on involvement practices, they vary greatly in name (high involvement practices, high performance systems, employee involvement) (Buchanan, 1982; Huselid, 1995; Pil & MacDuffie, 1996), and also vary in terms of the human resource practices involved, from more common practices such as training and teamwork to other less common practices such as promotion rules (Ordiz-Fuertes & Fernández-Sánchez, 2003). The focus of this literature review is to define the HIWS concept, and to determine a model to be applied to the New Zealand context for this research.

Firstly, HIWS are examined through various definitions, and the components of HIWS are identified. To date the uptake of HIWS components has not been great; therefore, organisational and managerial barriers are then reviewed to identify possible reasons for this slow uptake. A significant factor identified for this slow uptake is the resistance felt by middle managers to support the required changes necessarily for implementation of HIWS components, and the reasons for this resistance are considered.

The enthusiasm for implementing components of HIWS is disappointing considering the possible gains from such implementation. Therefore, a review of the benefits of HIWS to the organisation, and the effect they have on organisational performance follows. One of the most significant impacts of HIWS is the influence on employee turnover, and so the literature on turnover in relation to HIWS is reviewed in depth.

The final section draws the relevant literature together, and outlines the relevance and importance of this thesis in light of the preceding literature review. Additionally, an outline of this research and its hypotheses are provided.

# 2.2 High Involvement Work Systems – Definitions and Evolution of the Term Over Time

The term "HIWS" is not universally accepted as being the best descriptor for a group of work practices designed to encourage greater employee input and influence into the work they undertake. In fact there are many terms all referring to similar, if not the same idea: the idea that employee involvement in deciding how to undertake work is beneficial, and should be actively encouraged through such things as training and remuneration plans that will motivate employees to be more involved at work. Some of the terms used by researchers are: 'high performance practices' (Buchanan, 1982; Godard, 2001a; Gospel & Willman, 2003; Scotti, Harmon, & Behson, 2007; White, Hill, McGovern, Mills, & Smeaton, 2003), 'high performance systems' (Appelbaum et al., 2000; Boslie & van der Wiele, 2002; Edwards & Wright, 2001; Harley, 2002; Lloyd, 2000), 'high commitment' (Berg, Kalleberg, & Appelbaum, 2003; Wood & De Menezes, 1998), 'high involvement work processes' (Vanderberg, Richardson, & Eastman, 1999) and 'high-level employee involvement' (Kaufman, 2003).

Other researchers focus mainly on employee involvement (Addison, 2005; Klein, 1984; Lawler, Mohrman, & Ledford Jr, 1989, 1992; McNabb & Whitfield, 2000; Riordan et al., 2005) or empowerment (Bowen & Lawler, 1992; Hardy & Leiba-O'Sullivan, 1998; Wall, Cordery, & Clegg, 2002) in a way that also closely resembles elements of HIWS (both in the components or elements of HIWS, and in how these components are executed). Others describe the concept in terms of organisational transformation (Osterman, 1994) and again, scrutiny of how they define organisational transformation shows an overlap with HIWS, in areas such as cross training and teamwork.

The lack of an agreed definition of what constitutes a HIWS leads to some potential difficulties. For instance, multiple terms are likely to lead to confusion, and mean that it will be harder for practitioners to evaluate whether or not implementing HIWS components is likely to be of value to their organisation. It is also likely to mean that researchers, who fail to search on the key words the journal articles on HIWS may be indexed by, might overlook valuable research contributions. However, a lack of a commonly accepted definition is not an indication that the area has limited potential,

and may indeed be an indication that the topic is new and will still benefit from further research, which will in turn help define just what are the key elements of HIWS. To better understand how the topic is starting to evolve, and hopefully move towards achieving a more universally accepted definition, it is useful to initially consider some of the earlier reported studies that either looked at HIWS, or key elements that go towards such systems.

Initially Lawler (1986) focused on selection processes (bringing the right people into the organisation), along with problem solving, job enrichment, contingent pay systems and ongoing training. This was followed up much later by MacDuffie (1995) who used these components, building on them to provide a more comprehensive picture which also considers teams, more participation through suggestions systems and ongoing training to support job rotation.

To illustrate the development of HIWS, the names of significant research contributors and the components they focused on in their research have been collected and summarised in Table 2.1. Looking at Table 2.1 it is interesting to note that there appears to have been a change of focus in what constitutes HIWS through the last few decades. For example there is little focus on the area of high involvement and its components by authors other than Lawler (1986; Lawler, 1988, 1992; Lawler & Mohrman, 1987) from 1986 through to Osterman (1994), MacDuffie (1995) and Huselid (1995). Even then, Osterman (1994) discusses the concept as 'workplace transformation', MacDuffie (1995) as 'human resource bundles' and Huselid (1995) as 'human resource practices'.

Another interesting pattern seen in Table 2.1 is the apparent de-emphasis of the degree of participation and information sharing in 2000/2001. Although some authors (Gollan & Davis, 1999; Ramsey, Scholarios, & Harley, 2000; Richards, 2006) had an information system comprising of all three components that contributed to the dissemination of information, many others (Edwards & Wright, 2001; Guthrie, 2001; Lloyd, 2000; Way, 2002) seem to suggest that one, or two components of the three were sufficient.

	Teams/Teamwork	Job Rotation	Job Enrichment/redesign	Problem solving	Conflict resolution	TQM/Quality Circles	Participative Decision Making	Information Sharing	Suggestion Systems/Meetings		Contingent/Skill Based Reward				Ongoing training	Hiring (from within)	Attitude/Opinion Surveys	Promotion rules	Feedback on goals	Low Status barriers	Job Security
Author/Year:							Ч		01		Ŭ										
Lawler III (1986)			$\checkmark$	$\checkmark$						$\checkmark$	$\checkmark$				$\checkmark$			$\checkmark$	$\checkmark$		
Ledford & Mohrman (1993)			$\checkmark$	$\checkmark$			$\checkmark$			$\checkmark$	$\checkmark$				$\checkmark$						
Osterman (1994)	$\mathbf{\nabla}$	$\checkmark$				$\checkmark$															
Macduffie (1995)	$\mathbf{\nabla}$	$\checkmark$		$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$					$\checkmark$	
Huselid (1995)			$\checkmark$					$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			
Pil et al. (1996)		$\checkmark$		$\square$		$\mathbf{\nabla}$															
Fenton-O'Creevy (1998)				$\checkmark$									_								
Gollan & Davis (1999)	$\mathbf{\nabla}$	$\checkmark$				$\checkmark$			$\checkmark$			$\mathbf{\nabla}$	$\square$							$\checkmark$	
Vanderberg et al.(1999)				$\checkmark$				$\checkmark$							$\square$						
Sanchez et al. (1999)		$\checkmark$	$\checkmark$																		
Ramsay et al.(2000)								$\checkmark$	$\checkmark$	$\mathbf{\nabla}$		$\square$	$\square$		$\square$	$\mathbf{\nabla}$					
Whitfield (2000)		$\checkmark$		$\checkmark$							$\checkmark$			$\checkmark$							
Freeman & Kleiner (2000)	$\mathbf{\nabla}$					$\checkmark$	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\square$								$\mathbf{\nabla}$				
Addison & Belfield (2000)							$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\square$		$\checkmark$										
Lloyd (2000)	$\checkmark$					$\checkmark$	$\checkmark$		$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$					$\checkmark$	
Godard et al. (2000)	$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$					$\checkmark$								
Cappelli & Neumark (2001)	$\mathbf{\Lambda}$	$\checkmark$				$\checkmark$	$\checkmark$				$\checkmark$			$\checkmark$	$\checkmark$						
Guthie (2001)	$\checkmark$			$\checkmark$			$\checkmark$						$\checkmark$	$\checkmark$	$\checkmark$						
Bacon & Blyton (2001)	$\checkmark$					$\checkmark$	$\checkmark$		$\checkmark$											$\checkmark$	
Edwards & Wright (2001)	$\checkmark$			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$					$\checkmark$	$\checkmark$						
Guthie et al. (2002)	$\checkmark$	$\checkmark$			$\checkmark$																
Way (2002)	$\checkmark$	$\checkmark$					$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$						
Kaufman (2003)	$\checkmark$					$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$											
Guy (2003)		$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$					$\checkmark$							
White et al (2003)	$\checkmark$					$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$			$\checkmark$						
Ordiz-Fuertes et al, (2003)	$\checkmark$					$\checkmark$		$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$					$\checkmark$	$\checkmark$
Carvariella (2003)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$						
Felsted & Gallie (2004)	$\checkmark$			$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$									
Long & Shields (2005)	$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$					$\checkmark$	
Gollan (2005)	$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$						$\checkmark$	
Konrad (2003)	$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$			$\checkmark$			$\checkmark$	$\checkmark$							
Richards (2006)	$\checkmark$		$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$				$\checkmark$					$\checkmark$	$\checkmark$
Scotti et al. (2007)	$\mathbf{N}$		$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$						$\checkmark$				$\checkmark$		$\checkmark$

 Table 2.1: High Involvement Work System/Performance Practices - Chronological

Huselid (1995) also describes human resource practices (high-performance work practices) as having components in the area of employee recruitment/selection, offering incentive compensation and performance management systems, as well as extensive employee involvement and training. However, he, along with many other researchers, does not clearly define what is meant by 'employee involvement'. However, many authors seem to define this concept broadly in terms of the ability of the individual to participate in organisational decision making (Freeman & Kleiner, 2000).

Other researchers have defined HIWS using a range of variables. Guy (2003, p. 4) used a very minimalist definition, mainly focusing on practices that "attempt to improve organizational performance by increasing the range of actions, decisions or relationships for which employees are intended to be responsible". This definition essentially encompasses human resource practices that may increase an organisation's performance, but does not help establish what is actually included in HIWS.

The danger of using such a minimalist approach is that it fails to acknowledge the importance of many of the supporting human resource practices, which are essential to an effective HIWS. Some of the keys to a successful HIWS are information flows, training, and evaluation of employees. This is an acknowledgment of an organisation as a system (Ramsey et al., 2000) rather than as a large set of unrelated variables (Forth & Millward, 2004).

Different researchers have looked at HIWS in terms of areas of importance, such as: task practices, individual supports, and organisational supports (Harmon et al., 2003) Ideally, a HIWS should "represent a holistic work design that includes interrelated core features such as involvement, empowerment, development, trust, openness, teamwork, and performance-based rewards" that will lead to "higher productivity, quality, employee and customer satisfaction, and market and financial performance" (Harmon et al., 2003, p. 393).

Table 2.2: High Inv													siice S		MOS		$\frac{1100}{100}$		s	>	S
Author/Year:	Teams/Teamwork	Participative Decision Making	Information Sharing	Suggestion Systems/Meetings	Ongoing training	TQM/Quality Circles	Contingent/Skill Based Reward	Mulit-skill Training	Problem solving	Job Rotation	Job Enrichment/redesign	Initial training	Low Status barriers	Performance Appraisal	Selection Processes	Conflict resolution	Hiring (from within)	Attitude/Opinion Surveys	Promotion rules	Job Security	Feedback on goals
Ramsay et al.(2000)	$\checkmark$	$\checkmark$	$\mathbf{\Lambda}$	$\overline{\mathbf{A}}$	$\mathbf{\Lambda}$	$\overline{\mathbf{A}}$	$\checkmark$	$\checkmark$	$\checkmark$			$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$				
Richards (2006)	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\overline{\mathbf{v}}$	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\overline{\mathbf{v}}$	$\overline{\mathbf{v}}$				$\mathbf{\nabla}$		$\checkmark$								
Gollan & Davis (1999)	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\overline{\mathbf{V}}$		$\checkmark$		$\overline{\mathbf{V}}$	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\checkmark$	$\checkmark$							
Carvariella (2003)	$\mathbf{\nabla}$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$									
Long & Shields (2005)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$								
Scotti <i>et al.</i> (2007)	$\square$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$						$\checkmark$										$\mathbf{\nabla}$
Freeman & Kleiner (2000)	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$												$\checkmark$			
Fenton-O'Creevy (1998)	$\mathbf{\nabla}$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$			$\checkmark$		$\checkmark$										
Gollan (2005)	$\mathbf{\nabla}$	$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$							
Felsted & Gallie (2004)	$\mathbf{\nabla}$	$\checkmark$	$\checkmark$	$\checkmark$					$\checkmark$					$\checkmark$							
Kaufman (2003)	$\mathbf{\nabla}$	$\checkmark$	$\checkmark$			$\checkmark$									$\checkmark$						
Way (2002)	$\mathbf{\nabla}$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$					$\checkmark$						
Lloyd (2000)	$\mathbf{\nabla}$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$				$\checkmark$	$\checkmark$								
Bacon & Blyton (2001)	$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$							$\checkmark$								
Cappelli & Neumark (2001)	$\checkmark$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$											
White et al (2003)	$\mathbf{\nabla}$	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$							$\checkmark$							
Sanchez et al. (1999)	$\mathbf{\nabla}$	$\checkmark$			$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$							
Guthie (2001)	$\mathbf{\nabla}$	$\checkmark$			$\checkmark$			$\checkmark$	$\checkmark$			$\checkmark$									
Whitfield (2000)	$\mathbf{\nabla}$	$\checkmark$				$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$											
Konrad (2003)	$\mathbf{\nabla}$	$\checkmark$				$\checkmark$	$\checkmark$		$\checkmark$			$\checkmark$			$\checkmark$						
Edwards & Wright (2001)	$\mathbf{\nabla}$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$												
Godard et al. (2000)	$\mathbf{\nabla}$		$\checkmark$						$\checkmark$			$\checkmark$				$\checkmark$					
Ordiz-Fuertes et al, (2003)	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$				$\checkmark$	$\checkmark$						$\checkmark$		
Macduffie (1995)	$\checkmark$			$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$		$\checkmark$						
Osterman (1994)	$\checkmark$					$\checkmark$				$\checkmark$											
Pil et al. (1996)	$\checkmark$					$\checkmark$			$\checkmark$	$\checkmark$											
Guthie et al. (2002)	$\checkmark$									$\checkmark$						$\checkmark$					
Addison & Belfield (2000)		$\checkmark$	$\checkmark$	V			$\checkmark$														
Guy (2003)		$\checkmark$	$\checkmark$	V				$\checkmark$		$\checkmark$	$\checkmark$										
Vanderberg et al.(1999)		$\checkmark$	$\checkmark$		$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$		$\checkmark$										
Ledford & Mohrman (1993)		$\checkmark$			$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$				$\checkmark$						
Huselid (1995)			$\checkmark$		$\checkmark$		$\checkmark$				$\checkmark$			$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	$\checkmark$		
Lawler III (1986)					$\checkmark$		$\checkmark$		$\checkmark$		$\checkmark$				$\checkmark$				$\checkmark$		$\checkmark$

 Table 2.2: High Involvement Work System/Performance Practices - Most Cited

It appears that the only New Zealand research in the area of HIWS defined work practices as being "employee centred-information and decision-making power dispensed through the organisation with all employees at all levels taking on a greater responsibility" (Guthrie, 2001, p. 181). The focus of the research was on teams, job rotation, problem solving, participative decision-making and training.

Ciavarella's (2003) system of components covers the key areas (see Table 2.2) and shows a clear linkage to employee involvement and empowerment. This makes the framework one of the clearer models of HIWS.

#### 2.3 The Components of High Involvement Work Systems

As discussed in the previous section, HIWS have been defined in various ways. Fortunately, there are three areas that many researchers agree upon. Firstly, the employees need to possess the aptitude for relatively high skill levels that can be accessed and built upon through training. Secondly, the work itself needs to be designed so that employees have discretion, and an opportunity to use their skills. This can be through a team environment, or through job enrichment and rotation. Thirdly, the supporting pay structure needs to provide incentives that motivate and encourage commitment of employees to the organisation (Whitfield, 2000).

A framework that covers the areas discussed above, as well as many of the other important components from table 2.2, is Ciavarella (2003). Ciavarella (2003) breaks down HIWS into four areas: power, information, rewards, and knowledge. As mentioned in the previous section, this framework will be the basis for discussing the important areas of a HIWS.

#### 2.3.1 Power: Teams and Job Redesign/Rotation

Teams are an important part of HIWS. They operate best when employees are involved in checking the quality of work, and organising the work process. This can be achieved either through team-based work, or through flexible work practices for the individual (Felstead & Gallie, 2004). Appelbaum & Batt (1994, p. 253) described

teams as "groups of workers who have substantial discretion over the work process, make changes in production methods as needed, and take on many of the tasks traditionally carried out by front-line supervisors, such as allocating and co-ordinating work between different employees and scheduling". This fits with what an organisation using HIWS is trying to achieve by empowering their workers.

Interestingly, two important elements in a HIWS, multi-skilling and job rotation can produce its own problems within a firm if the firm is a 'traditional' manufacturing organisation. A study conducted in Canada found that innovative human resource management (problem-solving teams, self-managed teams, flexible job design, profit sharing, merit pay and formal training on teamwork) practices actually drove up employee turnover in the manufacturing firms (D. Brown, 2003). Brown (2003, p. 2) found that "the quit rate in manufacturing firms without any alternative work practices was 10.7% while at those operations with teamwork and formal teamwork training, the rate was 15.8%. In a plant where the work is standardized and routine, then maybe traditional work organization is best."

This is different for high-skill service firms. In these firms (such as technical services), not using alternative practices, such as HIWS, resulted in a quit rate of 15.8% while firms with formal training on teamwork had a quit rate of only 6.1% (D. Brown, 2003) The study also found that although much of the human resource management literature advocates combining a number of practices, only 6% were actually doing this (D. Brown, 2003).

#### 2.3.2 Employee Empowerment

One way to assist with pushing the operational decisions down through the organisation is by empowering the employees (Howard, 1997). This can be achieved by giving employees information about organisation performance; providing rewards based on action using that information, giving employees knowledge that enables them to understand and effectively use this information, and finally allowing employees the power to make the decisions that will actually influence organisational direction and performance (Bowen & Lawler, 1992; Wall et al., 2002). This needs to

be extended right down to the lowest levels of the organisation (Ledford Jr & Mohrman, 1993).

With participative climates it is important that employees are allowed, encouraged and have the opportunity to participate in problem solving teams (Tesluk et al., 1999). It is hoped that this participation will have a "cascading effect of employee involvement support" (Tesluk et al., 1999, p. 562). Participative work environments need a 'systems approach' (Bowen & Ostroff, 2004). Participation needs to be reinforced with the appropriate supporting systems to assist the organisation to be both effective and efficient (Tesluk et al., 1999). For a participative environment to be successful there needs to be formal training in problem solving and communications (Tesluk et al., 1999). "Appropriate ongoing training enables employees to develop the knowledge required for effective performance" (Riordan et al., 2005, p. 472).

#### 2.3.3 Information Sharing

Information sharing and dissemination appears to be a critical component of HIWS. All but four of the authors (Guthrie, Spell, & Ochoki Nyamori, 2002; Lawler, 1986; Osterman, 1994; Pil & MacDuffie, 1996) have one or more of these information-sharing components. There are three components that have been highlighted in the present research as a way to involve employees. These are 'participative decision making', 'suggestion meetings' and the more generic 'information sharing' (see Table 2.2).

Effective HIWS give employees all the information required to be involved and participate, without overloading them with information and details that they are either not interested in, don't need, or are unable to process (White et al., 2003). It should not simply be a system which management uses to 'offload' information onto employees. The depth and detail of the information needs to be carefully balanced and assessed. Too much information can make the employees feel overwhelmed and undervalued (Bowen & Ostroff, 2004). Not enough information can make employees feel that management is 'holding out', and potentially cause dissatisfaction and mistrust as employees question why information is being withheld.

There needs to be support within the organisation that encourages employees to participate fully in the process of involvement. Many of the definitions of HIWS fail to acknowledge that the system needs various organisational supports in the forms of appropriate rewards, communication practices, and training and selection procedures (Ledford Jr & Lawler, 1994).

#### 2.3.4 Rewards

Remuneration should be reflective of the desire to encourage employees to continue training. The remuneration needs to be clearly linked to goals and individually tailored to acknowledge differences in intrinsic motivations (Gittleman et al., 1998). Many authors feel that financial participation (gain sharing/profit sharing/employee ownership schemes) is an essential part of high involvement management (Huselid & Becker, 1996; Kochan & Osterman, 1994; MacDuffie, 1995; Pfeffer, 1994). Employees also need to feel that they are to be compensated for effective use of power, information and knowledge (Ledford Jr & Mohrman, 1993; Vanderberg et al., 1999). It is important that it does really involve actual power transference to all staff and through to lower levels (Hardy & Leiba-O'Sullivan, 1998). Financial participation, a form of indirect employee involvement, has been associated with improved economic performance (Addison & Belfield, 2000).

Skill based pay encourages functional flexibility through cross training and teamwork, although 'pay for job' is the most equitable way for employees to be paid because it removes individual differences, is more transparent and less subjective (Long & Shields, 2005). However, high involvement management firms are more likely to use 'person-based' pay rather than 'job-based' pay (Long & Shields, 2005). 'Person-based' pay fits with a highly educated workforce, and HIWS are likely to demand cognitive and interpersonal skills, such as problem solving, teamwork and communication (Felstead & Gallie, 2004).

HIWS are more likely to have team-based rewards, variable pay programs (skillbased, gain sharing, employee ownership) and flexible benefits (Richards, 2006). These schemes actively encourage employee participation in the organisation. If organisations do not have any form of payment that actively invests the employee in the success of the organisation, this can affect both the success of the system and the effect on organisational turnover. Employees need to be fully involved – this needs to include compensation policies to properly motivate employees to fully participate in HIWS (Lau & May, 1998). "Pay should be clearly linked" to HIWS (Gittleman et al., 1998). It has been reported that there has previously been a 61.5% failure of job enlargement or enrichment initiatives due to lack of links to remuneration (D. Brown, 2002). Employees feel they are doing more but not being compensated for it (D. Brown, 2002).

Another component of HIWS has been performance appraisals. However, performance appraisals often fail to improve the performance of the employees, instead creating an atmosphere of distrust amongst the employees who see performance appraisal as solely a means of control and accountability (Lee, 1996). Juncai (2002, p. 47) believes that "Appraisals invariably fail…because leaders at the top place appraisals at the bottom of organizational priorities". This assumption is supported in the literature by the lack of ongoing training that is available to managers to administer the process correctly.

#### 2.3.5 Knowledge: Training, Skill Development and Decision-Making

Many of the current practices involve workers taking on a higher level of skill and becoming skilled problem solvers, which helps to increase involvement in decision making with the aim of increasing flexibility and multi-skilling (Guthrie, 2001). "High performance workplace practices convey an intention by employers to attain competitive advantage based on high involvement, flexible assignment, and/or enhanced team working" (Whitfield, 2000, p. 5).

Wilson & Western (2001) also identified training as an area where companies failed to fully enhance their organisation's potential, and therefore fail to optimise the effect of systems such as HIWS. They listed many components that are lacking in current training systems, such as: training and development plans remaining unchanged from year to year, initial enthusiasm replaced by lethargy, and the training and development need bearing no relation to the actual nature of the business. Guy (2003) found that high involvement work practices work because they allow employees to make decisions that make a difference to the organisation. Decisionmaking by lower level employees improves performance for various reasons. For example it allows an employee to use tacit knowledge that they have gained through shop floor experience; experience and knowledge that may not necessarily be available to higher-level managers. The freedom to make these decisions (alone or associated with performance pay) provides motivation for greater effort (Guy, 2003).

#### 2.3.6 Other Components

Total Quality Management (TQM) is a component that just over half of the authors considered an element of HIWS. TQM is a component that within itself is a system and management philosophy. Many of the components of TQM are also synonymous with HIWS, such as teamwork, training, empowerment and continuous improvement (A. Brown, 1993; Shepard & Helms, 1995; Wallace, 1993) To include TQM as a component of HIWS may seem to be valid but the TQM is also a system itself and contains many components that are also considered to be part of HIWS.

Selection was an important part of high involvement work practices initially (Huselid, 1995; Lawler, 1986; MacDuffie, 1995), but this particular practice seems to have become less important over time with only Way (2002) citing this practice as one of the components of high performance/high involvement systems. This seems counter intuitive with a system that relies on employees' cognitive ability and responsiveness. Selecting the right employee would seem to an important ingredient of a successful HIWS, especially as not all employees welcome the extra responsibility (Wilkinson, 1998).

Forth & Millward (2004) cite that job security seems to increase the likelihood that high involvement management will yield performance improvements, but job security is not often considered a part of a HIWS. In fact if job security is considered important in HIWS this can be seen as a considerable barrier. Paradoxically, stability and security can actually lead to less innovative practices as the climate is not one conducive to requiring 'new ideas' to remain competitive (Lloyd, 2000).

Proponents of HIWS processes recognise that competitive advantages from involvement may come through many avenues, especially that of participation. It takes the attributes of information, rewards, and knowledge, which work together with power, to "create the type of synergy necessary to claim that an organization is truly involving" (Vanderberg et al., 1999, p. 308).

#### 2.4 Synergy Resulting From High Involvement Work Systems

High involvement work practices must be part of a system, in order to be successful (White et al., 2003). For example, recruitment needs to be part of the system, as the correct employees with the right cognitive and personality functions must be employed, since there are some people do not want 'extra responsibility' (White et al., 2003). The benefits of a systems approach have been discussed in previous research (Harley, 2002; Ramsey et al., 2000).

The notion of HIWS emerged predominately from the 'human relations school', which "advocated better communication, more human style work designs and more participatory decision processes" (Godard & Delaney, 2000, p. 483). However, HIWS take this further by placing all important decisions in the 'partners' hands, while also training them to be able to communicate, understand the process, resolve conflicts, and problem solve within their own areas. The idea behind the systems approach is that combinations of human resource management practices are more difficult to imitate and are more valuable than a single practice in isolation (Delery & Shaw, 2002).

If HIWS are to succeed then the employees must be encouraged to participate fully (Gittleman et al., 1998) They need to possess skills and knowledge that is complementary to those already held by management, and be willing to apply these where necessary. This may require additional training and support from human resource systems (Gittleman et al., 1998; Vanderberg et al., 1999).

Ramsay et al. (2000), found evidence of British employers using a 'system of practices' as well as evidence of associations between such systems and employee outcomes. "If the system of practices is implemented properly, the empowerment of the employees should have an effect on their attitudes towards the workplace. This may manifest itself either positively or negatively depending on the expectations and desires of the individual employees" (Wood, 1999, p. 372). Often employers use an 'ad hoc' approach to implementing practices. Unfortunately, if they what are taken out of context they will not produce the desired improvements in performance (Appelbaum & Batt, 1994).

HIWS should ideally allow people to have greater flexibility in working life and therefore be able to balance this with their family life by allowing them to make decisions and have greater intrinsic control (Berg et al., 2003). Increasingly, organisations are required to have a more flexible workplace to counter the complex/dynamic environment, and the more highly educated workforce, which has higher expectations (Wilkinson, 1998).

Organisations should be seeking the best system for current employees as a group. There is no one best fit for organisations. A more prescriptive approach to HIWS needs to be taken for the system to achieve the best fit. High involvement work practices can be successful if implemented correctly (D. Brown, 2002).

# 2.5 Organisational Barriers to Implementing High Involvement Work Systems in Organisations

Top management support is one of the most important factors for employee involvement to be successful (Tesluk et al., 1999). If top management actually believes that the employees have the knowledge and skills necessary to improve organisational performance, they are more likely to offer opportunities to do so (Tesluk et al., 1999). They are also more likely to provide support in the form of reward and recognition systems that encourage participation. The quality of employee involvement processes and opportunities are a result of the support

provided by top-level management, in the form of how the processes are monitored, the amount of training provided, and the devolution of resources (Tesluk et al., 1999).

If we accept that HIWS improve company performance then the question remains as to why so few firms are adopting these practices (O'Toole & Lawler, 2006). At the managerial level the barriers that are encountered include: the inability of managers to implement their own belief/values systems/ideologies, and that the levels of trust and co-operation that are actually required are far more difficult to achieve and far more fragile to maintain than first assumed (Godard & Delaney, 2000; O'Toole & Lawler, 2006).

For greater efficiency and productivity, improved HRM practices are pivotal. However, this does not seem to be matched by the commitment of management attention, time and resources at the workplace (Gollan, 2005). According to Gollan (2005) labour costs appeared to increase with the increase in training that may be necessary to maintain HIWS. This is consistent with research from the US (Cappelli & Neumark, 2001), although other research (Addison, 2005) has contradicted this finding. Although the increasing employee costs associated with training and HIWS would seem to be intuitive, the merits of this idea could benefit from more focused research.

The high-performance model is often not as widely applicable as is often assumed (Gittleman et al., 1998), because of the lack of necessary elements for success. These include: employee cooperation, managerial attitude and skills that need to be selected into the organisation, or trained and developed within the organisation (Godard, 2001b). In fact, the high-performance approach is not always appropriate. The industry may not gain the required benefits to offset the cost of building and maintaining trust in the organisation (Godard & Delaney, 2000).

Rainbird & Munro (2003, p. 34) stated that "Managers have a key role in facilitating or blocking access to all kinds of learning, but the adoption of tools such as development reviewing do not guarantee that employees' needs will be met. Managers and trainers are not the sole initiators of workplace learning."

Managers also underestimate the difficulties when implementing a new human resource management system. For example, certain elements need to be unlearned for new learning to occur (Pil & MacDuffie, 1999). This unlearning and learning process takes time, and managers are often unwilling to suffer through the short-term consequences, especially if the goals and objectives fall far short of the time for benefits of the new systems to be realised, and they are unable to foresee the long-term benefits of these changes (O'Toole & Lawler, 2006; Pil & MacDuffie, 1999).

Certainly, high involvement work practices are expected to lead to increased product or service quality, greater innovation, stronger employee motivation, lower-cost but higher speed production, and lower absenteeism and turnover (Lawler, 1986, 1992; Lawler & Mohrman, 1989). Unfortunately these practices, that may actually benefit the organisation are often pushed aside, because to optimise them organisations need to take the "harder path" and make a commitment to stay on that path, no matter what (Huselid, 1995). These are described by Pil & Macduffie (1996) as "competency traps", where organisations keep inferior routines because of past favourable experiences. Inferior routines can become established in daily activities of an organisation, which can lead to inertia (Osterman, 1994).

It has been observed that variables based around management/employee relations have a powerful mediating effect on the potency of HIWS. This is very significant because it shows how important the right 'top level' support is as "the effects of high-performance work systems on commitment occurred primarily through good management relations" (Ramsey et al., 2000, p. 509). Cynical managers are often resistant to the implementation of new human resource management practices (Burke, 2006).

According to Huselid (1995, p. 645) "there needs to be a culture of trust and responsibility both from employees to management and reverse. Management needs to trust that their employees are capable, and their employees need to trust that they will be given the information required to be allowed the freedom to make the decisions". Upper management also needs to be able to devolve responsibility to middle management.

Human resource management practices appear to be more effectively adopted in bundles, with a high involvement approach more associated with a focus on training front line employees (Whitfield, 2000). This approach may also have its weaknesses. By focusing on lower end employees, paying higher wages to increase the quality of workers and decrease turnover, a 'bimodal' training imbalance may occur. Workers at the higher and lower ends of the organisation will receive training, and middle management overlooked (Whitfield, 2000).

#### 2.6 Drivers of the Adoption of High Involvement Work Systems

One theoretical framework described three factors driving adoption of HIWS (Pil & MacDuffie, 1996). These include: the presence of complementary human resource practices and technology, low levels of economic performance achieved with current work practices, and the organisation displaying characteristics and behaviours that reduce the cost of introducing new work practices. Human resource management policies that look to prompt empowerment, work best where the overall focus in the organisation is aimed at improving quality and flexibility, not cost reduction (Schuler & Jackson, 1978; Youndt, Snell, Dean Jr, & Lepak, 1996).

Organisational factors for the adoption of HIWS include: innovative culture, flexible leadership, craft or non-routine technology, highly skilled workforce (Richards, 2006).

Management attitude is the key to existence of highly developed employee involvement practices (Gollan & Davis, 1999). Therefore, for employee involvement and participation to be effective, and improve organisation performances there needs to be a number of conditions, including: the management team being able to act as facilitators, effective training and support for shop floor employees to be involved in decision making, and effective communication strategies to allay employee fears and anxieties (Gollan & Davis, 1999).

Ordiz-Fuertes & Fernández-Sánchez (2003) found that organisation size and competitive strategy had no effect on the adoption of HIWS; but an innovate culture,

flexible leadership style and a competitive environment, did positively effect the adoption of HIWS. This contradicts previous research that found support for high involvement work practices, and differentiation strategies (Guthrie et al., 2002). Other studies in manufacturing have found that high involvement work practices are matched with flexible and high-quality production services (Arthur, 1994; MacDuffie, 1995; Youndt et al., 1996).

Another framework suggests that motivation is the link between empowerment practices and performance (Blumberg & Pringle, 1982). Motivation for empowerment needs to be in both intrinsic and extrinsic forms with clear outcomes linking pay to performance. There also needs to be a link between knowledge and opportunities within the organisation. This is especially important, as the system must facilitate the opportunity for employees to utilise their new skills and progress up the career ladder.

#### 2.7 Middle Management and High Involvement Work Systems

The middle management role is critical to the success of HIWS, but often they resist its implementation because of job security, role definition, and the requirement for additional work resources to develop and monitor participative practices (Klein, 1984; Tesluk et al., 1999). Middle managers, with some justification, see empowerment of front line managers as a threat to their jobs. Ultimately, middle managers often see their role as administrators rather than participants (Tesluk et al., 1999). These systems are only effective when the individual can actually perceive that the opportunity for involvement really exists, that it is beneficial for them, and this is consistent with the organisational policies (Vanderberg et al., 1999).

Supervisors often become lost in the middle of the change towards a more HIWS. The system may be seen as good for the company which in turn reflects positively on top management and employees, but there doesn't seem to be any real benefit for middle management (Klein, 1984).

Middle management resistance means employee involvement will reflect lower benefits. This resistance is likely to be lower where there is: strong senior support, supportive performance management and reward systems, decentralised resource control, improved internal communication, and there is training and development provided for middle managers to support employee involvement (Fenton-O'Creevy, 1998; Klein, 1984). The resistance to employee involvement is greater where organisations have reported: a failed attempt at system change, a focus on short-term performance measures, and where previous organisational change has resulted in any form of delayering (Fenton-O'Creevy, 1998).

Supervisors in HIWS are called on to perform many different functions. These include team building, people development, and performance management (Leitze & Donovan, 1990). To be successful in their new role as facilitators of HIWS, they must be able to communicate effectively, listen, and provide constructive feedback. These skills that are sometimes lacking in middle management, and a failure to address these training and development gaps will inevitably lead to a failure to optimise HIWS effectively (Leitze & Donovan, 1990).

To be effective in encouraging middle managers to participate in the employee involvement initiatives, top management "must pay attention to wide organizational systems" (Fenton-O'Creevy, 1998, p. 71). The more experience middle management has of involvement practices and participative management assisted by training, the more likely they are to develop more overall positive attitudes towards HIWS (Fenton-O'Creevy, 1998).

#### 2.8 Organisational Benefits of High Involvement Work Systems

There would appear to be many benefits to an organisation that can successfully implement a HIWS. Lloyd (2000) found support in the literature for HIWS delivering high levels of company performance. These benefits include: employee retention, job performance, attendance, work quality, work quantity, and personal sacrifice on behalf of the organisation (Konrad, 2006; Somers & Birnbaum, 1998).

Appelbaum et al. (2000) reported that positive worker outcomes suggest that innovation in workplace practices may be beneficial for both labour and management. The outcomes that were measured included: increased job security, lowered organisational cost, intrinsic rewards for the employees, increased organisational commitment, less job dissatisfaction, and reduced stress. "High performance work systems increased the rewards in terms of both earnings and working conditions" (Appelbaum et al., 2000, p. 132), results that can be reasonably and intuitively expected from a functioning HIWS.

Appelbaum et al. (2000, p. 229) also point out that "high performance work systems elicit discretionary effort from workers. The more participatory work organization in a high performance work system draws on the latent knowledge of workers to reduce waste, to solve problems more quickly, and to balance the workload and regulate the production process. Effective effort per hour of work in a high performance work system is higher than traditional workplaces because workers have the opportunity to work smarter". All this leads to economic gains through HIWS in: the reduction of the total number of employees, reduction in inventories (work in progress or finished), reducing equipment failure and time lost (Appelbaum et al., 2000; Edwards & Wright, 2001; Gollan, 2005). It can also be said that better feedback systems decrease wastage and increase productivity (Mohrman, Lawler, & Mohrman, 1992).

Freeman & Kleiner (2000) found that employee involvement had little effect on productivity but improved workers well being and was therefore beneficial to workers and managers. The HIWS, with teamwork and the ability of employees to influence their work practices and structure work to best suit their own style, can lead to a change in attitude (Gollan & Davis, 1999). "Job design and acquisition and

development of skill are the most significant factors" in overall increased productivity (Gollan & Davis, 1999, p. 73). This change in attitude can increase satisfaction and behaviour, which feeds into increased performance (Guest, 1997).

HIWS have been linked to higher productivity, quality, employee and customer satisfaction, and market and financial performance in 'Fortune 1000' firms (Harmon et al., 2003). This research found that HIWS were associated with both greater employee satisfaction and low patient service costs in 146 Veterans Health Administration centres, indicating that such practices pay off in both humanistic and financial terms (Harmon et al., 2003).

High involvement culture is a way to "unleash the talent and energy of employees at every level of the organisation" (Rodgers & Ferketish, 2005, p. 2). This can have positive effects on key performance variables such as: labour productivity, turnover, absenteeism, greater output and increased flexibility (Gollan, 2005). Positive performance effects arise in part from the creation of more co-operative labour management relations, which induce employees to work harder and share ideas in the pursuit of "mutual gains" with employers (Godard & Delaney, 2000). Appelbaum et al. (2000, p. 235) said that "high performance work systems increased the rewards in terms of both earnings and working conditions".

#### 2.9 Organisational Performance and Employee Turnover

HIWS have been linked to higher productivity, quality, employee and customer satisfaction, and market and financial performance (Harmon et al., 2003; Ramsey et al., 2000). It has been suggested that a "firm's performance is enhanced by the degree that the human resource management strategies support each other but also fit with its external strategies" (Huselid, 1995, p. 649). HIWS enhance the ability of organisations to retain employees (Way, 2002).

Lawler (1986) suggested that high involvement practices had superior operating results when the organisations were low cost, relatively flexible, and adaptive and were also very quality and customer orientated. Other researchers, for example

Guthie et al. (2002), report that organisations whose strategies are low cost do not in fact benefit from a high involvement type management system.

Ideally, high involvement practices help organisations to develop a kind of firm specific human capital, a knowledge of the firm's products, customers, and work processes that enables them to interact effectively with customers (Batt, 2002). This can lower turnover, while increasing organisation performance and commitment.

Performance is, on the whole difficult to uniformly and accurately measure with any degree of certainty. Traditional measures lie in the reported outputs of the organisation, such as sales and profit, but fail to recognise that these are very short-term focused measures that may not benefit the organisation in the long term.

#### 2.10 Conceptual Framework and Research Question Development

As previously stated, ideally, a 'HIWS' "represents a holistic work design that includes interrelated core features such as involvement, empowerment, development, trust, openness, teamwork, and performance-based rewards" that will lead to "higher productivity, quality, employee and customer satisfaction, and market and financial performance" (Harmon et al., 2003, p. 395).

The strength of a human resource based systems approach is that it is a logical combination that is hard to imitate (Delery & Shaw, 2002). This suggests that organisations can follow a variety of paths to develop the system which best suits them. The variables used in Ciavarella (2003) cover all but one of the twelve most cited components of HIWS. The only one that is not included is 'Total Quality Management' (TQM). The inherent problem with this particular component is its definition and its own particular synergy. This concept has many components, such as teamwork (Shepard & Helms, 1995) and training (A. Brown, 1993) that are correlated to HIWS; therefore it is a reasonable exclusion. The components of HIWS are to be defined in terms of four constructs: Power, Information, Rewards, and Knowledge.

For the Power construct, employee involvement includes: employee-participation groups, suggestion system, job enrichment or redesign, self-managing work teams, and participative decision making/empowerment (Ciavarella, 2003). The Information construct for employee involvement includes: information sharing about company operating and department results, business plans, new technologies and competitors relative performance (Ciavarella, 2003). The Rewards construct for employee involvement includes: profit sharing, gain sharing, employee-stock ownership plan, stock option plan, and recognition (Ciavarella, 2003). The Knowledge construct for employee involvement includes: training/ skill development in group decision making/problem-solving skills, leadership skills, business skills, quality/statistical skills analysis, team building skills, job-skills training, and cross-training (Ciavarella, 2003).

These components also allow for a certain amount of flexibility within systems as not all organisations will have all components but may have a selection of components from each construct. This will assist with establishing the diffusion of HIWS, and how this diffusion impacts organisational performance and employee turnover.

There has been limited research in the New Zealand organisational context examining the effect that HIWS has on employee turnover within the organisation, and whether HIWS have an impact on the financial performance of an organisation. Previous research (Guthrie, 2001) focused on organisations employing at least 100 individuals, which resulted in a target population of 701 organisations. Therefore, many New Zealand organisations, specifically those with less than 100 employees, have not been examined for the use of HIWS and, more importantly, the impact that these systems have on employee turnover and financial performance. At the time of the previous research (Guthrie, 2001), 67 per cent of organisations were employing less than 50 individuals (Macky & Johnson, 2003).

The present research aims to examine HIWS within New Zealand organisations across all industries, regardless of the number of individuals employed. Within this context, the research will examine the interaction that HIWS have with employee turnover in the organisations and financial performance of the organisations.

#### 2.11 Chapter Summary

This chapter reviewed the literature relevant to this research. Initially HIWS were discussed. Organisational barriers, managerial barriers, and middle management were then examined in relation to high involvement work practices. The potential benefits to the organisation both internally and in terms of performance of high involvement work were highlighted. Finally, the HIWS variables considered most relevant were defined and a conceptual framework developed. The next chapter will discuss the research methodology utilised in this research.

# **Chapter 3: Research Design and Methodology**

# 3.1 Chapter Overview

In the previous chapters, components that were considered part of the high involvement work system (HIWS) were discussed. In this chapter, these components, supported by previous research, were then used to develop a survey instrument that was applicable to the New Zealand business environment. Research objectives for the study are defined, and are used in conjunction with the literature to develop the theoretical models.

The second half of this chapter discusses sampling and data collection methods, development and the distribution of the survey instrument, analysis procedures, and packages that were used to analyse the data. Methods of analysis are also examined. Finally, the limitations and constraints of the research are discussed.

# 3.2 Research Objectives

The objectives of this study were to:

- 1. Determine the percentage of organisations that use high involvement work systems (HIWS) in New Zealand organisations.
- 2. Determine the number of the components of HIWS that are used in New Zealand organisations.
- 3. Compare whether organisations using HIWS have less employee turnover than organisations not using HIWS.
- 4. Compare whether organisations using HIWS systems have higher financial performance than organisations not using HIWS.

# 3.3 Theoretical Framework

This research is to determine the use of HIWS within New Zealand firms and the impact these have on organisational financial performance and employee turnover. Firms are analysed for utilisation of HIWS components, and whether the firms that use HIWS perform at a higher level than those that do not and have decreased employee turnover than those that do not have HIWS. The following two theoretical frameworks were the basis for the research regarding the use of HIWS in New Zealand firms.

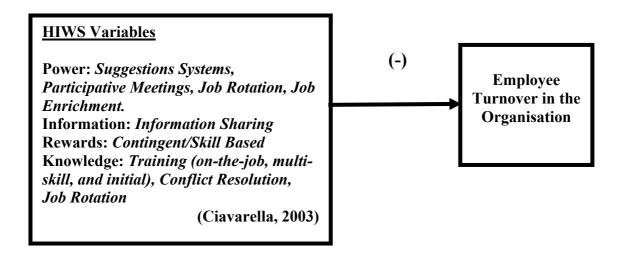


Figure 3.1: Model 1 - The Impact of HIWS on Employee Turnover

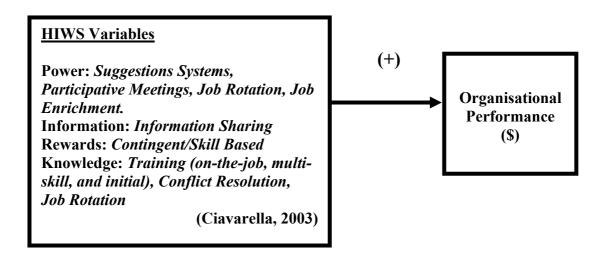


Figure 3.2: Model 2 – The Impact of HIWS on Organisational Performance

The theoretical framework was designed using both the model described by Ciavarella (2003) and analysis of the literature (see Tables 2.1 and 2.2) to chose the most commonly cited components in HIWS. Ciavarella's (2003) model appeared to be the most comprehensive and empirically tested model as it was based on previous research by Lawler (1986, 1992) and Lawler, Mohrman and Ledford (1995) who had initially developed and tested the relationship between power, information, rewards and knowledge and organisations using high involvement practices.

It is expected that HIWS, that have the sustained managerial support and development, will have an overall negative relationship with employee turnover and a positive relationship with organisational performance.

# 3.4 Sampling Method

Since the research had an organisational focus, rather than an industry focus, the decision was to use a database that contained organisations across all industries. Size of the organisation was not a consideration, as HIWS can exist in organisations with any number of employees. It is also important in the New Zealand context that organisations with lower numbers of employees were included as the "average size of New Zealand workplaces is small therefore imperative that small workplaces are included in the sample frame for a workplace survey" (Ryan, 1996, p. 103). In fact, "27 per cent of the labour force in 1996 employed in enterprises employing five or fewer people" with " 67 per cent employed in enterprises employing fewer than 50 people" (Macky & Johnson, 2003, p. 62).

The list of firms (population) used in the survey was obtained from the 'Kompass Database<sup>1</sup>'. This database contains information about a wide number of New Zealand organisations that cover all industries and sectors. The decision was made to remove Government and Local Government companies from the list as these organisations tended to be large often with many different branches but centrally controlled. Under company activity was six different filters: producer, distributor, service provider,

<sup>&</sup>lt;sup>1</sup> http://www.kompass.co.nz/ accessed through Lincoln University Library databases.

exporter, importer and both importer & exporter. By choosing "Producers, Distributors, Service Providers, Exporters and Importers" Government and Local Government organisations were removed from the sample. This left 5370 companies that fitted the criteria for this survey.

The sample size required was 500 due to financial constraints of the survey instrument and the postage required. Therefore, the list needed to be reduced. This was achieved by first separating out the organisations into groups using the number of employees in the organisations. A weighted representative sample was then calculated. Interval sampling, using an interval of choosing every 10<sup>th</sup> organisation from within each group (total population divided by required sample), was then used to find the final set of organisations that would be surveyed.

# Table 3.1Sample Distribution

Number of Employees:	Number of Companies	Weighted %	Sample Number
1 to 10	1457	27.1	135
11 to 20	1040	19.4	97
21 to 50	1058	19.7	99
51 to 100	979	18.2	91
101 to 250	375	7.0	35
251 to 500	247	4.6	23
501 to 1000	117	2.2	11
More than 1000	97	1.8	9
		100	500

The database is regularly updated. This results in a changed order of the companies in the database. Therefore, a snapshot view was required to be completed quickly, thus avoiding the possibility of an organisation be sampled twice. The data could not be electronically downloaded, therefore the organisations were selected and their details where manually entered into an Excel spreadsheet to allow for label construction using mail merge over a couple of days.

#### 3.5 Data Collection

Due to time and financial constraints, a mail questionnaire survey was considered to be the best instrument for data collection. This approach also allowed for a wide geographical coverage (Dillman, 2000), which was important, as the target population was organisations throughout New Zealand. The mail survey method allowed for complete anonymity. This was particularly important when requesting sensitive information such as financial performance figures, employee turnover and employment costs (Churchill, 1983; Nachmias & Nachmias, 1997), and could reasonably be expected to help promote a higher response rate.

The other important advantage of the postal questionnaire was, it was the most economical form of surveying (Denscombe, 1998). Also, participants' responses were not influenced by the presence of researchers or evaluators as in other data gathering instruments (Boyce, 2002).

#### 3.5.1 Questionnaire Design

The survey instrument for this research was developed from the Workplace Employee Relations Survey (this is more commonly known as WERS) 2004, in the UK (National Centre for Social Research, 2004). WERS was part of a series of workplace surveys conducted in the UK beginning in 1980 and then again in 1984, 1990 and 1998 (Cully, 1998). WERS 2004 was chosen because its purpose was "to provide a dispassionate evidence about a broad range of industrial relations and employment practices" (Haskel, 2005).

WERS 2004 also had the advantage of feedback from previous surveys as well as similar surveys conducted overseas; specifically these were Workplaces Employment Survey (this is more commonly known as WES) 1999 Canada, and Australian Workplace and Industrial Relations Survey (this is more commonly known as AWIRS) 1995 Australia (Godard, 2002). The AWIRS 1995 survey was not chosen in spite of the similarity workplace environments. The primary reason for this was the survey was a shortened version of the WERS 1990 main survey that was designed to be "administered to a selection of workplaces employing between 5 - 19 employees" (Ryan, 1996, p. 103). The sample for this present survey was to be drawn from organisations with both less than 5 employees and more than 19 employees and the numbers in between, therefore it was more appropriate to use the fuller WERS 2004 survey.

WERS 2004 was also preferable because it was designed to not necessarily be answered by Human Resource Managers. In Britain, Human Resource/Personnel Managers answered only 44% of the surveys (Haskel, 2005). That the survey did not need to be answered by Human Resource Managers was particularly important for a New Zealand workplace survey, as many smaller organisations will not have a dedicated human resource person. Many New Zealand organisations do not have a dedicated human resource person due to the small number of employees in the organisation (Macky & Johnson, 2003), therefore the survey was designed to be answered by the most appropriate member of senior management (Haskel, 2005).

Using the literature to define the key components and choosing the most appropriate model of a HIWS (Ciavarella, 2003), a draft questionnaire was designed from the WERS 2004 management questionnaire. The questions represented the key areas of: power, information, rewards and knowledge; employee turnover; and financial performance (National Centre for Social Research, 2004). For example questions such as "Do supervisors have the authority to make final decisions on taking on people who work for them?" represented a component of power, "Does management regularly give employees, or their representatives, any information about internal investment plans?" represented a component of information, "Do any employees at this workplace receive payments or dividends from any of the following variable pay schemes?" represented a component of reward, and "What proportion of supervisors here have been trained in people management skills?" represented a component of knowledge (for the complete questionnaire see Appendix B).

Other changes were made, such as removal of questions referring to procedures that were optional in the UK, such as personal grievances due to the fact that they are part of New Zealand's legislation under the Employment Relation Act 2000 (ERA). Such changes to the questionnaire aligned it better with the New Zealand business environment. The final version of the questionnaire was sent out to 500 companies in New Zealand.

To try to reduce the often low response rate of mail questionnaires (Dillman, 2000), the questionnaire was designed to be as brief as possible and utilised dichotomous and Likert scaling for the majority of the responses.

### 3.5.2 Questionnaire Distribution

For the required information to be obtained, the right people in the organisation needed to be contacted. The most appropriate people were those in upper management, preferably with personnel and financial knowledge. The questionnaires were generically addressed to top management personnel, as the differing structure and size of many New Zealand organisations meant that to be too specific about the person required to answer the questionnaires might have meant the most appropriate person may have been overlooked.

Once a list of the organisations to be sampled was compiled, a mailing list was set up and postcards sent out a week prior to posting the questionnaire (see Appendix A). The aim of the postcard was to inform potential respondents about the survey and, therefore facilitate faster delivery of the questionnaire to the correct people in the organisation. Sending a postcard before the questionnaire was sent was seen as a cost effective way of potentially boosting the response rate (Martin, Duncan, Powers, & Sawyer, 1989).

After the postcards a covering letter, along with the questionnaires (see Appendix B), were then sent to the organisations on the mailing list. The questionnaires were printed on Lincoln University letterhead, to increase the response rate by showing the legitimacy of the survey. A reply paid envelope was included, to make it as easy and

possible for participants to return the questionnaire, and thus hopefully to boost the response rate.

# 3.6 Data Analysis

The data collected from the companies was entered into an Excel spreadsheet, and checked for any data entry error before data analysis began. The data was then imported into the SPSS Statistical Package version 11 for Windows.

The first analysis was involving collating the data and running descriptive statistical analysis. The distribution of the sample was checked, as well as providing descriptive statistics to fulfil the first tow objects of this research as identified in Section 3.2, of determining the percentage of organisations using HIWS, and the number of components of HIWS these organisations use. Checking the distributions also enabled the data to be checked for any data entry errors (i.e., any outliers could be re-checked for accuracy).

To test the theoretical model that HIWS leads to less employee turnover (research objectives 3.2.3), and that HIWS organisations have greater financial performance (research objective 3.2.4) analytical and inferential statistical tests were run.

As part of the data analysis, the data were explored for other significant relationships that may not have been initially predicted, yet which might be of theoretical or practical value.

#### 3.7 Development of Dependent Variables

The dependent variable 'employee turnover' was obtained straight from the survey responses, as there was a question asking responds to state the employee turnover of the organisation as a percentage in the questionnaire (see Appendix B). No adjustment of the data was required.

Organisational performance was determined by taking organisational turnover and then removing total employment costs and total capital costs so that the remaining amount represented organisational profit (Guthrie, 2001). The responses were missing some data in the areas of organisational performance and total costs which resulted in a non-normal distribution of that variable (see Table 4.2). Therefore labour productivity (a self-reporting response about whether employers thought that labour productivity had increased or decreased in the previous five years) was also to be used as a dependent variable as a proxy for organisational performance. This was consistent with previous research (Bryson, Charlwood, & Forth, 2006) that had utilised this variable from the WERS 2004 survey. This research will be discussed further in Chapter 5.

# 3.8 Development of Independent Variables

The independent variables were developed from the survey responses using Ciavarella's (2003) model. The model consisted of four areas (power, information, rewards and knowledge) with key functions defined within each area. These key functions were used to divide the questionnaire responses into the four areas of Ciavarella's (2003) model. Dichotomous values were then used to indicate whether each organisation had that particular function in each particular area or not. These were then added together to determine an overall score in each of the four areas (power, information, rewards and knowledge) for each organisation.

These responses were then imported from an excel spreadsheet into the computer package SPSS version 11.0 for Windows.

# 3.9 Limitations and Constraints

Although Ciavarella's (2003) model provided a sound basis for analysis, it did not necessarily include all possible functions and components that may constitute a HIWS. This is reflective of the contentious nature of this area of research. Time

constraints did not allow for the survey to explore whether these functions are widely used and universally applicable in the New Zealand organisational context.

The research was limited by budgetary constraints, which limited the researcher in the manner in which data was selected, collected, and analysed. This also limits the amount and type of data that the researcher could collect, and the overall size of the sample.

Key assumptions that were made include:

- That some companies in the New Zealand do use components that constitute HIWS.
- That respondents in companies using HIWS with access to the training budget, employee turnover and financial performance information.

# 3.10 Chapter Summary

This chapter reviews the research methodology and the development of the theoretical models, survey instrument, and variables. Literature was used to develop the models and objectives, and this guided which questions were most suitable from the WERS 2004 questionnaire (National Centre for Social Research, 2004). The sample was selected from the 'Kompass Database' of New Zealand companies, which contained industry and size information about the company. Descriptive, correlation and regression analysis were used to analyse the data. The next chapter will present the analysed results.

# **Chapter 4: Findings**

# 4.1 Chapter Overview

This chapter analyses the data in relation to the research objectives of investigating the impact high involvement work systems (HIWS) have on organisational financial performance and employee turnover in New Zealand organisations. The computer package SPSS version 11.0 for Windows was used for the statistical analysis of the collected data. The main techniques used were descriptive frequencies, correlation linear regression analysis and regression analysis.

Firstly, the response rate was analysed and respondent demographics discussed. The next section of the chapter looks at results of the correlation analysis. Finally, a series of regression analyses were performed to test the relationships in the models as proposed in Chapter 3.

# 4.2 Response Rate Analysis

The response rate of 20.8% (18.7% unusable) was sufficient, but slightly lower than expected given the complete anonymity of the questionnaire. Although the response rate was perhaps lower than expected for a mail survey, the useable number of questionnaires of 91 was, however, a good result. The survey responses are summarised in Table 4.1.

Table 4.1Mail Survey Responses

	Number	Percent
Questionnaires Posted	500	100
Less: Questionnaires 'Address Unknown'	14	2.8
Net Questionnaires:	486	100
Response Rate	101	20.8
Less: Declined Participation	10	2.1
Less: Responses Discarded	0	0
Useable Response	91	18.7

For almost all of the surveys, the response to the questions on internal human resource practices was complete, but only 82% answered the question on company turnover and 68% answering the question on employment costs. This meant that only 61% of the surveys yielded enough complete data for regression analysis using organisational performance as the dependent variable. Missing data was expected given the sensitive nature of some of the questions, and broad organisational knowledge required to answer the questionnaire fully. The treatment of the missing responses will be discussed in the next section.

### 4.3 Missing Data

The decision was made to adjust the data in the non-financial section of the survey by replacement the missing data using the SPSS statistical package, and utilising the interpolation method. This is a method of constructing new data points from a discrete set of known data points and was considered the best way to treat the missing data due to the very small (less than 1%) number of missing responses.

The missing data in the rest of responses, the financial response section, was left as it was reported. There were too many gaps in this part of the data and it was felt that it was best left with the no data manipulation.

#### 4.3.1 Data Checking

The data that was entered was checked for input bias by running frequencies to check for incorrect data entry, and the financial data was compared to other similar companies to detect possible data errors from inputting the data.

#### 4.4 Coding

The coding for the surveys allocated a numerical value. A majority of the responses were ordinal scale (numerical responses of either 0 or 1), with the remaining responses using a likert scale (with values either between 1 and 5, or values between 1 and 7). Where the questions were negatively geared, reverse coding was utilised. The data was then entered into an excel spreadsheet using the numerical responses.

#### 4.5 Analysis of Dependent and Independent Measures

The dependent variables for this research were employee turnover, organisational performance and labour productivity. An analysis of the dependent variables shows that organisational performance had a high skew and kurtosis (see Table 4.2). Skew and kurtosis are measures of normal distribution, and the organisational performance variable demonstrated a high positive skew (data skewed towards the lower variable) and a leptokurtic (positive) kurtosis (Emory & Cooper, 1991).

Normal distributions have a skew of 0 and a kurtosis of 0, although a standard normal distribution has a kurtosis of 3 (Emory & Cooper, 1991). Skew and kurtosis, which are abnormally high, need to be accounted for in the analysis (Lind, Narchal, & Mason, 2002). Organisational performance was the only variable that demonstrated a skew and kurtosis that may greatly affect the outcome of any analysis (Carver &

Nash, 2006). The other two variables had an acceptable skew and kurtosis, although employee turnover did have a low variance.

# Table 4.2

Descriptive Statisti	cs for Dependent	<i>Variables</i> $(N = 91)$	)
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Confidence Confidence										
Variable	Mean	-95%	-95%	Min	Max	Variance	SE	SD	Skew*	Kurtosis*
Employee Turnover	.01	.06	.12	.00	.50	.01	.01	.09	1.81	3.81
Organisational Performance	2505324.8	1118478.8	3892170.9	-1800000	3400000	2.73E+13	692301.25	5226760	4.59	24.65
Labour Productivity	3.92	3.66	4.20	1	5	1.03	.13	.96	81	.11

\* The standard error of skew was .32 and the standard error of kurtosis was.62 for all measures

Mean	Confidence - 95%	Confidence 95%	Min	Max	Variance	SE	SD	Skew*	Kurtosis*
15.13	14.55	15.72	7	20	2.80	.29	2.81	34	02
6.99	6.75	7.22	2	9	1.28	.19	1.13	92	2.94
2.98	2.79	3.17	1	4	.84	.10	.92	57	49
.92	.73	1.12	0	4	.87	.10	.93	1.16	1.49
4.24	4.05	4.43	1	5	.85	.10	.92	-1.20	1.07
	15.13 6.99 2.98 .92	Mean         95%           15.13         14.55           6.99         6.75           2.98         2.79           .92         .73	Mean         95%         95%           15.13         14.55         15.72           6.99         6.75         7.22           2.98         2.79         3.17           .92         .73         1.12	Mean95%95%Min15.1314.5515.7276.996.757.2222.982.793.171.92.731.120	Mean95%95%MinMax15.1314.5515.727206.996.757.22292.982.793.1714.92.731.1204	Mean95%95%MinMaxVariance15.1314.5515.727202.806.996.757.22291.282.982.793.1714.84.92.731.1204.87	Mean95%95%MinMaxVarianceSE15.1314.5515.727202.80.296.996.757.22291.28.192.982.793.1714.84.10.92.731.1204.87.10	Mean95%95%MinMaxVarianceSESD15.1314.5515.727202.80.292.816.996.757.22291.28.191.132.982.793.1714.84.10.92.92.731.1204.87.10.93	Mean95%MinMaxVarianceSESDSkew*15.1314.5515.727202.80.292.81346.996.757.22291.28.191.13922.982.793.1714.84.10.9257.92.731.1204.87.10.931.16

Descriptive Statistics for HIWS Independent Variables (N = 91)

Table 4.3

\* The standard error of skew was .25 and the standard error of kurtosis was.50 for all measures

The independent variables of the model were also analysed. The independent variables had acceptable skew and kurtosis. Again, HIWS Information, HIWS Rewards and HIWS Knowledge had low variation between the lowest and highest scores (see Table 4.3).

# 4.6 Results

Initially the demographics and organisational turnover of the respondents were analysed. The four areas of Ciavarella's (2003) model were then examined in terms of percentage of organisations using each variable and then the organisations were scored in each construct area (power, information, rewards and knowledge). Correlation and linear regression analysis was conducted to see if there was any significant relationships between the dependent variables of employee turnover, organisational performance and labour productivity and the independent variables of the HIWS model (see Table 4.3).

#### 4.6.1 Demographics

The majority of the survey respondents were the firm's Managing Director (37%), General Manager (21%), or Human Resource Managers (9%) (see Table 4.4). Line Managers (10% of responses) were any manager that may be considered front line, for example Factory Manager.

Table 4.4 *Respondents' Demographics* 

Position Held:	Percent of Responses
Managing Director	37
General Manager	21
Owner	2
Human Resource Manager	9
Financial Manager	7
Line Manager	10
Office Manager	6
Sales Manager	4
Accountant	4
	100

The organisations that responded appeared to be relatively small organisations, based on their overall turnover (see Table 4.5). Just over half of the organisations earned between less than \$5 million dollars a year.

Table 4.5Respondents Organisational Turnover

Turnover (\$)	Percent of Responses
< 1 Million	5
1 Million to 5 Million	50
6 Million to 10 Million	20
11 Million to 50 Million	18
50 Million +	7
	100

#### 4.6.2 Summary of HIWS Variables

All organisations responded saying that employees had some form of discretion and flexibility over how they carried out their work activities. Almost all of the organisations (99%) allowed employees to have some influence over their work and gave them information about the organisation. Although in just under half of the organisations surveyed, the information was not related to the company's internal plans.

Less than half of the organisations had introduced any employee involvement initiatives or allowed supervisors to have authority within the workplace. Flexi-time was another area that scored poorly. This could be an area that organisations need to look to develop.

Very few organisations had deferred profit sharing schemes (2%), employee share ownership schemes (13%), or individual or group performance schemes (24%). The results of the number of organisations using each HIWS components can be seen in Table 4.6.

	Variable	Percent of Workplaces
Power	Employee Consultation	95
	Employee Channels	92
	Ask Employees About Changes	90
	Supervisor Authority	52
	Employee Influence	99
	Job Rotation	88
	Individual Discretion at Work	100
	Introduction of Employee Involvement Initiatives	43
	Flexi-time	32
Information	Standard Induction Programme	78
	Management Give Employees Internal Information	53
	Management Give Employees Financial Information	68
	Information provided to Employees	99
Reward	Profit Related Payments	53
	Deferred Profit Sharing Schemes	2
	Employee Share Ownership Schemes	13
	Individual or Group Performance Schemes	24
Knowledge	Any Supervisors Trained	86
	Off-the-Job Training	88
	Any Employees Multi-skilled	95
	Appraisal to Assess Training Needs	56
	Employee Flexibility	100

Table 4.6Percentage of New Zealand Organisations Using Each Construct

Overall, the most popular HIWS components in organisations were employee flexibility, multi-skilling employees, providing information to employees, consulting with employees, allowing employees to have some form of discretion about their work, and allowing employees some influence in the organisation.

#### 4.6.3 Summary of HIWS

As previously stated, by using the variables in the Ciavarella (2003), 'Power, Information, Rewards and Knowledge Model', and producing a score for each responding organisation, it appears that many organisations in the survey have some form of a HIWS.

Table 4.7Summary of Organisation Variables Scores (maximum 22)

HIWS Variable	Minimum	Maximum	Mean	SD
Power	2	9	6.99	1.13
Information	1	4	2.98	0.92
Rewards	0	4	0.92	0.93
Knowledge	1	5	4.24	0.92
Total	7	20	15.13	2.81

Twenty-two variables were entered into the model for HIWS. Therefore the maximum total score for any organisation was 22. Twenty organisations scored between 6 and 15. This set of organisations could be considered to have a 'low involvement work system'. The largest group was a score between 16 and 20, with almost 52% of respondents in this category. Although no organisation scored 22 variables, 52% of New Zealand organisations could be considered HIWS with scores ranging from 16 variables to 22 variables.

Score	Percent of Organisations
1 to 5	0
6 to 10	4
11 to 15	44
16 to 20	52

Table 4.8Summary of Organisational HIWS Scores (out of 22 variables)

All firms in the survey responded that they use some component of 'Power', 'Information' and 'Knowledge' from the HIWS. The average score across all components for New Zealand organisations was 15.13 out of a possible score of 22 (see Table 4.7). The least extensively used component was 'Rewards' with an average organisational score of 0.92 out of a possible score of four.

HIWS Power was scored out of nine variables. Eighty-nine percent of the organisations reported having at least two-thirds of the Power variables, with over a third having eight or nine variables (see Table 4.9). Only 6% of all the organisations in the survey had less than five components that contributed to employee power and empowerment.

Score	Percent of Organisations
1	0
2	1
3	0
4	0
5	5
6	25
7	33
8	31
9	5
	100

Summary of Organisational HIWS Power (out of 9 variables)

Table 4.9

Table 4.10

HIWS Information was scored out of four variables. Seventy-two percent of the organisations reported having at least half of the Information variables (see Table 4.10). However, 28% of organisations in the survey had less than half of the areas of employee information.

Summary of Organisational HIWS Information (out of 4 variables)						
C	D	1 60	•			

Score	Percent of Organisations
1	8
2	20
3	39
4	33
	100

HIWS Rewards was scored out of four variables. A majority of the respondents (44 %) had only one of the Rewards variables. Thirty-six percent of the organisations reported having none of the Rewards variables in their organisation (see Table 4.11).

Table 4.11
Summary of Organisational HIWS Rewards (out of 4 variables)

Score	Percent of Organisations
0	36
1	44
2	13
3	5
4	2
	100

HIWS Knowledge was scored out of five variables. Almost half of the respondents reported having all of the Knowledge variables with only five percent reporting one or two Knowledge variables in their organisation (see Table 4.12).

Table 4.12

Summary of Organisational HIWS Knowledge (out of 5 variables)

Score	Percent of Organisations				
1	1				
2	4				
3	14				
4	32				
5	49				
	100				

In summary, 52% of organisations surveyed could be considered HIWS with scores ranging from 16 variables to 22 variables (out of a possible 22 variables). The highest areas the organisations scored in were Power and Information, while the lowest scores were from the Rewards' variables.

#### 4.6.4 Correlations between HIWS Variables

Correlation analysis was conducted using the dependent variables (employee turnover, organisational performance and labour productivity) and the independent variables both independently and as HIWS (HIWS Total, HIWS Power, HIWS Information, HIWS Rewards and HIWS Knowledge).

Correlation analysis demonstrated that there was no statistically significant relationship between individual HIWS variables and the organisational performance of those organisations (see Table 4.13). The correlation analysis was only one relatively weak (p<.05) statistically significant relationship between 'employee involvement initiatives' and the employee turnover of those organisations (see Table 4.13).

Correlation analysis using labour productivity demonstrated a statistically significant relationship (p<.005) with individual HIWS variables 'employee involvement initiatives', 'employees given financial information' and 'supervisors trained'.

# Table 4.13

Correlations Between Subscales for HIWS (N = 91)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Labour Productivity											
2. Employee Involvement Initiatives	.35**										
3. Employees Given Financial Information	.32**	.21*									
4. Supervisors Trained	.30**	.23*	.21*								
5. Employees Multi-Skilled	08	.32**	06	.32**							
6. Flexi-time	.06	.17	.32**	* .08	15						
7. Employee Ownership Schemes	.07	.12	.19	.16	.09	.36**	*				
8. Employee Channels	.19	.25*	.25*	.24*	.11	.02	.11				
9. Off-the-Job Training	.08	.19	.04	.14	.21*	.04	.05	.39*	*		
10. Employee Turnover	04	22*	.08	.16	.05	17	02	03	.05		
11. Organisational Performance	.03	.03	.15	.12	.09	.09	.07	.19	.11	05	

\* p < .05 \*\* p < .005

Correlation analysis demonstrated that there was no significant relationship between the organisations using HIWS, and the employee turnover of those organisations (see Table 4.14). The correlation analysis also showed that there was no significant relationship between the organisations using HIWS, and the organisational performance of those organisations, with the exception of 'Rewards' (see Table 4.14).

Correlation analysis between labour productivity and HIWS variables Total, Power, and Information showed a statistically significant relationship at p<.005.

Table 4.14Correlations Between Dependent and Independent (HIWS) Variables (N = 91)

Variable	1	2	3	4	5	6	7	8
1. Labour Productivity								
2. Employee Turnover	04							
3. Organisational Performance	.03	05						
4. HIWS Total	.34**	07	.19					
5. HIWS Power	.32**	12	.00	.79**				
6. HIWS Information	.34**	06	.12	.72**	.49**			
7. HIWS Rewards	.11	11	.36**	.65**	.35**	.28**		
8. HIWS Knowledge	.21*	.09	.14	.67**	.33**	.31**	.33**	

\* p < .05

\*\* p < .005

#### 4.6.5 Regression Analysis of the Dependant Variable Employee Turnover

When the components of HWIS were regressed against employee turnover the variance accounted for,  $R^2$ , was .05. In this instance there were no statistically significant relationships between the dependent variable, employee turnover, and the independent variables of HIWS (see Appendix 3).

# 4.6.6 Regression Analysis of the Dependent Variable Organisational Performance

When the components of HWIS were regressed against employee turnover the variance accounted for,  $R^2$ , was .16. In this instance there were no statistically significant relationships between the dependent variable, organisational performance, and the independent variables of HIWS (see Appendix 3).

### 4.6.7 Regression Analysis of the Dependent Variable Labour Productivity

When the components of HWIS were regressed against labour productivity the variance accounted for,  $R^2$ , was .15. As the sample size was fairly small and the  $R^2$  is likely to overestimate the variance accounted for in small samples, the adjusted  $R^2$  value is a better estimation of the variance accounted for (Green & Salkind, 2005). In this instance the adjusted  $R^2$  was .11, F(4, 86) = 3.90, p = .01, which means that 11% of the variance seen in labour productivity is accounted for by the components of HIWS measured in this research.

When looking at which variables made the largest unique contribution the variable, HWIS Information, with a Standardized Beta coefficient of .23, was the only significant variable (see Table 4.15).

Table 4.15

Linear Regression of HIWS and Dependent Variable Labour Productivity

	Std. B	t	Sig.
HIWS Power	.19	1.61	.11
HIWS Information	.23	1.99	.05
HIWS Rewards	06	53	.59
HIWS Knowledge	.09	.86	.39
Constant		2.54	.01

This means that while the other variables contributed to the regression analysis, HWIS Information has the most impact on explaining the variance seen in labour productivity, and therefore is the variable of primary importance for organisations to target when working towards gains to be made by implementing a HIWS that has a positive influence on labour productivity

# 4.7 Chapter Summary

This chapter presents the results from this research. The first section of the chapter analysed and discussed the response to the questionnaire, and the main demographics of the respondents. The response rate was 20.8% of 500 surveys that were distributed. The majority of the respondents were in Top or Upper Management positions, which meant they had access to the information required to complete the surveys.

The second section of the chapter used frequencies, correlation and regression to test the objectives and the conceptual framework. New Zealand organisations appear to use many of the variables considered to be part of the HIWS, but these components did not appear to have any significant effect on employee turnover or organisational performance. However, they did appear to have an effect on labour productivity.

# **Chapter 5: Discussion**

# 5.1 Chapter Overview

This chapter will discuss the research findings from this study. The first section of the chapter looks at the findings from the correlation analysis in relation to the literature, and the second section discusses the findings and implications of the regression analysis.

# 5.2 Research Findings Discussion

The discussion of the research findings focuses on the research objectives of examining the effect that high involvement work systems (HIWS) components have on employee turnover and organisational performance, using correlation and regression analysis. The effect of HIWS on labour productivity, a variable used as a proxy measure of organisational performance, is also discussed.

#### 5.2.1 HIWS and New Zealand Organisations

The lowest HIWS score for a New Zealand organisation in the survey was 7 HIWS variables out of a possible 22 variables (see Table 4.7). This was low given that many of the variables involved in the survey could be considered to be relatively mainstream good human resource practices. This response could reflect a lack of knowledge of human resource practices, or a lack of understanding of the organisation. However, this low scoring organisation did actually score in each of the four components groups (Power, Information, Rewards, and Knowledge), while a third of the responding organisations did not score in the area of rewards (see Table 4.11).

The low score of HIWS, in some cases, does not necessarily mean that these New Zealand organisations do not have complete HIWS. There is the tendency for researchers to say that firms either 'have' or 'have not' when it comes to HIWS

(Osterman, 2000), which may not necessarily be realistic, especially given the size of organisations. "High involvement management is premised on organisations pursing an integrated approach, ensuring that employment relations policies are incorporated into all aspects of the organisations planning and implementation process" (Gollan & Davis, 1999, p. 72). However, "most companies fail to recognise the link between good people management practices and business success" (Gollan & Davis, 1999, p. 73).

The present research found that 36% of New Zealand organisations did not score in the area of rewards (see Table 4.11). These firms did not have any form of payment that actively invested the employee in the success of the organisation. This suggests that many firms are willing to pay lip service to the concept of involving and trusting the employee, but when it comes to completing the system many firms (a third in this survey) do not use increased remuneration. This may be due to trust issues (Batt, 2002); it may also be due to the actual firm structure and size.

#### 5.2.2 HIWS Variables

The most utilised HIWS component in New Zealand organisations appears to be that of 'information' with an average score of 66%. As mentioned in previous sections, this would seem to suggest that employees are being given more information and expected to understand more, without the proper compensation or encouragement to be fully involved in the organisation. In combination, these results provide a possible explanation for there being no overall increase in organisational performance when using HIWS; the synergistic positive effect of HIWS components on organisational performance may not occur when some variables are not represented.

High involvement work practices should be studied in conjunction with "higher order" employment practices such as remuneration and decision-making, because without these the practices HIWS are likely to deteriorate to the point where they are no longer beneficial to the organisation. This could effect the perception of these practices; if the deteriorated versions are still under the collective umbrella of high-performance or high involvement, this could lead to an overall negative perception of adopting any of these practices (Kochan, 2000).

In Knowledge, the sub area training was an opportunity that many New Zealand organisations appeared to offer their employees. Eighty-eight percent of organisations said employees participated in off-the-job training, 86% said their supervisors were trained and 95% of organisations had employees that were multi-skilled (see Table 4.6). This particular component may have high organisational participation because training is easy to do, and therefore easy to implement. Management can see and understand the strategy involved in training employees, and can measure and assess the impact of training on the organisation.

However, training often not being carried on after the initial induction or familiarisation period, and management training especially is an issue (Lloyd, 2000). This research did not look at ongoing training specifically. Managerial training plays a vital role in the success of HIWS. Implementing some forms of HIWS to some areas of company may require 'innovative tweaking' to make it work with that particular organisation. This tweaking may be beyond the grasp of management or require time that management does not have (Lloyd, 2000).

Less than half of the organisations in the survey indicated that they had introduced any employee involvement initiates (see Table 4.6). The reason that so few organisations are willing to try introduce ways to encourage employee participation may be an indication of how difficult it is to measure the success of introducing such initiatives. Employee involvement initiatives, and also HIWS, are much harder to measure in terms of key performance indicators. What exactly are the 'measurable indicators' that clearly point to the success or failure of a HIWS (Lloyd, 2000)? The lag time involved in realising the full potential in a HIWS can ultimately mean that employers 'pull the plug' on HIWS schemes without realising all the benefits (Lloyd, 2000).

#### 5.2.3 HIWS and Employee Turnover

In chapter 4, correlation analysis showed there was no significant relationship between organisations using HIWS, and employee turnover in those organisations (see Table 4.14). This is contradictory to previous New Zealand organisation based research that found increased high involvement work practices were correlated with increased employee turnover (Guthrie, 2001). The research hypothesised that this could be associated with the expectation that the more involved the employees are in the organisation the more they feel valued and therefore the higher pecuniary value they place on their work (Guthrie, 2001). When they do not receive increased remuneration from the organisation, they leave.

The present study did not find there to be any correlation between employee turnover and HIWS. This could also be reflective of the possibility that HIWS require extra training and participation, while employees do not wish to have any additional responsibility. This effort needs to be adequately remunerated, and potentially organisations have been slow to realise this. Employees with extra skills will feel that this needs to be reflected in the pay system and are likely to look for this compensation in other organisations.

Way (2002) found that HIWS enhanced the ability for organisations to retain employees but only when associated with group based pay. Group based pay was only reported in 24% of organisations in the survey (see Table 4.6) and may, in part, explain why there was no statistically significant relationship between HIWS and employee turnover. Other research (Way, 2002) has found that HIWS was not correlated with labour productivity, which is a contradictory finding to this research.

Previous research (Gittleman et al., 1998; Goodboe, 2002), has stated that training practices can be used to reduce turnover. This was not a finding from the present study, which showed that New Zealand organisations did have training practices, but these practices had no perceivable effect on employee turnover although the definition of what constitutes training may vary between organisations.

#### 5.2.4 HIWS and Organisational Performance

There appeared to be no effect of HIWS on organisational performance (Appendix 3) although there was a correlation with 'Rewards' (see Table 4.14). There could be many reasons for this lack of empirical support. HIWS can be costly to implement,

and training employees, making time for consultation and diffusion of information may impact on productivity, and initially raise organisational costs. Cappelli & Neumark (2001) found that high involvement work 'practices' raised labour costs, but also appeared to raise sales per worker at the same rate, meaning that there was no clear outcome for the organisation.

Many New Zealand organisations' indicated that they did use many of the HIWS variables (see Table 4.8) but did not experience a better than average organisational performance. This result was similar to a study conducted by Guerrero & Barraud-Didier (2004), which found that French firms did not experience any significant correlation between HIWS and financial performance. However, Guerrero & Barraud-Didier (2004) did find individual relationships where communication, training and empowerment practices did appear to positively affect organisational performance. Many organisations in the present survey reported having communication, training and empowerment practices, but there was not indication as to how well there were maintained and supported in New Zealand organisations.

Godard's (2004) research also does not support high involvement management as leading to superior performance, as general good human resource practices are likely to yield more benefit. Gollan (2005), reported that it was difficult to prove a link between employee involvement and organisational performance, due to the time and costs involved for what is essentially long term rewards. Effective consultation needed to change organisational culture and realise the full benefits of HIWS (Gollan, 2005). HIWS can raise labour costs per worker, but also sales per worker rise at the same rate meaning there is no clear outcome for productivity gains (Cappelli & Neumark, 2001). Therefore, there is no real net gain for employers in terms of profit and loss.

HIWS are a reflection of "the presence of more skilled and educated employees" (Edwards & Wright, 2001, p. 575). The lack of statistical support for HIWS increasing organisation performance may also be attributed to HIWS removing "prior inefficiencies rather than making new contributions of its own" (Edwards & Wright, 2001, p. 581). This presents a problem for researchers, how do you differentiate the

removal of inefficiencies already present in the organisation with the contribution that HIWS are theorised to be making to the overall organisational performance.

The lack of a statistical relationship between HIWS and organisational performance could be related to the minimal links in New Zealand organisations between HIWS and 'Rewards'. New Zealand organisations often did not use any of the variable pay schemes that would support HIWS, and encourage employee involvement and participation. Employees' need to feel 'invested' in the organisation, and the best way to do this is through rewards systems (Gittleman et al., 1998).

In small organisations, ownership and share option schemes may not be appropriate, but bonuses for innovative work reorganisation ideas that result in increased organisational efficiency may be. Managers may need to be creative to encourage employee participation through monetary or other kinds of incentives. Ultimately, many organisations did not appear have any form of payment that actively invested the employee in the success of the organisation. Remuneration that clearly linked to goals and was individually tailored to acknowledge difference in motivational drives, is more likely to increase participation, and potentially increase organisational performance (Gittleman et al., 1998).

#### 5.2.5 HIWS and Labour Productivity

New Zealand organisations that use HIWS in this research appear to experience an improvement in productivity (see Table 4.15). This may be an effect of HIWS making employees feel more valued, and encouraging increased commitment and productivity. Bryson, Forth, & Kirby (2005) found that high involvement management (HIM) practices had a positive effect on productivity, although this was restricted to organisations with union involvement. "In the non-union sector, HIM has no apparent impact on productivity or financial performance" (Bryson et al., 2005, p. 452). Only 22% of the organisations in the survey had employees in unions, but HIWS did appear to positively affect labour productivity.

In contrast to the present work, Wood and De Menezes (1998) found that there were actually few statistically significant associations between HIWS and labour

productivity. Similarly, Cappelli & Neumark (2001) reported that, at best there was a weak empirical case for productivity gains, from HIWS. Previous New Zealand based research (Guthrie, 2001) found that there was only productivity gains when HIWS were not present, this also contrast the present work that found productivity gains when HIWS were present.

The way HIWS are diffused throughout an organisation may also affect any results. This study was cross sectional, not longitudinal due to budget and time constraints. HIWS may have just been introduced to the organisation, and may not have had time to take effect (Addison, 2005). Similarly, the practices may exist in the organisation but may not be extensively utilised by all employees (Addison, 2005). However, the broadness of the response options and possible management bias may have distorted just how broadly HIWS are diffused throughout the organisation (Riordan et al., 2005). There may also be the question as to whether the initiatives that may have been introduced historically were still operational and functional.

HIWS appear to improve productivity but it could be argued that 'good' human resource practices can do the same thing (Gollan & Davis, 1999). Increasing human resource management awareness by both employees and employers could mean that even if organisations are not specifically using a HIWS they are still producing a productivity gain that reduces the gap between organisations employing practices and those who are not (Edwards & Wright, 2001), and would reflect in organisations in the survey showing improved labour productivity gains. Ultimately, "managing people well rather than badly affects productivity" (Edwards & Wright, 2001, p. 569).

### 5.3 Summary of Discussion

With HIWS, employee rewards should also to be part of the decision. Employees need to be allowed to participate fully in aspects of the organisation. This needs to include compensation policies. Previous research (Lloyd, 2000) has shown clearly that people are motivated by different pay structures, and this needs to fit with the involvement as motivation is one of the keys to HIWS success in the organisation.

Rewards and appropriate compensation needs to be in place to encourage participation in HIWS. This seems to be an area that New Zealand organisations need to develop. Many organisations indicated that they had staff training and shared information with employees. Unfortunately it is hard to gauge if the decisions made about training and the level of information shared with employees is based on reciprocity or does upper management make an isolated decision?

Overall, the research found that HIWS did not increase organisational performance or decrease employee turnover at any significant level, but HIWS did appear to positively affect labour productivity within New Zealand organisations.

### 5.4 Chapter Summary

This chapter has discussed the findings of the previous chapter. The results showed no statistically significant relationships between the HIWS components, employee turnover, and organisational performance, but there was a statistically significant relationship with the self-reporting variable of labour productivity.

# **Chapter 6: Conclusions and Implications**

### 6.1 Chapter Overview

The first section of this chapter discusses the organisational and managerial implications from this study. The second section discusses research limitations and potential future research directions.

### 6.2 Research Implications

The finding of this research has various implications both at an organisational and managerial level.

#### 6.2.1 Organisational Implications

A good high involvement work system (HIWS) is one that involves and engages employees in such a way that they are working at optimum productivity (Konrad, 2006). Information should be available to employees in the organisation but the information should not be at a level that overwhelms employees or distract them. Some employees only need basic information, open communication channels and fair remuneration to feel involved and valued in the organisation (Richards, 2006). Abundant information given to the employees may make them feel like the organisation is 'off-loading' rather than seeking participation. The danger with this kind of system may simply be that is comes with 'additional features that no one uses'.

Labour productivity appears to benefit from information dissemination (see Tables 4.14 and 4.15). This may simply be an employee understanding where they fit in the organisational structure or timely feedback improving overall production efficiency. Whether it is part or a HIWS or part of the organisational policy, timely and relevant information dissemination appears to be beneficial to organisations. Employees, who do feel they have the aptitude and motivation to participate more fully in an

organisation, are likely to feel more valued and appreciated. This can translate into increased productivity for the organisation, and may help to retain employees in the long term (Freeman & Kleiner, 2000).

The way employees are rewarded within the organisation for increased participation and involvement also appears to be an area that New Zealand organisations may need to develop. Eighty percent of the organisations in the survey had either only one or none of the reward systems associated with HIWS (see Table 4.11). This could reflect that New Zealand organisations use different systems in conjunction with HIWS or that these particular reward systems are not well understood within the New Zealand organisational environment.

Organisations need to have supporting systems in place for HIWS to function correctly. These may need to include recruitment and selection procedures to attract employees who wish to contribute fully to an organisation (Ramsey et al., 2000). Some potential employees may also need to be 'trained' into a culture of high involvement, rather than expecting them to fit in without support.

It would seem beneficial for the organisation to build HIWS into their core values from the very beginning (Ciavarella, 2003). If HIWS are adopted from the beginning, this decreases the amount of resources that will be needed to adopt them later (Ciavarella, 2003). This may be especially important given the current sociological climate. Individuals are more likely to expect to be involved in the organisation in some way. This attitude can lead to a form of apathy towards 'innovative' and 'progressive' human resource practices as employees come to view them more as a right rather than a privilege (Ciavarella, 2003).

Provided the HIWS has components from each of the four areas of Power, Information, Rewards, and Knowledge (Ciavarella, 2003), it must come close to being described as 'high involvement'. This would allow the organisation to stipulate how integral the system was to its overall functioning and financial performance. The number of variables utilised from each area, and the significance placed on these, could allow the organisation to vary the degree of involvement from 'low' to 'high' involvement (Wood & De Menezes, 1998). Often organisations with few employees may view a system with to many options as an unnecessary complication rather than a potential asset. The ability to tailor the system to a specific organisation may make it more viable for smaller organisations to implement.

#### 6.2.2 Managerial Implications

For a HIWS to function properly in the organisation, managerial support is required (Tesluk et al., 1999). If organisations follow a comprehensive recruitment and selection procedure with managerial endorsement, managers may be more likely to trust the employees, and feel more comfortable with the devolution of sensitive material.

Training can also be of assistance in alleviating any potential reservations that managers may have about a HIWS (Wilson & Western, 2001). If employees are trained in basic employment regulations and expectations, managers may be more likely to allow the employees, especially in supervisory roles, to make higher-level decisions, an area that almost half of the organisations in the survey failed to score in (see Table 4.6).

Managers need to look at how HIWS are implemented and used in the organisation. Managers also need to be aware of the potential costs that are associated with implementing new systems, and understand that it is the long-term benefits that should be the focus of organisational change, not any possible short-term financial returns (Gollan, 2005). It is the investment in human capital in the short-term that will lead to much greater results for the organisation in the future (Gollan, 2005). Unfortunately, many organisations choose to employ managers on a contractual basis that generally have short term performance indicators linked to financial rather that 'human' successes.

Information and feedback given to employees appears to improve the overall productivity of an organisation and could be an area for managerial development (see Table 4.15). It would seem to be that where an information system was instigated, that it could be maintained with minimal effort but potentially many gains in productivity.

Management also needs to be aware that not all employees want to be fully involved in the organisation. Those that do wish to be fully involved in the organisation, need to feel secure enough in the culture of the organisation to be able to voice concerns and put forward suggestions about the ways to streamline the work processes.

### 6.3 Research Limitations

The data collected for this survey appeared to be comprehensive, but most managers do not know what is happening in all areas of the organisation. Therefore, some sections of the responses may have been very accurate while other areas less so, and it is not possible to tell with each individual returned survey if this has occurred. Ideally the surveys should be split into two separate surveys; one with a human resource focus and one with a financial focus, and addressed to the relevant members of upper management. However, due to financial constraints this was not done.

Another factor that may limit the viability of the data was the requirement in the financial performance section to give sensitive financial data about the organisation, which the respondents may not wish to disclose this information. Although the surveys were completely anonymous, there is a natural reluctance to reveal any information of a sensitive nature to unknown researchers.

As previously mentioned, this research was also limited by financial constraints inherent in Masters level study. Ideally, the sample size needed to be increased to allow for a more returned surveys. Postcards were used to try and increase the response rate, but these did not appear to have any great effect overall.

The measurement of the dependent variables, specifically organisational performance, needs to be developed more. This particular dependent variable suffered from both the potential lack of knowledge by the respondents, and the sensitive nature of the information required to complete the organisational financial performance section.

The ambiguity in the area of HIWS, and how exactly it is defined, limited the comparability and analysis of research findings. A more consistent model needs to be developed to make conclusions drawn from such comparisons more robust.

### 6.4 Future Research

Future research in the area of HIWS in New Zealand needs to consider linking HIWS specifically to organisation size. As discussed in the previous chapters, there may be a relationship between organisational size and the effect of HIWS, which this research did not address.

HIWS could also be examined in an industry specific context within New Zealand organisations. International research had found that some industries might be more conducive to the uptake of HIWS than others. Whether this is applicable to the New Zealand context is an area that could be explored.

HIWS require a longitudinal study over at least 3-5 years to be able to show any true benefits that the systems may produce. Environmental macro factors such as economic and labour factors that may influence financial performance need to be monitored. More qualitative case study research needs to be undertaken in the area of HIWS to monitor how organisations design and implement systems. Implementation and diffusion appear to be keys to successful HIWS, but little qualitative research has been done on how either function in the organisation.

There appears to be a limited amount of research into how unionised workplaces enhance or destroy HIWS in general and no research on the phenomenon in New Zealand. The research that has been conducted in the US and the UK examining the varying effects of unionisation on HIWS has had varying results. More research needs to be conducted about the role unions now play in New Zealand organisations when it comes to implementing new human resource practices, as the workplace and society become increasingly individualised.

When conducting further research, there needs to be inclusion of variables that are universally considered to be part of HIWS (see Table 2.1), but allow for more open questions that may lead to more insight into how organisations are functioning and evolving; this may lead to possible innovations in the area of HIWS. Most systems are hybrids, and there is the potential for these hybrids to spawn newer more effective practices.

For organisations looking for a competitive edge in an increasingly ruthless business environment, employee development is a key to success. It is very difficult to imitate and replicate systems that have human factors involved, especially if employees are used to create a unique system that can often allow the organisation to build a distinctive advantage in the marketplace

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# **Appendix 1: Postcards and Cover Letter**

# Lincoln University Logo/ Letterhead

You will shortly receive a questionnaire that contributes to research for a Masters Thesis in Commerce. The research explores the area of Human Resource Management and policies that encourage overall increased productivity.

We are seeking the views of managers like yourself and hope you will have about 15 minutes to complete and return the questionnaire to enable us to highlight key factors in HR management policies that are instrumental in organizational productivity. Thursday 8<sup>th</sup> December 2006

Dear Sir/Madam,

This questionnaire is for research as part of a Masters Thesis in Commerce. The research explores the area of Human Resource Management and policies that encourage overall increased productivity. We are seeking the views of managers like yourself and hope you will return the completed questionnaire to participate and contribute to work that is supported by the Lincoln University Commerce Division. This research is based on previous studies in Britain and Australia, and will enable us to highlight key factors in HR management policies that are instrumental in organizational productivity.

I will be grateful if you can spare about 15 minutes to complete the enclosed questionnaire. In return for you kind assistance, I will be pleased to send you a copy of the final report summary (please provide your details on the questionnaire). I will respect your preference if you would rather remain anonymous. However, I assure you that your responses will remain entirely confidential, and that no individual or company will be named in the report at any stage. All results will be presented in a coded aggregate format.

**Please return the completed questionnaire to the Lincoln University Commerce Division in the enclosed pre-paid envelope**. Please accept my thanks in advance for taking the time and effort to complete this survey.

Yours sincerely,

Sarah-jane Doody

## **Appendix 2: Questionnaire**



### **MANAGEMENT SURVEY 2006**

1. What is the title of your job?

2. What is the annual employee turnover for this organisation (%)?

3. Are any employees here members of a trade union or independent staff association?

- 1. Yes
- 2. No

4. Are any of the controlling owners actively involved in day-to-day management of this workplace on a full-time basis?

Yes No

5. I would like to obtain **your** views, as a manager at this workplace, about a number of employee relations issues. I'd like you to tell me what you think about these issues. Please indicate below:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree
Employees are led to expect long-term employment in this organisation	1	2	3	4	5
It is up to individual employees to balance their work and family responsibilities	1	2	3	4	5
Those at the top are best placed to make decisions about this workplace	1	2	3	4	5
Unions help find ways to improve workplace performance	1	2	3	4	5
We would rather consult directly with employees than with unions	1	2	3	4	5
We do not introduce any changes here without first discussing the implications with employees	1	2	3	4	5
Most decisions at this workplace are made without consulting employees	1	2	3	4	5

6. Approximately what proportion of your time do you spend on employee relations matters?

7. Do supervisors have the authority to make final decisions on taking on people who work for them? 1. Yes 2. No

8. Do supervisors have the authority to make final decisions on dismissing workers for unsatisfactory performance?

1. Yes 2. No

9. What proportion of supervisors here have been trained in people management skills?

1.	All	100%
2.	Almost all	80-99%
3.	Most	60-79%
4.	Around half	40-59%
5.	Some	20-39%
6.	Just a few	1-19%
7.	None	0%

10. Have you sought advice from any of these bodies on any employee relations issues during the last 12 months?

1. Management consultants

- 2. Employers' association
- 3. Other professional bodies (e.g. NZIM)
- 4. None of these

11. Is there a standard induction programme designed to introduce new employees to this workplace

- 1. Yes
- 2. No

12. What proportion of employees have had formal off-the-job training over the past 12 months? (Offthe-job training is training away from the normal place of work, either on or off the premises)

1.	All	100%
2.	Almost all	80-99%
3.	Most	60-79%
4.	Around half	40-59%
5.	Some	20-39%
6.	Just a few	1-19%
7.	None	0%

13. If any with training: On average, about how much time did these employees spend in formal offthe-job training sessions over the past 12 months?

1. No time

- 2. Less than 1 day
- 1 to less than 2 days
   2 to less than 5 days
- 5. 5 to less than 10 days
- 6. 10 days or more

14. Approximately, what proportion of employees are formally trained to be able to be able to do more than one job or fill more than one position?

%
9%
'9%
9%
9%
%

15. To what extent would you say that individual employees here have...

	A lot	Some	A little	None
variety in their work?	1	2	3	4
discretion over how they do their work?	1	2	3	4
control over the pace at which they work?	1	2	3	4

16. What proportion of the time at staff meetings is given over to questions from employees, or for employees to offer their views?

1.	None	0%
2.	A small proportion	Less than 10%
3.	Up to a quarter	10-24%
4.	A quarter or more	25% or more

17. Are there any committees of managers and employees at this workplace primarily concerned with consultation, rather than negotiation?

1. Yes

2. No

18. Do you have any channels through which employees can make suggestions for improving working methods?

1. Yes 2. No

19. Have you or a third party conducted a formal survey of your employees' views or opinions during the past five years?

- 1. Yes
- 2. No

20. Does management regularly give employees, or their representatives, any information about internal investment plans?

1. Yes 2. No

21. Does management regularly give employees, or their representatives, any information about the financial position of the organisation?

1. Yes

2. No

22. Compared with five years ago, is management here more or less likely to negotiate with union representatives over matters at this workplace, or has there been no change?

- 1. More
- 2. Less
- 3. No change

23. Do any employees at this workplace receive payments or dividends from any of the following variable pay schemes?

- 1. Profit-related payments or bonuses
- 2. Deferred profit sharing scheme
- 3. Employee share ownership schemes
- 4. Individual or group performance-related schemes
- 5. Other (please specify)

#### 24. What proportion of employees at this workplace have their performance formally appraised?

1.	All	100%
<u> </u>	A 1 / 11	00.000/

2.	Almost all	80-99%
•		(a) = 0.0 (

- 3. Most 60-79% 40-59%
- 4. Around half 20-39%
- 5. Some 6. Just a few 1-19%

25. How frequently are appraisals conducted?

26. What are the main purposes of the appraisal?

- 1. Assess suitability for promotion or transfers
- 2. Give feedback to employees on their performance
- 3. Give employees a chance to discuss future career moves
- 4. Set personal objectives and review progress against past objective(s)
- 5. Determine pay increases
- 6. Set/evaluate training and development needs
- 7. Promote behavioural change
- 8. Some other purpose (please specify)

27. What proportion of employees at this establishment, if any, ever work from home during normal working hours?

1.	Half or more	50% +
2.	A quarter up to a half	25-49%
	Up to a quarter	10-24%
4.	A small proportion	5-9%
5.	Hardly any	Less than 5%
6.	None	0%

28. Do you have any of the following working time arrangements for any non-managerial employees at this workplace?

- 1. Annualised hours
- 2. Regularly working in excess of 48 hours per week
- 3. Flexitime
- 4. Shift working
- 5. Sunday-only working
- 6. Zero-hour contracts
- 7. 9 day fortnight /  $4\frac{1}{2}$  day week
- 8. Other (please specify)

29. In your opinion, has there been in change in the following?

	Gone up <i>lot</i>	Gone up <i>little</i>	Stayed the same	Gone down <i>little</i>	Gone down lot
Labour productivity at this workplace gone up or down compared with five years ago	1	2	3	4	5
Importance of employee relations matters in setting organisation goals and objectives	1	2	3	4	5
Flexibility to move employees from one task to another	1	2	3	4	5
The amount of employee influence over the way they do their job	1	2	3	4	5
The amount of information provided to employees about this workplace	1	2	3	4	5
Amount of employee influence over managerial decision-making	1	2	3	4	5

30. Over the past five years has management here introduced any of the changes listed below?

- 1. Changes in payment systems
- 2. Introduction of new technology
- 3. Changes in working time arrangements
- 4. Changes in the organisation of work
- 5. Changes in work techniques or procedures
- 6. Introduction of initiatives to involve employees
- 7. Other (please specify)

31. Finally, how would you rate the relationship between management and employees generally at this workplace?

- Very good
   Good
- 3. Neither good nor bad
- 4. Poor
- 5. Very poor

#### For the following questions, please give best estimates if you do not have exact data.

32. What was your organizations' turnover in your last annual report?

33. What is the approximate value of buildings, machinery, and equipment?

34. What was the total capital expenditure (excluding depreciation) over the last financial year?

Total cost of acquisitions:

Total proceeds from disposals:

35. What was the total value of purchases of goods, materials and services (excluding labour) over the last financial year?

36. What were the total employment costs over the last financial year?

37. What were the total training and development costs over the last financial year?

That is the end of the questions, thank you very much for taking part. Please return the questionnaire to Lincoln University in the prepaid envelope provided. If you would like a copy of the final results, please include a contact address or email below.

# **Appendix 3: Regression Analysis**

### Table 1

Linear Regression of HIWS and Dependent Variable Employee Turnover

Std. B	t	Sig.
13	-1.01	.32
05	13	.90
12	-1.06	.29
.18	1.55	.13
	1.49	.14
	13 05 12	13 -1.01 0513 12 -1.06 .18 1.55

### Table 2

Linear Regression of HIWS and Dependent Variable Organisational Performance

		Sig.
19	-1.17	.25
.06	.35	.73
.39	2.75	.01
.06	.38	.71
	.92	.36
	.06 .39	.06.35.392.75.06.38