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**A Longitudinal Study on the High Involvement Work System and Its Effect
on Job Resources, Job Demands and Outcomes among New Zealand
Employees: Considerate Leadership as a Moderator**

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Science (Psychology)

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Abstract

Retaining a high-quality workforce is synonymous with organisational excellence. New Zealand (NZ) currently experiences a large fluctuation of its high-quality workforce moving in and out of the country (OECD, 2024). The issue we are faced with is an influx of competition and fewer high-quality employees. New Zealand (NZ) organisations are therefore tasked with producing and maintaining a work system that attracts, develops, and retains high-quality employees. In the study, we turn to employees' involvement to achieve a high-quality workforce.

While several important factors contribute to the quality of a workforce, we must begin by recognising an individual's quality of life (QoL) as an essential element. The quality of an individual's life will likely predict the quality of work (QoW) one produces (Bubonya et al., 2017; Lim et al., 2000). Using a sample of 250 New Zealand (NZ) employees, the longitudinal study systematically examined the effect of job resources, namely, opportunities for skill development, and emotional job demands on employees' quality of work (QoW) and quality of life (QoL), while highlighting mediating effects of these variables on the relationship between employee involvement and employee outcomes.

The analysis of our quantitative data indicated the significant positive effect of opportunities for skill development on employees' quality of work (QoW) and quality of life (QoL). In addition, the high involvement work system (HIWS), conceptualised by the PIRK model's four dimensions (power, information sharing, rewards and knowledge), had significant and positive effects on opportunities for skill development. Moreover, information sharing produced a significant and negative effect on emotional job demands. Emotional job demands mediated the relationships between the high involvement work system (HIWS) and employees' quality of work (QoW) and quality of life (QoL). Opportunities for skill development produced a mediating effect on the relationship between the high involvement work system (HIWS) and only employees' quality of work (QoW). A considerate leadership style produced no moderating effects on the high involvement work system (HIWS) and employee's quality of work (QoW) and quality of life (QoL) but did directly effect employees' opportunities for skill development. This study contributes to the limited longitudinal research in New Zealand (NZ) and provides empirical evidence on organisational-level change that supports employee outcomes, thus helping to progress employees' involvement in New Zealand (NZ) organisations.

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List of Abbreviations

CMB	common method bias
COPSOQ	Copenhagen Psychosocial Questionnaire
DV	dependent variable
EAP	employee assistance program
ECA	<i>Employment Contracts Act 1991</i>
HIWP	high involvement work practice/s
HIWS	high involvement work system
HPWP	high performance work practice/s
HR	human resources
HRM	human resource management
IV	independent variable
JD	job demands
JD-R model	job demands–resources model
JR	job resources
NCEA	National Certificate of Educational Achievement
NZ	New Zealand
NZ-WHOQOL-Brief	New Zealand’s version of the World Health Organization Quality of Life Questionnaire – Brief
OECD	Organisation for Economic Co-operation and Development
PIRK model	power, information sharing, rewards, knowledge model
QoL	quality of life
QoW	quality of work
QoWL	quality of working life
SD	standard deviation
SDGs	Sustainable Development Goals
SE	standard error
SHRM	strategic human resource management
UN	United Nations

Chapter 1: Introduction

Organisations in New Zealand (NZ) retain a highly dynamic workforce. As demands change, NZ holds the highest rate worldwide for people moving in and out of the country (Organisation for Economic Co-operation Development [OECD], 2024). With the domestic labour market open, employees have choices about where they work. For NZ employees, switching jobs has been recorded at a higher rate than the Organisation for Economic Co-operation and Development (OECD) average (OECD, 2024). The problem with this dynamic is the influx of competition and fewer high-quality employees. Thus, the objective for NZ organisations is to create and maintain a work system and environment that attracts, develops and retains a high-quality workforce.

The quality of life (QoL) of an employee is a significant factor to consider as it underpins how that individual perceives the entirety of his/her life. This is particularly important in the workplace as it may be a contributing factor for why individuals make certain decisions or feel a certain level of satisfaction at work. Long-standing research supports the notion of the quality of life (QoL) being a critical dimension of the quality of work (QoW) produced by an individual. Scholars highlight a significant correlation of poor mental health with higher degrees of absenteeism and diminishing productivity rates (Bubonya et al., 2017; Lim et al., 2000). New Zealand (NZ) organisations need to focus on building a work system that enhances their employees' quality of work (QoW) and quality of life (QoL) to ensure the attainment of a high-quality workforce.

Quality of Life (QoL)

An individual's quality of life (QoL) can be defined and measured in many ways. The World Health Organization (WHO)'s definition is that quality of life (QoL) is an individual's subjective assessment of his/her life situation in the context of the culture and value systems of his/her environment, while considering his/her goals, expectations, standards and concerns (World Health Organisation [WHO], 2012). The term 'quality of life (QoL)' is a multifaceted concept that is affected in a complex way by an individual's psychological state, physical health, social relationships, personal beliefs and relationship with salient features of their environment (WHO, 2012).

Quality of life (QoL) embodies an individual's overall well-being and happiness. Scholars recognise two groups of conditions which act as internal indicators for the quality of someone's life. The first comprises an individual's characteristics which encompass features over and above his/her overall health and psychophysical condition, by including his/her personality and life experiences (Faden & Leplège, 1992). The second comprises an individual's situational factors, including features limited to his/her living conditions and economic situation, life-long and professional challenges, and social environment and support (Ryff, 2014). It is the interaction of the individual and situational factors that shape the behaviours of an individual and link directly to the subjective assessment of his/her life.

The Rangahau te Korou o te Ora/Quality of Life Survey is a council-run survey completed every two years in all major urban areas of NZ (Neilsen, 2022). It's latest results, from the survey taken in 2022, show that 36% of New Zealanders stated that their quality of life had decreased from 12 months prior. Individuals' top two reasons for this decrease was a reduction in financial well-being and lifestyle changes, including a sense of a loss of freedom. A reduction in quality of life (QoL) leads to an increased sense of unhappiness in an individual's life which exacerbates illness and accelerates mortality (Sirgy, 2012). Spiegel and Giese-Davis (2003) highlighted "growing evidence of a relationship between depression and cancer incidence and progression" (p. 278).

Recently, a statistic gathered by the New Zealand Ministry of Health indicated that the rate of mental distress experienced by New Zealanders was a current issue, with one in five adults aged 15 years and over being diagnosed with anxiety and/or mood disorders (Ministry of Health, 2019). A more recent measure reported that this statistic had neither dropped nor increased over a four-year period, currently remaining at one in five adults (Ministry of Health, 2023). Attention is specifically focussed on NZ's indigenous population, with 50% of the Māori population reporting having anxiety and/or depression (Sullivan et al., 2023). These statistics indicate that many in the NZ population suffer from some form of mental distress which strongly correlates with how their quality of life (QoL) is perceived by them (Karunanithi et al., 2018). In addition to individuals enduring adverse consequences from their reduced quality of life (QoL), organisations may also experience detrimental effects. An employee with a low quality of life (QoL) will have greater rates of work absences and impaired work performance due to psychological issues, such as depression and anxiety (Lerner et al., 2010). Consequently, an organisation may experience several

cascading effects including a reduction in productivity levels, an increase in costs associated with paying absent employees or hiring new employees, and a reduction in the overall morale of its team members.

Quality of Work (QoW)

The term ‘quality of work (QoW)’ refers to an employee’s subjective level of satisfaction with the work he/she produces. The quality of working life (QoWL) in which an employee is involved is the first focus, with QoWL being a multidimensional construct associated with job satisfaction, job involvement, job security, work-life balance, productivity, health, safety, professional skills and competence development (Srivastava & Kanpur, 2014). It is closely linked to the extent to which employee’s working conditions meet his/her needs (Green, 2021). The International Labour Organization (ILO) defines ‘decent work’ as meeting

the aspirations of people in their working lives. It involves opportunities for work that is productive and delivers a fair income, security in the workplace and social protection for families, better prospects for personal development and social integration, freedom for people to express concerns, organise and participate in the decisions that affect their lives and equality of opportunity and treatment for all women and men.

When the workplace places decent work as a priority, employees feel as though their needs are being met, leading to an increase in their quality of work (QoW) (Green, 2021).

Statistics from the OECD’s research findings have stated that New Zealanders work longer hours than the global average (Ministry of Development, 2010). However, their income does not appear to reflect their hard work, having been reported as falling below the OECD average income. Recognising hard work through rewards is imperative for both the organisation and the workforce. Several studies have confirmed the positive correlation of rewards and recognition with employees’ motivation to be effective and efficient on the job (Akafo & Boateng, 2015; Khan et al., 2011). Therefore, while the needs of NZ employees are not being met, it can be neither assumed nor expected that their quality of work (QoW) is at its highest. This is potentially a long-term issue for NZ organisations wanting to sustain their workforce and competitive edge for survival in the current labour market.

It is important to note that the subjective evaluation of one’s quality of work (QoW) will differ substantially between individuals. Several external factors may also contribute to

the way in which individuals perceive their quality of work (QoW): one noteworthy factor is their access to workplace resources. Some years ago, Brown et al. (2012) stated that employees in low-quality jobs did not always report low job satisfaction. One explanation for this phenomenon is that jobs possibly perceived as lacking in quality often make up for this lack with additional resources. For example, good working hours may mitigate poor pay rates for some individuals. Therefore, access to workplace resources can have significant mitigating effects on the quality of work (QoW) produced by an employee.

Concerns about potential health hazards for employees associated with their low-quality work are not new. Findings from Phase 13 of the Stress and Health (Whitehall II) Study (Marmot & Brunner, 2005) reported that two main theoretical models exist for understanding the relationship between work and health among employees (Stress and Health [Whitehall II] Study, 2023). The first factor, demand control, emphasises that more senior employees may have greater demands; however, the level of autonomy and resources they use to manage these demands is also at a higher level, making it easier to manage and reducing the stress burden. The second factor, effort–reward imbalance, states that employees with higher quality jobs have greater levels of satisfaction, while also receiving a higher level of remuneration and more promotions. In contrast, employees who report a low quality of work (QoW) are more likely to experience additional stressors, including insecurity and unpredictability of work, which may contribute to an increase in detrimental health outcomes.

A low quality of work (QoW) not only affects the health and well-being of an employee but can cause serious implications for the organisation's outcomes. When an employee is faced with an increase of demands without having the necessary resources to deal with them, the employee can experience stress and fatigue, leading to a lower standard of work (Arshadi & Damiri, 2013; MacDonald, 2003). According to the University of Cambridge (2024), this may then impact rates of absenteeism, turnover, performance and productivity, as well as employee complaints. In turn, this may have significant implications, such as a decrease in the organisation's overall reputation, financial consequences, a reduction in productivity and demoralisation of employee morale.

Supporting Work and Personal Outcomes

Countries throughout the world have demonstrated long-standing commitment to the United Nations (UN)'s Sustainable Development Goals (SDGs) (United Nations [UN] General Assembly, 2015). The 2030 Agenda brings with it a vision for people, the planet and

prosperity, acknowledging the immense challenges to sustainable development faced by our world today but also identifying this as a time of vast opportunity (UN General Assembly, 2015). Now more than ever before, NZ organisations are turning to formal well-being strategies or, at the very least, ad hoc support in the workplace to ensure that they are contributing to the sustainable development of their workforce (Fleming, 2024). It is commonplace for employees to have been, or continue to be, involved with support systems throughout their time at work. However, Oxford researcher, William Fleming (2024) made headlines with his recent discovery about employee well-being. Fleming's (2024) study produced findings which showed no greater outcomes, in relation to employee well-being, than when participants utilised individual-level incentives compared to those that did not. Fleming (2024) reported the growing consensus that organisations must focus on changing the workplace instead of changing the employee when employee outcomes are the priority. Organisational interventions, such as changes to work systems, management practices, scheduling, performance reviews and staff resources, may be considered more beneficial for improving work and personal outcomes (Fleming, 2024).

New Zealand Work Systems

The need for organisations to remain globally competitive exerts pressure, demanding that they adapt and change. New Zealand (NZ) faces these major changes due to ongoing global pressures, rapidly changing technologies and intense competition (Hawkins, 2010). This was displayed as early as the 1970s with the onset of Japanese 'lean production' systems, marked by methodologies, such as quality circles and team-based production (Doeringer et al., 2003). It is now emphasised that the focus has shifted from economising to delivering value due to stakeholders' expectations for quality, innovation and cost-effective products.

To some extent, NZ is illustrative of global trends as it seeks to change its markets to enhance competitiveness. These changes, known as "the New Zealand experiment" (Kelsey, 2015), have proved more radical than reforms in most other countries. In 1984, NZ introduced dramatic free market reforms, which included deregulating product and financial markets, denationalising state-run businesses, disassembling import restrictions and eliminating agricultural supports (Guthrie, 2001). In addition, the release of the *Employment Contracts Act 1991* (ECA) radically transformed the industrial relations landscape in NZ by

dismantling compulsory unionism (Guthrie, 2001). Previously, NZ's competitive advantage was barely a part of the lexicon; today, it is imperative for survival.

Additional concerns about the quality of work design in Western industries have been sparked by the surge in offshoring to countries like China, India and other low-cost producers (e.g. Batt, 2002). Therefore, many stakeholders are questioning traditional hierarchical structures and delineations of activities, authority, functions, organisational effectiveness and responsibilities (Hawkins, 2010). In response to the diverse needs and interests of these stakeholders, subsequent adjustments have been implemented through strategic human resource management (SHRM), including high-performance (e.g., Huselid, 1995), involvement (e.g., Guthrie, 2001) and commitment (e.g., Arthur, 1994) work systems.

Strategic human resource management (SHRM) can be defined as “the pattern of planned HR [human resource] deployments and activities intended to enable an organisation to achieve its goals” (Wright & McMahan, 1992, p. 298). Professionals in the human resources (HR) space have a lengthy track record of presenting evidence on how HR practices can increase organisational performance, leading to enhanced work and personal outcomes for employees (Rotich, 2015). Organisations have been adopting HR practices, such as high-performance work practices (HPWP), aiming “to attract, select, manage, and retain the highest quality human capital” (García-Chas et al., 2016, p. 451). Others have turned to its conceptual companions: high involvement and high commitment.

Much of the previous research conducted on strategic human resource management (SHRM) in the NZ context has examined the link between SHRM practices and employee performance (e.g., Agbodo-Otinpong, 2015; Iqbal, 2019). A prominent premises of human resource management (HRM) is that, in addition to increasing employee performance, work practices should support employees' longevity in the workplace. This falls in line with a mutual gains perspective which argues that HRM benefits both the employee and the organisation through a reduction of absenteeism and employee turnover, and by creating a work environment with higher employee satisfaction, job control and skill (Storey & Wright, 2023). In today's notably competitive and complex organisational climate, developing and maintaining positive employee outcomes is at the forefront of many organisations' objectives. Conversely, the conflicting outcomes perspective states that HRM negatively impacts employees through an increase in work intensification, stress and strain (Peccei et al., 2013).

The high involvement stream of SHRM aims to shift decision-making processes to all organisational levels through empowering employees with high levels of decision-making authority (O'Toole & Lawler, 2007). Therefore, high involvement work practices (HIWP) are said to focus more on the well-being of the individual employee by promoting high levels of autonomy in employees' individual jobs and employees' involvement in decisions regarding the organisation of their work team or work unit (Boxall & Huo, 2022).

According to Lawler (1986) and Vandenberg et al. (1999), four key dimensions underpin the high involvement construct. Argued to be crucial factors when attempting to enhance employee participation, these dimensions comprise power (P), information sharing (I), rewards (R) and knowledge (K) (i.e., the PIRK model). Once implemented correctly, the dimensions can provide insights into where and what organisational adjustment needs to be made to benefit employees as well as the organisation. Vandenberg et al. (1999) acknowledged the PIRK model's core premises as being to improve employees' well-being through increased morale, to enrich employees' jobs, to provide employees with more meaningful jobs and to allow for increased employee autonomy and feedback. A growing stream of empirical research has supported the notion of high involvement positively affecting employees' outcomes (Bartram et al., 2012; Butts et al., 2009; Kilroy et al., 2016).

However, Vandenberg et al. (1999) stated the mere appearance of some of the PIRK dimensions in an organisation does not suffice as they influence each other in mutual ways. Therefore, the four dimensions cannot be implemented effectively in isolation but rely on being part of a coherent package (Guerrero & Barruad-Didier, 2004). This relationship was highlighted clearly by Lawler (1986) when he stated that "information and knowledge without power leads to frustration because people cannot use their expertise" (p. 42).

Research Problem

Effectiveness of high involvement

The conflicting outcomes perspective of HRM systems, also referred to as the dark side perspective, is considered by some managers as a significant barrier to the effective implementation of high involvement. This perspective is in contrast to the mutual gains perspective which believes that both the employee and the organisation benefit from HRM systems. Conversely, a conflicting outcomes perspective argues that these systems portray little to no real benefit for employees' well-being (Macky & Boxall, 2008; Ogbonnaya et al.,

2017; Ramsay et al., 2000). Future research therefore needs to address the effectiveness of HRM systems on the outcomes of employees.

The logic behind the dark side perspective is that these systems are teamed with harsh economic conditions and intense labour market competition which place undue pressures on employees (Ogbonnaya et al., 2017). Indeed, Kroon et al.'s (2009) empirical investigation identified that some HR practices are related to an increase in job demands. However, it is worth noting that these practices within the work system are often implemented with inadequate levels of support (Ramsay et al., 2000). This highlights the importance of additional influential aspects of an organisation that may play a significant part in the effectiveness of these systems. The current research aims to address this gap by undertaking an empirical investigation to progress the high involvement stream.

A systems approach to high involvement

Only recently has research begun to examine the “systems” or “bundles” of HR practices (Boxall & Macky, 2009; Subramony, 2009). Empirical evidence has been in support of the ‘bundling’ of practices due to the synergistic and performance enhancing effects when combined. In MacDuffie’s (1995) study, he argued that “implicit in the notion of a ‘bundle’ is the idea that practices within bundles are interrelated and internally consistent and that ‘more is better’” (p. 204). He reached this conclusion through his study, conducted on automotive assembly plants, in which he saw plants with high commitment HR bundles of practices, consisting of training, measures of employee skills and performance-based compensation, outperform mass production plants.

Previous research has found that a systems approach has been successful in enhancing a range of employee outcomes through enhanced attitudes, abilities and skills which contribute to strategic business objectives (Para-González et al., 2019). Building on the existing literature, the current study examines the effect of synergistic systems by using Lawler’s (1986) influential PIRK model. By grouping together individual HR practices and compartmentalising them into the employee involvement dimensions of power, information sharing, rewards and knowledge, this study explores how these system constructs influence employee outcomes. Prior knowledge of this relationship has outlined positive relationships between the PIRK model and employee outcomes, including job satisfaction and commitment (Vandenberg et al., 1999).

In other research, scholars have argued that high involvement management increases job demands, such as intensification in the workplace, thus leading to negative employee outcomes (Wood et al., 2012). This remains a debate that is yet to be resolved and, therefore, a call has been made for additional clarification surrounding this issue (Harley et al., 2007). The current research addresses this gap through an empirical investigation into the effect of the systems approach of HR practices on employee outcomes through Lawler's (1986) influential PIRK model. More specifically, the high involvement HR practices are grouped into the four dimensions of the PIRK model to build an understanding of the influence that these dimensions have on employees' job demands and job resources, as well as their work and personal outcomes, including quality of work (QoW) and quality of life (QoL).

Focus moving from individual-level to organisational-level change

Interventions aimed at improving mental well-being target either individual or organisational changes (LaMontagne et al., 2007), with most currently being implemented at the individual level. The most popular interventions have included employee assistance programs (EAPs), counselling, and resilience and stress management training, as well as the promotion of a healthy lifestyle (Chartered Institute of Personnel and Development [CIPD], 2022). The benefits of individual-level approaches have been widely researched and increasingly debated. Significant disagreement has arisen about the effectiveness of individual-level approaches when compared to organisational change. In addition to these empirical concerns, sociologists and scholars in industrial relations have raised a strategic and normative critique. The many criticisms are aimed at these practices being endorsed, with this verbalised by trade unions as "changing the worker, and not the workplace" (Trade Union Congress [TUC], 2018).

Recent research has recommended that, when focusing on supporting an employee's outcomes, we should be more concerned with organisational changes, rather than initiatives aimed at the employee (Fleming, 2024; Fox et al., 2022; Lovejoy et al., 2021). The current study aimed to gain an understanding of the influence of Lawler's (1986) PIRK model on the quality of work (QoW) and quality of life (QoL) of an individual employee to confirm the high involvement stream of organisational change. While conducting this research, it was important to keep in mind the argument of McGregor (2004) who stated that managing organisational change and managing organisational quality are two sides of the same coin. More specifically, the change involved in improving an individual employee's quality of work (QoW) and quality of life (QoL) through the introduction of the PIRK model assumes a

change from the status quo. Thus, these processes go hand in hand while complementing and supporting one another (Smith, 2011). However, to the best of the author's knowledge, no previous research has exposed the extent to which employees' quality of work (QoW) and quality of life (QoL) are influenced by the PIRK model's dimensions. Therefore, gaps remain that need to be addressed in relation to this strategy of organisational change. Hence, the current research aimed to address these gaps through an empirical investigation of the four PIRK dimensions and the effects of each dimension on employees' outcomes.

Limited quantitative longitudinal research in New Zealand (NZ)

Global studies have identified how high employee involvement in workplaces positively impacts employee outcomes. This is evident in Bauer's (2004) empirical research which analysed working conditions in Europe and in Appelbaum et al.'s (2000) work, each of which related to the PIRK model. Indeed, increased autonomy, greater quality of workplace communication and increased development of skills have been linked to the most likely principal causes of employee gains. Warr (2011) argued in his "vitamin" theory of work outcomes that enhancements which focus specifically on personal control are healthy only until they reach a point of plateau or downturn in relation to employee benefits. It is crucial that organisations consider both work and personal outcomes as they can help in achieving a stable workforce, sustaining an organisation's competitive advantage (Bradley et al., 2008).

The limited studies in the literature report the established relationship between work intensification and some forms of strategic human resource management (SHRM) systems (Boxall & Macky, 2009; Cooke, 2001; White et al., 2003). The high involvement stream aimed to address these issues; however, most existing research in the literature has experienced constraints in presenting direct statistical associations between participatory work systems and employee outcomes (Bowen & Ostroff, 2004). Most of the existing literature has been cross-sectional in nature and, thus, has failed to incorporate a longitudinal evaluation over an extended time period (Fleming, 2024; Wood & de Menezes, 2011; Wright et al., 2004; Zhu et al., 2018). In addition, due to the cross-sectional nature of these studies as opposed to a longitudinal examination, very little is known about the process followed that eventually leads to the desired outcomes.

To address this gap, the current study conducted a quantitative longitudinal study on the NZ population. The study investigated the outcomes of high involvement employees while observing the job demands and job resources that they experienced. The study used a

temporal design with a three-week time delay between Time 1 and Time 2 of data collection. The reason for incorporating this break was to have an appropriate amount of time during which to analyse changes in measures for the sample population. The current study, due to its interest in changes of phenomena over time, included this specific temporal design, following Collins and Graham (2002) who highlighted important factors related to time that could affect the results of a longitudinal data set. These scholars argued that researchers who conduct longitudinal research should be cognisant of the need to vary temporal design in relation to the characteristics of the phenomena being studied (Collins & Graham, 2002). Several other studies also confirmed the validity of a similar number of weeks between time points through their successful measures of work and personal outcomes, including quality of life (QoL) and depressive symptoms (Li et al., 2017; White et al., 2023).

According to Caruana et al. (2015), longitudinal studies provide a more comprehensive approach to research, allowing for an understanding of direction and change over time. In addition, strong evidence exists that temporal separation of the independent and dependent variables in the form of longitudinal design reduces common method bias (CMB) (e.g., Lindell & Brandt, 2000); thus, it is viewed particularly favourably in management research (Lin & Tsai, 2020). The current research utilises this type of study due to its numerous benefits, including its ability to identify and relate events to specific outcomes or exposures, establish a sequence of events, discover changes over time within a particular population and exclude risks of recall bias by collecting data prospectively (Caruana et al., 2015).

Role of considerate leadership in the adoption of employee involvement

Considerate leadership is defined as a leadership style “that emphasises commitment to developing personal relationships with followers, care and concern for others, willingness to attend to the unique preferences and work styles of subordinates and facilitating cooperation among members of a work group” (Piccolo & Moise, 2019). Considerate leadership, commonly associated with transformational leadership, is the style of a leader who develops followers through mentoring, teaching and coaching, and provides a supportive environment for followers (Bass, 1985; Hoffman & Frost, 2006; Kirkbride, 2006; Sarros & Santora, 2001). Thus, followers of a considerate leader will feel that their concerns have been heard and their needs have been met.

Leroy et al. (2018) highlighted that the abundance of leadership and human resource management (HRM) literature share a common goal: to develop a better understanding of how to effectively manage people in organisations. These scholars continued by stating that this field of research is largely independent and, therefore, added their voices to the growing call that the study of leadership should be integrated with HRM research (Leroy et al., 2018). Previous empirical studies have examined how leadership styles influence employee outcomes (Dumdum et al., 2013; Judge & Piccolo, 2004; Rafferty & Griffin, 2004). Unlike the extensive links established by research between a transformational leadership style and employees' outcomes, the considerate leadership style has not been commonly researched in academia. The limited amount of the previous literature, however, has provided evidence that leaders who are considerate to their followers create subordinate satisfaction, possibly leading to higher subordinate performance (Greene, 1975). It is evident that prior research conducted on considerate leadership and its influence on organisational aspects needs to be updated.

Ordiz-Fuertes and Fernández-Sánchez (2003) found that an organisation's size and competitive strategy had no effect on the adoption of employee involvement, whereas an innovative culture, flexible leadership style and competitive environment, positively affected the adoption process. Focusing particularly on the considerate leadership style, previous research has identified that considerate leaders foster followers' development by appointing projects to followers as opportunities for skill development and growth, while offering their support to warrant success and learning (Bass, 1999). Considerate leaders help their followers to successfully reach higher levels of development and, therefore, encourage empowerment throughout their workforce (Bass, 1985; Rafferty & Griffin, 2006). Moreover, considerate leaders are likely to de-emphasise the power-related differences with their followers in the expected hierarchical status to facilitate the relationship which they strive to attain with their workforce.

From the author's knowledge of the previous literature, no prior research has been conducted to address the role of considerate leadership in the adoption of employee involvement and, more specifically, in relation to the four dimensions of the PIRK model, namely, power, information sharing, rewards and knowledge. The study was interested in focusing on considerate leadership, not only owing to the limited understanding of its potentially influential role but also due to its supportive nature in relation to employee outcomes. Avolio and Bass (1995) clarified that considerate leaders ensure the well-being of their followers and strive for them to have effective work. Therefore, the current study

addressed this gap by conducting an exploratory study in search of the moderating role of considerate leadership in the relationship between employee involvement and employee outcomes.

Research Questions

The corresponding research questions that underpin this study are:

1. How can New Zealand (NZ) organisations ensure a high quality of work (QoW) and high quality of life (QoL) for their employees?
2. To what extent do job demands and job resources predict the employee outcomes of quality of work (QoW) and quality of life (QoL)?
3. To what extent do the dimensions of the PIRK model (power, information sharing, rewards and knowledge) relate to job demands and job resources?
4. To what extent do job demands and job resources mediate the relationships between the dimensions of the PIRK model (power, information sharing, rewards and knowledge) and quality of work (QoW) and quality of life (QoL)?
5. What role does considerate leadership have in moderating the relationships between the dimensions of the PIRK model (power, information sharing, rewards and knowledge) and job demands and job resources?

Research Objectives

The purpose of this study was to provide empirical evidence to support high employee involvement in organisations when focusing on employee outcomes. To ensure this objective was achieved, the study addressed the research questions above that relate to the job demands, job resources and outcomes of NZ employees, the work system and a considerate leadership style. The intention of the study was to bridge the gaps identified in the existing literature by providing a longitudinal investigation of NZ employees. In addition to addressing the gaps, the study aimed to conduct an in-depth exploratory study which provided evidence for policy makers to influence future decision making on organisational-level change.

As stated above, the aim of this study was to progress high employee involvement within NZ organisations when focusing on employee outcomes. To achieve this objective, the study followed Fleming's (2024) recommendation that, when setting out to create real change

and support for employee outcomes, the focus should be less on individual-level initiatives and more on adjustments that could be made on an organisational level. The study sought to achieve this objective by observing whether a direct or indirect link existed between employee involvement and employees' quality of work (QoW) and quality of life (QoL). The study, therefore, was longitudinal in nature, allowing an appropriate amount of time for potential changes to be identified between each data collection time.

Throughout the investigation, job demands (i.e., emotional job demands) and job resources (i.e., opportunities for skill development) were introduced into the relationships to understand the influence these factors have on the relationships of employee involvement with work and personal outcomes. The suggestions of the job demands–resources (JD-R) model (Demerouti et al., 2001) were followed to understand how the organisational environment impacts employee outcomes, with these linked to well-being and performance. Study participants were invited to provide quantitative data to allow measurable outcomes for the study.

An additional objective throughout the study was to assess the impacts of a considerate leadership style on the relationship between each dimension of the PIRK model (power, information sharing, rewards and knowledge) and job demands (i.e., emotional job demands) and job resources (i.e., opportunities for skill development). To achieve this objective, each participant provided a subjective evaluation of his/her leader's level of considerate leadership. This information allowed the study to present findings on an important leadership style and to answer Leroy et al.'s (2018) recent call to include leadership within HRM research.

Study Contributions

Relationship between job demands/job resources and work and personal outcomes

The current research contributes empirical evidence in support of the relationships between job demands/job resources and several employee work and personal outcomes, including quality of work (QoW) and quality of life (QoL). Through building on prior research, this study's findings corroborate the job demands–resources (JD-R) theory's assertion that job demands and job resources both elicit distinct psychological processes that influence significant organisational outcomes (Schaufeli & Taris, 2014). In turn, the study's findings offer substantial empirical evidence attesting to the validity and effectiveness of the JD-R model in predicting employee outcomes.

Relationship between the PIRK model and the JD-R model

The current study aimed to develop a link between Lawler's (1986) PIRK model and Demerouti et al.'s (2001) job demands–resources (JD-R) model. This relationship was investigated to gain an understanding of the effects of the dimensions of the PIRK model (power, information sharing, rewards and knowledge) on employees' job demands and job resources. The study explored how the dimensions of the PIRK model could produce opportunities for employee skill development. For example, an employee with a significant level of empowerment may utilise this to make decisions that can influence organisational practices, policies and directions. In another instance, the sharing of information, for example, regarding the organisation's overall performance, may provide employees with valuable data for future decision making.

In addition, the study expanded on Vandenberg et al.'s (1999) assertion that the mere presence of the four dimensions of the PIRK model (power, information sharing, rewards and knowledge) is not significant enough to produce a meaningful impact on employee outcomes. Indeed, an employee must experience a high level of all four dimensions of the PIRK model for that employee to be classified as being highly involved in his/her workplace. Therefore, a critical examination in NZ organisations of all four dimensions against the JD-R model is required to add to the high involvement literature stream.

By identifying that the dimensions of the PIRK model lead to opportunities for employee skill development, it can be assumed that the nature of the outcomes which follow will be a positive derivative of this relationship. Bakker and Demerouti (2007) found, through their state-of-the-art overview of the JD-R model, that resources can motivate employees, leading to higher levels of work engagement, while demands can increase employees' strain. However, when job resources are strong, they can reduce job demands and the associated physiological and psychological costs (Bakker & Demerouti, 2007). The level of autonomy and control experienced by high involvement employees helps to alleviate the impact of job demands (Castanheira & Chambel, 2010; Sun & Pan, 2008).

By investigating this relationship, the current study builds on the mutual gains perspective of high involvement, reporting that both the employer and employee experience benefits. Specifically, this perspective implies that, if individual employees perceive their organisation to be concerned about their needs, this improves the outcomes for each individual (Salas-Vallina et al., 2020). In line with the JD-R model, the current study

identifies job resources as opportunities for skill development and associates the exposure to these opportunities with an increase in quality of work (QoW) and quality of life (QoL). The study also identifies emotional job demands as leading to negative outcomes, through a reduction in quality of work (QoW) and quality of life (QoL). By establishing a link between employee involvement and work and personal outcomes, NZ policy makers can gain the knowledge required to make organisational changes.

Relationship between the PIRK model and considerate leadership

In response to the growing calls to integrate leadership with HRM research (Leroy et al., 2018), our study aimed to contribute to the understanding of the PIRK dimensions (power, information sharing, rewards and knowledge) and their relationship with considerate leadership. Results obtained from this analysis drew conclusions on the potential moderating impacts that considerate leadership may have on job demands and job resources. Dependent on the moderating effects, organisations can become more conscious, and policy makers may become more informed, of the importance of the values possessed by their leaders towards their followers and the influence of these values on both work and personal outcomes.

Employee involvement in New Zealand (NZ)

The current study specifically examined employee involvement in the context of NZ organisations through a longitudinal investigation. Little research had been conducted that compared job demands and job resources as elucidated in the PIRK model. Hence, the study aimed to add to the knowledge on NZ employees' quality of work (QoW) and quality of life (QoL) in relation to the high involvement stream of SHRM, to gain further understanding and support for the mutual gains perspective. The current study aimed to discover the conditions under which an employee may flourish within the context of employee involvement, while proposing how an organisation can create and sustain the longevity of the employment of their workforce. Investigating these conditions has direct implications for organisations aiming to implement a work system in favour of high employee involvement and autonomy throughout their workforce.

Theoretical Framework

A work system rich in employee autonomy is said to bring about an abundance of resources which, in turn, leads to a reduction in levels of employee stress and emotional exhaustion (Butts et al., 2009; Boxall & Macky, 2014; García-Chas et al., 2016; Kilroy et al., 2017; Rana, 2015). This is in line with the mutual gains perspective of HRM systems which

is better understood through the job demands–resources (JD-R) model (Demerouti et al., 2001). At the core of the JD-R model (Bakker et al., 2003; Demerouti et al., 2001) lies the assumption that while all professions have their own specific risk factors linked to job stress, these can be categorised into two general groups, namely, job demands and job resources. These two groups form the basis of the JD-R model which can be applied to various occupational settings, irrespective of the specific demands and resources encompassed in those settings. The JD-R model states that the level of stress experienced by an individual employee depends on the number of demands placed on that employee, along with the number of resources with which that individual employee can alleviate the level of stress (Fila et al., 2014). Furthermore, Bakker and Demerouti (2007) stated that providing employees with the necessary resources at work, such as an appropriate amount of autonomy over their work and accessibility to information which supports their work, results in a buffering of the adverse impacts of job demands.

Employee involvement has been gaining increased recognition in the JD-R literature as a way of assisting employees to achieve work objectives, manage job demands and stimulate personal growth (e.g., Bakker & Demerouti, 2018; Boxall et al., 2019; Kilroy et al., 2020). Employee involvement promotes opportunities for skill development, offering the chance to build on the skills required for an organisation's strategic objectives (Gardner, 2022). In addition, employee involvement has been shown to alleviate day-level emotional exhaustion (Kilroy et al., 2020) and to directly curb employee burnout (Castanheira & Chambel, 2010; Kilroy et al., 2016). Therefore, through the proposition of employee involvement, the current study recognises employee involvement as a valuable policy to build on organisational resources and alleviate the impact of emotional job demands. The study builds on the JD-R theory to aid in future decision making for policy makers on organisational change strategies and to contribute strongly to the mutual gains perspective on strategic human resource management (SHRM). The theoretical model to be tested in this study is shown in Figure 1.

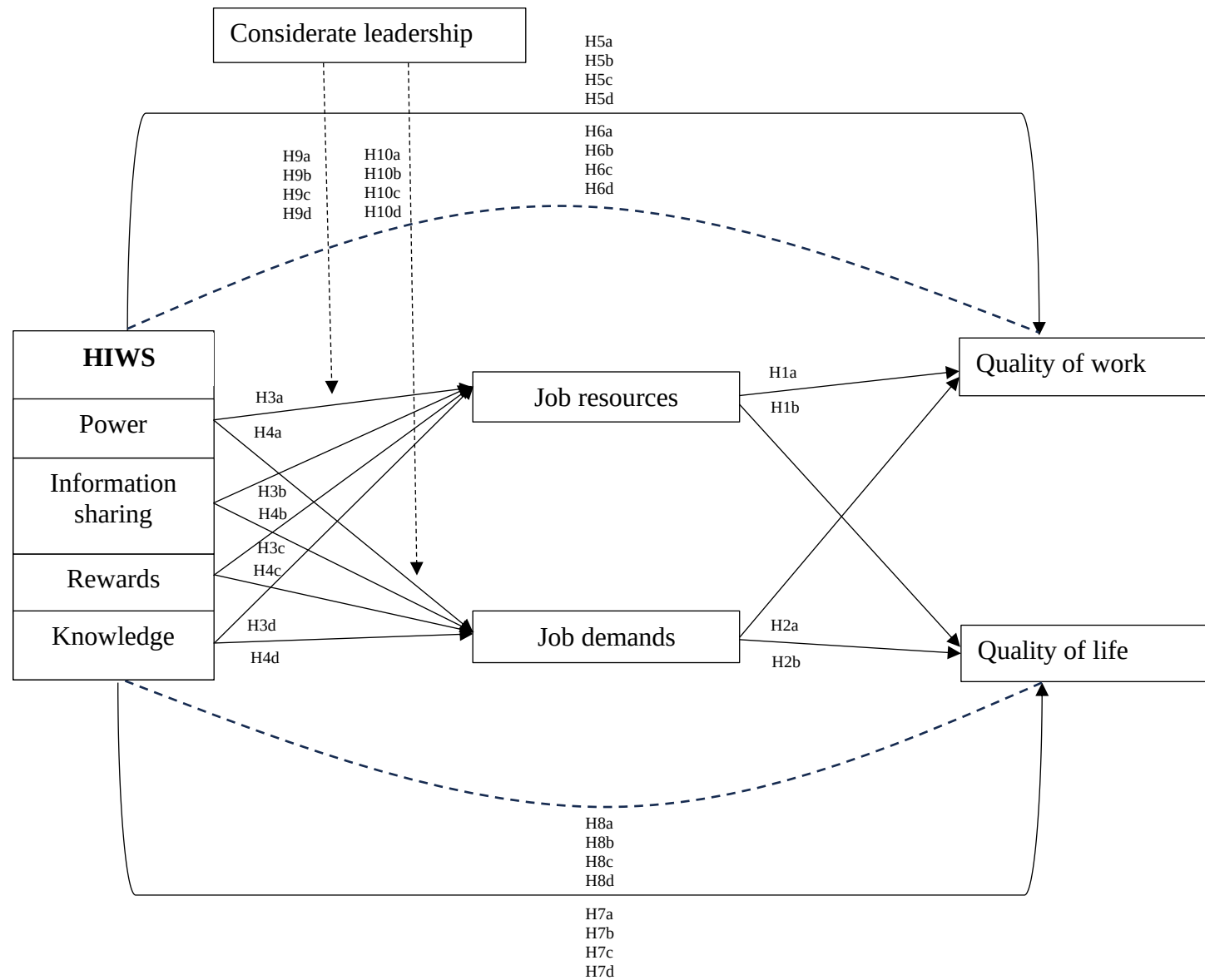


Figure 1: Conceptual Framework with Numbered Hypotheses

Chapter 2: Literature Review

Relationship of Job Resources and Job Demands with Quality of Work (QoW) and Quality of Life (QoL)

Opportunities for skill development

Job resources can be defined as aspects of the job that are functional in achieving work objectives and reducing job demands, as well as encouraging personal development, learning and growth (Bakker & Demerouti, 2007). An example of an individual's job resource is control over one's tasks in the workplace. A motivational process embodies job resources, stating that resources have (internal and external) motivational effects on employees, with these leading to positive outcomes, such as an increase in work engagement and performance, and a decrease in cynicism (Bakker & Demerouti, 2007). In response to this relationship, employee skill development has become an increasingly researched topic within organisational literature. The resource-based view (RBV) posits that skills and knowledge developed within an organisation are rare (specific to that organisation), hold great value and are hard to imitate (Barney, 2001; Hult et al., 2005; Ketchen et al., 2007).

When opportunities to develop skills in the workplace are provided to employees, these opportunities can motivate employees to step out of their professional comfort zone and draw on their knowledge, skills and abilities to establish effective solutions (Berings et al., 2005; Eraut, 2004; Pankhurst, 2010). This process requires a degree of initiative, willingness to engage and a certain level of self-reflection and awareness from employees. This job resource, therefore, stimulates a fulfilling and positive work-related state of mind through both the achievement of goals and satisfaction of basic needs. It is through this affective-motivational state that positive organisational outcomes arise (Schaufeli & Taris, 2014).

Opportunities for workplace skill development enable employees to advance their knowledge and skills to better cope with job demands which, in turn, leads to a reduction in work-related stress (Holman & Wall, 2002). A reduction of work-related stressors has previously been correlated with an improvement in both the quality of work (QoW) and quality of life (QoL) of employees (Ahmad et al., 2018; Jalagat, 2017; Li et al., 2021). Conversely, an insufficient number of resources when coping with job demands has been identified as a significant reason why employees experience a reduction of well-being at work (Bakker & Demerouti, 2014; Buruck et al., 2014). Therefore, providing employees in

the workforce with the opportunity to develop their workplace skills can be an intangible asset for both the organisation and employee. In response to these prior findings, the current study has formulated the following hypotheses:

Hypothesis 1: *Job resources have a positive relationship with (H1a) quality of work (QoW) and (H1b) quality of life (QoL).*

Threats of emotional job demands

Demerouti et al. (2001) defined job demands as “those physical, social, or organisational aspects of the job that require [...] sustained physical or mental effort and are therefore associated with certain physiological and psychological costs” (p. 501). Emotionally demanding interactions, work overload and high work pressure are job characteristics which constitute examples of workplace demands. If unaddressed through the support of necessary job resources, job demands can exhaust the energy levels of an employee and lead to work-related burnout (Fernandez de Henestrosa et al., 2023). Therefore, high job demands are likely to shape employees’ behaviours.

A job demand refers to a demand that can create emotional exhaustion at work causing a “depletion of emotional and mental energy” (Moore, 2000, p. 336). A longitudinal investigation conducted by van Vegchel et al. (2004) found that emotional job demands predict emotional exhaustion and lead to workplace burnout over time. Hockey’s (1997) model of compensatory control is supported by van Vegchel et al. (2004), in which the JD-R model assumes that an increase in job demands causes the exertion of additional effort by employees to ensure work goals are being met and to prevent a decrease in performance.

By gradually draining the individual’s mental resources, burnout significantly affects an employee’s overall well-being. The degree of mental exhaustion associated with emotional job demands causes a reduction in employees’ quality of work (QoW) and quality of life (QoL) (Khatatbeh et al., 2022; Maslach & Leiter, 2016). In a systematic review, scholars found that in a sample population of nurses, high levels of burnout were negatively associated with poor quality of life (QoL) (Khatatbeh et al., 2022). In addition, Maslach and Leiter (2016) highlighted that the level of burnout associated with emotional job demands creates a lack of control and engagement over one’s work, leading to a reduction in the standard of work produced by the employee. This alone can be stressful for employees; however, they may also be more likely to experience health problems, such as depression and cardiovascular disease. This is referred to as the energetic or health impairment process of the JD-R model

(Schaufeli & Taris, 2014). An employee will need to enter a state of recuperation by mobilising this extra energy and the associated costs to recover from the impacts of job demands. Insufficient recovery will be likely to lead to a state of sustained activation, gradually exhausting the employee (Schaufeli & Taris, 2014). The relevant literature has helped this study to formulate the following hypotheses:

Hypothesis 2: Job demands have a negative relationship with (H2a) quality of work (QoW) and (H2b) quality of life (QoL).

Relationship of the High Involvement Work System (HIWS) with Job Resources and Job Demands

Successfully adopting the high involvement work system (HIWS) creates many benefits for an organisation. Studies in the literature support the view that the HIWS augments workforce commitment by appealing to individual employees' inner drive (Bae & Lawler, 2000). In turn, the effective implementation of the HIWS improves employees' skills and behaviours in strategic planning and implementation, leading to greater organisational efficiency (Boxall et al., 2015; Shin et al., 2018). Rodgers and Ferketish (2005) stated this simply as the way to "unleash the talent and energy of employees at every level of the organisation" (p. 2). As a result, key performance variables, including labour productivity, absenteeism, turnover, flexibility and organisational output can all be positively impacted (Gollan, 2005). Each of these performance variables has a profound effect on the outcomes of an organisation.

With correct implementation of the HIWS, employees become a key source of competitive advantage for an organisation (Batt & Colvin, 2011; Riordan et al., 2005). In addition to the outcomes mentioned above, the HIWS provides employees with appropriate, ongoing training which enables the development of knowledge essential for effective performance (Riordan et al., 2005). The continued training and development that employees receive in the HIWS can be considered a valuable employee resource. For example, scholars highlight the importance of providing employees with opportunities to develop their problem-solving skills for effective filtering of information and absorption of knowledge, both of which can be adopted in the workplace (Reiter-Palmon & Illies, 2004).

The highly influential PIRK model, developed by Lawler (1986), provides an in-depth evaluation of the theory of employee involvement, highlighting important systematic links. When employees are given the appropriate combination of the four key dimensions of PIRK,

the organisation is promoting employee involvement and creating a high involvement organisation. Lawler (1986) views high involvement management as a philosophy in which steps to involve employees more deeply in decision making receive support from practices that open channels of communication. At the same time, employees are recognised for their improved contributions through rewards and ensuring that they have the requisite skills to participate meaningfully. A detailed description of the four PIRK dimensions and their relationship with job demands and job resources is detailed in the following sections.

Power

The first dimension underpinning the PIRK construct is power. This construct refers to the power through which an employee has autonomy and can make decisions that affect the organisation (Riordan et al., 2005). Empowering employees with their own decision-making power can be a valuable tool for pushing operational decisions down to lower levels of the workplace. Scholars have outlined that decision-making power can be achieved through providing employees with information about the organisation's performance; rewarding employees for their efforts when using this information; providing employees with relevant knowledge about the workplace to enable them to use the information; and, lastly, letting employees use their power to make effective decisions based on the direction and objectives of the organisation (Bowen & Lawler, 1992; Wall et al., 2002).

Riordan et al. (2005) expressed their view of the importance of creating a participative climate in which employees are equipped with the appropriate tools, training and knowledge to achieve their best work. Employees can then use their power to develop skills to create more effective solutions in the workplace, benefiting themselves and their organisation. They may also use this power to reduce the effects of emotionally demanding tasks, for example, scheduling their more strenuous work earlier in the day to ensure a clear and collected approach to the task at hand. The complexity associated with the planned creation of a climate of power makes it a significant source of competitive advantage for organisations that succeed in this process (Riordan et al., 2005). A key aspect of this process as an employer is to give employees the appropriate authority and decision-making power to conduct their duties at work effectively.

Information sharing

The second dimension of the PIRK model is information sharing. This aspect is apparent when details regarding the organisation, its goals and its strategies are perceived as being communicated openly to employees (Riordan et al., 2005). Long-standing arguments have persisted among scholars regarding the importance of open communication through which employees can receive the necessary information required for participation and quality decision making (Riordan et al., 2005; White et al., 2003). An effective HIWS will provide employees with all the information required for participation and involvement, while avoiding overloading them with irrelevant information. Indeed, too much information can cause the employee to become both overwhelmed and undervalued and may be interpreted as a means of offloading information as a coping mechanism for higher management. In turn, employees who feel they have insufficient information for effective decision making may become frustrated and demotivated by the tasks they have been asked to perform. Hence, the right level of information sharing is a vital aspect of this dimension and can be a determining factor as to whether it is perceived as leading to an employee job resource or an employee job demand.

Rewards

The third dimension of the PIRK model ensures that employees are rewarded for their efforts through incentives, with employees beginning to perceive that these incentives link their behaviours to outcomes (Riordan et al., 2005). Scholars have agreed that performance-based rewards wield significant influence over the strength of employees' attitudes and behaviours (Sanders et al., 2018; Thneibat & Sweis, 2023). An individual's level of remuneration is one such incentive which can instil these attitudes and behaviours. Employees may be more likely to adapt their behaviours to align with an organisation's objectives if they feel their level of remuneration reflects their performance (Riordan et al., 2005). Therefore, it is crucial for employees to believe the reward system is linked closely with workplace objectives and goals, the organisational structure and the design of work.

Scholars have found a significant correlation between insufficient recognition and rewards and high rates of burnout (Maslach & Leiter, 2016). The understanding behind this finding is that when an employee perceives he/she is not being recognised or rewarded financially, institutionally or socially in the workplace, both the employee and his/her work become devalued, with the employee beginning to form a feeling of inefficiency (Maslach &

Leiter, 2016). An employee who feels undervalued in the workplace may then become disenchanted with his/her role, leading to an emotional response, such as stress or emotional strain. In contrast, when rewards and recognition are awarded consistently in the workplace, an employee is more likely to feel satisfied with his/her job (Maslach & Leiter, 2016) and motivated to perform better at work (Ali & Ahmed, 2009; Flynn, 1998; Mehmood et al., 2013; Victor & Hoole, 2017).

Knowledge

Ongoing training, appropriate to an organisation's objectives, helps in the development of employee knowledge required for effective performance. In addition, training is closely connected to participation and information. Employees need to perceive that the opportunities in the workplace are to build on their skills with skills which accompany decision-making abilities and information processing capabilities (Guthrie, 2001). Wilson and Western (2001) stated that training and development were common areas underutilised by organisations; however, they are significant ways of enhancing the full potential of the workforce. In today's workplace, it is common for many annual training and development plans to remain unchanged or to be viewed as irrelevant to the nature of the business (Wilson & Western, 2001). In this instance, employees' skills and abilities can remain stagnant in the ever-changing world of work which can create significant pressures on the individual employee.

With a focus placed on training and development, employees can make impactful decisions to benefit the organisation. This is especially true when decision making comes from lower-level employees as they can share tacit knowledge developed from their position in the workplace. This knowledge is important as their experience and knowledge may not be accessible to higher-level managers. Guy (2003) acknowledged that freedom provided to lower-level employees for decision making is an important incentive and motivation for greater effort. In addition, access allowed by top management to knowledge and training opportunities provides employees with a basis for taking a particular course of action, as does management being empathetic to why employees considered that course of action more desirable than others. The understanding of each PIRK dimension, as informed by the previous literature, has led to the development of the following hypotheses:

Hypothesis 3: *The high involvement work system (HIWS) (H3a: power, H3b: information sharing, H3c: rewards, H3d: knowledge) has a positive relationship with job resources.*

Hypothesis 4: *The high involvement work system (HIWS) (H4a: power, H4b: information sharing, H4c: rewards, H4d: knowledge) has a negative relationship with job demands.*

Job Demands and Job Resources as Mediators in Relationships between the High Involvement Work System (HIWS) and Quality of Work (QoW) and Quality of Life (QoL)

The objectives for adopting an involvement approach include empowering employees to make higher-quality decisions more frequently, enhancing their access to the essential knowledge needed and rewarding them for their efforts (Boxall & Macky, 2009). Indeed, employees must experience elevated levels of all four attributes for an ideal employee involvement climate to be established (Riordan et al., 2005). Guerrero and Barraud-Didier (2004) stated that high involvement practices rely on a coherent package for this approach to be successful and cannot be implemented effectively in isolation from each other. This statement was earlier presented by Lawler (1986), affirming the synergistic and multiplicative effects of high involvement practices. Delery and Shaw (2001) stated that this synergistic effect influences a workforce's characteristics, and, in turn, these characteristics influence employees' outcomes.

Vandenberg et al. (1999) proposed two pathways to explain the influence that high involvement has on employee and organisation output: a "cognitive" path and a "motivational" path. The cognitive path proposes that high involvement processes "take greater advantage of the skills and abilities their employees already have" (Vandenberg et al., 1999, p. 304). When an employee is empowered to utilise these skills in the way that he/she decides is best, his/her "performance should be better than when employees' actions are dictated by someone with less relevant experience or knowledge" (Vandenberg et al., 1999, p. 305). In addition, the motivational path proposes that greater employee involvement leads to improved effectiveness through enhanced motivation (Boxall et al., 2014).

The cognitive and motivational pathways outlined by Vandenberg et al. (1999) are essential in understanding how job demands and job resources influence the relationship between the predictor and outcome variables. The study begins by unpacking the dimensions

of the PIRK model which encompass the HIWS, establishing clear links with work and personal outcomes, as well as discussing the influence of job demands and job resources on these relationships.

The first dimension, power, involves the extent of employees' autonomy and participation in decision making. Encouraging employees to feel independent and fostering a sense of responsibility forms the essential foundation for the process of empowerment, in much the same way that it is seen critical to enhance the employee's opportunity to participate (Appelbaum et al., 2000). This empowers employees through their own decision-making abilities. In line with the cognitive path, employees are empowered to utilise their skillset to benefit both themselves and their organisation. When additional opportunities to develop these skills are introduced, this strengthens employees' ability to make effective decisions (Vandenberg et al., 1999). Hence, employees' motivation to produce work of high quality may be enhanced, along with their decision-making abilities in terms of their quality of life (QoL). Indeed, Morrison et al. (2005) found that the development of skills is one of the strongest predictors of job-related affective well-being.

Conversely, emotional job demands can be seen to disrupt the motivational pathway outlined by Vandenberg et al. (1999). Kilroy et al. (2016) found that job demands (i.e., role conflict and role overload) partially mediated the relationship between the HIWS and burnout. Hence, for the relationship between empowerment and employees' quality of work (QoW) and quality of life (QoL) to flourish in the workplace, Berg et al. (2003) stated that the high involvement system should be characterised by a flexible working life for employees and an ability to balance family life, while having the autonomy to make decisions for themselves and hold greater intrinsic control.

The information sharing dimension, "a source of power and effectiveness" (Lawler, 1986, p. 24), occurs in both downward and upward flow (management to employee as well as employee to management). Hence, when an employee is well informed and feels that he/she has been heard, mutual trust can form between the employee and manager (Vanhala & Dietz, 2015). A trusting workplace environment is essential for skill development (Hauer et al., 2014). In turn, skill development fosters a healthy workplace where positive outcomes are more likely to be achieved (Detsimas et al., 2016). Opportunities to develop skills are likely to enhance this relationship. Employees may begin to utilise the information to make more meaningful changes to their work and life decisions, increasing quality in both areas.

Alternatively, emotional job demands may produce a feeling of job strain and of being overwhelmed when greater access to information is available (Kilroy et al., 2016). Hence, job demands are likely to negatively influence an employee's quality of work (QoW) and quality of life (QoL).

The role of rewards can be considered "important determinants of behaviour in organisations and should be directly related to promotions, providing recognition to individual-level, group-level and organisational-level performance" (Lawler, 1986, p. 25). Being recognised and rewarded for good performance is key to motivating an employee to continue developing his/her skills in the workplace. This relationship then feeds into the effectiveness of the employee in the organisation (Boxall et al., 2014). Therefore, an effective employee can make decisions which lead him/her to more positive outcomes, both in and out of the workplace. Maslach and Leiter (2016) stated that a lack of recognition creates a feeling of inefficiency which may influence a drop in the motivation to continue seeking opportunities to develop at work, while reducing the level of quality that the employee holds for himself/herself and his/her work. Moreover, Bakker et al. (2003) stated that emotional job demands can overtax an employee's mental resources. Therefore, emotional job demands may alter the effort–reward relationship for an employee. More specifically, when emotional job demands are present, an imbalance may occur between the efforts an employee puts into his/her work to remain afloat in response to those job demands and the recognition he/she receives in response. Hence, this disrupts the direct effect that rewards have on the employee's quality of work (QoW) and quality of life (QoL).

Lastly, knowledge encompasses the improvements of employees' skills through various training, coaching, mentoring or job rotation opportunities. More involved employees gain greater responsibilities at work and require additional technical and thinking skills to perform (Lawler, 1986). The knowledge dimension falls in line with the cognitive path proposed by Vandenberg et al. (1999) in which systems of high involvement take advantage of employees' pre-existing knowledge. When opportunities to develop skills are introduced, employees with pre-existing knowledge of the workplace will understand the importance of developing skills that fall in line with organisational objectives. Hence, the level of responsibility placed on an employee may create an obligation to develop and utilise his/her knowledge. Emotional job demands may alter this relationship, creating barriers to improved quality of work (QoW) and quality of life (QoL). Indeed, scholars have found that high job demands lead to emotional exhaustion, resulting in a decrease in job satisfaction (Koon &

Pun, 2018). With unsatisfied employees, an organisation may experience lowered levels of work quality and an overall decrease in employees' motivation. If the job demands remain unsupported by job resources, employee burnout is likely to develop (Fernandez de Henestrosa et al., 2023). Accordingly, the current study hypothesised the following:

Hypothesis 5: Job resources mediate the relationship between the high involvement work system (HIWS) (5a: power, 5b: information sharing, 5c: rewards, 5d: knowledge) and quality of life (QoL).

Hypothesis 6: Job resources mediate the relationship between the high involvement work system (HIWS) (6a: power, 6b: information sharing, 6c: rewards, 6d: knowledge) and quality of work (QoW).

Hypothesis 7: Job demands mediate the relationship between the high involvement work system (HIWS) (7a: power, 7b: information sharing, 7c: rewards, 7d: knowledge) and quality of life (QoL).

Hypothesis 8: Job demands mediate the relationship between the high involvement work system (HIWS) (8a: power, 8b: information sharing, 8c: rewards, 8d: knowledge) and quality of work (QoW).

Considerate Leadership as a Moderator between the High Involvement Work System (HIWS) and Job Demands/Job Resources (JD/JR)

Leaders play an important role in the management of employees. Considerate leadership is embodied by the notion of individual employees being important contributors to the workplace (Sarros & Santora, 2001) and leaders being sensitive to the needs of each of their employees (Olivier et al., 2009). Considerate leaders are both a coach and a mentor (Judge & Piccolo, 2004) and hold the key elements of encouragement and care for individuals, while maintaining a consultative and open approach (Sarros & Santora, 2001).

A leadership style can shape how employees perceive and respond to designated HR practices (Bowen & Ostroff, 2004; Wright & Nishii, 2004). For example, leaders embodying dimensions of transformational leadership are likely to exert the greatest influence than any other leadership style in modifying an employee's behaviour (Bass, 1985; Purcell & Hutchinson, 2007). Indeed, Riordan et al.'s (2005) findings stated that managers' transformational leadership behaviours are a significant element in encouraging a climate of involvement for employees.

The level of consideration that a leader has for his/her employees can have a significant impact on their outcomes in the workplace. The previous literature has stated that a considerate leadership style is positively related to employee's work engagement and negatively related to their intention to leave the organisation (Glasø et al., 2018). Considerate leadership is said to lead employees to feeling a sense of psychological safety in the workplace and, therefore, increases their willingness to become fully engaged in their work (Lai et al., 2020). In addition, knowledge sharing among employees can be instilled by high levels of considerate leadership (Wu & Lee, 2020). These findings substantiate the strong impact leadership behaviour may have on employees' attitudes, and thus, outcomes, in the workplace.

Leadership has been closely linked to the JD-R model (Cheung et al., 2021; Diebig et al., 2017; Perko et al., 2014; Syrek et al., 2013), in which conclusions are drawn regarding the correlation of considerate leadership with an increase in support for employees and, therefore, access to additional resources (Antonakis & Day, 2017). Macgregor and Cunningham (2018) stated that "job resources serve to achieve work goals and to reduce the effects of job demands, and include job security, career opportunities, supervisor, and co-worker support" (p. 318). However, not all scholars have agreed that leadership can be considered a job resource or a job demand. Others have claimed it to be a moderator, in this role, changing the impact of job demands and job resources on the employee. For example, a study conducted by Breevaart and Bakker (2018) found that transformational leadership moderates the impact of challenge and hindrance demands on employee engagement.

Besides this frequently optimistic stance on the universally positive effects of the HIWS, the perspective needs to be acknowledged that various contextual factors could either bolster or diminish these benefits. For example, a considerate leader who shows support for the efforts of employees and encourages their autonomy may increase their use of resources (Avolio & Bass, 1995). The current study aimed to investigate the interaction between the HIWS and considerate leadership and its effect on both job demands and job resources. More specifically, the study sought to explore whether considerate leadership acts as a moderating variable to the HIWS, leading to an increase or decrease in job demands and job resources. It can be assumed that when high levels of considerate leadership are present in the HIWS, low levels of job demands and high levels of opportunities for skill development will also be present.

In a general sense, some leadership styles more than others may give higher priority to their obligation to develop an environment that encompasses better working conditions. Indeed, Berson and Linton (2003) discovered that, among their study participants who contributed data, both transformational and transactional leaders established a high-quality environment for their employees. Additionally, Omolayo (2007) found that employees under participative leadership or shared leadership styles did not experience higher job-related tension than employees working under an authoritarian leadership style. Consequently, a leader's conduct can have important ramifications for both the employee and the entire organisation. The current study therefore proposes the following hypotheses:

Hypothesis 9: Considerate leadership moderates the relationship between the high involvement work system (HIWS) (H9a: power, H9b: information sharing, H9c: rewards, H9d: knowledge) and job resources.

Hypothesis 10: Considerate leadership moderates the relationship between the high involvement work system (HIWS) (H10a: power, H10b: information sharing, H10c: rewards, H10d: knowledge) and job demands.

Chapter 3: Methodology

Study Design

This quantitative study focuses on the relationship between the high involvement work system (HIWS), job demands and job resources, work and personal outcomes, and considerate leadership. The study used the PIRK dimensions to conceptualise the HIWS, the antecedent variable of the study. The job demand (JD) variable of the study was emotional job demands, with opportunities for skill development as the job resource (JR) variable. The work outcome of the study was quality of work (QoW), while the personal outcome of the study was quality of life (QoL). The research utilised considerate leadership as a moderating variable in the HIWS–JD/JR relationship. The study was longitudinal in design, with quantitative data from the continuous JD/JR and outcome variables obtained at two points of time. The surveys allowed for clear numerical findings to be recognised which meant that clear relationships between the HIWS, JD/JR, quality of work (QoW), quality of life (QoL) and considerate leadership could be established. Prior research on the link between the HIWS and work and personal outcomes have also used surveys as a means of measurement (Kilroy et al., 2020; Riordan et al., 2005). Through the use of regression analyses, a mediational analysis and a moderation analysis, confidence was expressed that the study would produce robust conclusions.

Participants

In total, 250 NZ employees were willing to participate in this research's longitudinal study. Participants were required to be actively employed within an NZ organisation. As displayed in Table 1, the average age for participants aged between 18–39 years was 31.25 with a standard deviation (SD) of 2.56 (N = 143, 57.2%). The average age for participants aged between 40–59 years was 45.62 with a SD of 3.32 (N = 70, 28%). The average age for participants aged between 60–70 years was 61.21 with a SD of 1.26 (N = 34, 13.6%), while three people failed to respond (1.2%). In terms of gender, 202 females completed the study compared to 44 males, while four participants reported that they were non-binary. In all, 89 participants were married, 82 were living with a partner, two had been widowed and 60 reported never having been married.

Most participants did not have children, with 58% reporting zero children, 14% with one child, 16.8% with two children, 5.6% with three children, 4% with four children, while 1.6% reported having five or more children. Most were of NZ European/Pākehā ethnicity

comprising 66.4% of the sample, 10.4% reported being Māori, 3.2% as Pacific Islander, 3.6% as Asian, while 16.4% reported belonging to an ethnicity that was not listed. When participants were asked about their education level, 13 stated they had their school certificate/ National Certificate of Educational Achievement (NCEA) Level 1, 23 reported university entrance, bursary or NCEA Level 3 and 52 had gained a tertiary certificate or diploma. Of the remainder, 86 successfully completed a Bachelor's degree, while 75 completed studies at postgraduate level.

Each participant was asked to report the NZ location where they were currently living. 35.2% of the sample stated they lived in Wellington; 28.4% in Auckland; 9.2% in the Bay of Plenty; 7.6% in Whanganui; 4.4% lived in Canterbury; 4% in Waikato; 2.4% in Northland; 2% were located in each of Otago and Southland; 1.6% in Taranaki; 1.2% in Hawkes Bay; 0.8% in Marlborough; and a mere 0.4% in Gisborne, Nelson and West Coast. Just under half (48%) were employed at an intermediate work level; 14% were at entry level; 17.6% were first-level management; 15.6% at mid-level management; 4% at top-level management, while 3.2% left the question blank.

When participants were asked their annual income, two participants did not know; 51 stated they earned under NZ\$50,000; 59 earned from NZ\$50,000–NZ\$75,000; 68 earned from NZ\$75,000–NZ\$100,000; 35 earned NZ\$100,000–NZ\$125,000; 11 earned NZ\$125,000–NZ\$150,000; while 16 people, at the highest threshold, earned NZ\$150,000 or more per annum. The number of individuals working in the public and private sectors were split quite evenly, with 50.8% working in the public sector and 49.2% in the private sector.

In the demographic questions, participants were asked to report their job duration. This question was left blank by 17.6% of participants; 8% stated they had been working in their current job for less than one year; 46.4% had been working in their job for 1–3 years; 13.6% for 3–6 years; 6% for 6–9 years; while 8.4% reported working in their current job for more than nine years. When participants were asked how long they had been working under their current supervisor, 65 left this question blank; 37 stated less than one year; 122 stated from 1–3 years, seven reported from 3–4.5 years, while 19 stated five or more years.

All participants were provided with a set of screening questions before accessing the survey questions (refer to Appendix D). Participants were required to be 18 years of age or older and working full-time, part-time or casually in an NZ company; and were required to provide their workplace location if their country code indicated they were outside of New

Zealand (NZ). Consequently, the exclusion criteria for the study comprised those who were under the age of 18 years, those working for a company that was not an NZ company, those that gave the same answer to some sets of items, duplicate participants and those identified as bots.

Table 1: Demographic Information Displaying the Categories, Frequencies and Percentages of Each Variable

Demographic Variables	Categories	Mean	SD	N	%
Age	18–39	31.25	2.56	143	57.2
	40–59	45.62	3.32	70	28
	60–70	61.21	1.26	34	13.6
	(blank)			3	1.2
Gender	Male			44	17.6
	Female			202	80.8
	Non-binary			4	1.6
	Other			0	0
Marital status	Married			89	35.6
	Living with a partner			82	32.8
	Widowed			2	.8
	Divorced/separated			17	6.8
	Never been married			60	24.0
Number of children	Zero			145	58.0
	One			35	14.0
	Two			42	16.8
	Three			14	5.6
	Four			10	4.0
Ethnicity	Five or more			4	1.6
	New Zealand European/Pākehā			166	66.4
	New Zealand Māori			26	10.4
	Pacific Islander			8	3.2
	Asian			9	3.6
Education level	Other			41	16.4
	School certificate or NCEA Level 1			13	5.2
	University entrance, bursary or NCEA Level 3			23	9.2
	Tertiary certificate or diploma (not a degree)			52	20.8
	Bachelor's degree (e.g., BA, BSc)			86	34.4

Demographic Variables	Categories	Mean	SD	N	%
Location	Postgraduate (e.g., Master's, PhD or postgraduate diploma)			75	30.0
	Te Tai Tokerau – Northland			6	2.4
	Tāmaki-makau-rau – Auckland			71	28.4
	Waikato			10	4.0
	Te Moana-a-Toi – Bay of Plenty			23	9.2
	Te Tai Rāwhiti – Gisborne			1	.4
	Te Matau-a-Māui – Hawkes			3	1.2
	Taranaki			4	1.6
	Manawatu / Whanganui			19	7.6
	Te Whanga-nui-a-Tara – Wellington			88	35.2
	Whakatū – Nelson			1	.4
	Te Taihū-o-te-waka – Marlborough			2	.8
	Te Tai Poutini – West Coast			1	.4
	Waitaha – Canterbury			11	4.4
	Otākou – Otago			5	2.0
	Murihuku – Southland			5	2.0
Work level	Entry-level			35	14.0
	Intermediate			120	48.0
	First-level management			44	17.6
	Mid-level management			39	15.6
	Top-level management			10	4.0
Income	(blank)			8	3.2
	Unknown			2	.8
	Under NZ\$50,000			51	20.4
	NZ\$50,000–NZ\$75,000			59	23.6
	NZ\$75,000–NZ\$100,000			68	27.2

Demographic Variables	Categories	Mean	SD	N	%
Work sector	NZ\$100,000–NZ\$125,000			35	14
	NZ\$125,000–NZ\$150,000			11	4.4
	NZ\$150,000 or more			16	6.4
	Public			127	50.8
	Private			123	49.2
Job duration (years)	(blank)			44	17.6
Years worked under current supervisor	0			20	8.0
	1			51	20.4
	1.5			2	.8
	2			32	12.8
	3			31	12.4
	4			15	6.0
	4.5			1	.4
	5			9	3.6
	6			9	3.6
	7			10	4.0
	8			3	1.2
	9			2	.8
	10 or more			21	8.4
	(blank)			65	26.0
Supervisor gender	0			37	14.8
	1			56	22.4
	1.5			3	1.2
	2			37	14.8
	3			26	10.4
	3.5			1	.4
	4			5	2.0
	4.5			1	.4
	5 or more			19	7.6
	Male			97	38.8
	Female			149	59.6
	Non-binary			0	0
	Other			4	1.6

Note: N = 250

Procedure

Prior to data collection, this research was granted ethics approval (4000027810; refer to Appendix A). Participants were recruited through the newsletters of several organisations, including the New Zealand Mental Health Foundation Working Well E-News and the New Zealand Psychological Society Connections newsletter. In addition, organisations were approached to assess their willingness to participate in the study. Organisations that expressed interest supplied their email contact details, subsequently receiving a study overview and a link to the online survey for dissemination within their organisation. The email explained the objectives of the study, outlining it was a Massey University study investigating the HIWS and both work and personal outcomes. Organisations, professionals and institutions also promoted the research through their LinkedIn pages.

The online survey tool, Qualtrics software, was used to create and distribute the questionnaire and was open for data collection from August 2023 through to November 2023. The longitudinal study involved participants completing two surveys separated by a three-week interval. As the study was interested in phenomena that change over time, it was agreed that a three-week interval was a significant period over which to produce a robust, longitudinal data set. This decision was confirmed by the arguments presented by Collins and Graham (2002) in their article on the impacts of temporal design in research, as well as prior research conducted on outcome variables with a similar period between time points (Li et al., 2017; White et al., 2023).

The first survey for this study included all scales, while the second survey included only the Copenhagen Psychosocial Questionnaire (COPSOQ) scale and the quality of life (QoL) scale to remeasure employees' outcomes. Prior to completing the survey, participants were given an information sheet containing all details, including the assurance of complete anonymity and confidentiality, and that no personally identifiable information about participants would be released (refer to Appendix C). Participants were then required to consent to the study before continuing to complete the survey (refer to Appendix B). Each completed survey was stored on the Qualtrics database. After successfully completing both surveys, participants had the opportunity to be included in a draw to win one of 30 NZ\$20 Prezzy Card e-vouchers. Those participants who completed both surveys and opted to participate in the draw were chosen randomly and contacted via email with their e-voucher.

Measures – Instruments

The current study utilised four scales previously validated and demonstrated as reliable in prior research. Cronbach's alpha values were used to confirm the reliability of the assessment instruments. A value of Cronbach's alpha between .60 and .80 was deemed acceptable (Raharjanti et al., 2022). Unless stated otherwise, all variables were measured on a 5-point Likert scale, with responses ranging from '0' = never/hardly ever to '100' = always.

Demographic information. Participants were asked several demographic questions (refer to Appendix E). The answers to most demographic questions were arranged into categories, from which the participant would choose; for example, the genders of the participant and supervisor were determined by asking the participant to select from four alternatives (male, female, non-binary, other). Gender was then recorded by calculating the mean of each alternative. Additionally, participants were asked to state the sector in which they worked (public, private), with the sum of each construct recorded. Similarly, to determine the position level held by participants, they were provided with five position-level alternatives from which to choose (entry-level, intermediate, first-level management, mid-level management, top-level management). The position level was recorded by calculating the sum of each alternative level in which participants identified they had worked. In addition, the duration of time participants had worked under their current supervisor was determined by asking the participant to indicate in years and/or months. The indicated durations were then grouped as follows: under 1 year, 1–3 years, 3–5 years and 5+ years, with the sum recorded for each group.

High involvement work system (HIWS). Perceptions of the HIWS in this study were measured using the four core dimensions from the PIRK model, namely, power, information sharing, rewards and knowledge (Guerrero & Barraud-Didier, 2004; Lawler, 1986) (refer to Appendix F). Specifically, the HIWS measurement utilised the widely recognised 18-item scale developed by Riordan et al. (2005). Participants were asked how strongly they agreed with the statements using a 5-point Likert scale, ranging from '1' = strongly disagree to '5' = strongly agree. Scores were generated by calculating the average of the relevant items.

Three statements were used for power. An example of an item is: "I have enough input in deciding how to accomplish my work". The reliability analysis for power yielded a Cronbach's alpha value of .81. Six statements were used for information sharing. An example

of an item is: “The channels for employee communication with top management are effective”. The Cronbach’s alpha value for information sharing was .83. One item in the information sharing dimension was reverse coded as per the original study. Five statements were used for rewards. An example of an item is: “I am satisfied with the amount of recognition I receive when I do a good job”. The Cronbach’s alpha value for rewards was .81. Four statements were used for knowledge. An example of an item is: “I receive sufficient training to do my job”. The training and development dimension yielded a Cronbach’s alpha value of .82. Hence, following Raharjanti et al. (2022), this Cronbach’s alpha value was deemed acceptable.

Job resources (opportunities for skill development). Job resources were measured using three items from the ‘opportunities for skill development’ scale of the Copenhagen Psychosocial Questionnaire (COPSOQ) (Kristensen et al., 2006) (refer to Appendix J). An example of an item is: “does your work give you the opportunity to develop your skills?” The reliability analysis for opportunities for skill development at Time 1 and Time 2 yielded Cronbach’s alpha values of .79 and .80, respectively. Hence, following Raharjanti et al. (2022), these Cronbach’s alpha values were deemed acceptable.

Job demands (emotional job demands). Job demands were measured using five items from the ‘emotional job demands’ scale of the Copenhagen Psychosocial Questionnaire (COPSOQ) (Kristensen et al., 2006) (refer to Appendix I). An example of an item is: “is your workload unevenly distributed so it piles up?” The statements “do you have to deal with other people’s personal problems as part of your work?” and “is your work emotionally demanding?” were added to the job demands scale, with approval from Dr Fatima Junaid, a member of NZ’s COPSOQ network. The reliability analysis for emotional job demands at Time 1 and Time 2 yielded Cronbach’s alpha values of .67 and .73, respectively. Hence, following Raharjanti et al. (2022), these Cronbach’s alpha values were deemed acceptable.

Quality of work (QoW). Quality of work (QoW) was measured using three items from the NZ version of the Copenhagen Psychosocial Questionnaire (COPSOQ) (Kristensen et al., 2006) (refer to Appendix H). An example of an item is: “to what extent do you find it possible to perform your work tasks at a satisfactory quality?” The statement “does your workplace provide you with confidence to complete tasks at a satisfactory level?” was included in the scale, with approval by Dr Fatima Junaid, a member of NZ’s COPSOQ network, so participants could better relate to the study’s objective. The reliability analysis

for quality of work (QoW) at Time 1 and Time 2 yielded Cronbach's alpha values of .76 and .71, respectively. Hence, following Raharjanti et al. (2022), these Cronbach's alpha values were deemed acceptable.

Quality of life (QoL). The study utilised NZ's version of the World Health Organization Quality of Life Questionnaire – Brief (NZ-WHOQOL-Brief) to measure participants' quality of life (QoL) (Group development of the World Health Organization [WHOQOL-BREF] quality of life assessment, 1998). The 5-item scale asked participants to assess their feelings over the past two weeks, when answering all questions (refer to Appendix K). The first question “how would you rate the quality of your life?” asked participants to answer on a 5-point Likert scale, ranging from ‘1’ = very poor to ‘5’ = very good. The next four questions asked participants to answer on a 5-point Likert scale ranging from ‘1’ = not at all to ‘5’ = extremely. An example of the additional four items in the NZ-WHOQOL-Brief scale is: “to what extent do you feel your life to be meaningful?” Participants' overall quality of life (QoL) score was calculated based on the sum of all five items: the higher the score, the more likely the participant rated his/her quality of life as high. The reliability analysis for quality of life (QoL) at Time 1 and Time 2 yielded Cronbach's alpha values of .79 and .83, respectively. Hence, following Raharjanti et al. (2022), these Cronbach's alpha values were deemed acceptable.

Considerate leadership. Considerate leadership was measured using the 5-item Individualised Consideration subscale of the Multi-Factor Leadership Questionnaire by Bass and Avolio (1996) (refer to Appendix G). Examples of the statements include “my leader spends time teaching and coaching” and “my leader considers an individual as having different needs, abilities and aspirations from others”. The overall considerate leadership score was calculated based on the sum of all five items: the higher the score, the more likely the participant perceived his/her supervisor to be a considerate leader. The reliability analysis of considerate leadership yielded a Cronbach's alpha value of .90. Hence, following Raharjanti et al. (2022), this Cronbach's alpha value was deemed acceptable.

Control Variables

In this study, age, gender and public/private sector work were assessed as potential control variables in the studied relationships of emotional job demands and opportunities for skill development with quality of work (QoW) and quality of life (QoL). Previous research has found that an individual's age negatively correlated with actively open-minded thinking,

thus influencing areas of judgement in decision making. This suggested that an older individual may be reluctant to change long-standing values and, therefore, may struggle to embrace empowerment opportunities in the workplace. Additionally, gender and the work sector may influence employees' work and personal outcomes. For instance, Jensen and Messersmith (2013) stated that women experienced greater levels of work-related stress than men, resulting in significant impacts on their well-being. Additionally, previous research has suggested a more significant drop in the quality of life (QoL) of government employees than of private sector employees (Kim & Cho, 2003). Based on these previous findings, the current study ran an analysis to assess whether age, gender and public/private sector work were confounding factors. The results suggested that these factors had no influence on the cause-and-effect relationships throughout the analysis; therefore, it was concluded that these variables did not need to be controlled for in the study.

Data Analysis

Data was analysed using IBM SPSS Statistics (formerly known as the Statistical Package for the Social Sciences) version 29.0. Participants' data were initially checked for corresponding missing values, outliers, duplicate responses and responses identified as being from a bot. The empirical literature on the identification of suspect bots was used to establish bot responses through the visual analytics approach (Chen et al., 2023). Altogether, responses from 94 participants were omitted from the current study due to them falling under the above criteria. After removing these 94 responses, our final sample number was 250.

Descriptive statistics and bivariate correlations were included into the analysis. Multiple linear regressions were used to analyse the effect of the independent variables of PIRK (power, information sharing, rewards, knowledge) on the outcome variables of emotional job demands (job demands) and opportunities for skill development (job resources). An additional multiple regression was performed to assess the effect of the independent variables (emotional job demands and opportunities for skill development) on the outcomes variables of quality of work (QoW) and quality of life (QoL).

A mediation analysis was conducted to assess the causal effects of the mediation variables, namely, emotional job demands and opportunities for skill development on the relationships of the antecedent variables of PIRK with quality of work (QoW) and quality of life (QoL), the outcome variables. The current study followed Baron and Kenny's (1986)

method to conduct a multiple linear regression for the mediation analysis. A Sobel test¹ was conducted to test the significance of the indirect effect and in support of Baron and Kenny's (1986) method.

The moderating effect of considerate leadership in the relationship of the antecedent variables of PIRK with the outcome variables of emotional job demands and opportunities for skill development was tested using the centred independent variables and centred moderators. The initial step involved testing for a linear relationship between the centred independent variable (HIWS), the moderator (considerate leadership) and the outcome variables (emotional job demands and opportunities for skill development). The interaction effects were then calculated by multiplying the centred independent variable with the moderator variable.

¹ A Sobel test is used to examine if the indirect pathway in the mediation model is statistically significant.

Chapter 4: Results

The High Involvement Work System (HIWS)

This study involved examining the antecedent variables and determining their presence among the sample population. The results showed that 98.4% of participants reported experiencing some form of all four dimensions of the HIWS in their workplace. The findings indicated that of the four PIRK dimensions, NZ employees viewed power as the dimension most present in their organisations, with rewards the least present dimension (see Table 2).

Considerate leadership

The moderator variable of the study, considerate leadership, produced a strong positive correlation with each of the four dimensions of the PIRK model. Table 2 shows that considerate leadership produced a positive correlation with power (.47), information sharing (.50), rewards (.49) and knowledge (.43). Hence, the strongest correlation for considerate leadership was with information sharing.

Job resources

One of the mediating variables analysed in the relationships of the HIWS with outcome variables was job resources (opportunities for skill development). Therefore, the study's main interest was in the direct relationships of job resources at Time 1 and Time 2 with these variables. As displayed in Table 2, job resources at Time 1 and Time 2 correlated highly with each of the four PIRK dimensions. The strongest correlation was recorded with knowledge at Time 2 (.73). In addition, job resources produced strong and positive correlations with quality of work (QoW) and quality of life (QoL) at Time 1 and Time 2.

Job demands

The other mediating variable analysed in this study was job demands (emotional job demands), seeking to determine its influence in the relationships of the HIWS with employee outcomes. All correlations were recorded as negative between emotional job demands and the dimensions of the PIRK model. Table 2 suggests that the strongest negative correlation was with information sharing at Time 1 (-.37). In addition, job demands produced strong negative correlations with quality of work (QoW) and quality of life (QoL) at Time 1 and Time 2.

Quality of work (QoW)

Table 2 displayed a strong positive correlation with each of the PIRK dimensions in the study at Time 1 and Time 2. The strongest correlation was with information sharing at Time 1 (.58). The weakest correlation was with rewards at Time 2 (.36). Quality of work (QoW) also produced positive correlations with job resources and a negative correlation with job demands.

Quality of life (QoL)

As shown in Table 2, quality of life (QoL) produced positive correlations at Time 1 and Time 2 with each of the PIRK dimensions. Notably, for quality of life (QoL) at Time 2, an insignificant correlation was produced with the information-sharing dimension of PIRK, while interestingly the strongest correlation was also produced with information sharing at Time 1 (.51). Quality of work (QoW) also produced positive correlations with job resources and a negative correlation with job demands.

Bivariate correlations

The bivariate correlations are presented in Table 2 below.

Table 2: Means, Standard Deviations, Cronbach's Alpha and Pearson's Bivariate Correlations between Independent Variables, Antecedent Variable, Moderator Variable and Dependent Variables

Variables	Mean	SD	Alpha	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Power	4.01	0.85	0.81	1													
Information	3.46	0.84	0.83	.48**	1												
Rewards	2.95	0.90	0.81	.31**	.54**	1											
Knowledge	3.54	0.87	0.82	.40**	.55**	.51**	1										
Considerate Leadership	3.41	1.03	0.90	.47**	.50**	.49**	.53**	1									
JR at T1	68.17	23.13	0.79	.41**	.51**	.53**	.63**	.53**	1								
JR at T2	66.21	22.49	0.80	.33**	.43**	.43**	.73**	.45**	.76**	1							
JD at T1	53.69	18.72	0.67	-.16*	-.37**	-.28**	-.25**	-.23**	-0.11	-0.04	1						
JD at T2	53.91	19.21	0.73	-0.16	-.32**	-0.17	-.24*	-0.08	-0.01	-0.05	.70**	1					
QoW at T1	68.60	19.21	0.76	.54**	.58**	.51**	.54**	.49**	.60**	.50**	-.26**	-.27**	1				
QoW at T2	68.64	15.35	0.71	.42**	.42**	.36**	.42**	.30**	.39**	.51**	-.24*	-.39**	.64**	1			
QoL at T1	3.26	0.71	0.79	.45**	.51**	.42**	.47**	.34**	.51**	.41**	-.33**	-.31**	.58**	.47**	1		
QoL at T2	3.28	0.65	0.83	.28**	0.32	.26**	.36**	0.11	.34**	.37**	-.22*	-.39**	.33**	.48**	.73**	1	

Notes: $**p < .01$, $*p < .05$; SD = standard deviation; Alpha = Cronbach's alpha for internal consistency; Power = employee's level of power in the workplace; Information sharing = employee's level of information sharing in the workplace; Rewards = employee's level of recognition in the workplace; Knowledge = employee's level of knowledge acquired in the workplace; Considerate leadership = level of considerate leadership from his/her manager as perceived by an employee; QoW = quality of work; QoL = quality of life; T1 = Time 1; T2 = Time 2.

Hypotheses' Testing

Hypothesis 1: Job resources have a positive relationship with (H1a) quality of work (QoW) and (H1b) quality of life (QoL)

Hypothesis 1a predicted that job resources at Time 1 would have a positive relationship with quality of work at Time 2. As displayed in Table 3, the regression analysis suggested that with every 1-unit increase in job resources, quality of work increases by .39-units ($\beta=.25$, standard error [SE]=.06, $t=4.37$, $p<.001$). Thus, by producing a positive significant relationship with job resources allowed the conclusion that Hypothesis 1a was supported.

Hypothesis 1b predicted that job resources at Time 1 would have a positive relationship with quality of life at Time 2. As displayed in Table 3, the regression analysis suggested that with every 1-unit increase in job resources, quality of life increases by .34-units ($\beta=.01$, SE=.00, $t=3.70$, $p<.001$). Therefore, a positive significant relationship was produced, allowing the conclusion that Hypothesis 1b was supported.

Hypothesis 2: Job demands have a negative relationship with (H2a) quality of work (QoW) and (H2b) quality of life (QoL)

Hypothesis 2a predicted that job demands at Time 1 would have a negative relationship with quality of work at Time 2. As displayed in Table 3, the regression analysis suggested that with every 1-unit increase in job demands, quality of work increases by -.24-units ($\beta=-.20$, SE=.08, $t=-2.54$, $p>0.05$). Hence, a negative non-significant effect was displayed, allowing the conclusion that Hypothesis 2a was not supported.

Hypothesis 2b predicted that job demands at Time 1 would have a negative relationship with quality of life at Time 2. In Table 3, the regression analysis suggested that with every 1-unit increase in job demands, quality of life increases by -.22-units ($\beta=-.01$, SE=.00, $t=-2.38$, $p>0.05$). Hence, a negative non-significant relationship was displayed, allowing the conclusion that Hypothesis 2b was not supported.

Table 3: Regression Analysis: Effects of Job Demands and Job Resources at Time 1 on Outcomes at Time 2

IV	DV	B	SE	β	t	p
JRT1	QoLT2	.34	.00	.01	3.70	<.001**
	QoWT2	.39	.06	.25	4.37	<.001**

<i>JDT1</i>	<i>QoLT2</i>	-.22	.00	-.01	-2.38	.02
	<i>QoWT2</i>	-.24	.08	-.20	-2.54	.01

Notes: ** $p < .001$; DV = dependent variable; IV = independent variable; JRT1 = job resources at Time 1; JDT1 = job demands at Time 1; QoLT2 = quality of life at Time 2; QoWT2 = quality of work at Time 2

Hypothesis 3: The high involvement work system (HIWS) (H3a: power, H3b: information sharing, H3c: rewards, H3d: knowledge) has a positive relationship with job resources

Hypothesis 3a predicted that power at Time 1 would have a positive relationship with job resources at Time 2. As indicated in Table 4, the regression analysis on the main effect of power showed that with every 1-unit increase in power, job resources increase by .33-units ($\beta=9.24$, $SE=2.53$, $t=3.65$, $p<.001$). A positive significant relationship was found with job resources; hence, Hypothesis 3a was supported.

Hypothesis 3b predicted that information sharing at Time 1 would have a positive relationship with job resources at Time 2. As is evident in Table 5, the regression analysis suggested that the main effect of information sharing on job resources showed that with every 1-unit increase in information sharing, job resources increase by .43-units ($\beta=12.16$, $SE=2.45$, $t=4.96$, $p<.001$). Information sharing displayed a positive significant relationship with job resources; therefore, Hypothesis 3b was supported.

Hypothesis 3c predicted that rewards at Time 1 would have a positive relationship with job resources at Time 2. As indicated in Table 6, the regression analysis on the main effect of rewards on job resources showed that with every 1-unit increase in rewards, job resources increase by .43-units ($\beta=9.85$, $SE=2.00$, $t=4.92$, $p<.001$). A positive significant relationship was identified with job resources; thus, Hypothesis 3c was supported.

Hypothesis 3d predicted that knowledge at Time 1 would have a positive relationship with job resources at Time 2. As indicated in Table 7, the regression analysis on the main effect of knowledge on job resources was significant, showing that with every 1-unit increase in knowledge, job resources increase by .73-units ($\beta=19.00$, $SE=1.70$, $t=11.19$, $p<.001$). Rewards displayed a positive significant relationship with job resources; hence the current study concluded that Hypothesis 3d was supported.

Hypothesis 4: The high involvement work system (HIWS) (H4a: power, H4b: information sharing, H4c: rewards, H4d: knowledge) has a negative relationship with job demands

Hypothesis 4a predicted that power at Time 1 would have a negative relationship with job demands at Time 2. As indicated in Table 4, the regression analysis on the main effect of power on job demands was insignificant, showing that with every 1-unit increase in power, job demands increase by -.16-units ($\beta=-3.71$, $SE=2.26$, $t=-1.64$, $p>0.05$). A negative insignificant relationship was recorded with job demands; hence, this study concluded that Hypothesis 4a was not supported.

Hypothesis 4b predicted that information sharing at Time 1 would have a negative relationship with job demands at Time 2. As indicated in Table 5, the regression analysis on the main effect of information sharing on job demands showed a negative significant effect, stating that with every 1-unit increase of information sharing, job demands increase by -.32-units ($\beta=-7.80$, $SE=2.20$, $t=-3.55$, $p<0.01$) at Time 2; hence, Hypothesis 4b was supported.

Hypothesis 4c predicted that rewards at Time 1 would have a negative relationship with job demands at Time 2. As shown in Table 6, the regression analysis on the main effect for rewards showed that with every 1-unit increase in rewards, job demands increase by -.17-units ($\beta=-3.33$, $SE=1.86$, $t=1.79$, $p>0.05$). A non-significant effect at Time 2 indicated that Hypothesis 4c was not supported.

Hypothesis 4d predicted that knowledge would have a negative relationship with job demands. As indicated in Table 7, the regression analysis on the main effect between knowledge and job demands was non-significant, displaying a -.24-unit increase ($\beta=-5.32$, $SE=2.07$, $t=-2.57$, $p>0.05$). Hence, Hypothesis 4d was not supported.

Table 4: Regression Analysis: Effects of Power at Time 1 on Job Demands and Job Resources at Time 2

Variable	B	SE	β	<i>t</i>	<i>p</i>
JRT2	.33	2.53	9.24	3.65	<.001**
JDT2	-.16	2.26	-3.71	-1.64	0.10

Notes: ** $p < .001$; JRT2 = job resources at Time 2; JDT2 = job demands at Time 2

Table 5: Regression Analysis: Effects of Information Sharing at Time 1 on Job Demands and Job Resources at Time 2

Variable	B	SE	β	<i>t</i>	<i>p</i>
JRT2	.43	2.45	12.16	4.96	<.001**
JDT2	-.32	2.20	-7.80	-3.55	<.001**

Notes: ** $p < .001$; JRT2 = job resources at Time 2; JDT2 = job demands at Time 2

Table 6: Regression Analysis: Effects of Rewards at Time 1 on Job Demands and Job Resources at Time 2

Variable	B	SE	β	<i>t</i>	<i>p</i>
JRT2	.43	2.00	9.85	4.92	<.001**
JDT2	-.17	1.86	-3.33	-1.79	.077

Notes: ** $p < .001$; JRT2 = job resources at Time 2; JDT2 = job demands at Time 2

Table 7: Regression Analysis: Effects of Knowledge at Time 1 on Job Demands and Job Resources at Time 2

Variable	B	SE	β	<i>t</i>	<i>p</i>
JRT2	.73	1.70	19.00	11.19	<.001**
JDT2	-.24	2.07	-5.32	-2.57	0.01

Notes: ** $p < .001$; JRT2 = job resources at Time 2; JDT2 = job demands at Time 2

Hypothesis 5: Job resources mediate the relationship between the high involvement work system (HIWS) (5a: power, 5b: information sharing, 5c: rewards, 5d: knowledge) and quality of life (QoL)

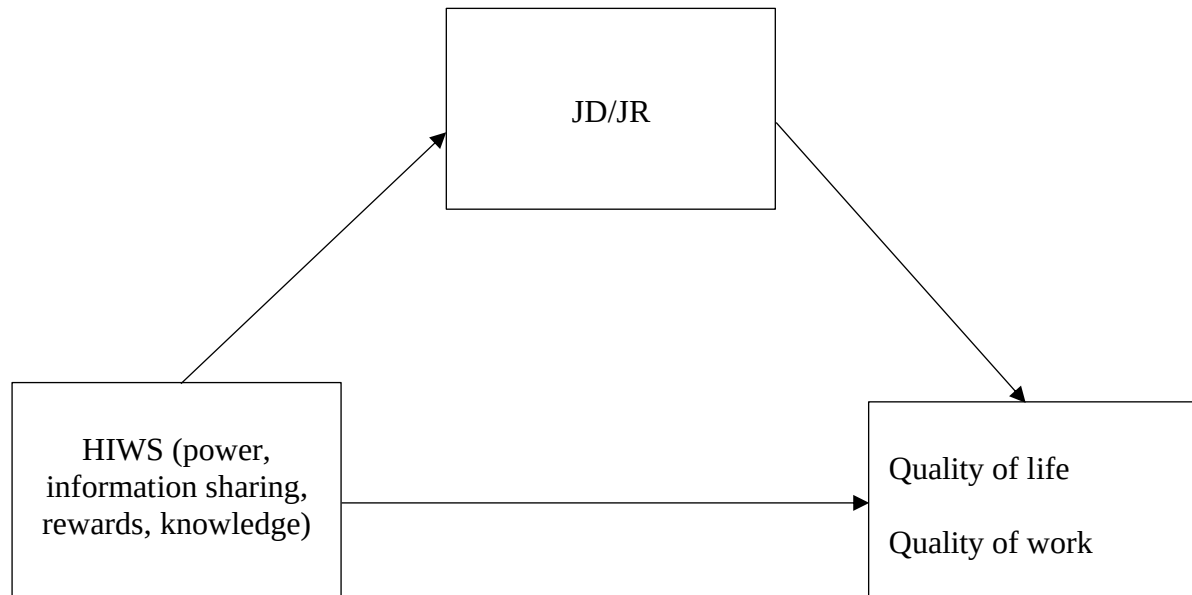


Figure 2: Mediation Model Depicting Mediating Effect of Job Demands and Job Resources on Relationships between the High Involvement Work System (HIWS) and Quality of Life and Quality of Work

Hypothesis 5 predicted that job resources at Time 1 would mediate the positive relationships between (H5a) power, (H5b) information sharing, (H5c) rewards and (H5d) knowledge at Time 1 and quality of life at Time 2. In testing these hypotheses, the results, as displayed in Table 8, showed that job resources had no mediation effect in the relationship between the HIWS (power, information sharing, rewards and knowledge) and quality of life. Hence, no further mediation analysis was conducted on these variables.

Table 8: Mediation Analysis: Job Resources as a Mediator between the High Involvement Work System (HIWS) and Quality of Life

DV	IV	B	SE	β	Adj R^2	Sobel
1. QoL	Power	.22	.08	.28**	.07	
2. JR	Power	11.05	1.74	.41**	.17	
3. QoL	Power	.15	.08	.18	.13	
	JR	.01	.00	.34**	.10	1.80
1. QoL	Info	.26	.08	.32**	.09	
2. JR	Info	13.38	1.63	.51**	.25	
3. QoL	Info	.17	.08	.20	.13	
	JR	.01	.00	.34**	.10	2.06
1. QoL	Rewards	.18	.06	.26*	.06	
2. JR	Rewards	13.25	1.51	.53**	.28	
3. QoL	Rewards	.08	.07	.13	.11	
	JR	.01	.00	.34**	.10	1.13
1. QoL	Knowledge	.27	.07	.36**	.12	
2. JR	Knowledge	16.35	1.46	.63**	.39	
3. QoL	Knowledge	.18	.09	.24	.13	
	JR	.01	.00	.34**	.10	1.97

Notes: ** $p < .001$; * $p < .05$; QoL = quality of life; JR = job resources; DV = dependent variable; IV = independent variable

Hypothesis 6: Job resources mediate the relationship between the high involvement work system (HIWS) (6a: power, 6b: information sharing, 6c: rewards, 6d: knowledge) and quality of work (QoW)

Hypothesis 6a predicted that job resources at Time 1 would mediate the relationship between power at Time 1 and quality of work at Time 2. In testing the hypothesis, the results displayed in Table 9 show a significant total effect between power and quality of work (B=7.90, SE=1.67, $p < .001$). The direct effect of power on job resources was also significant

($B=11.05$, $SE=1.74$, $p<.001$), suggesting a direct influence of power on job resources, the mediator variable. The direct effect of job resources on quality of work was significant and positive ($B=.25$, $SE=.06$, $p<.001$). This indicates that job resources were a significant predictor of quality of work. When job resources entered the relationship between power and quality of work, the direct effect decreased slightly and was significant ($B=6.08$, $SE=1.71$, $p<.001$), suggesting partial mediation by job resources. In addition, a Sobel test was conducted to test the significance of the indirect effect. The test showed a z-score of 3.10 ($p<.001$). The significant Sobel test results showed a significant indirect effect of power on quality of work through job resources. Therefore, job resources played a part in explaining how power influenced quality of work.

Hypothesis 6b predicted that job resources at Time 1 would mediate the relationship between information sharing at Time 1 and quality of work at Time 2. In testing the hypothesis, the result shown in Table 9 display a significant total effect between information sharing and quality of work ($B=8.04$, $SE=1.69$, $p<.001$). The direct effect of information sharing on job resources was also significant ($B=13.38$, $SE=1.63$, $p<.001$), suggesting a direct influence of information sharing on job resources, the mediator variable. When job resources were added to the relationship of information sharing with quality of work, the direct effect was reduced and significant ($B=5.78$, $SE=1.88$, $p<.05$), suggesting partial mediation by job resources. In addition, a Sobel test was conducted to test the significance of the indirect effect. The test showed a z-score of 2.88 ($p<.05$). The significant Sobel test result showed a significant indirect effect of information sharing on quality of work through job resources. Therefore, job resources played a part in explaining how information sharing influenced quality of work.

Hypothesis 6c predicted that job resources at Time 1 would mediate the relationship between rewards at Time 1 and quality of work at Time 2. In testing the hypothesis, the results displayed in Table 9 show a significant total effect between rewards and quality of work ($B=5.66$, $SE=1.41$, $p<.001$). The direct effect of rewards on job resources was also significant ($B=13.25$, $SE=1.51$, $p<.001$), suggesting a direct influence of rewards on job resources, the mediator variable. When job resources entered the relationship of rewards with quality of work, the direct effect was reduced and significant ($B=3.50$, $SE=1.58$, $p<.05$), suggesting partial mediation by job resources. In addition, a Sobel test was conducted to test the significance of the indirect effect. The test showed a z-score of 2.15 ($p<.05$). The significant Sobel test result showed a significant indirect effect of rewards on quality of work

through job resources. Therefore, job resources played a part in explaining how rewards influenced quality of work.

Hypothesis 6d predicted that job resources at Time 1 would mediate the relationship between knowledge at Time 1 and quality of work at Time 2. In testing the hypothesis, the results displayed in Table 9 show a significant total effect between knowledge and quality of work ($B=7.46$, $SE=1.54$, $p<.001$). The direct effect of knowledge on job resources was also significant ($B=16.35$, $SE=1.46$, $p<.001$) suggesting a direct influence of knowledge on job resources, the mediator variable. When job resources were added to the relationship between knowledge and quality of work, the direct effect was slightly reduced and significant ($B=5.22$, $SE=2.13$, $p<.05$), suggesting partial mediation by job resources. In addition, a Sobel test was conducted to test the significance of the indirect effect. The test showed a z-score of 2.39 ($p<.05$). The significant Sobel test result showed a significant indirect effect of knowledge on quality of work through job resources. Therefore, job resources played a part in explaining how knowledge influenced quality of work.

Table 9: Mediation Analysis: Job Resources as a Mediator between the High Involvement Work System (HIWS) and Quality of Work

	DV	IV	B	SE	β	Adj R^2	Sobel
1.	QoW	Power	7.90	1.67	.42**	.17	
2.	JR	Power	11.05	1.74	.41**	.17	
3.	QoW	Power	6.08	1.71	.32**	.23	
		JR	.25	.06	.39**	.14	3.10**
1.	QoW	Info	8.04	1.69	.42**	.17	
2.	JR	Info	13.38	1.63	.51**	.25	
3.	QoW	Info	5.78	1.88	.30*	.20	
		JR	.25	.06	.39**	.14	2.88*
1.	QoW	Rewards	5.66	1.41	.36**	.12	
2.	JR	Rewards	13.25	1.51	.53**	.28	
3.	QoW	Rewards	3.50	1.58	.22*	.17	
		JR	.25	.06	.39**	.14	2.15*
1.	QoW	Knowledge	7.46	1.54	.42**	.17	
2.	JR	Knowledge	16.35	1.46	.63**	.39	
3.	QoW	Knowledge	5.22	2.13	.30*	.18	
		JR	.25	.06	.39**	.14	2.39*

Notes: ** $p < .001$; * $p < .05$; QoW = quality of work; JR = job resources; DV = dependent variable; IV = independent variable

Hypothesis 7: Job demands mediate the relationship between the high involvement work system (HIWS) (7a: power, 7b: information sharing, 7c: rewards, 7d: knowledge) and quality of life (QoL)

Hypothesis 7a predicted that job demands at Time 1 would mediate the positive relationship between power at Time 1 and quality of life at Time 2. In testing the hypothesis, the results displayed in Table 10 show a significant total effect between power and quality of life ($B = .22$, $SE = .08$, $p < .05$). The effect of power on job demands produced a negative

significant result ($B=-3.52$, $SE=1.53$, $p<.05$), suggesting a direct influence of power on job demands, the mediator variable. The effect of job demands on quality of life was significant ($B=-.01$, $SE=.00$, $p<.05$). This indicates that job demands were a significant predictor of quality of life. Finally, when job demands entered the relationship between power and quality of life, the direct effect was slightly reduced and significant ($B=.20$, $SE=.080$, $p<.05$), suggesting partial mediation by job demands. In addition, a Sobel test was conducted to test the significance of the indirect effect. The test showed a z-value of -1.74 ($p<.05$). The significant Sobel test result showed a significant indirect effect of power on quality of life through job demands. Therefore, job demands played a part in explaining how power influenced quality of life.

Hypothesis 7b predicted that job demands at Time 1 would mediate the relationship between information sharing at Time 1 and quality of life at Time 2. In testing the hypothesis, the results shown in Table 10 display an insignificant total effect between information sharing and quality of life ($B=.26$, $SE=.08$, $p>.05$). However, the growing consensus in prior research has been in favour of moving past insignificant total effects being treated as a gatekeeper for tests of mediation (Hayes, 2009; Shrout & Bolger, 2002). Therefore, the mediation analysis in the current study was continued. The effect of information sharing on job demands was negative and significant ($B=-8.01$, $SE=1.42$, $p<.001$). When job demands entered the relationship between information sharing and quality of life, the direct effect was slightly reduced and significant ($B=.22$, $SE=.08$, $p<.05$), suggesting partial mediation by job demands. A Sobel test was also conducted to test the significance of the indirect effect. The test showed a z-value of -2.50 ($p<.001$). The significant Sobel test result showed a significant indirect effect of information sharing on quality of life through job demands. Therefore, job demands played a part in explaining how information sharing influenced quality of life.

Hypothesis 7c predicted that job demands at Time 1 would mediate the relationship between rewards at Time 1 and quality of life at Time 2. In testing the hypothesis, the results displayed in Table 10 show a significant total effect between rewards and quality of life ($B=.18$, $SE=.06$, $p<.001$). The effect of rewards on job demands was negative and significant ($B=-5.67$, $SE=1.39$, $p<.001$). When job demands entered the relationship between rewards and quality of life, the direct effect was slightly reduced and significant ($B=.15$, $SE=.06$, $p<.05$), suggesting partial mediation by job demands. A Sobel test was also conducted to test the significance of the indirect effect. The test showed a z-value of -2.05 ($p<.001$). The significant Sobel test result showed a significant indirect effect of rewards on quality of life

through job demands. Therefore, job demands played a part in explaining how rewards influenced quality of life.

Hypothesis 7d predicted that job demands at Time 1 would mediate the relationship between knowledge at Time 1 and quality of life at Time 2. In testing the hypothesis, the results displayed in Table 10 show a significant total effect between knowledge and quality of life ($B=.27$, $SE=.07$, $p<.001$). The effect of knowledge on job demands was negative and significant ($B=-5.33$, $SE=1.46$, $p<.001$). When job demands entered the relationship between knowledge and quality of life, the direct effect reduced slightly and was significant ($B=.25$, $SE=.07$, $p<.05$) suggesting partial mediation of the relationship by job demands. A Sobel test was conducted to test the significance of the indirect effect. The test showed a z-value of -2.54 ($p<.001$). The significant Sobel test result showed a significant indirect effect of knowledge on quality of life through job demands. Therefore, job demands played a part in explaining how knowledge influenced quality of life.

Table 10: Mediation Analysis: Job Demands as a Mediator between the High Involvement Work System (HIWS) and Quality of Life

DV	IV	B	SE	β	Adj R^2	Sobel
1. QoL	Power	.22	.08	.27**	.07	
2. JD	Power	-3.52	1.53	-.16*	.02	
3. QoL	Power	.20	.08	.25*	.09	
	JD	-.01	.00	-.22*	.04	-1.74*
1. QoL	Info	.26	.08	.32	.09	
2. JD	Info	-8.01	1.42	-.37**	.14	
3. QoL	Info	.22	.08	.27*	.10	
	JD	-.01	.00	-.22*	.04	-2.50**
1. QoL	Rewards	.18	.06	.26**	.06	
2. JD	Rewards	-5.67	1.39	-.28**	.07	
3. QoL	Rewards	.15	.06	.22*	.08	
	JD	-.01	.00	-.22*	.04	-2.05**
1. QoL	Knowledge	.27	.07	.36**	.12	
2. JD	Knowledge	-5.33	1.46	-.25**	.06	
3. QoL	Knowledge	.25	.07	.33**	.13	
	JD	-.01	.00	-.22*	.04	-2.54**

Notes: ** $p < .001$; * $p < .05$; QoL = quality of life; JD = job demands; DV = dependent variable; IV = independent variable

Hypothesis 8: Job demands mediate the relationship between the high involvement work system (HIWS) (8a: power, 8b: information sharing, 8c: rewards, 8d: knowledge) and quality of work (QoW)

Hypothesis 8a predicted that job demands at Time 1 would mediate the positive relationship between power at Time 1 and quality of work at Time 2. In testing the hypothesis, the results displayed in Table 11 show a significant total effect between power and quality of work ($B=7.90$, $SE=1.67$, $p < .001$). The effect of power on job demands produced a negative significant result ($B=-3.52$, $SE=1.53$, $p < .05$), suggesting a direct

influence of power on job demands, the mediator variable. The effect of job demands on quality of work was significant ($B=-.20$, $SE=.08$, $p<.05$). This indicated that job demands were a significant predictor of quality of work. Finally, when job demands entered the relationship between power and quality of work, the direct effect was slightly reduced and significant ($B=7.35$, $SE=1.67$, $p>.001$), suggesting partial mediation by job demands. A Sobel test was conducted to test the significance of the indirect effect. The test showed a z-value of -2.04 ($p<.001$). The significant Sobel test result showed a significant indirect effect of power on quality of work through job demands. Therefore, job demands played a part in explaining how power influences quality of work.

Hypothesis 8b predicted that job demands at Time 1 would mediate the positive relationship between information sharing at Time 1 and quality of work at Time 2. In testing the hypothesis, the results displayed in Table 11 show a significant total effect between information sharing and quality of work ($B=8.04$, $SE=1.69$, $p<.001$). The effect of information sharing on job demands was negative and significant ($B=-8.01$, $SE=1.42$, $p<.001$), suggesting a direct influence of information sharing on job demands, the mediator variable. When job demands entered the relationship between information sharing and quality of work, the direct effect was slightly reduced and significant ($B=7.34$, $SE=1.81$, $p<.001$), suggesting partial mediation by job demands. An additional Sobel test was conducted to test the significance of the indirect effect. The test showed a z-value of -3.30 ($p<.001$). The significant Sobel test result showed a significant indirect effect of information sharing on quality of work through job demands. Therefore, job demands played a part in explaining how information sharing influenced quality of work.

Hypothesis 8c predicted that job demands at Time 1 would mediate the positive relationship between rewards at Time 1 and quality of work at Time 2. In testing the hypothesis, the results displayed in Table 11 show a significant total effect between rewards and quality of work ($B=5.66$, $SE=1.41$, $p<.001$). The effect of rewards on job demands was negative and significant ($B=-5.67$, $SE=1.39$, $p<.001$), suggesting a direct influence of rewards on job demands, the mediator variable. When job demands entered the relationship between rewards and quality of life, the direct effect was slightly reduced and significant ($B=5.08$, $SE=1.43$, $p<.001$), suggesting partial mediation by job demands. An additional Sobel test was conducted to test the significance of the indirect effect. The Sobel test showed a z-value of -2.68 ($p<.001$). The significant Sobel test results showed a significant indirect effect of

rewards on quality of work through job demands. Therefore, job demands played a part in explaining how rewards influenced quality of work.

Hypothesis 8d predicted that job demands at Time 1 would mediate the positive relationship between knowledge at Time 1 and quality of work at Time 2. In testing the hypothesis, the results displayed in Table 11 show a significant total effect between knowledge and quality of work ($B=7.46$, $SE=1.54$, $p<.001$). The effect of knowledge on job demands was negative and significant ($B=-5.33$, $SE=1.46$, $p<.001$), suggesting a direct influence of knowledge on job demands, the mediator variable. When job demands entered the relationship between knowledge and quality of work, the direct effect reduced slightly and was significant ($B=6.86$, $SE=1.57$, $p<.001$), suggesting partial mediation by job demands. An additional Sobel test was conducted to test the significance of the indirect effect. The Sobel test showed a z-value of 2.80 ($p<.001$). The significant Sobel test showed a significant indirect effect of knowledge on quality of work through job demands. Therefore, job demands played a part in explaining how knowledge influenced quality of work.

Table 11: Mediation Analysis: Job Demands as a Mediator between the High Involvement Work System (HIWS) and Quality of Work

	DV	IV	B	SE	β	Adj R^2	Sobel
1.	QoW	Power	7.90	1.67	.42**	.17	
2.	JD	Power	-3.52	1.53	-.16*	.02	
3.	QoW	Power	7.35	1.67	.39**	.19	
		JD	-.20	.08	-.24*	.05	-2.04**
1.	QoW	Info	8.04	1.69	.42**	.17	
2.	JD	Info	-8.01	1.42	-.37**	.14	
3.	QoW	Info	7.34	1.81	.38**	.17	
		JD	-.20	.08	-.24*	.05	-3.30**
1.	QoW	Rewards	5.66	1.41	.36**	.12	
2.	JD	Rewards	-5.67	1.39	-.28**	.07	
3.	QoW	Rewards	5.08	1.43	.32**	.14	
		JD	-.20	.08	-.24	.05	2.68**
1.	QoW	Knowledge	7.46	1.54	.42**	.17	
2.	JD	Knowledge	-5.33	1.46	-.25**	.06	
3.	QoW	Knowledge	6.86	1.57	.39**	.18	
		JD	-.20	.08	-.24*	.05	2.80**

Notes: ** $p < .001$; * $p < .05$; QoW = quality of work; JD = job demands; DV = dependent variable; IV = independent variable

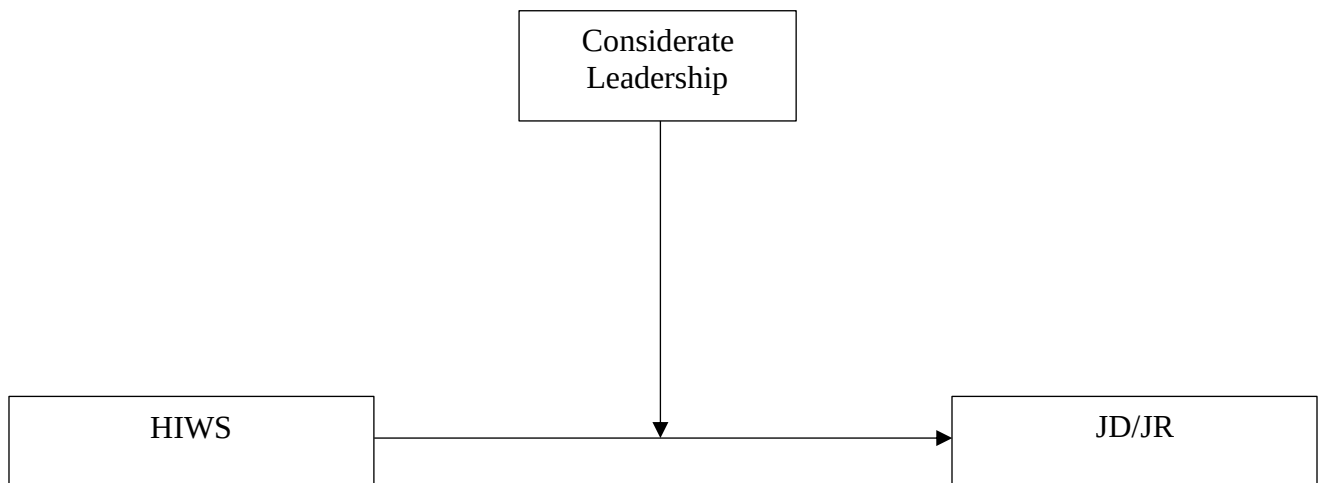


Figure 3: Moderation Model Depicting Moderating Effect of Considerate Leadership on Relationships between the High Involvement Work System (HIWS) and Job Demands/Job Resources (JD/JR)

Hypothesis 9: Considerate leadership moderates the relationship between the high involvement work system (HIWS) (H9a: power, H9b: information sharing, H9c: rewards, H9d: knowledge) and job resources

Hypothesis 9 predicted that considerate leadership would moderate the relationship between all four dimensions of the PIRK model (H9a power, H9b information sharing, H9c rewards, H9d knowledge) at Time 1 and job resources at Time 2. However, when investigating the interaction effect, the interactions displayed in Tables 12, 13, 14 and 15 show that considerate leadership did not act as a significant moderator in the relationship between the PIRK dimensions and job resources.

Hypothesis 10: Considerate leadership moderates the relationship between the high involvement work system (HIWS) (H10a: power, H10b: information sharing, H10c: rewards, H10d: knowledge) and job demands

Hypothesis 10 predicted that considerate leadership would moderate the relationship between all four dimensions of the PIRK model (H10a power, H10b information sharing, H10c rewards, H10d knowledge) and job demands. When investigating the interaction effect, the interactions displayed in Tables 12, 13, 14 and 15 showed that considerate leadership did not act as a significant moderator in the relationship between the PIRK dimensions and job demands.

Table 12: Linear Regression Analysis: Interaction Effect of Considerate Leadership on Power at Time 1 and Job Demands and Job Resources at Time 2

Variable	B	SE	β	<i>t</i>	<i>p</i>
Power	.04	.12	.04	.33	.74
CL	.38	.09	.40	4.21	<.001**
CLT1xPxJRT2	-.15	.08	-.20	-1.97	.05
Power	-.12	.14	-.12	-.90	.37
CL	-.02	.10	-.02	-.16	.88
CLT1xPxJDT2	.04	.09	.06	.49	.63

Notes: ** $p < .001$; CL = considerate leadership; CLT1xPxJRT2 = interaction effect between considerate leadership and power at Time 1 and job resources at Time 2; CLT1xPxJDT2 = interaction effect between considerate leadership and power at Time 1 and job demands at Time 2.

Table 13: Linear Regression Analysis: Interaction Effect of Considerate Leadership on Information Sharing at Time 1 and Job Demands and Job Resources at Time 2

Variable	B	SE	β	<i>t</i>	<i>p</i>
Info	.32	.10	.30	3.26	.00
CL	.31	.09	.33	3.54	<.001**
CLT1xINxJRT2	.05	.08	.05	.59	.56
Info	-.38	.12	-.36	-3.53	<.001**
CL	.06	.10	.07	.66	.51
CLT1xINxJDT2	-.04	.08	-.04	-.42	.68

Notes: ** $p < .001$; CL = considerate leadership; Info = information sharing; CLT1xINxJRT2 = interaction effect between considerate leadership and information sharing at Time 1 and job resources at Time 2; CLT1xINxJDT2 = interaction effect between considerate leadership and information sharing at Time 1 and job demands at Time 2.

Table 14: Linear Regression Analysis: Interaction Effect of Considerate Leadership on Rewards at Time 1 and Job Demands and Job Resources at Time 2

Variable	B	SE	β	<i>t</i>	<i>p</i>
Rewards	.26	.09	.28	2.90	<.001**
CL	.29	.09	.31	3.11	<.001**
CLT1xRxJRT2	-.02	.07	-.03	-.33	.74
Rewards	-.18	.10	-.19	-1.75	.08
CL	-.04	.10	-.04	-.35	.72
CLT1xRxJDT2	-.13	.08	-.17	-1.67	.09

Notes: ** $p < .001$; CL = considerate leadership; CLT1xRxJRT2 = interaction effect between considerate leadership and rewards at Time 1 and job resources at Time 2; CLT1xRxJDT2 = interaction effect between considerate leadership and rewards at Time 1 and job demands at Time 2.

Table 15: Linear Regression Analysis: Interaction Effect of Considerate Leadership on Knowledge at Time 1 and Job Demands and Job Resources at Time 2

Variable	B	SE	β	<i>t</i>	<i>P</i>
Knowledge	.71	.08	.71	8.74	<.001**
CL	.05	.08	.05	.61	.54
CLT1xKxJRT2	-.01	.06	-.01	-.09	.93
Knowledge	-.30	.12	-.30	-2.64	<.001**
CL	.07	.12	.08	.62	.54
CLT1xKxJDT2	-.07	.09	-.08	-.81	.42

Notes: ** $p < .001$; CL = considerate leadership; CLT1xKxJRT2 = interaction effect between considerate leadership and knowledge at Time 1 and job resources at Time 2; CLT1xKxJDT2 = interaction effect between considerate leadership and knowledge at Time 1 and job demands at Time 2.

Due to the insignificant interaction effects from the considerate leadership analysis, an additional analysis was performed to investigate the direct effects of considerate leadership on job demands and job resources at Time 2. As displayed in Table 16, the main effect of considerate leadership on job resources was positive and significant, with a .45-unit increase ($\beta=9.16$, $SE=1.77$, $t=5.17$, $p<.001$). The results showed that considerate leadership individually predicted job resources by producing a positive significant effect. However, the main effect of considerate leadership and job demands produced a negative non-significant effect.

Table 16: Linear Regression Analysis: Main Effect of Considerate Leadership at Time 1 and Job Demands and Job Resources at Time 2

Variable	B	SE	β	t	p
JRT2	.45	1.77	9.16	5.17	<.001**
JDT2	-.08	1.69	-1.35	-.80	.43

Notes: ** $p<.001$; JRT2 = job resources at Time 2; JD = job demands at Time 2

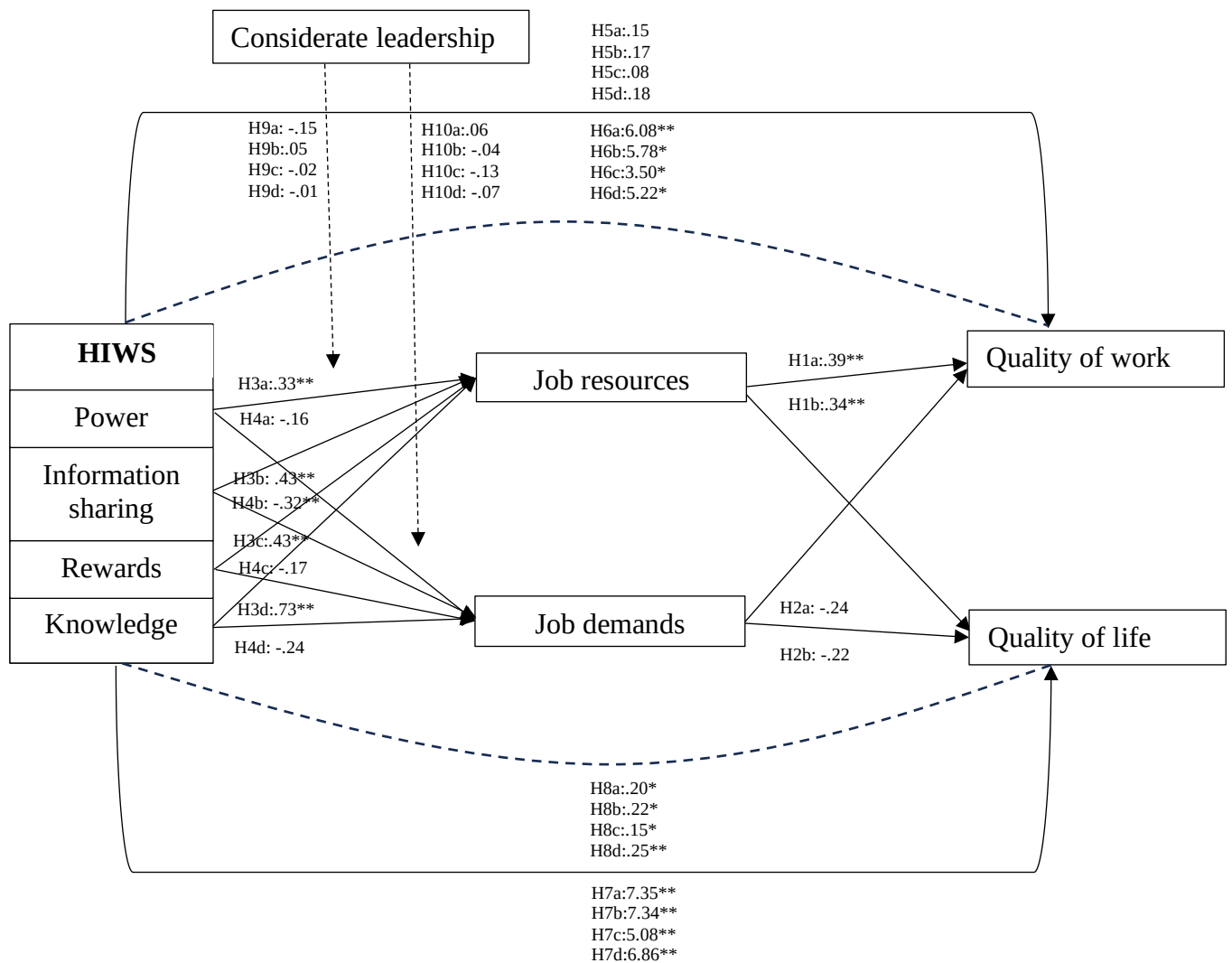


Figure 4: Model Displaying Regression Results, Mediation Results and Moderation Results
 Notes: All values are standardised values (B); ** $p < .001$; * $p < .05$

Chapter 5: Discussion

Previous research linking the high involvement work system (HIWS) to employee outcomes has focused on producing cross-sectional evaluations of the relationship. The current study's longitudinal contribution provides a greater understanding of the role that the HIWS can have in terms of the impacts on an individual employee's quality of work (QoW) and quality of life (QoL) throughout a long-term period. Specifically, this study investigated: (1) how emotional job demands and opportunities for skill development impact an employee's quality of work (QoW) and quality of life (QoL); (2) how the HIWS is encapsulated by the PIRK model and influences the emotional job demands and opportunities for skill development experienced by an employee; (3) the mediational role that job demands and job resources have on the relationship between the HIWS and an employee's quality of work (QoW) and quality of life (QoL); (4) the potentially moderating role of considerate leadership on the relationship between the HIWS and emotional job demands and opportunities for skill development.

Overall, using a two-wave longitudinal design with a three-week time gap, the study found that the HIWS, as collectively perceived through the PIRK model's dimensions, provides empirical evidence of direct significant effects on all employee's job resources and only information sharing on job demands. The study found some forms of partial mediation on an employee's subjective assessment of his/her quality of work (QoW) and quality of life (QoL), thus showing that the HIWS provides a reliable work system policy which all organisations can follow.

Theoretical Contributions

This study makes several theoretical contributions to the existing literature. It firstly contributes empirical evidence to support the relationships of emotional job demands and opportunities for skill development with the employee outcomes, quality of work (QoW) and quality of life (QoL). The results confirmed the study's predictions that opportunities for skill development would lead to an increase in quality of work (QoW) and quality of life (QoL). Hence, the study adds to the theoretical findings of scholars such as Berings et al. (2005), Eraut (2004) and Pankhurst (2010) who established skill development as a key element for motivating employees to disconnect themselves from their professional comfort zone and draw on pre-existing skills, knowledge and abilities to establish effective solutions in the

workplace. This affective-motivational state, as highlighted by Schaufeli and Taris (2014), is the driving force for the occurrence of positive organisational outcomes.

Interestingly, the results for the relationship of emotional job demands with quality of work (QoW) and quality of life (QoL) were not significant. A potential explanation for this outcome is that, in line with the job demands–resources (JD-R) model (Bakker & Demerouti, 2007), the strength of the current study’s selected job resource (i.e., opportunities for skill development) may have acted as a buffer towards emotional job demands. The authors believe that the HIWS leads to more pragmatic and robust employees dealing with emotional job demands. Hence, a resilient workforce with greater access to resources may lead to insignificant results in the relationship between emotional job demands and quality of work (QoW) and quality of life (QoL).

The JD-R model states that the amount of stress an employee experiences relies on the level of demands that are placed on them, alongside the number of resources they have that will alleviate the adverse impacts of these demands (Bakker & Demerouti, 2007; Fila et al., 2014). Empirical research has previously established this relationship, including a study conducted in a home care setting which showed that employees who faced high job demands were less exhausted when sufficient job resources were available (Bakker et al., 2003). Another study confirmed this effect showing that a high level of job demands, including but not limited to workload and emotional demands, did not result in high levels of exhaustion and cynicism if employees experienced high levels of autonomy and social support, received adequate feedback and shared a high-quality relationship with their supervisors (Büssing & Höge, 2004).

These findings are necessary to consider as the results of the study show that emotional job demands were present in the study, however, the insignificant result of emotional job demands suggests the study’s job resources have created a buffering effect. As scholars suggest, more attention should be placed on the interaction between job demands and job resources as it helps to explain the meaning of main effects of unfavourable job characteristics on burnout (Bakker et al., 2005). Indeed, the study of interactions between work characteristics to predict employee outcomes contributes one step closer to uncovering the complexity of the work situation.

An additional contribution is the study’s theoretical approach towards understanding the impacts of strategic human resource management (SHRM) on work and personal

outcomes. Previous studies, such as Fleming's (2024) work, have advised future research to steer away from individual-level initiatives when seeking support for employees' outcomes. The current study answers Fleming's (2024) call by focussing on the organisational level. Therefore, this study investigated the adoption of the HIWS, through the dimensions of the PIRK model, as a way to build opportunities for skill development which would contribute to the development of an employee's quality of work (QoW) and quality of life (QoL) and buffer the impacts of emotional job demands.

The current study draws upon the JD-R theory (Bakker & Demerouti, 2007) in which the dimensions of the HIWS lead an employee to opportunities for skill development. In addition, as displayed in Table 2, this study's results confirmed that the HIWS produced a positive and significant correlation with employees' opportunities for skill development which increased their quality of work (QoW) and quality of life (QoL). In helping to maintain the quality of employees' work produced within the organisation and the quality of their lives, this study's findings support the notion of the HIWS adding to the company's competitive advantage while building a robust and resilient workforce. Hence, the study's results confirmed Gardner's (2022) argument that employee skill development offers a chance to build on the skills required to achieve an organisation's strategic objectives. Upskilling employees through providing opportunities for skill development is becoming increasingly important in the changing nature brought on by the current industrial revolution. Technological advancements, such as the adoption of artificial intelligence (AI), are now commonplace in organisations, therefore opportunities for skill development can support employees in the adoption of AI in the workplace (Jaiswal et al., 2022). These findings resonate with the HRM mutual gains perspective of benefits for both the employee and the organisation (Storey & Wright, 2023).

Focussing specifically on the PIRK dimension of knowledge, the authors identify the importance of knowledge on the study's job resources. Knowledge was found to have the strongest relationship with opportunities for skill development among all four of the PIRK dimensions (.73**). Research conducted by Rapp et al. (2006) on the impact of knowledge on 175 employees in the pharmaceutical field, showed that employees with less experience, yet high levels of knowledge about their organisation, were more inclined to work harder. In a more general sense, research conducted by Schieman & Plickert (2008) highlighted knowledge as power, stating that employees with higher levels of knowledge about their organisation have greater levels of schedule control, experience more challenging, interesting

and enriching work with greater economic rewards and security and hold a higher level of trust at work. These findings support the positive association the present research establishes in the relationship between knowledge and opportunities for skill development while highlighting the importance knowledge plays in the overall access to job resources.

Information sharing, one of the dimensions of the PIRK model, displayed the only significant and negative relationship with emotional job demands ($-.32^{**}$). Therefore, the current study's results suggest that an employee's exposure to workplace information produces a significant decrease in emotional job demands. The findings support scholars' work which suggests regular information sharing alleviates job demands by helping to develop a broader understanding of employee's role at work (Bartunek et al., 1999; Gioia & Chittipeddi, 1991; Maitlis & Christianson, 2014). Therefore, information sharing may facilitate the sensemaking process whereby employees will attribute meaning to their roles. A study conducted by Lang et al. (2007) supports these findings through its research, stating role clarity moderated the job demands-strain relationship among participants. Specifically, participants who experienced high levels of job demands reported lower levels of physical and psychological strain when role clarity was high. In the same vein, Bliese and Castro's (2000) empirical research found that role clarity moderated the impact of job demands on psychological distress. These studies help to confirm the positive association of information sharing on emotional job demands found in the present study.

Conversely, the PIRK model's dimensions of power, rewards and knowledge produced no significant relationship with employees' emotional job demands. The explanation could be that this is due to the study's sample population. The study's demographic profile showed that the sample population primarily consisted of intermediate-level employees, with a sense of empowerment not being a common feature of that specific work level. It is the author's strong belief that, if the study had been undertaken with a sample population of employees at an organisation's management level, a different result would have been produced due to the relevant power dynamics.

An explanation for the insignificant effect between the PIRK model's dimension of rewards and emotional job demands could lie in the previously established findings from the OECD's Better Life Index which revealed that the time NZ employees spend at their work is not appropriately rewarded (OECD, 2024). That is, in comparison to the rest of the world, the effort NZ employees exert into their work may be unbalanced in relation to the degree of

rewards and recognition they receive. To further explain why this may be the case for NZ employees, the author of this paper turned to NZ's unique business landscape, finding that 99% of NZ businesses are small to medium (OECD, 2020). Small and medium-sized enterprises (SMEs) are therefore seen as the backbone of the NZ economy (Tongsuksai et al., 2023). Due to the isolated nature of NZ, SMEs face challenges such as transporting goods, recruitment and retention which all relate to NZ's small population size and low average income (Ministry of Business and Innovation [MBIE], 2019). Hence, the study's findings which show no significance between employees' rewards and emotional job demands may be a result of the financial constraints NZ experiences throughout its business landscape.

In addition, the knowledge dimension of the PIRK model also produced an insignificant result with emotional job demands. It is the author's belief that this outcome was formed as a result of the subjectivity and choice that accompanies knowledge and training opportunities in the workplace. The study's sample showed that most participants had gained a Bachelor's (34.4%) or Master's degree (30%). The largest group of participants had also been working in their present job for only one year (20.4%). With this demographic information in mind, it can be argued that the study's sample population of highly educated and newly employed participants (i.e., most of the study's sample population) may not have felt it necessary to contribute to further expansion at this time. Scholars highlight that choosing to participate in an organisation's learning and development opportunities is largely linked to an individual's level of competence and motivation to build skills suited to an organisation's objectives (Macky & Boxall, 2008; Marescaux et al., 2013; Ryan & Deci, 2000). It is especially important to highlight the disconnect between employees' reward and effort expenditure mentioned above. Rewards and recognition in the workplace act as a source of intrinsic motivation for employees (Hansen et al., 2002). This relationship dates back to the early work of Maslow (1954) on human motivation². Hence, a lack of rewards may be considered a significant barrier toward further training and development among employees.

It is important, at this point, we recognise the synergistic effects of the HIWS. The literature suggests that the PIRK dimensions mutually reinforce each other, leading to a

² Maslow (1954) distinguished between two modes of human motivation: the "coping" mode and the "expressive" mode. According to Maslow, "coping behavior is characteristically more determined by relatively external determinants... [coping behavior] is an attempt to make up internal deficiencies by external satisfiers (p. 184). Conversely, the expressive mode states that people are "propelled by growth motivation rather than by deficiency motivation...they are dependent for their own development and continued growth (p. 214).

“system of inclusion” that creates a synergistic effect (Boxall & Macky, 2009; Kilroy et al., 2016). The previously stated empirical research of Riordan et al. (2005), argued that employees must experience elevated levels of all four dimensions of the PIRK model to be considered as working within a climate of high involvement. Additionally, the high involvement bundle is argued to be both unsuccessful and ineffective if dimensions are implemented in isolation of each other. Therefore, this could provide the rationale behind our study’s insignificant results in relation to emotional job demands. More specifically, the insignificant effects of the power, reward and knowledge dimensions on emotional job demands signify a large gap in the climate of high involvement. Thus, the foundation of the research between the HIWS, emotional job demands and employee outcomes could be shown to be futile before the investigation has even begun.

Through the results of the current study’s mediation analysis, partial mediation was found for opportunities for skill development and emotional job demands on the relationships between the HIWS and quality of work (QoW) and quality of life (QoL). However, the mediation analysis run on opportunities for skill development on the HIWS and quality of life (QoL) produced an insignificant result. An explanation for the insignificant result is that insufficient time may have been provided between Time 1 and Time 2 of the data collection to capture a true mediational effect specific to these variables. However, the significant partial mediation results provide insight into the role played by opportunities for skill development and emotional job demands in the relationship of the HIWS with employees’ work and personal outcomes.

The current study has answered scholars’ calls for leadership to be integrated into HRM research (Leroy et al., 2018). The main effect of considerate leadership on opportunities for skill development was shown to be significant; however, as prior evidence had suggested, a non-significant effect was produced with emotional job demands. The current study set out to explore whether considerate leadership moderated the relationship of the PIRK model’s four dimensions (i.e., power, information sharing, rewards and knowledge) of the HIWS with job demands and job resources. The findings indicated the absence of a significant moderating effect of considerate leadership in this relationship. A potential explanation could be that other variables served as moderators in this relationship. More specifically, it could be that alternative leadership styles moderated the relationship of the HIWS with job demands and job resources. An empowering leadership style, for instance,

aims to empower employees through participative decision making, showing a high degree of concern for individuals, sharing information and taking time to coach employees (Pearce & Sims, 2002; Srivastava et al., 2006). Access to these resources could lead to a decrease in job demands as employees feel connected and in control of their workload, meaning that they are confident within themselves that they are contributing meaningful work (Bakker et al., 2011).

Practical Implications

The study's findings show that opportunities for skill development is an important job resource, enhancing employees' work and personal outcomes. This adds to the existing literature which has argued for the important role played by opportunities for skill development in the overall effectiveness and efficiency of an organisation (Bakker & Demerouti, 2007; Schaufeli & Taris, 2014). In the current study, this links directly to the quality of work (QoW) and quality of life (QoL) of employees. Additionally, the findings show that the HIWS translates into increased opportunities for skill development and decreased emotional job demands for NZ employees. In other words, a greater amount of empowerment, information sharing, rewards and knowledge received by an employee in his/her workplace significantly alters his/her job resources in terms of opportunities for skill development and emotional job demands.

Adjusting a work system to incorporate the PIRK model's dimensions of power, information sharing, rewards and knowledge is a long and rigorous process. Lawler (1991) argued that, to perform such a task, an organisation must redesign virtually every feature within it. Therefore, before an organisation decides to embark on this large-scale change, it may want to consider the time and money required to implement the HIWS, including the formulation of a plan with a suitable time frame attached to each goal. It is advised that leaders provide adequate communication with their workforce prior to implementing the new changes, continuing this communication throughout the implementation and after all work system aspects have been implemented to ensure adequate feedback for improvements.

Furthermore, presenting the workforce with the ideas behind the organisational change needs to be done with consideration of the challenges these changes may cause employees. Cornescu and Adam (2016) made clear that resistance to change is a basic human characteristic as change involves an uncomfortable process. In addition, while implementing organisational changes, a loss of productivity may occur during this transition phase. To ensure employees are supported during this period, organisations may wish to utilise the

“self-design” method developed by Ledford and Mohrman (1993). This change strategy ensures employees are provided with a clear vision from top-level managers but are also left with the flexibility to make more specific changes to their own individual units. This allows the workforce to reshape the work system instead of relying on external experts or a work design model which may not capture the organisation’s complete vision.

Given the strong and positive association between the knowledge dimension of PIRK and job resources, organisations should focus on providing employees with more access to training opportunities. In prioritising training and development in the workplace, organisations can assist their employees in making more impactful decisions to benefit the organisation. This is especially important for lower-level employees as they can share tacit knowledge that only their position level may experience in the workplace. Guy (2003) states that the sense of freedom that accompanies the decision-making power can also be an important incentive and motivation for greater effort.

The information sharing dimension of PIRK was shown to have a negative and significant association with job demands in the present study. These findings were supported by scholars stating that an increase in information sharing alleviates emotional job demands due to the level of transparency employees receive regarding their role at work (Bartunek et al., 1999; Gioia & Chittipeddi, 1991; Maitlis & Christianson, 2014). Furthermore, information sharing facilitates the sensemaking process whereby employees can place meaning on their particular role. The results obtained from the present study support the argument for greater efforts to be placed on the increase of information sharing in organisations to assist in the reduction of emotional job demands.

Strengths, Limitations and Future Directions

This longitudinal study has produced robust conclusions which support employees’ quality of work (QoW) and quality of life (QoL). The study aimed to understand the extent to which job demands and job resources impact NZ employees’ quality of work (QoW) and quality of life (QoL). This objective was successfully achieved through the study’s findings which help to establish the importance of accessibility to opportunities for skill development in the workplace. In addition, the study provides evidence of how job demands and job resources can mediate the relationships of the HIWS with quality of work (QoW) and quality of life (QoL). These findings support the progression of the high involvement stream within

NZ organisations and will hopefully provide evidence to support organisational-level change with employee outcomes as the focus, sparking further research in this field in the future.

The study was designed and conducted to reduce the threat of common method bias (CMB) by ensuring the anonymity and privacy of all participants, by developing and utilising different Likert scales for various constructs and by creating two waves of data collection, although these strategies still did not fully eliminate the threat of CMB. Therefore, future research is recommended to ensure data collection is obtained not only at the subjective level but also from various sources of objective data (Podsakoff et al., 2003).

The current study chose opportunities for skill development as the job resource variable and emotional job demands as the job demand variable. Participants were aware that emotional job demands were the chosen job demand; however, the relationship of opportunities for skill development as a job resource was not specified. As mentioned above, common method bias (CMB) could influence the response outcomes (Podsakoff et al., 2003; Spector & Brannick, 2009); therefore, the study's sample may not have interpreted opportunities for skill development as the job resources variable that it was shaped to be throughout the study. Thus, the question remains as to what results would have been produced if participants were clearly informed of the job resource/job demand association possessed by each variable.

The findings on the relationships of job demands and job resources with employee outcomes of quality of work (QoW) and quality of life (QoL) may only be relevant in the NZ context as these relationships have not been tested in other contexts or other countries. Therefore, the current study could not confirm if similar findings would be found in other countries beyond NZ to validate the study's findings. Future research could replicate this study in other Westernised countries and with different employee outcomes to gradually provide a more comprehensive understanding of the relationship of job demands and job resources with employee outcomes within the HIWS in a Western context. In addition, other studies could replicate this study in contexts other than the Western culture to compare outcomes derived from these job demands and job resources. For example, the Asian culture may display a different level of job demands or job resources in Asian organisations (Ahmed et al., 2016), causing employees to rate their quality of work (QoW) and quality of life (QoL) at a different level. Future studies may wish to investigate the prevalence of the HIWS within organisations in different cultures to gain an understanding of how work systems vary across

cultures and to explore the effects of potentially dominating dimensions of the PIRK model in different cultures.

It is recommended that future research should adjust the time lag between Time 1 and Time 2 of data collection to assess potential differences in employees' outcomes. In Mäkikangas et al.'s (2016) systematic review, scholars wanted to further understand the development of employee wellbeing within multi-wave studies. Among their empirical investigation, a majority of the reviewed studies were termed as involving "relatively short time lags (i.e. 6 months to 1 year)" between data collection at Time 1 and Time 2, offering only a snapshot of wellbeing development (Mäkikangas et al., 2016, p. 18). Conversely, other scholars argue that time lags that are too long lead to an underestimation of causal effects (Dwyer, 1983). Dormann & Griffin (2015) encourage researchers to estimate optimal time lags through "shortitudinal" pilot studies over periods that are shorter than the intended longitudinal study. Scholars believe this process allows for a more effective detection of continuous change through which the independent variables exert an ongoing influence on the lagged dependent variables (Dormann & Griffin, 2015). Future studies wishing to conduct additional research on the present study's relationship may wish to adjust the time lag and incorporate the "shortitudinal" approach suggested by Dormann & Griffin (2015).

The current study chose to focus specifically on considerate leadership due to the limited prior literature conducted on this leadership style among NZ leaders. In the limited amount of prior research, considerate leadership has been shown to lead to subordinate satisfaction and higher performance (Greene, 1975). However, the current study showed that considerate leadership had no moderating effect; therefore, future research may wish to investigate the moderating effects of other leadership styles. For example, a leadership style aimed at empowering followers through participative decision making, such as the empathetic leadership style, may be more likely to produce a moderating effect among these key relationships (Tzouramani, 2017).

Chapter 6: Conclusion

This study is one of the first quantitative longitudinal design studies to be conducted on the relationship outcomes between the HIWS and employees in the NZ context. Only a limited amount of literature exists in this context; however, the need for additional studies aimed at supporting New Zealanders' quality of work (QoW) and quality of life (QoL) has existed for some time. Organisations are being asked to turn towards changes at an organisational-level to support the outcomes of their workforce, rather than changes at the individual-level, requiring them to focus more on adjusting the work system. The present study has highlighted the importance of the knowledge dimension of PIRK on opportunities for skill development among employees. In addition, the study suggests that organisations should increase their level of information sharing within the organisation as a means for harnessing and reducing the emotional job demands employee's experience. Future studies could investigate the individual dimensions of the PIRK model within the HIWS to gain a deeper understanding of the impacts of each aspect of the work system on employees' work and personal outcomes. In addition, it may be of interest to adjust the time lag between data collection at Time 1 and Time 2 and incorporate the "shortitudinal" approach suggested by Dormann & Griffin (2015) to investigate differences among the outcomes. These types of findings could support NZ organisations to build on the sustainability and resilience of their workforce, thus leading these organisations towards a stronger competitive advantage and retention of a high-quality workforce.

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Appendices

Appendix A: Ethics



31/07/2023

Dear: Tabitha Raley

Re: Low Risk Notification - 4000027810 - High-Performance Work Practices and Employee Wellbeing – Does Organisational Culture Make a Difference?

Thank you for your notification which you have assessed as Low Risk.

Your project has been recorded in our database for inclusion in the Annual Report of the Massey University Human Ethics Committee.

The low risk notification for this project is valid for a maximum of three years.

If situations subsequently occur which cause you to reconsider your ethical analysis, please contact a Research Ethics Administrator.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research."

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director - Ethics, telephone 06 3569099 ext 85271, email humanethics@massey.ac.nz."

Please note, if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to complete the application form again, answering "yes" to the publication question to provide more information for one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Professor Craig Johnson
Chair, Human Ethics Chairs' Committee and Director (Research Ethics)

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand T 06 951 6841; 06 95106840
E humanethics@massey.ac.nz; animalethics@massey.ac.nz; gtc@massey.ac.nz

Appendix B: Consent Information

Thank you for participating in this questionnaire. Your participation implies consent. You have the right to decline to answer any particular question.

I have read and understood the information sheet for this study and consent to collection of my responses.
(Please click on the 'Yes' choice if you wish to proceed.)

☐ Yes (1)

☐ No (2)

Appendix C: Participant Information Sheet

Information Sheet

We would really appreciate your contribution in this important research.

What is involved?

The research involves completing two surveys, three weeks apart from each other. The first survey will take approximately 15 minutes which you will complete today. In three weeks, you will be emailed an invitation to complete a second survey taking approximately 5 minutes. Your responses will contribute to research designed to find important information for this study. Upon completion of both surveys, you will be placed in a draw to win 1 of 30 vouchers, valued at \$20.

Please fill in your email at the bottom of this page and click on the next button which will take you to the first survey. Thank you for taking the time to complete this survey.

Who is doing this research?

My name is Tabitha and I am a Masters student in Psychology at Massey University being supervised by Dr Michelle Lee.

Who can participate?

You will need to be an employee residing in New Zealand to participate. If you agree to participate you will be asked to complete a survey questionnaire.

Your rights as a participant: You are under no obligation to accept this invitation. If you decide to participate, completion and submission of the questionnaire implies consent. You have the right to decline to answer any particular question. In order to protect your privacy, the survey is anonymous. Data resulting from this research will be securely stored at Massey University for 5 years, after which it will be destroyed.

The information you provide will be used in my Master's thesis and submitted for assessment and the findings may be published in scientific journals or presented at scientific conferences in New Zealand and overseas.

Many thanks, Tabitha Raley

Contact information

If you have any questions or queries regarding this project, please don't hesitate to contact the following:

Researcher

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T +64 9 414-0800 ext 43116 : W psychology.massey.ac.nz *This research project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.*

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact the Research Ethics Office, email humanethics@massey.ac.nz.

Appendix D: Screening Questions

Q.1 How old are you?

▼ Less than 18 (17) ... 100 (100)

Q.2

Display This Question:

If Country_Code != NZ

It appears that you may be located outside of New Zealand.
Can you confirm your location for the purposes of this survey?

- ☐ I normally work in Aotearoa New Zealand (1)
- ☐ I do not live in New Zealand (2)
- ☐ I am temporarily out of the country (3)

Q.3 Are you working full-time, part-time, or casually in New Zealand?

- ☐ Full-time (1)
- ☐ Part-time (2)
- ☐ Casually (3)
- ☐ Unemployed/Retired (4)

Appendix E: Demographic Questions

Q.1 What is your gender?

- ☐ Male (1)
- ☐ Female (2)
- ☐ Non-binary (3)
- ☐ Other (4) _____

Q.2 What is your current marital status?

- ☐ Married (1)
- ☐ Living with a partner (2)
- ☐ Widowed (3)
- ☐ Divorced/Separated (4)
- ☐ Never been married (5)

Q.3 Number of children

- ☐ Zero (0)
- ☐ One (1)
- ☐ Two (2)
- ☐ Three (3)
- ☐ Four (4)
- ☐ Five or more (5)

Q.4 Which ethnic group do you belong to? *(If your answer includes more than one ethnic group, please indicate which one you consider to be your primary ethnicity).*

- ☐ New Zealand European/ Pākehā (1)
- ☐ New Zealand Māori (2)
- ☐ Pacific Islander (3)
- ☐ Asian (4)
- ☐ Other (5) _____

Q.5 What is the highest education qualification you have achieved?

- ☐ School certificate or NCEA Level 1 (1)
- ☐ University Entrance, Bursary or NCEA level 3 (2)
- ☐ Tertiary certificate or diploma (not a degree) (3)
- ☐ Bachelor's degree (For example: BA, BSc) (4)
- ☐ Postgraduate (For example: Masters, PhD or postgraduate diploma) (5)

Q.6 What position level do you hold at your workplace?

- ☐ Entry-level (1)
- ☐ Intermediate (2)
- ☐ First-level management (3)
- ☐ Mid-level management (4)
- ☐ Top-level management (5)

Q.7 What is your annual income from this job (Including bonuses)?
(round up to nearest thousand)

Q.8 Do you work in the New Zealand public or private sector?

☐ Public (1)

☐ Private (2)

Q.9 How long have you worked in your current job?

☐ Years (1) _____

☐ Months (2) _____

Q.10 How long have you worked under your current supervisor/manager?

☐ Years (1) _____

Q.11 What gender is your immediate supervisor/manager?

☐ Male (1)

☐ Female (2)

☐ Non-binary (3)

☐ Other (4) _____

Appendix F: HIWS

High Involvement Work System

Provide one response to each statement by selecting the answer that relates most to you.

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
I have sufficient authority to fulfill my job responsibilities. (HIWS_1)	☐	☐	☐	☐	☐
I have enough input in deciding how to accomplish my work. (HIWS_2)	☐	☐	☐	☐	☐
I have enough freedom over how I do my job. (HIWS_3)	☐	☐	☐	☐	☐
Company goals and objectives are clearly communicated to employees. (HIWS_4)	☐	☐	☐	☐	☐
The channels for employee communication with top management are effective. (HIWS_5)	☐	☐	☐	☐	☐
Top management is adequately informed of the important issues in my department. (HIWS_6)	☐	☐	☐	☐	☐
Company policies and procedures are clearly communicated to employees. (HIWS_7)	☐	☐	☐	☐	☐
I often have to rely on the grapevine to get job-related information (reverse). (HIWS_8)	☐	☐	☐	☐	☐

Most of the time I receive sufficient notice of changes affecting my work group. (HIWS_9)	☐	☐	☐	☐	☐
I am satisfied with the amount of recognition I receive when I do a good job. (HIWS_10)	☐	☐	☐	☐	☐
Generally I feel this company rewards employees who make an extra effort (HIWS_11)	☐	☐	☐	☐	☐
There is a strong link between how well I perform my job and the likelihood of receiving a raise in pay/salary. (HIWS_12)	☐	☐	☐	☐	☐
There is a strong link between how well I perform my job and the likelihood of receiving high performance appraisal ratings. (HIWS_13)	☐	☐	☐	☐	☐
If I perform well, I am more likely to be promoted. (HIWS_14)	☐	☐	☐	☐	☐
I receive sufficient training to do my job. (HIWS_15)	☐	☐	☐	☐	☐
Education and training are integral parts of this company's culture. (HIWS_16)	☐	☐	☐	☐	☐
I have had sufficient/adequate job-related training. (HIWS_17)	☐	☐	☐	☐	☐

If I felt that I needed more job-related training, the company would provide it. (HIWS_18)	☐	☐	☐	☐	☐
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Appendix G: Considerate Leadership

Considerate leadership

Provide one response to each question by selecting the answer that relates most to your current leader.

	Never/hardly ever (1)	Seldom (2)	Sometimes (3)	Often (4)	Always (5)
My Leader spends time teaching and coaching. (CLS_1)	☐	☐	☐	☐	☐
My leader takes time to find out what I need. (CLS_2)	☐	☐	☐	☐	☐
My leader treats others as an individual rather than just as a member of a group. (CLS_3)	☐	☐	☐	☐	☐
My leader considers an individual as having different needs, abilities and aspirations from others. (CLS_4)	☐	☐	☐	☐	☐
My leader helps others to develop their strengths. (CLS_5)	☐	☐	☐	☐	☐

Appendix H: Quality of Work

Quality of Work

Please read the questions, assess your feelings **OVER THE LAST THREE WEEKS**.

Provide one response to each question by selecting the answer that relates most to you.

	Never/hardly ever (0)	Seldom (25)	Sometimes (50)	Often (75)	Always (100)
To what extent do you find it possible to perform your work tasks at a satisfactory quality? (COPSOQ_QW_1)	☐	☐	☐	☐	☐
Are you satisfied with the quality of the work performed at your workplace? (COPSOQ_QW_2)	☐	☐	☐	☐	☐
Does your workplace provide you with confidence to complete tasks at a satisfactory level? (COPSOQ_QW_3)	☐	☐	☐	☐	☐

Appendix I: Emotional Job Demands

Emotional Job Demands

Please read the questions, assess your feelings **OVER THE LAST THREE WEEKS**.

Provide one response to each question by selecting the answer that relates most to you.

	Never/hardly ever (0)	Seldom (25)	Sometimes (50)	Often (75)	Always (100)
Is your workload unevenly distributed so it piles up? (COPSOQ_WD_1)	☐	☐	☐	☐	☐
How often do you not have time to complete all your work tasks? (COPSOQ_WD_2)	☐	☐	☐	☐	☐
Do you get behind with your work? (COPSOQ_WD_3)	☐	☐	☐	☐	☐
Do you have to deal with other people's personal problems as part of your work? (COPSOQ_WD_4)	☐	☐	☐	☐	☐
Is your work emotionally demanding? (COPSOQ_WD_5)	☐	☐	☐	☐	☐

Appendix J: Opportunities for Skill Development

Opportunities for Skill Development

Please read the questions, assess your feelings **OVER THE LAST THREE WEEKS**.

Provide one response to each question by selecting the answer that relates most to you.

	Never/hardly ever (0)	Seldom (25)	Sometimes (50)	Often (75)	Always (100)
Do you have the possibility of learning new things through your work? (COPSOQ_PD_1)	☐	☐	☐	☐	☐
Can you use your skills or expertise in your work? (COPSOQ_PD_2)	☐	☐	☐	☐	☐
Does your work give you the opportunity to develop your skills? (COPSOQ_PD_3)	☐	☐	☐	☐	☐

Appendix K: Quality of Life

Quality of Life

Please read the question, assess your feelings **OVER THE LAST THREE WEEKS**
Provide one response to each question by selecting the answer that relates most to you.

Q.1 How would you rate your quality of life?

- ☐ Very poor (1)
- ☐ Poor (2)
- ☐ Neither poor nor good (3)
- ☐ Good (4)
- ☐ Very good (5)

WHOQOL

Please read the question, assess your feelings **OVER THE LAST THREE WEEKS**
Provide one response to each question by selecting the answer that relates most to you.

	Not at all (1)	A little (2)	A moderate amount (3)	Very much (4)	Extremely (5)
To what extent do you feel your life to be meaningful? (WHOQOL_2)	☐	☐	☐	☐	☐
How well are you able to concentrate? (WHOQOL_3)	☐	☐	☐	☐	☐
Do you have enough energy for everyday life? (WHOQOL_4)	☐	☐	☐	☐	☐
To what extent do you have the opportunity for leisure activities? (WHOQOL_5)	☐	☐	☐	☐	☐

Thank you for completing this portion of the survey.

When you click on the '**Submit**' button below, your set of answers will be recorded in the data file and you will then be transferred to a separate survey to record a name and contact email for the second short five-minute survey in three weeks' time. These contact details are held separately and will be used for the survey invitation in three weeks' time, or for the prize draw or sending you the results of my research.

You will also be able to enter the draw for 1 of 30 gift vouchers, valued at \$20 each, and/or request a summary of results when the research analysis is completed.

Thank you again for your participation,
Tabitha