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**Positive Organisational, Dispositional and Perception Factors to  
Engagement and Performance Outcomes: A multi-sample study**

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**Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

**Sarah McCallum** \_\_\_\_\_

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## **Abstract**

This thesis researched several positive psychological factors towards job outcomes, to provide a more complete and complex understanding of relationships or clusters of factors interacting within the workplace. This includes *organisational factors* (high-performance work systems, leadership communication, and perceived organisational support) *dispositional factors* (psychological capital and mindfulness) and *perception factors* (work-life balance and meaningful work). In turn, these factors were tested towards work engagement (vigor, dedication, and absorption) and work outcomes of job satisfaction, turnover intentions, job stress, and job performance. The motivation was to look at clusters of positive factors (organisation, disposition, and perceptions) that can be brought into the workplace in order to contribute to a positive working environment and culture that will make a difference in employees' lives while at work.

Within this thesis, I conducted two separate studies. Study one included pink- and white-collar workers (n=210) and a sample of blue-collar workers (n=133) from the same organisation. Study two consisted of n= 245, three distinct samples, with a total sample of 584 employees. Each sample has been separated into a distinct work type. In study one, my two samples were (1) white-collar employees and (2) blue-collar employees. Study two included n=245 workers, in 50 stores, and included store manager and Head Quarters data on performance. This sample was a more feminine or 'pink-collar' workforce from a retail setting.

I found that the clusters of positive factors (organisation, disposition, and perceptions) did link significantly to the outcomes examined, although not universally. The findings showed that different factors had different influences on the key study outcomes of work engagement and work outcomes, which did appear to link to the various samples and thus the type of work (e.g., blue-, pink-, or white-collar). Study two built on study one and included external store performance and sales data, which provided additional validity to the findings. Overall, the findings provide evidence to encourage businesses to focus on (and examine) their workplace cultures and environments, to better understand the opportunities that positive workplace factors can bring towards enhancing work engagement and work outcomes, including performance. It also highlights that even within a single organization, different effects might exist across different job types, encouraging research within an organisation.

## **Chapter 1. Introduction**

Positive psychology is defined as ‘the science of positive subjective experience, positive individual traits and positive institutions’ understanding and fostering the factors that allow individuals, communities and societies to flourish rather than to create misery (Seligman & Csikszentmihalyi, 2000). Positive psychology and the potential benefits from positivity, in general, have been formally recognised since the time of ancient Greek philosophy (e.g., the Pygmalion effect, people's moods, and expectations can influence other behaviours). Positive psychology calls us to turn our attention to what is right and good about people and focus our attention on developing or enhancing these aspects. Previously, psychology had a sole preoccupation with the negative and dysfunctional but focusing attention on positivity and relating factors will make a difference in our lives and the lives of others (Seligman & Csikszentmihalyi, 2000).

Seligman and Csikszentmihalyi (2000) questioned the *negative psychology* philosophy and discovered positive psychology can help us understand ourselves and others. Enabling humans to find a sense of inner peace allows individuals to accept their thoughts and enables humans to live with themselves and deal with their imaginings. Positive psychology research indicates to us all how to live better lives and focus on what is right in the world and helps us develop a sense of positivity for all the good things that are happening around us (Donaldson & Ko 2010). Positive psychology foundations and philosophy are becoming increasingly visible in workplaces.

Organisations find that encouraging positive psychology foundations within the workplace can be a useful strategy to set up the right environments and cultures to ensure that they are set up for connectedness, engagement and higher performance. Positive psychology encourages people to look at their positive traits, develop themselves, and ultimately to make a difference in their work, business, at home and in society.

Organisations that focus on developing their people through positive psychology theory have the potential to make a difference on a national and international scale. Workplaces that are asking how they can support their people to reach their full potential while they are working with them will potentially reap the rewards. The literature calls for an effort to refocus on the value of under-represented positive psychological resources in the field of organisational behaviour and human resource management (see Luthans, 2002). There are many complexities to creating a workplace environment where the primary objective is to foster positive attitudes, employee engagement and ultimately business success. Business leaders must take responsibility for developing and maintaining organisational environments and cultures that are as attractive and beneficial as possible.

Donaldson and Ko (2010) conducted a review of the current research that focuses on positive organisations between 2001 and 2009. Positive organisational scholarship is concerned with organisational processes that drive positive outcomes, such as perceived organisational support, high-performance work practices, and leadership communication. PsyCap, as defined in the introductory comments, has been researched under the umbrella

of positive organisational behaviour (Avey, Reichard, Luthans, & Mhatre, 2011; Donaldson & Ko, 2010). When individuals follow their calling, research shows they will increase their job satisfaction and complete work for the joy it brings rather than the expectation of material rewards (Seligman, 2011). Although 'positive psychology' factors influence a range of business outcomes, the literature suggests there is not one single solution or a specific 'bundle' of factors that make a difference across all employee types. This is especially true in the context of the present study where I am exploring both (a) professional, white-collar workers and (b) traditional, blue-collar factory worker/labourers (study one) and (c) pink-collar retail sector workers (study two).

In seeking to address this research gap, my research focuses on several organisational factors and employee attitudes and tests them across three distinct employee samples to provide a breadth of contexts to test hypothesised effects. The next chapter examines these factors in more depth in the literature review on each factor to provide greater understanding of these factors.

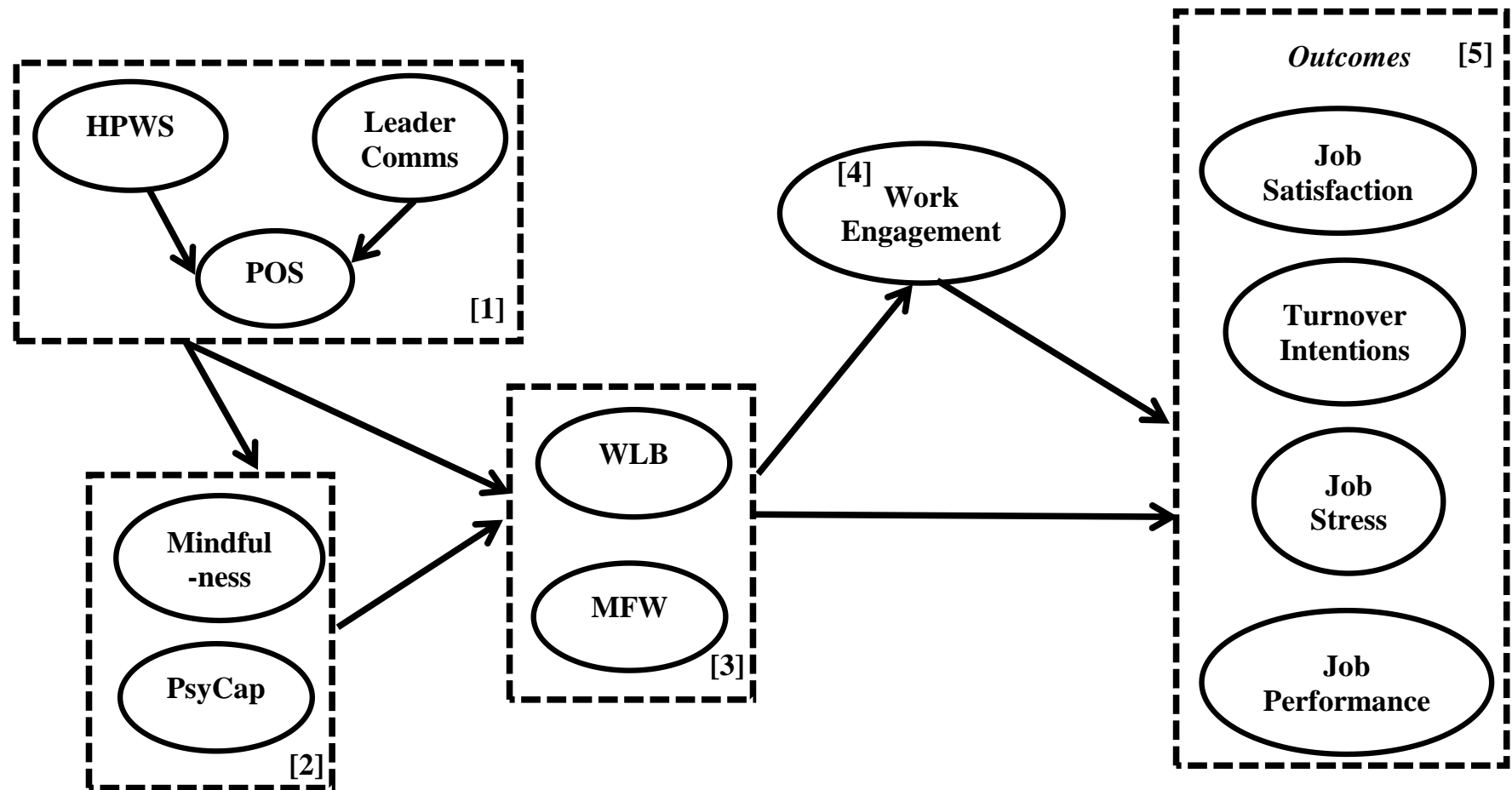
## **Chapter 2. Literature Review**

The factors in this study have been intentionally chosen for the power they have to positively influence organisational culture. Extensive literature argues that the following factors will make a difference to how people feel about themselves and their rationales for being at work, and enhance their job attitudes and behaviours, including increasing employee engagement and job performance. I explore five main categories of factors:

1. Organisational factors: specifically, human resource practices (high-performance work systems), leadership communication, and perceived organisational support.
2. Dispositional factors: explicitly drawing on the positive psychology literature, I examine psychological capital (PsyCap), made up of the components of hope, optimism, resilience and self-efficacy and mindfulness.
3. Work perceptions: specifically work-life balance, and meaningful work.
4. Work engagement.
5. Job outcomes: specifically, job satisfaction, turnover intentions, job stress, and job performance.

The overall study model is represented in **Figure 1**.

Figure 1. Overall Study Model



## **Block One: Organisational Factors**

### **High-Performance Work Systems (HPWS)**

Strategic human resource management (SHRM) practices are vital to improving organisational performance outcomes including employee engagement and performance. HRM practices when viewed systematically and designed appropriately can direct, guide and organise workforce behaviours. When these practices are grouped strategically, they are often called High-Performance Work Systems (HPWS). HPWS are defined as “systems of human resource (HR) practices designed to enhance employees’ skills, commitment, and productivity” (Datta, Guthrie & Wright, 2005, p. 135) and have also been defined as “the systematic use of mutually reinforcing human resource management (HRM) practices which have an emphasis on selecting the ‘right’ employees, developing their skills, organizing work so that employees have the discretion to solve problems creatively” (Harley, Allen, & Sargent, 2007, pp. 608-9).

HPWS are made up of a ‘bundle’ of HRM practices which form the HPWS structure. HPWS help shape employee behavioural processes and provide the structural support required to direct human activities towards the strategic goals of an organisation. Desired employee behaviour may not come about if the right mix of HPWS is absent from an organisation, and the present study explores the role of HPWS and its effect on engagement and ultimate job outcomes including job performance. Overall HPWS can improve organisational performance by increasing employee’s knowledge, skills and abilities (KSAs) by empowering employees to leverage their KSAs for



organisational benefit, and at the same time motivating them to do so (Combs, Liu, Hall & Ketchen, 2006). Regarding employee motivation and its relationship to HPWS, Huselid (1995) discusses in earlier research that HPWS can provide employees with enhanced KSAs, which ultimately increases “their motivation, reduces shirking and enhance retention of quality employees while encouraging nonperformers to leave the firm” (p. 635).

However, HPWS are not exclusively beneficial to performance. HRM practices showing recognition of employee contributions are positively related to perceived organisational support (POS) (Shore & Shore, 1995). Most employees believe that organisations have control over their human resource practices, and therefore HPWS may also relate strongly to POS as well as contributing to organisational climate perceptions (Kurtessis, Eisenberger, Ford, Buffardi & Steward, 2017). Thus, employees who perceive their organisation as investing in their employees through HPWS are likely to feel stronger about their organisation caring about their wellbeing, and thus enhancing POS.

Work climates (through HPWS) could also influence the psychological states of employees’ work motivation and job satisfaction (Bowen & Ostroff, 2004; Gelade & Ivery, 2003). HPWS will play a critical role in employee climate perceptions, as climate is widely defined as the perception of formal and informal organisational policies, practices and procedures. HPWS has the potential to send messages to employees and may be viewed as a symbolic or signalling function to make sense of the work situation as well as define personal psychological meaning (Bowen & Ostroff,

2004). Therefore, it is expected that those employees who perceive their organisational HPWS as high performing will also be engaged, satisfied and perform better.

HPWS have also been found to positively relate to other factors such as increased wellbeing amongst employees by lowering stress and fewer work-life balance issues (Boxall & Macky, 2014; Macky & Boxall, 2008). Boxall and Macky (2014) also note that HPWS may empower employees to exercise superior workplace control and participate in decision making through enhanced information, communication, and reward systems. HPWS has been found to also decrease the chances of job burnout (Bartram, Casimir, Djurkovic, Leggat, & Stanton, 2012; Fan, Cui, Zhang, Zhu, Härtel & Nyland, 2014). Bartram et al. (2012) suggested HPWS gave workers enough resources (time, control) to reduce and minimise the detrimental effects of their work, ultimately reducing job burnout, and finally other research has shown that HPWS are also linked to quality of life (Shen, Benson, & Huang, 2014).

Along with the many benefits above, HPWS is consistently linked to organisational performance. Organisational performance and its relationship to HPWS have been widely researched, and consistently show linkages between HPWS and many subsequent benefits, including greater job satisfaction, reduced turnover, productivity, positive performance outcomes and financial success (Bowen & Ostroff, 2004; Collins & Clark, 2003; Combs et al., 2006; Delaney & Huselid, 1996; Huselid, 1995; Huselid, Jackson & Schuler, 1997; Kehoe & Wright, 2010; Ketkar & Sett, 2009). A strong HPWS allows for a certain uniqueness and will encourage high performance from

employees, and characteristics include allowing an HPWS to stand out and engage with employees. A strong HPWS captures attention and arouses interest, visibility (practices are significant and readily accessible), understandability (lack of ambiguity and ease of comprehension), legitimacy of authority (belief that authority comes from the right place) and relevance (need to be able to see the system as relevant to an important goal) (Bowen & Ostroff, 2004).

Successful HPWS may include organisational design systems; defining what work is performed, how work will get accomplished, and how work will directly affect organisational performance (profit). HPWS can include opportunities for promotion, team-based systems, and employee participation systems. HRM practices should be able to create and encourage skill flexibility and behaviour flexibility, affecting employee performance, operational performance, and financial performance (Ketkar & Sett, 2009; Messersmith, Patel, Lepak & Williams, 2011). HPWS practices may include but are not exclusive to HRM practices on recruitment and selection, compensation and performance management systems, employee involvement, and employee training and development which all may influence organisational performance (Delaney & Huselid, 1996).

HPWS that protect employees from being mistreated may also motivate employees to work harder as they know they will be rewarded and treated fairly (Collins & Clark, 2003). A meta-analysis completed by Combs et al. (2004) found 92 research studies reported relevant statistics on the link between HPWS and organisational performance. Research also supports the

‘bundle’ effect (HRM practices linked together) having a stronger effect than individual HRM practices. HRM practices have been found to be more effective when working with other practices, rather against them or in isolation (Dyer & Reeves, 1995; Meuer 2016).

When examining the influence of HPWS, researchers typically argue for a bundle effect – that is HR practices in combination, and then typically extending the influence of HPWS on outcomes as working through various other factors – called the ‘black box’ of HRM systems approach (Boxall, Ang & Bartram 2011). The implementation of HRM systems and the organisational culture are often included as influencers of HRM systems that lead to business performance. This relationship is often referred to as the ‘black box’ of HRM, researchers try to contribute to the ‘black box’ of HRM literature, meaning, conceptualising the interlinkages between HR practices and organisational human, operational and financial outcomes (Boxall, et al., 2011; Chow, 2012; Ketkar & Sett, 2009).

While HPWS are likely to link to important employee outcomes such as turnover and engagement they may well also do so through other mechanisms such as the ‘black box,’ beneficial influences and interlinkages of HPWS are not necessarily always direct or obvious (Messersmith et al., 2011). The most important contribution to illuminating the black box is the flexibility of the HPWS as it develops and then the ability of the HPWS to go on to affect business performance and other employee outcomes (Ketkar & Sett, 2009). Flexibility of the HPWS is required and focuses on creating organisational adaptability to simultaneously create and demonstrate

alignment while supporting current and continuously evolving business strategy (Ketkar & Sett, 2009). HPWS includes line management practices, and these practices are required to fit with the current business strategy to improve the current organisational performance.

Another 'black box' factor may include the part HRM practitioners play in supporting the implementation of strategic HRM activities. Two sets of capabilities are essential: professional HRM capabilities and business-related capabilities (Huselid, 1995). Professional HRM capabilities refer to the delivery of traditional HRM practices; however, these alone are not enough, and business-related capabilities are also significant contributors to strategic HRM activities. HRM practitioners need to understand how unique business considerations create specific HRM requirements (Becker, Huselid, Pikus & Spratt, 1997). For line managers to formulate effective strategies to improve the KSAs flexibilities of employees, as well as employee performance, they require an improved understanding of HRM practices and the practices' linkage to human behaviour and performance (Ketkar & Sett, 2009; Messersmith et al., 2011).

The effectiveness of the HRM-performance relationship is driven by the quality of the HPWS, as well as the success of the implementation. That is, the mere presence of an HRM system may not necessarily result in high performance. Although there are many positive effects of high performing HRM systems, the literature also discusses limitations of HPWS that may exist. One criticism is that HPWS may lead to employees feeling they are required to compete and improve their performance continuously. Dependent

on the organisational climate, pressure on employees may exist with HPWS, competition between employees may bring psychological stress, ill health due to too much pressure, heightened demands, or other challenges (Oppenauer & Van De Voorde, 2016). HR practitioners need to beware multiple HPWS practices can reduce organisational performance if the practices are working against each other. For example, two practices within a HPWS may form a combination that takes away effectiveness of the system, i.e. individual incentives may be at a team effectiveness cost (Becker et al., 1997; Combs et al., 2006).

HPWS literature is limited when measuring and comparing systems from organisation to organisation. As systems and context vary from organisation to organisation further research is required to compare the performance of the HPWS accurately. Delaney and Huselid (1996) found typically studies have measured HRM systems in different ways, but if the HPWS are implemented with care and awareness of the 'big picture' including business capabilities positive outcomes can be expected. HRM content and process must be implemented in context with the organisational environment to make a difference to organisational performance. Further research needs to identify other critical contextual variables required to be able to match different HPWS to both context and business strategy (Combs et al., 2006). Although Huselid et al. (1997) support the argument that HRM is a potential source of competitive advantage (i.e., contributes to organisational performance), the authors go on to talk about the requirement for further

research in this field to understand the actual HRM practices that are required to fully realise this potential.

In summary, the literature highlights the potential advantage that HPWS can have on employee outcomes including engagement and performance. The research literature argues that HRM should be managed strategically and HPWS can help to do so. Through the research literature, HPWS consistently shows the linkages between HPWS and organisational performance and enables other factors (job satisfaction, work-life balance, engagement, meaningful work) that will also benefit the employee. HR practitioners will find strategic HPWS as a strong enabler to employee engagement and a viable contributor to supporting overall organisational strategy. Research contributes to the growing evidence of the positive effects strategic HRM can have on an organisation and supports encouraging HR practitioners to continuously improve the already established HPWS within their workplaces.

### **Leadership Communication**

Leadership occurs through the process of interaction with followers; communication plays a vital role in leadership task and actions, change management, organising, and organisational performance (Johansson, Miller & Hamrin, 2013). Leaders who can articulate and communicate a vision gain the confidence of their followers, with the two-way nature of communication (team meetings, group problem-solving sessions, supervisor briefings) enhancing leader-follower relationships more than any other communication

channels (Men, 2014). Leaders that create a strong sense of purpose and a collective mission will be able to motivate employees through communication of the organisational vision, setting high-performance expectations and creating a sense of emotional attachment to the organisation (Men, 2014). For example, Steve Jobs, founder and CEO of Apple Inc., was well known for his charismatic communication style and presentations (Galleo, 2011; Walker, 2011).

A leader's strategic vision plays an essential role in firms achieving greater organisational performance and success (Mayfield, Mayfield & Sharbrough, 2015). Communicating and implementing a vision has been found to be a leadership essential (Kirkpatrick & Locke, 1996). Using communication in a positive way, certain leadership styles can motivate employees by communicating a vision and high-performance expectations, creating a sense of emotional attachment between leader and followers (Men, 2014). In order to lead organisations towards achieving strategic objectives, it is important for CEOs and other leaders to be able to articulate the organisation's mission, vision, strategy, and goals. Leaders who can articulate and communicate an organisational vision within their teams have employees with a higher level of job satisfaction and work engagement (Men & Stacks, 2014).

Westley and Mintzberg (1989) discuss visionary leadership as a process with three specific steps: the vision (idea), communication (word), empowerment (action). Visionary leaders are also skilled at using language. Vision only comes alive when it is shared, but only at the right time with the



right audience can strategy become vision and leadership become visionary (Westley & Mintzberg, 1989 pg. 22). How leaders frame messages are vital in the implementation of organisational objectives and makes the difference between employees carrying out actions and tasks (performance) in a way that executes the vision or employees deciding to not take the vision seriously and lack belief in what the organisation wants to achieve. If employees do not believe in the message from their leaders, they will see the vision as just 'empty words' (Johansson et al., 2013). Thus, how a leader communicates – how and what – helps shape positive (or negative) behaviours and attitudes in their followers.

A leader's vision may affect the motivation of their followers and their followers' performance to the extent they can inspire, lead employees to set goals, and increase self-efficacy or motivate employees. Leadership communication can enhance successful change (strategy or vision implementation), as leaders are required to act as change agents with a focus on how they communicate and motivate employees (Gilley, Gilley, & McMillan, 2009). Supportive leadership (including supportive and effective communication) has been found to be linked to positive follower attitudes and self-confidence, as well as shaping feelings of self-efficacy which in turn positively influences employee performance (Banai & Reisel, 2007; Men & Stacks, 2014). A supportive leadership communication style works via employees seeing an alignment of both words and actions. Leadership traits such as openness, consistency, transparency, truthfulness, and accountability

have a direct effect on the effectiveness of leadership communication (Men & Stacks, 2014).

Leaders can influence the development and use of an organisation's strategic internal communication system. These internal communication systems can increase the quality of employee-organisation relationships (Vogelgesang, Leroy & Avolio, 2013; Men & Stacks, 2014), which aligns well with SET and POS discussed earlier. Technology and virtual communication such as social media channels might also be harnessed to promote employee participation and engagement, as well as linking communication to returns on investment and business outcomes and metrics (Men, 2014).

As with POS, front line supervisor communication is the key to employee engagement; immediate supervisors are critical to messages being believed and cascading down at all levels. Immediate supervisors are the preferred source of information and are seen to have more credibility than senior executives. This is because employees deal with their supervisors on a day-to-day basis and can query, complain and challenge their supervisors more than, say, the CEO who they might see once a year (Men & Stacks, 2014; Mishra, Boynton, & Mishra, 2014). Immediate managers are critical to sharing information to promote a sense of belonging and commitment among employees as well as employee understanding of business strategies.

Positive leadership communication can foster a trusting relationship between management and subordinates. Jo and Shim (2005) found that in the context of their study, 168 people from South Korea from airline agencies,

advertising agencies and local banks, positive communication is most likely to motivate subordinates to form two-way trusting relationships. These relationships are built when subordinates receive communication from their direct supervisor, helpful advice and sharing business news enhances a leader's relationship with their employees. The interaction between direct supervisors and employees is more important than more formal channels, and supervisors need to work to build relationships with their direct reports (Men & Stacks, 2014).

Leaders who communicate with followers daily and are preferred and regarded as a more credible source of information by employee leaders should encourage more open-door policies to foster an environment that shows a willingness to listen to employees and solicit their opinions and ideas via two-way communication (Men & Stacks, 2014). High-level executive leaders see internal communication is an imperative driver towards employee engagement (Mishra et al. 2014). Employee engagement has been found to be dependent on direct contact/communication with an employee's manager (Harmin, 2016; Mishra et al., 2014). Face-to-face communication is essential for employee awareness of strategic goals and depicts the leader's openness, honesty and ability to listen.

Virtual communication systems and media such as video messages or newsletters will not have the same impact as face-to-face communication with employees (Jo & Shim, 2005; Harmin, 2016). These systems may never replace the richness of close personal communication which is fundamental to building trusting relationships (Johansson et al., 2013). Leaders need to be

physically present and visible to their teams when they communicate to get the most benefits from their communication. When leaders are consistent in their words and actions, and are accountable for what they say and do, the quality employee-organisation relationship leads to a favourable internal reputation and employee engagement (Men & Stacks, 2014).

Vogelgesang et al. (2013) looked at how exactly leader integrity (words and actions) around communication affects employee work engagement and performance. The authors suggested that when a leader communicates with integrity and transparency, there will be a positive relationship with follower work engagement and performance. They found that followers that rated their leaders as showing transparent communication behaviours also rated themselves as more engaged at work. A leader's reputation of integrity is built when their words and actions are congruent. Open communication builds a leader's reputation for integrity and is seen as continuous open and transparent communication to give followers both stability and confidence in their leaders and therefore they become more engaged at work.

Argenti (2017) found similar themes come through in his research: transparency builds trust, two-way communication is a must, employees are more engaged if they are a part of the conversation. Johansson et al. (2013) developed a framework focusing on communicative leaders. This framework was used as foundation for the expected outcomes in their research as being role clarity for employees, commitment to the organisation, and higher engagement (Johansson et al. 2013). Hamrin (2016) also used this framework

when looking at leadership discourse. Focusing on the benefits of enhancing a leader's ability to engage employees in decision making means increased participation from the employee in the organisation's environment. Leadership communication also links back to increased POS which leads on to increased engagement. (Saks, 2006).

### **Perceived Organisational Support**

Perceived organisational support (POS) is an individual's developed global beliefs "concerning the extent to which they believe their organisation values their contributions and cares about their well-being" (Eisenberger, Huntington, Hutchinson & Sowa, 1986, p. 501). POS is usually associated with an organisational culture that values fairness, supervisor support, organisational rewards and favourable job conditions (Eisenberger et al., 1986). POS theory has developed from a range of social psychology theories, which include ideals such as social justice, social exchange, and fairness. These theories have origins within social psychology exchange ideologies, and more specifically include the norm of reciprocity (Gouldner, 1960) and social exchange theory (SET) (Blau, 1964). These theories are used to describe the motivation behind employee behaviours and the fundamentals of employee attitudes.

The basis of exchange relationships can be described concerning either social or economic principles. For example, people should/will help people (organisations) that have helped them (Gouldner, 1960). The norm of reciprocity is viewed as a moral obligation and a starting point for a mutual

exchange of help (Gouldner, 1960). Reciprocation is an aid that reinforces the giving by the originator (Blau, 1964). Individuals will seek to reciprocate in ways that their effort will be noticed by the originator (Gouldner, 1960; Blau, 1964). For example, if an employee perceives their employer as going the extra mile for them, they will reciprocate to highlight their commitment and obligation to the employer.

When both employee and employer apply the reciprocity norm to their relationship, favourable treatment from either party is then reciprocated to the other leading to beneficial outcomes for both parties (Rhoades & Eisenberger, 2002; Cropanzano & Mitchell, 2005). SET in everyday terms is like ‘you scratch my back, and I will scratch yours’. Thus, if an organisation treats the employee well, the employee will feel an obligation to reciprocate – try harder at work, arrive on time, and say positive things about their employer. However, if employees perceive their wellbeing is of no concern to the organisation, they are likely to put less effort into their jobs, complain, and seek other opportunities outside the organisation.

POS has also been found to be a strong influence on other factors such as absenteeism and turnover intentions (Riggle, Edmondson & Hansen, 2009). When there is a high level of POS within an organisation, positive outcomes such as employee job satisfaction, positive mood, commitment, and performance (profit) are also often present (Rhoades & Eisenberger, 2002). POS has been found to increase the performance of standard job activities and actions favourable to the organisation, implying that employees will go beyond their assigned responsibilities (Rhoades & Eisenberger, 2002). Thus,

POS taps into the extra effort that employees may give to an organisation. The stronger the individual's exchange ideology, the higher an individual's performance (Eisenberger et al., 1986; Cropanzano & Mitchell, 2005).

Consequently, employee's beliefs may include how the organisation feels about the employee and how they feel the organisation is committed to them. The greater the employee's attachment to the organisation the more significant the return for the organisation. Ideally, employees may incorporate the organisational identity as part of their own, creating a sense of attachment to the organisation and hopefully develop a positive emotional bond to the organisation. This attachment would also hopefully increase employee effort (including attendance at work and theoretically engagement and performance) and contribute towards the direction of the business in meeting the organisational goals (Eisenberger et al., 1986; Eisenberger et al., 2002).

To increase and develop employee work engagement, leaders need to develop their understanding of the importance of an essential social exchange (leadership communication). There is a strong connection between POS and employee attitudes and behaviours, including a substantial positive impact on organisational commitment and job satisfaction, weak to moderate positive effect on employee performance, and a substantial adverse effect on the employee's intent to leave (Kurtessis et al., 2017). POS can be influenced by the organisations treatment of employees and could influence the employees' interpretation of the motives behind the organisational actions. Employees may perceive organisational support as the organisation's readiness to reward increased work effort as well as meet the employee's need for praise and

approval (Eisenberger, Stinglhamber, Vandenberghe, Sucharski & Rhoades, 2002; Kossek, Pichler, Bodner & Hammer, 2011).

Investment into such initiatives as programmes that address employees' needs and concerns (e.g. surveys, focus groups, and suggestion programmes) and demonstrate caring and support (e.g., flexible work arrangements, leadership communication) may cause employees to reciprocate with higher levels of engagement (Riggle et al., 2009; Saks, 2006). As such, high-performance work systems (HPWS) can also influence employee's perceptions. HPWS may include reward and recognition, health and safety procedures, performance management, disciplinary procedures, providing support, and making work meaningful and interesting (Eisenberger et al., 1986; Kurtessis et al., 2017; Riggle et al., 2009). Liao, Toya, Lepak, and Hong (2009) agree that the HPWS may motivate employees and see HPWS as the opportunity for a favourable social exchange with the organisation, enhancing POS for employees.

Indeed, this relationship may be reciprocal. Research has discovered, in a service industry, POS may be a potential path by which HPWS influences employee performance. Liao et al. (2009) found that from the employee perspective, HPWS had a direct positive impact on POS, which in turn related to general and knowledge-intensive service performance. Indeed, POS fully mediated the relationship between employee ratings of HPWS and general service performance (Liao et al., 2009).

POS can increase engagement by the receipt of praise and approval (leadership communication) (Saks, 2006). Employees will choose to engage



themselves to varying degrees and in response to the resources they receive from their organisation (Saks, 2006). When employees receive resources from their organisation, they feel obliged to repay the organisation with higher levels of engagement (Saks, 2006). Both Saks (2006) and Sulea, Virga, Maricutoiu, Schaufeli, Dumitru, and Sava (2012) found that POS predicted job and organisation engagement, with employees who perceived higher organisational support being more likely to reciprocate with greater levels of engagement in their job and the organisation. Authors argue that organisations that wish to improve engagement should focus on increasing employees' perceptions of the support they receive from their organisation.

## **Block Two: Dispositional Factors**

### **Psychological Capital**

It has been suggested that positive attitudes in today's business environments have added more value than has realised in the past (Luthans et al., 2007). Research shows there is value in encouraging and teaching our employees how to build on their positive emotions, and in turn employers will be rewarded with achieving higher employee engagement and performance. The impact of positive employee behaviours and attitudes can transform into tangible, measurable outcomes that directly impact businesses. Evidence shows that positively orientated human traits may have a positive influence on performance and other desired outcomes such as employee retention, absenteeism, leadership outcomes, well-being, customer satisfaction, business excellence and organisational change (Hsu, Wang, Chen &

Dahlgaard-Park, 2014; Luthans, Avolio, Avey & Norma, 2007; Luthans & Youssef, 2007; Youssef-Morgan & Luthans, 2014). Psychological capital (PsyCap) is a construct that encompasses positive psychology foundations and is shown through an individual's attitudes and behaviours, how they interpret and deal with the external world.

PsyCap is a construct made up of a combination of four psychological resources: hope, optimism, self-efficacy, and resilience. Snyder, Irving, and Anderson (1991) define hope as “a positive motivational *state* based on an interactively (a) derived sense of successfulness (b) agency (goal-directed energy) and (c) pathways (planning to meet goals)” (p. 287). Bandura (1986, 1997) defined *self-efficacy* as one's belief in one's ability to succeed in specific situations or accomplish a task. Stajkovic and Luthans (1998) defined self-efficacy as an “individual's belief in their abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context” (p.66).

Luthans (2002) defined *resilience* as the “positive psychological capacity to rebound, to ‘bounce back’ from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility” (p. 702). It is about adapting and bouncing back from an adverse event (Masten & Reed, 2002; Masten, 2001), which may include work pressure or stress (Luthans, 2002). Optimism is defined as “people expect good things to happen to them” (Snyder & Lopez, 2009, p. 231). Optimists consider adverse events as temporary and likely to get better.

A meta-analysis which focused on the impact of PsyCap on employee attitudes, behaviours and performance (51 samples, a total of 12,567 employees) found PsyCap to have a significant relationship with desirable employee attitudes and behaviours (job satisfaction, organisational commitment, psychological well-being, citizenship) as well as a negative relationship towards undesirable employee behaviours (Avey et al., 2011). The researchers suggest that PsyCap is positively related to desirable employee attitudes and negatively related to undesirable employee attitudes. An employee higher in PsyCap expects good things to happen at work (optimism), they believe they create their success (efficacy and hope) and are more likely to overcome setbacks (resilience) when compared to those lower in PsyCap (Avey et al., 2011).

Employees who are more hopeful, optimistic, efficacious and resilient are more likely to be able to weather the storm (at work and home) than those employees that have lower PsyCap (Luthans et al., 2007). Employees higher in PsyCap are likely to be more committed to the organisation, as the organisation theoretically fulfils their needs for efficacy and accomplishment, and the employee is then more likely to embed themselves within the organisation and be more enthusiastic about their work (engagement). Those employees higher in PsyCap are less likely to have turnover intentions (Avey et al., 2011) because employees can manage work stress and have higher job satisfaction generally. Those individuals higher in PsyCap are likely to be energised and put forth effort that manifests in higher performance over extended periods (Avey et al., 2011).

Research shows that job performance is highest when employees report high scores on both psychological well-being and job satisfaction (Luthans, Avey, Clapp-Smith & Li, 2008; Luthans & Yossef, 2007). There was significant evidence in a meta-analysis that focused on PsyCap, showing that PsyCap relates directly to employee performance, with a slightly stronger effect size for the studies in the service sector rather than manufacturing, manufacturing  $r = .29$  (LLCI = .24, ULCI = .35), service  $r = .38$  (LLCI = .34, ULCI = .43) suggesting that PsyCap may be more critical or less critically dependent on the role or work. PsyCap may have a stronger impact on service work which relies on social interactions that require the expression of positive emotion.

Positive emotion is also an outcome enhanced for those employees with higher levels of PsyCap. In the meta-analysis, there is a solid argument that PsyCap has a significant and robust relationship with employee performance. Many studies have found strong evidence for the relationship between PsyCap and performance. For example, in a study of Chinese workers, Luthans, Avolio, Walumbwa, and Li (2005) found evidence that each of the PsyCap states were positively associated with performance outcomes of Chinese factory workers. In a follow-up investigation of the role that PsyCap plays as an influencer of performance, Luthans et al. (2008) confirmed that PsyCap does predict employee performance. The authors go on to posit that hiring employees that are either predisposed or higher in PsyCap could enhance organisational performance over time as well as the competitive advantage. Also, Luthans and colleagues note that PsyCap is a

developmental construct, which means organisations can enhance their workers' PsyCap through initiatives and training, and this is discussed in depth below.

A study conducted by Thompson, Lemmon, and Walter (2015) specifically looked at how enhanced PsyCap can improve employee engagement. Using the results of five case studies they argue that leaders who are serious about increasing engagement should use PsyCap to directly influence the emotional ties of employees to the organisation. A study completed by Bonner (2016) which focuses on nurse's PsyCap and work engagement, found nurses with high levels of PsyCap reported having higher levels of engagement, and those with higher PsyCap and engagement were more likely to have positive work outcomes.

Similarly, the positive relationship between PsyCap and work engagement has been confirmed in a study involving 312 hotel workers in Korea. This study showed employee work engagement as one of the positive outcomes of PsyCap and gave evidence that the positive emotions created by the link between PsyCap and work engagement are the foundation of the strong relationship between the two (Paek, Schuckert, Kim, & Lee 2015). In a South African study that used a cross-sectional survey of 106 call centre workers, found significant positive relationships between PsyCap, work engagement and organisational commitment (Simons & Buitendach, 2013). Additionally, in a study completed in a manufacturing environment showed another strong relationship between PsyCap and work engagement (Luthans, Avolio, Walumbwa & Li, 2005). Overall, there is strong evidence that

employees with high PsyCap are more likely to report greater work engagement.

PsyCap has been found to have a positive relationship to other constructs including leadership, managing change, stress, job satisfaction, and further research is needed on work-life balance and meaningful work. A study completed by Roche, Haar, and Luthans (2014) found that positive PsyCap may be one of the psychological strengths that leaders can draw from in trying times. PsyCap also plays a beneficial role in combating adverse psychological outcomes. Higher level leaders were found to have higher levels of PsyCap when compared to lower level managers or entrepreneurs, and those individuals with higher PsyCap were found to report lower anxiety and depression, lower negative affect, and lower burnout.

Positive PsyCap and emotions are essential in managing organisational change and combating negative emotions or reactions to change (Avey, Wernsing & Luthans, 2008). Positive attitudes relate to positive engagement, an awareness of employee's thoughts and feelings interacts with PsyCap producing positive emotions. The outcomes of interest for this research are engagement, job satisfaction, turnover, job stress and job performance.

Research shows that PsyCap is a trait that can be developed within organisations and businesses can work with their people to develop PsyCap attitudes and behaviours. Smart organisations will look at hiring those with higher PsyCap tendencies, rather than continue to develop these positive tendencies once employed (Luthans et al., 2008). PsyCap may bring a new

perspective to the way organisations recruit and manage employees' training and development, therefore directly affecting organisational performance and competitive advantage. PsyCap has emerged as an essential construct in Human Resource development, building such positive traits within individuals would give them the tools to 'look after' their issues and problems within their work day and life issues (Luthans, 2002; Luthans, Avey, Avolio & Peterson, 2010). That is, through training and intervention, positive psychology constructs can be improved and developed.

An initial study using micro interventions to develop PsyCap has been completed and successfully showed that PsyCap can be enhanced (Luthans, Avey, Avolio, Norman, & Combs, 2006). Following these micro-interventions, Luthans, Avey, and Patera (2008) undertook a study that looked at web-based training as an intervention to develop PsyCap. The results showed that the treatment group did experience a significant increase in their PsyCap, and this was retained months after the training. This suggests that indeed, PsyCap is developmental, and can be enhanced. Again, similar evidence was found in a study by Luthans, Avey, Avolio, and Peterson, (2010) who found a PsyCap intervention was able to enhance an individual's PsyCap and then went on to have a positive impact on individual job performance. The potential to develop and enhance PsyCap makes it a particularly valuable positive psychological resource for organisations to better understand.

## **Mindfulness**

Mindfulness in health and well-being circles has been credited for helping people become more aware of their thoughts and perceptions at any given time and therefore has the potential ability to increase an individual's control over emotions and feelings. However, mindfulness has yet to gain full mainstream acceptance in an organisational context for its ability to increase employee outcomes like contentment, commitment, and engagement. Mindfulness has been defined as “enhanced attention to and awareness of current experiences or present reality” (Brown & Ryan, 2003, p. 823). Mindfulness has been tied to positive psychological and physiological well-being (Baer, 2003; Avey et al., 2008; Roche et al., 2014) and claims to provide greater non-judgmental awareness of one's internal and external environment (Avey et al., 2008).

It is for these reasons that it has become so popular in the health and well-being space. There is an emerging literature of how mindfulness can improve organisational performance and employee engagement (King & Haar, 2017). However further research is required to understand to what extent workplace mindfulness relates to work outcomes such as engagement and performance. This is especially true in the context of the present study where I am exploring both (a) professional, white-collar workers, (b) traditional, blue-collar factory worker/labourers and (c) pink-collar retail/service sector workers. Thus, I can explore whether these effects hold across occupational groups, especially blue-collar workers where it may be



expected that the more alternative approaches like mindfulness to be less apparent.

Mindfulness is a natural characteristic, recognising that individuals differ in their ability to be aware and sustain attention to what is occurring in the present, and mindful capacity varies within individuals as it is increased or decreased by various factors (Brown & Ryan, 2003). Mindfulness may also contribute to wellbeing and happiness in a direct way (Roche, Haar & Luthans, 2014) as mindfulness creates the ability to disengage individuals from automatic thoughts, unhealthy habits, and behaviours. For example, a highly mindful individual will be focused and aware of their work and what is going on around them, while a low mindfulness individual might dream and drift away, failing to recognise changes and events occurring around them.

Mindfulness has been shown to be effective in helping individuals to cope with their clinical and non-clinical problems, including coping with stress or conditions of other severe disorders. There are many health-based studies that claim the benefits of mindfulness in stress reduction and increasing well-being (Grossman, Niemann, Schmidt & Walach, 2004; Chiesa & Serretti, 2009; Flook, Goldberg, Pinger, Bonus & Davidson, 2013; Poulin, Mackenzie, Soloway & Karayolas, 2008; Bergen-Cico, Possemato, Cheon, 2013; Brown, Kasser, Ryan, Linley & Orzech, 2009; Weinstein, Brown, & Ryan, 2009; Gregoire, & Lachance, 2015). For example, the Bergen-Cico et al. (2013) study found evidence that after taking part in a

mindfulness stress reduction programme, 119 participants reported that they had significant improvements in their psychological health.

As well, emerging studies that contradict the positive benefits of mindfulness and claim an over-reporting of positive results in the mental health area (Coronado-Montoya, Levis, Kwakkenbos, Steele, Turner & Tombs, 2016). In this study it was argued that the benefits of mindfulness have been 'over-rated'. Coronado-Montoya et al. (2016) discovered that there had been an over-reporting of positive results in randomised controlled trials of mindfulness-based mental health interventions. The authors posit that mindfulness studies with significant results may overstate what would occur in practice. This provides further encouragement for workplace studies of mindfulness in the 'natural setting' of an individual's workplace and job. Hence, it is crucial for studies of mindfulness to determine whether its effects are consistently significant and positive or, perhaps, accounted for by other factors (in my thesis, PsyCap), to provide more precise insights into the role and benefit of mindfulness amongst employees.

The literature shows mindfulness as substantially impacting participant's lives and proving beneficial to employee's well-being, specifically health care professionals in the workplace (Shapiro, Astin, Bishop & Cordova, 2005; Poulin et al., 2008). Participants experienced greater relaxation and felt more satisfied with their lives after the mindfulness intervention. The researchers go on to say that mindfulness is not merely a quick fix for a stressful day, it involves learning skills that lead to renewable and sustainable health and wellbeing through a greater self-awareness of the

interplay between the mind and the body. Flook et al. (2013) found that teachers experienced a heightened feeling of self-compassion and a reduction in psychological symptoms relating to burnout and increased useful teaching behaviour (performance). Thus, mindfulness appears to have a role to play in the psychological wellbeing of workers.

Dane and Brummel (2013) found support for a positive relationship between workplace mindfulness and job performance. Collecting survey data from workers and managers in the American restaurant industry; these employees are required to pay attention to their environment, customers, targets and other details. At the same time, these employees must make decisions which can make or break customer's experiences within the restaurant. The researchers also completed face-to-face interviews with employees to help develop a measure of mindfulness. The researchers measured mindfulness, engagement and job performance. They found in this setting mindfulness is positively related to job performance, and negatively related to turnover intentions. Interestingly though, in this study, none of the engagement dimensions related significantly to job performance. However, one dimension of engagement, dedication, did also relate negatively to turnover intentions, and the authors posit that the strength of the link between work engagement and work performance may depend on how closely tied the activities prompting engagement are to work performance itself (Dane & Brummel, 2013).

Dane (2011) also found that mindfulness may contribute to task performance in a variety of ways but goes on to discuss that it would be hasty

to say that mindfulness was always beneficial without a cost, as the overall impact of mindfulness on task performance depends on both the environment and the employee's ability to perform the task. Mindfulness is a state of consciousness that may help or hinder job performance, depending on conditions. Glomb, Duffy, Bono, and Yang (2011) also found mindfulness to be a combination of processes that are most likely to affect task performance but depends on the type of task and the environment as to whether mindfulness will increase task performance. Those tasks involving interpersonal interactions may benefit from mindfulness support, perhaps those occupations with high emotional content as mindfulness helps with decreased rumination and improved effective regulation, so mindfulness may help with improved performance.

Gregoire and Lachance (2015) found a mindfulness intervention reduced psychological distress for call centre workers in financial institutions. Van Gordan, Shonin, Zangeneh and Griffiths (2014) looked through current evidence and found mindfulness to increase both mental health and job performance. Leroy, Anseel, Dimitrova, & Sels (2013) also found evidence in their research that mindfulness contributes to work engagement and authentic functioning in individuals. Although mindfulness can be expected to be beneficial to many job types, the role it plays in performance largely depends on the task and contextual features of the work (Glomb et al., 2011).

Although the research above supports the use of mindfulness within organisations, there is still further research needed to understand how mindfulness can further benefit employees and organisations specifically

regarding engagement and performance. Research has shown that mindfulness may be useful as it helps people deal with organisational issues, either by their being more thoughtful about the changes they implement – perhaps through being aware quicker and pondering the potential effects – and being more considerate in the way they do their work. Mindfulness gives employees the increased ability to cope with changes placed upon them. Mindfulness may also be helpful to people as they will be able to cope with existing situations within the organisation in a more effective way. Mindfulness works by helping employees be present in the moment and enables them to think clearly about their actions and the related outcomes. Mindfulness is a tool that employees can use to connect with awareness to their intuition and feelings to understand themselves and control their external action/behaviours.

### **Block Three: Work Perceptions**

#### **Meaningful Work**

Maynard, Gilson, and Mathieu (2012) defined meaningful work as “the fit between one's work goals and beliefs or values; in other words, it is an individual's extent of caring about a task” (p. 1235). The perceived ‘fit’ between an individual's self-concept and their role and experience of the role will lead to an experience of meaning in work (Kahn, 1990; May et al., 2004; Olivier & Rothman, 2007). Meaningful work has been found to relate positively to employee engagement (Shuck, Reio, Wollard, & Fairlie, 2011; May, Gilson & Harter, 2004), job performance (Scroggins, 2008), motivation and personal growth (May et al., 2004).

When an employee considers their work a calling, and of importance, this will contribute to more significant work satisfaction (Bunderson & Thompson, 2009; Wrzesniewski, Mccaluley, Rozin & Schwartz, 1997). Work that serves others and makes a difference can help to make work feel meaningful (Lips-Wiersma & Morris, 2009). Work relationships can also contribute to meaningful work (Harpaz & Fu, 2002).

Meaningful work is defined as being able to see or comprehend the relationship of ones' contribution to a larger purpose (Sarros, Tanewski, Winter, Santora, & Densten, 2002). For example, a teacher might see their role of teaching ten-year-old students as 'shaping the future of society,' thus they can see a much broader focus of their work beyond their immediate tasks. Another common example is nursing, where a nurse might see their work as 'helping other people'. When people feel that little is asked or expected of them to give or receive in work role performances, they may feel that their work is meaningless. Meaningfulness is a feeling that one is receiving a return on their investments of physical, cognitive or emotional energy (Kahn, 1990). May et al. (2004) explored the workplace dimensions that influence psychological meaningfulness including job enrichment, work role fit and co-worker relations. They go on to define meaningfulness within the workplace as defined by an individual's standards.

Specific to my thesis study, meaningfulness is one of the strongest predictors of engagement (May et al., 2004). Shuck et al. (2011) defined meaningful work as "job and other workplace characteristics that facilitate the attainment or maintenance of one or more dimensions of meaning" (p.

510), while Spreitzer (1995) defined it as “meaning is the value of a work goal or purpose, judged in relation to an individual's own ideals or standards. Meaning involves a fit between the requirements of a work role and beliefs, values, and behaviours” (p. 1443). In a pioneering study by Morse and Wiess (1955), meaningful work was found to be a part of the reason employees would still turn up for work even if they had inherited enough money to live comfortably. A study completed with 400 men (only) found that over 80% of respondents said their primary motivation was to be occupied or interested (Morse & Wiess, 1955).

To the typical working-class man in the 1950s, work meant having a purpose, gaining a sense of accomplishment and being able to express himself. As such, work gives an individual a meaningful (which is subjective) and socially integrating activity. Kahn (1990) also looked at the link between personal engagement and meaningfulness and found that those employees who felt more engaged also found increased levels of meaningfulness than those who were disengaged.

US soldiers deployed to Bosnia were engaged in meaningful work and if the soldiers found their work to be meaningful while deployed this increased their personal experience as well as their capacity to deal with personal stress (Britt, Adler & Bartone, 2001). In a qualitative study looking at the role of a zookeeper, Buderson and Thompson (2009) found zookeepers with a greater sense of calling (found their work meaningful) were also willing to sacrifice money, time and physical comfort or wellbeing for their work. Which also meant they were more vulnerable to exploitation by

management, suggesting meaningful work or following a 'calling' is, in fact, a 'double-edged sword'. Meaningful work is also referred to by Karakas (2010) who describes evidence that shows that a broader sense of meaning and purpose for employees is essential and enables employees to perform better and to be more productive and creative at work.

Leadership may have a significant impact on meaningfulness for an employee. Arnold, Turner, Barling, Kelloway, and McKee (2007) discuss transformational leaders as the catalyst for employees to find their work more meaningful, the way transformational leaders present and aspire to increase followers' motivation can mean that followers will find their work more meaningful. Their study found transformational leaders had a positive impact on followers' psychological well-being and determined this link comes from followers perceiving their work as meaningful. Tummers and Knies (2013) also speak about how leaders' influence and impact followers' feelings about their work and see leadership as being able to make a positive or negative difference in followers' work lives, depending on the leadership style (positive or negative). Tummers and Knies (2013) also agree that meaningful work is an essential mediator between leadership and work outcomes. When leaders and followers have a good relationship, this positively affects employees' perceptions of making a difference in their work and seeing the relationship of their work to the bigger picture of the organisation.

Lips-Wiersma, Wright, and Dik (2016) looked specifically at meaningful work and the differences between blue, pink and white-collar occupations (a similar approach undertaken in this thesis) and found that



white-collar workers place more importance on living up to their potential and serving others than the blue and pink-collar workers. The researchers discuss adaptive preferences where individuals have responded to the restricted opportunities presented to them in their lives which has directed them to their current profession. However, the results show that regardless of occupational status workers want to feel as though their work matters to their inner selves. However, the extent that workers experience their work to be meaningful does appear to vary across occupations.

Hence, organisations that can enhance the meaning of work for the blue and pink-collar workers may end up being extremely valuable in enhancing work engagement, for example, allowing employees to use their strengths while at work, expressing full potential and developing inner self dimensions. Connecting individuals to the beneficiaries of their work satisfies serving another dimension. Crafting, relationships, and meaning of jobs are all promising (Lips-Wiersma et al., 2016).

### **Work-Life Balance**

Haar (2013) defines work-life balance as “the extent to which an individual is able to adequately manage the multiple roles in their life, including work, family and other major responsibilities” (p. 3308). Despite work-life balance being a common term, research specifically providing empirical evidence of the benefits of work-life balance has only recently begun to emerge. Research by Haar (2013) showed that work-life balance is positively related to job outcomes like job satisfaction, and beneficial to wellbeing outcomes

including life satisfaction and mental health outcomes like anxiety and depression. These effects have been replicated across multiple samples and countries (e.g. Haar et al., 2014).

Haar (2013) offered role balance theory for understanding how work–life balance has a positive influence, stating, “attaining a level of self-perceived balance between these roles...will enable employees to attain additional benefits from their roles through the successful management of these roles” (p. 3308). Consequently, Haar (2013) suggested that role balance theory means that achieving greater work-life balance perceptions can enable employees to gain significant benefits from successfully managing work and family roles.

Overall, there is a strong understanding in the literature that a person-centric approach is key to understanding work-life balance. Hence, it is capturing an employee’s own perception of how they manage the various roles in their life that is vital (Haar, 2013; Haar et al., 2014; Greenhaus & Allen, 2011). As such, when examining work-life balance, it is important to capture employees own subjective appraisal of their work and non-work roles, and ultimately, greater harmony between these roles is ultimately what work-life balance captures. Importantly, this harmony or balance is not a specific 50/50 percent breakdown between work and life roles (Haar, 2013), but rather how an individual assesses their achievement of balancing work and non-work roles.

The role balance theory approach aligns with Barnett and Hyde (2001), who suggests work-life balance is about the combination of roles

being balanced rather than the exact number of roles per se. Under role balance theory (Haar, 2013), work-life balance captures an employee's ability to manage all their roles, and not the number of roles engaged with or the time spent on these roles. Indeed, Haar (2013) stated that work-life balance is not about division "in time, engagement, and satisfaction... but [as] a personal assessment of how employees balance multiple roles" (p. 3308). As such, this approach to work-life balance means employees articulate a subjective appraisal of their roles (work and non-work) and consequently, higher work-life balance represents more harmony and equilibrium between the multiple roles that are vital to an employee.

Studies of the antecedents of work-life balance are uncommon beyond the work and family factors of work-family conflict (Haar, 2013; Haar et al., 2014) and work-family enrichment (Haar, 2013). For example, Russo, Shteigman, and Carmeli (2016) found supporting inside and outside the workplace to be important antecedents of work-life balance. More recently, Haar, Sune, Russo, and Ollier-Malaterre found supervisor support and job autonomy were both important antecedents of work-life balance. In addition, Haar, Carr, Arrowsmith, Parker, Hodgetts, and Alefaio-Tugia (2018c) found pay fairness was a significant antecedent of work-life balance, as was ethical leadership and leader-member exchange (Haar et al., 2018a).

The consequences of work-life balance are becoming more established. The initial findings of being positively related to job satisfaction and negatively related to anxiety and depression (Haar, 2013) has been replicated across seven samples in six countries (Haar et al., 2014). This lead

Haar et al. (2014) to suggest that work-life balance is universal across cultures. Recently, Haar, Roche, and ten Brummelhuis (2018b), in a daily diary study found significant positive correlations between work engagement and daily work-life balance scores, which aligns with the focus of this thesis. Indeed, Haar, Brougham, Roche, and Barney (2017) found work-life balance was positively related to all three dimensions of work engagement. Empirically, there is much support for work-life balance influencing job satisfaction (Haar, 2013; Haar et al., 2014; Haar et al., 2018c; Haar et al., 2018a) and mental health outcomes similar to job stress (Haar, 2013; Haar et al., 2014). While Haar et al. (2018a) found a significant link between work-life balance and turnover intentions, Brough et al. (2014) found work-life balance was a significant predictor of turnover intentions, which combined, provides useful links between work-life balance and behaviours. It is only towards job performance, that there exists a lack of empirical evidence.

## **Block Four: Engagement**

### **Work Engagement**

There are several approaches to engagement (Bailey, Madden, Alfes, & Fletcher, 2017). Individual engagement has been defined by Kahn (1990, p. 694) as the "simultaneous employment and expression of a person's "preferred self" in task behaviours that promote connections to work and to others, personal presence (physical, cognitive, and emotional) and active, full role performances." Thompson, Lemmon, and Walter (2015) define engagement as the complete cognitive, emotional, and physical immersion of

the self in one's work. However, Bailey et al. (2017) notes that the Utrecht Group's work engagement construct is the dominant approach in the literature and is thus the one I utilise. That work engagement approach is described as "a positive, fulfilling, work-related state of mind that is characterised by 'vigor, dedication, and absorption'" (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002, p. 74).

Work engagement is made up of three distinct dimensions. Schaufeli et al. (2002) considered *vigor* as high levels of energy, mental resilience, and willingness to invest effort and persistence amidst obstacles. Strong work involvement, meaningfulness, enthusiasm, and challenge make up the definition of *dedication*; whereas *absorption* is defined as concentration, where one has the feeling that time flies, and there is an unwillingness to get separated from work.

The Job demands-resources theory (Bakker & Demerouti, 2014; Bakker & Demerouti, 2017) is often used to explain work engagement. The theory considers that a combination of job characteristics and personal resources predicts job performance through employee engagement. Employees can proactively seek resources or challenges. If the employee has enough resources to complete their work, they will be more engaged. Job characteristics, employee behaviours, and personal resources can make all the difference to employee engagement. Personality traits can also make a difference to engagement, showing the importance of the right people in the role to ensure the best results (Bakker & Albrecht, 2018). Research shows

consistently that adequate job resources and personal resources are predictors of work engagement (Bakker et al., 2011).

The link between work engagement and performance has been widely researched and is a driver for the increasing interest in developing engagement within organisations. Thompson et al. (2015) found that higher levels of engagement are more likely to lead to higher levels of performance. Christian, Garza, and Slaughter (2011) completed a meta-analysis on research that looked at conceptualising engagement, and engagement related to performance, and the authors found evidence that engagement is related to job performance – which is a critical focus of my thesis. Truss, Shantz, Soane, Alfes, and Delbridge (2013) also completed an overview of the evidence of this performance link and the relevance to HRM practices. In their article, they discuss seven pieces of research that show evidence of the engagement-performance link. This thesis aims to add to the body of research, firstly including factors within the workplace that increase engagement, which lend themselves to also increasing performance.

The last decade has seen a significant increase in research around engagement and its relationship to business bottom line outcomes, such as job performance, customer satisfaction and financial returns (Bakker, Albrecht & Leiter, 2011). Harter, Schmidt, and Hayes (2002) use an instrument developed by Gallup to measure employee engagement in their research and refer to the definition of engagement as the “individual's involvement and satisfaction with, as well as enthusiasm for, work” (p. 269). Those authors discovered after completing their meta-analysis a correlation between

employee engagement and business outcomes. The top-rated business outcomes include turnover, customer satisfaction-loyalty, and safety — the higher rated business profitability outcomes related to higher engagement scores. The authors also claim that companies could learn about the management talents and practices that drive business outcomes if they studied their top rating business units.

Work engagement is a fundamental focus area for both researchers and practitioners. Haar et al. (2017) discuss the connections between engagement and leadership, certain leadership styles can promote employee wellbeing and other work outcomes. Specifically, they found servant leadership was positively related to work engagement, but the influence of work-life balance mediated this. Ultimately, under this theory, employees will then become more engaged when they have more significant resources, with Bakker et al. (2011) also seeing leadership as a key influencer on work engagement. However, there is a need for more research to understand the linkages fully. Leaders must know that organisational cultures need to be flexible, agile and responsive and understand the impact that human resource management systems have on influencing employee engagement (Bakker & Albrecht, 2018). There is a call to move beyond routine administration and look closely at high-performance work systems, including recruitment, performance management, and learning and development.

Although the term ‘engagement’ could be considered a ‘new’ term for previously researched constructs such as job satisfaction, organisational commitment, job involvement, positive affect and affectivity, and proactive

and citizenship behaviour (Bakker, et al., 2011; Newman & Harrison, 2008), current criticisms of the usage of employee engagement terms, including the term engagement, have been overused and sold as an opportunity to increase the performance of entire workforces. Academic research and theory, however, vary on definition and outcome. Unfortunately, engagement literature is more likely to be found in practitioner journals than in theory and empirical research (Saks, 2006). Looking forward there is an increased number of intervention studies, and although it is essential to improve understanding around the nature, causes and consequences of engagement it is also essential all academic knowledge and research can be translated into practical solutions (Bakker & Albrecht, 2018). Our challenge moving forward is to match theory with real-time practice that makes a positive difference in the workplace.

### **Block Five: Job Outcomes**

Ultimately, the present study is examining the various blocks of factors: organisational, disposition, work perceptions and work engagement, towards block five which includes job satisfaction, turnover intentions, job stress and job performance. I briefly define these outcomes here before developing the theoretical model in the next chapter.

#### **Job Satisfaction**

Locke (1969) defines job satisfaction as “a pleasurable emotional state resulting from employees’ favorable appraisal of their job, achievements, and



job-related value” (p. 309). Weiss (2002) noted that job satisfaction is a “a positive (or negative) evaluative judgment one makes about one's job or job situation” (p. 175). Overall, Spector (1997) argues that job satisfaction is an attitude that captures the extent to which a person likes or dislikes her or his job and is a common metric for assessing employee wellbeing (Judge and Klinger, 2008). In its own right, job satisfaction is an important construct to examine, because it provides useful insights into how ‘happy’ employees are in their job. Beyond this though, employees who are highly satisfied in their job are more likely to produce superior job performance (Judge, Thoresen, Bono, & Patton, 2001). In addition, such workers are more likely to have lower turnover intentions (Griffeth, Hom, & Gaertner, 2000).

### **Turnover Intentions**

In their seminal meta-analytic review, Tett and Meyer (1993) defined turnover intentions as a “conscious and deliberate willfulness to leave the organization” (p. 262). Hausknecht, Rodda, and Howard (2009) assert that exploring turnover intentions is important because the retention of talented employees is important for many organizations. Morrell, Loan-Clarke, and Wilkinson (2001) define turnover as “voluntary cessation of membership of an organization by an employee of that organization” (p. 220). Importantly, turnover intentions are generally seen as something that is avoidable and thus within the sphere of management control (Morrell et al, 2001; Hom, Roberson, & Ellis, 2008). The reasons why turnover intentions are important to examine for employers is offered by Cascio and Boudreau (2011), who

note that the cost of turnover varies, but at the higher estimations, is around 150-250% of an employee's salary. Beyond this direct financial cost, Allen, Bryant, and Vardaman (2010) argue the true cost needs to include the loss of knowledge, which can have an important influence on a firm's competitiveness.

### **Job Stress**

Motowidlo, Packard and Manning (1986) defined stress as “stress as an unpleasant emotional experience associated with elements of fear, dread, anxiety, irritation, annoyance, anger, sadness, grief, and depression. Often job stress is viewed to capture the wellbeing of an employee (e.g., Xie, Schaubroeck, & Lam, 2008). Work stress is an important aspect to examine, because it is linked to overall health (Wang et al., 2007), and has important workplace consequences such as higher absenteeism rates and lower job performance (Stewart, Ricci, Chee, Hahn, & Morganstein, 2003; Lerner & Henke, 2008). Indeed, Motowidlo et al. (1986) stated that examining job stress is important because of its “potentially dysfunctional and socially costly effects on job performance” (p. 618).

### **Job Performance**

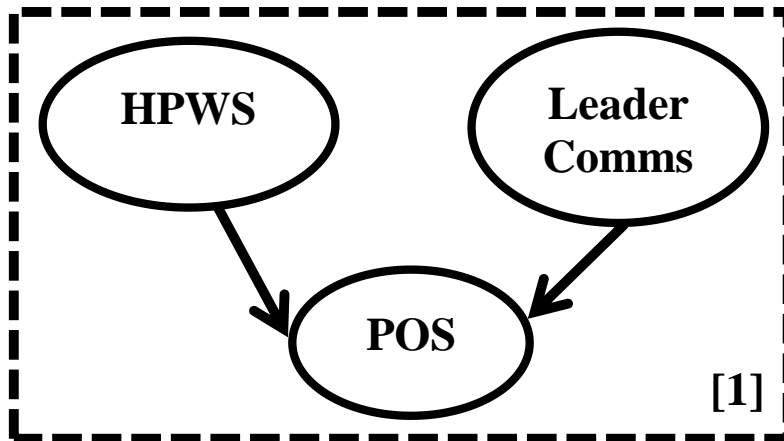
Harter et al. (2002) notes the importance of performance of employees for understanding the overall performance of an organisation. Judge et al. (2001) notes the importance of job performance in employee studies, especially regarding the influence of job satisfaction. Ultimately, job performance

related to the effectiveness of how an employee (and collectively, employees') contribute toward organizational goals (Motowidlo, 2003). Within the present study I examine job performance in a number of ways. In Study One, it is captured by the respondents themselves only, while in Study Two, I am able explore performance both as rated by the store manager, as well as with overall sales data (per store) from the organisations Head Quarters.

### Chapter 3. Theoretical Model

Ultimately, the present study is examining the various blocks of factors: organisational, disposition, work perceptions and work engagement, towards block five which includes job satisfaction, turnover intentions, job stress and job performance. This chapter provides the overall study hypotheses based on the literature presented previously. I build the model of the present study in stages or blocks to encompass all the various components of the thesis variables. The initial part of my model – called Block 1 – represents the organisational factors only. This is represented in the following figure:

*Figure 2. Study Model – Block 1*



In this model, the first factor is HPWS which relates to the “systems of human resource (HR) practices designed to enhance employees’ skills, commitment, and productivity” (Datta et al., 2005, p. 135). Harley et al. (2007) noted that when the combination of HR practices is used systematically, they become mutually reinforcing which enhances employee selection, skill development, employee organising and creative problem solving. The second factor is leadership communication, which relates to effective communication

between supervisor and employee (Yrle, Hartman & Galle 2002). Such effective leadership communication is vital because within an organisation it facilitates information transfer and determines the culture and climate (Men, 2014). While each of these factors is expected to influence some other factors – which I hypothesise next – my first hypothesis is around the role that HPWS and leadership communication will have on shaping POS.

In the two main meta-analyses of POS, there is an established number of antecedents (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017). In the earlier meta-analysis, Rhoades and Eisenberger (2002) identified antecedents including fairness, and stressors, but related to HPWS; they did find organisational rewards and job conditions were significant, as were promotions, job security, and rewards. In the more recent meta-analysis, Kurtessis et al. (2017) categorised antecedents into three factors: (1) treatment by organisational members (including leadership), (2) quality of employee-organisation relationships, and (3) human resource practices and job conditions. However, these were only specific aspects within HPWS and not exactly HPWS.

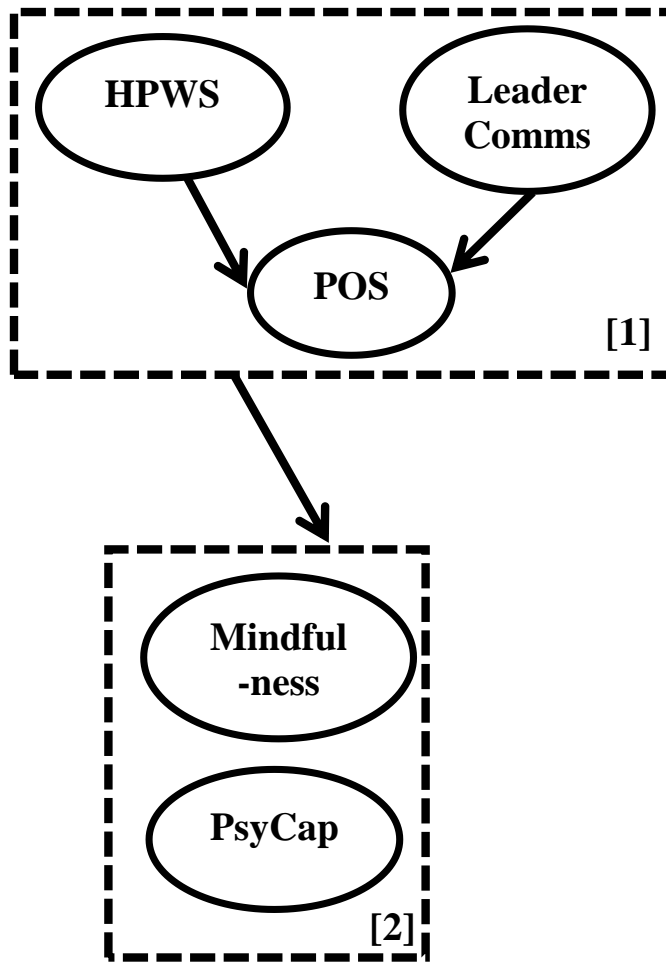
The significant factors – which relate specifically to HPWS – were developmental opportunities, job security, flexible work schedules, enriching job characteristics, autonomy, and participation in decision making. Hence, there is sufficient evidence to suggest that factors associated with HPWS and leadership should help form POS. Studies have examined the links between HPWS and POS (e.g., Liao et al., 2009; Takeuchi, Chen, & Leepak, 2009). Similarly, there is support for leadership communication being a positive

influence on employee perceptions (Einwiller & Boenigk, 2012), which aligns with the two meta-analyses on POS (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017) finding that leadership is an essential antecedent of POS. Also, a study by Allen (1992) found support for leadership communication positively influencing POS. Overall, this leads to the first hypothesis:

*Hypothesis 1: (a) HPWS and (b) leadership communication will be positively related to POS.*

Moving from this first block (Block 1), I now move to Block 2, which represents the dispositional factors I expect to be influenced by the organisational factors (Block 1). These blocks are represented in the following figure.

*Figure 3. Study Model - Block 1 and Block 2*



As can be seen in Figure 3, I expect the three organisational factors to be related to the two dispositional factors of mindfulness and PsyCap. In their theoretical model, Newman, Ucbasaran, Zhu, and Hirst (2014) suggested there was substantial evidence to suggest the organisational factors examined here would be positively related to PsyCap, stating “there is growing evidence that the provision of workplace support facilitates PsyCap development in employees” (p. S125). Hence, POS might influence PsyCap because such support provides employees with greater hope to seek out unique pathways to achieve their goals (Newman et al., 2014), and thus provides a resource that ultimately builds the PsyCap dimensions (Luthans et al., 2008).

Perceived supervisor support is aligned with POS (Rhoades & Eisenberger, 2002) and has been found to enhance PsyCap (Liu, 2013). Reb, Narayanan, and Ho (2015) found similar effects from supervisor support towards mindfulness. In a study of supportive organisational climates, Luthans et al. (2008) found it was positively related to PsyCap. Similarly, Liu, Hu, Wang, Sui and Ma (2013) found positive links between POS and PsyCap and Liu, Wen, Xu, and Wang (2014) reported that POS and PsyCap were related and that PsyCap mediated the effects of POS, indicating a causal direction of influence.

Beyond POS, there is an acknowledgement that antecedents of PsyCap have been largely neglected (Avey, 2014) and this is similar towards mindfulness (Reb et al., 2015). Indeed, Sutcliffe, Vogus and Dane (2016) stated “antecedents to individual-level mindfulness is remarkably thin” (p. 65). They went on to state that “As research on organisational influences on individual-level mindfulness remains in its infancy, we perceive much potential for further research in this area” (Sutcliffe et al., 2016, p. 66).

Links have been found between leadership and mindfulness. Madsen, Desai, Roberts and Wong (2006), Roberts, Madsen, Desai, and Van Stralen, (2005) and Knox, Simpson, and Garite (1999) found that leaders use of language including clear purpose, was positively related to collective mindfulness. Ausserhofer, Anderson, Colón-Emeric, and Schwendimann (2013) assessed a collective mindfulness construct in healthcare facilities, and it has been found that leadership has a positive influence on this collective mindfulness (Ausserhofer, Schubert, Desmedt, Blegen, De Geest, &



Schwendimann, 2013). Transformational leadership has been positively related to PsyCap (McMurray, Pirola-Merlo, Sarros, & Islam, 2010). Similarly, Rego, Sousa, Marques and e Cunha (2012) found that a leader's authentic leadership style was positively related to follower PsyCap. Combined, this provides support for the hypotheses that Block 1 – the various organisational factors – will influence dispositional factors of mindfulness and PsyCap (Block 2). I thus posit the following:

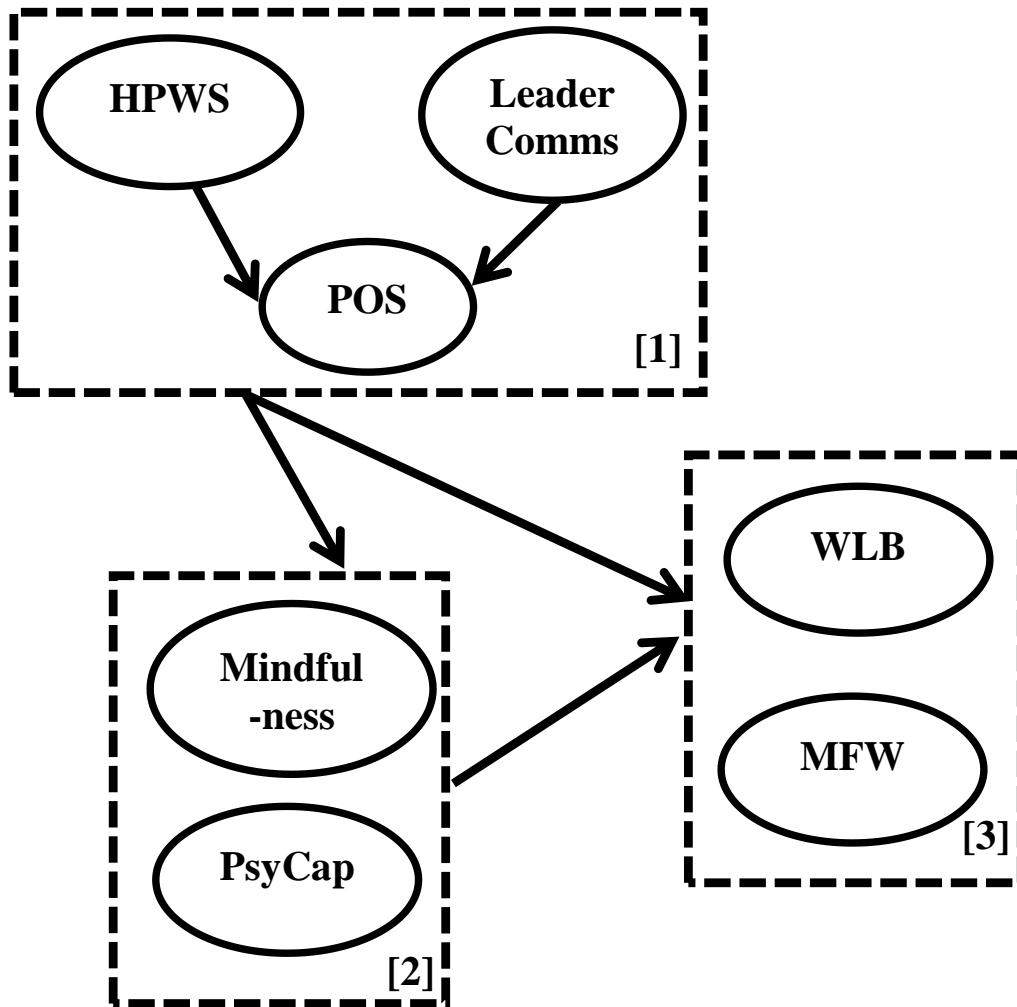
*Hypothesis 2: HPWS will be positively related to (a) mindfulness and (b) PsyCap.*

*Hypothesis 3: Leadership communication will be positively related to (a) mindfulness and (b) PsyCap.*

*Hypothesis 4: POS will be positively related to (a) mindfulness and (b) PsyCap.*

Moving from the first and second blocks (Block 1 and Block 2) I now move to Block 3, which represents the work perceptions I expect to be influenced by the organisational factors (Block 1) and the dispositional factors (Block 2). These blocks are represented in the following figure.

Figure 4. Study Model – Block 1 , Block 2, and Block 3



As can be seen in Figure 4, I expect the three organisational factors to be related to the two dispositional factors of mindfulness and PsyCap, and then these sets of factors to subsequently be related to work-life balance and meaningful work. Interestingly, while there is research on the consequences of work-life balance (e.g., Haar, 2013; Haar et al., 2014), there is much less on the antecedents (Haar et al., 2019). This approach is mirrored in the meaningful work field (Spreitzer, 1995), especially around antecedents (Scroggins, 2008; May et al., 2004).

HPWS have similarly been found to link to fewer work-life balance issues (Boxall & Macky, 2014; Macky & Boxall, 2008). That said, those studies focused on a construct of work-family conflict, but given the logic provided around work-family conflict being related to work-life balance, I expect these effects to hold. Butts, Vandenberg, DeJoy, Schaffer, and Wilson (2009) found that HPWS were significantly related to empowerment, of which meaningful work is one of the core dimensions (Spreitzer, 1995). Meaningful work – as a dimension of Spreitzer’s (1995) psychological empowerment – can be influenced by external practices (Seibert, Silver, & Randolph, 2004; Spreitzer, 1995) and Liao et al. (2009) stated “that HPWS may represent such empowering work practices” (p. 374).

Liao et al. (2009) found that HPWS were similarly correlated to empowerment and this effect held significant at the branch level (multi-level analysis). Similarly, Messersmith et al. (2011) found that HPWS were a significant predictor of meaningful work (as a dimension of empowerment). Hence, the skills and knowledge enhanced by HPWS can enable workers to better manage their work and life roles – that is, work-life balance (Haar, 2013) – and to find greater meaning in their work. I thus posit the following:

*Hypothesis 5: HPWS will be positively related to (a) meaningful work and (b) work-life balance.*

The links between leadership communication and work-life balance and meaningful work are sparse. Bass (1999) suggests that leadership is likely to positively influence meaningful work, suggesting working for a charismatic

leader might provide a greater sense of meaning in the work employees do. Studies have found different leadership styles are positively related to empowerment, which is a dimension of Spreitzer's (1995) psychological empowerment, such as transformational leadership (e.g., Gumusluoglu & Ilsev, 2009; Jung, Chow & Wu, 2003). Chen, Kirkman, Kanfer, Allen, and Rosen (2007) also examined Spreitzer's (1995) psychological empowerment and found it was significantly related to other leadership constructs: leader-member exchange and a positive leadership climate.

Beyond meaningful work, studies of the linkages between leadership and work-life balance are rare. Haar et al. (2017) found that servant leadership was positively related to work-life balance in a sample of New Zealand employees. Haar et al. (2017) argued that such a leadership style helps to build resources that enable greater work-life balance and, similarly, Syrek, Apostel, and Antoni (2013) found transformational leadership was positively related to work-life balance. Combined, I suggest that leadership communication – through open channels of communication that workers can understand (Yrle et al., 2002) – will provide the necessary resources to make work more meaningful and enable greater balancing of work and life roles. I thus posit the following:

*Hypothesis 6: Leadership communication will be positively related to (a) meaningful work and (b) work-life balance.*

Support from the workplace has been found to enhance work-life balance (Russo, Shteigman, & Carmeli, 2016; Haar et al., 2019), and the meta-

analysis by Kossek et al. (2011) found POS was significantly correlated to work-family conflict, with studies by Haar (Haar, 2013; Haar et al., 2014; Haar et al., 2018b) all showing that work-family conflict is an antecedent of work-life balance. Thus, I would expect support (POS) to influence work-life balance positively. Chiang and Hsieh (2012) found that POS was significantly correlated to empowerment, of which meaningful work is one of the core dimensions (Spreitzer, 1995). Butts et al., (2009) found POS was significantly correlated to meaningful work (Spreitzer, 1995) at  $r = .60$ , indicating a strong relationship between perceptions of support and meaningful work. Hence, I expect POS to be positively related to meaningful work as well as work-life balance. I thus posit the following:

*Hypothesis 7: POS will be positively related to (a) meaningful work and (b) work-life balance.*

Beyond the direct effects of the organisational factors (Block 1), I also hypothesize that the dispositional factors (Block 2) will play a role towards meaningful work and work-life balance. However, despite meta-analysis on the consequences of PsyCap (Avey et al., 2011), the influence of PsyCap on work perceptions like meaningful work and work-life balance has been neglected. Allen, Johnson, Saboe, Cho, Dumani, and Evans (2012) conducted a meta-analysis of dispositional factors towards work-family conflict; there has not been similar research on work-life balance. However, there is strong meta-analysis support for dispositional factors playing a role in work-family

conflict, and conflict is linked to work-life balance (Haar, 2013; Haar et al., 2014; Haar et al., 2018b).

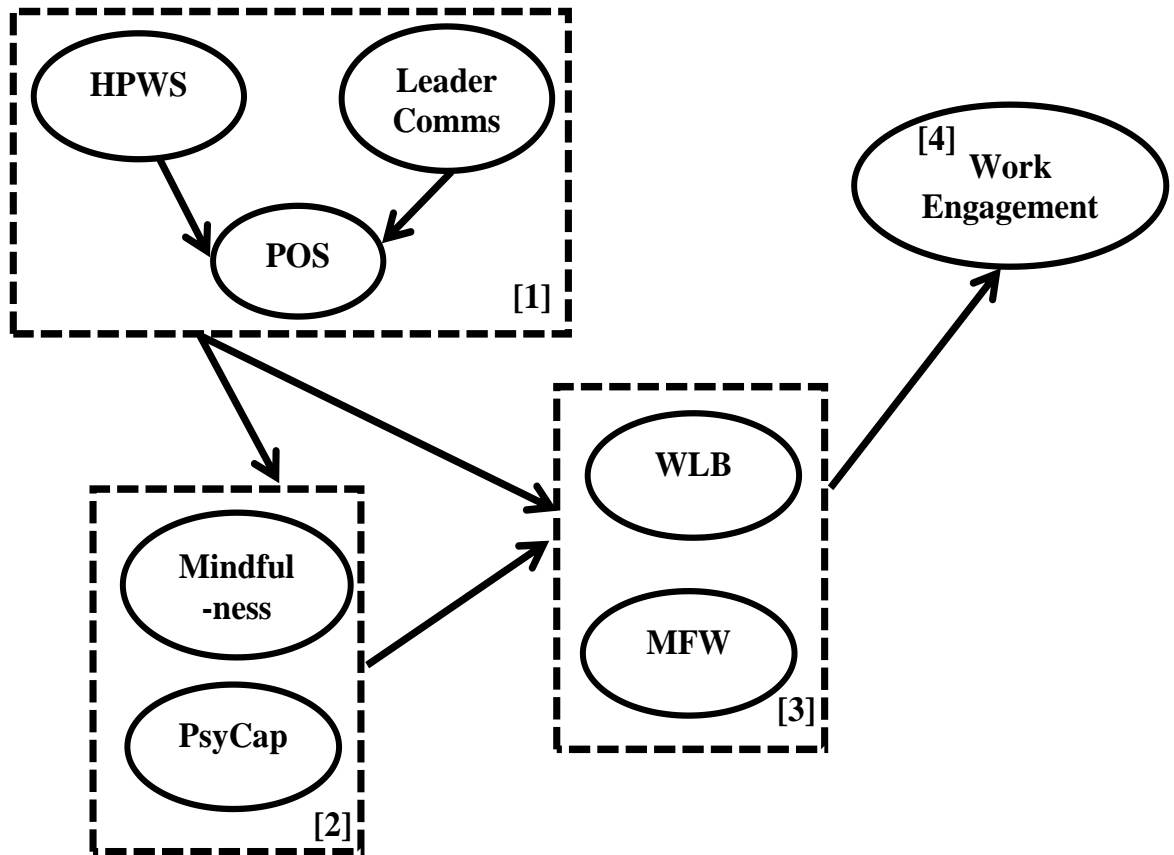
Siu (2013) found psychological capital was linked to work-life balance among Chinese employees, and Dorenzo, Greenhaus, and Weer (2015) found PsyCap was positively related to work-life balance, albeit very modestly. Michel, Bosch, and Rexroth (2014) found a mindfulness intervention was positively related with satisfaction with work-family balance, and, finally, Allen and Kiburz (2012) found that mindfulness was related to work-family balance. Overall, I would expect employees with greater PsyCap and mindfulness to have additional psychological resources (Luthans et al., 2007) that enable them to enjoy greater work-life balance and find stronger meaning in their work. I thus posit the following:

*Hypothesis 8: PsyCap will be positively related to (a) meaningful work and (b) work-life balance.*

*Hypothesis 9: Mindfulness will be positively related to (a) meaningful work and (b) work-life balance.*

Moving from the first set of factors (Block 1 to Block 3), I now hypothesize into Block 4, which relates specifically to work engagement. I expect engagement to be influenced by the organisational factors (Block 1), the dispositional factors (Block 2), and the work perception factors (Block 3). These blocks are represented in the following figure.

Figure 5. Study Model – Block 1, Block 2, Block 3 and Block 4



As can be seen in Figure 5, I expect the three organisational factors, two dispositional factors, and the two work perception factors to all play a role towards predicting work engagement. This section builds upon the previous hypotheses and ultimately tests the constructs within each block towards work engagement. The links between HPWS and performance are established at the meta-analytic stage (Harter et al., 2002) although there is not a significant examination of HPWS influencing work engagement. Cooke, Cooper, Bartram, Wang, and Mei (2016) found that HPWS were directly related to engagement, and similarly, Boon and Kalshoven (2014) found positive links between HPWS and engagement. These effects are replicated in different

cultural settings such as China (e.g., Huang, Ma, & Meng, 2018) and I expect this to hold in the present study.

Beyond HPWS, Li, Sanders, and Frenkel (2012) also included leadership (specifically leader-member exchange) towards engagement and found both HPWS and leadership were positively related to engagement. While the importance of leadership is well established, the role of communication is less concrete, although there is some support in the literature. Vogelgesang et al. (2013) tested leader transparent communication and follower work engagement and found those who rated their leader as a better communicator were more engaged three weeks later.

Vander Elst, Baillien, De Cuyper and De Witte (2010) note that communication is essential to employees and “concerns both the quantity and the quality or the information value of the communication” (p. 250). In the context of work engagement, they found employee perceptions of communication were positively related to engagement. Overall, this supports hypothesising a positive link between leadership communication and work engagement.

The meta-analyses of POS do not include work engagement (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017). This is strange given the latter date of the second meta-analysis (Kurtessis et al., 2017) and the plethora of engagement studies undertaken by that time. However, it might be that the linkages are seldom explored, which makes the present study more critical. That said, there is empirical support for POS influencing work engagement. Gillet, Huart, Colombat, and Fouquereau (2013) found that POS was



positively related to all three dimensions of work engagement (vigor, dedication, and absorption) in a sample of police officers.

Caesens and Stinglhamber (2014) tested POS towards work engagement and with two samples and found they were positively related in their structural models for both samples. Overall, employees who report higher support from their organisation are likely to respond with greater engagement. In summary, the three organisational factors are expected to be positively related to engagement, and thus I posit the following:

*Hypothesis 10: (a) HPWS, (b) leadership communication and (c) POS will be positively related to work engagement.*

The linkages between my dispositional factors and work engagement have also been explored, although not to the level of having a meta-analysis or meta-analyses conducted. Leroy et al. (2013) tested mindfulness at three periods and found this was significantly correlated with work engagement at all three periods. Indeed, mindfulness increase was significantly and positively correlated to engagement increase. Sweetman and Luthans (2010) theoretically proposed linkages between PsyCap and engagement and there is empirical evidence to support this, with Simons and Buitendach (2013) finding PsyCap was related to all three work engagement dimensions. Similarly, Paek et al. (2015), with a sample of hospitality workers, found that PsyCap was positively related to work engagement, and Avey et al. (2008) found PsyCap was a significant predictor of work engagement. Finally, Malinowski and Lim (2015) found that mindfulness and PsyCap were

significantly related to work engagement, encouraging the testing of both dispositional factors to work engagement. Overall, this provides support that employees with stronger dispositional factors are more likely to have psychological resources that enable them to be more engaged. I thus posit the following.

*Hypothesis 11: (a) mindfulness and (b) PsyCap will be positively related to work engagement.*

Finally, the linkages from work perceptions (Block 3) towards engagement are like the other factors explored here – there are some theoretical linkages and some empirical evidence, but there is not a wide range of empirical support. Under meaningful work (Spreitzer, 1995), employees with high meaningful work feel a greater fit between their work role and their values, beliefs, and behaviours, and this is likely to lead to positive outcomes (Spreitzer, 1995; Lips-Wiersma et al., 2016). May et al. (2004) and Lips-Wiersma and Wright (2012) found links between meaningful work and work engagement. Hence, it is likely that workers who find meaning in their work are more likely to be engaged. The links between work-life balance and engagement are similarly seldom explored. Haar et al. (2017) found that in the structural model, the work-life balance was positively related to all three work engagement dimensions. Finally, on a large sample of 2000 employees, Cahill, McNamara, Pitt-Catsoupes, and Valcour (2015) found that satisfaction with work-life balance was positively related to work engagement. Overall, I expect employees with stronger perceptions about

their work – having greater meaning and better work-life balance – will report higher work engagement. I posit the following.

*Hypothesis 12: (a) meaningful work and (b) work-life balance will be positively related to work engagement.*

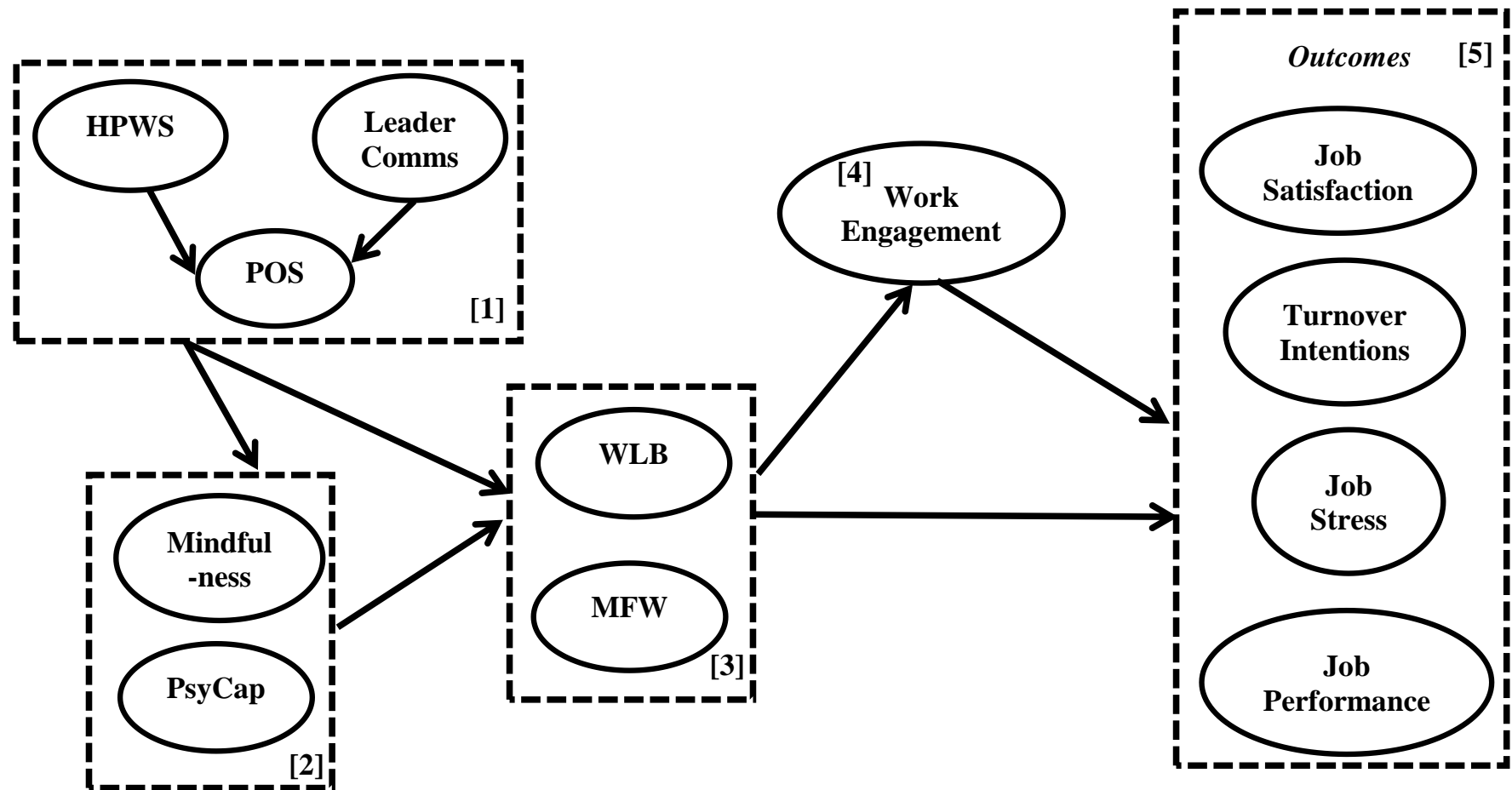
Finally, towards work engagement, I also hypothesize direct effects among the work engagement dimensions themselves. Salanova and Schaufeli (2008) assert that vigor and dedication should be viewed as antecedents of absorption, and this approach has been accepted – including just focusing on the first two dimensions (e.g., Hakanen, Seppälä, & Peeters, 2017; Salanova et al., 2010; Rodríguez-Munõz, Sanz-Vergel, Demerouti, & Bakker, 2014; Schmitt, Den Hartog, & Belschak, 2016). Hence, I hypothesize that the work engagement dimensions of vigor and dedication will predict the dimension of absorption. I thus posit the following.

*Hypothesis 13: The work engagement dimensions of (a) vigor and (b) dedication will be positively related to work engagement dimension of absorption.*

I now move to the whole thesis model (Blocks 1 to 5) and hypothesize that Block 4 (work engagement) will influence the work outcomes of interest in the present thesis: job satisfaction, turnover intentions, job stress, and job performance. These blocks are represented in the following figure. I expect the work outcomes (Block 5) to be influenced by the organisational factors (Block 1), the dispositional factors (Block 2), the work perceptions factors

(Block 3), and work engagement (Block 4). These blocks are represented in the following figure.

Figure 6. Overall Study Model



As can be seen in Figure 6, I expect the three organisational factors, two dispositional factors, two work perception factors, and three work engagement dimensions to all play a role towards predicting work outcomes. This section builds upon the previous hypotheses and ultimately tests the constructs within each block towards work outcomes. Within the organisational factors, HPWS is focused on performance and typically at the firm level (e.g., Datta et al., 2005; Combs et al., 2006; Huselid, 1995). Indeed, there is meta-analytic support for HPWS influencing firm performance (Combs et al., 2006) and thus I expect HPWS to link to performance.

Studies of HPWS at the employee level typically seek to ‘unpack’ the black box by including constructs that might account for performance enhancement. Becker et al. (1997) suggested that firm performance is influenced by HPWS not directly but through the enhancement of employee skills and motivation, which in turn, enhance productivity. In their theoretical model of the influences of HPWS, Boxall and Macky (2009) suggested ultimate firm benefits like performance were a function of employee level factors like enhanced job satisfaction and lower turnover intentions. For example, Boselie, Dietz, and Boon (2005) argued and found that HPWS would influence performance via job satisfaction.

Importantly, Boselie and colleagues argued that while the theoretical mechanism of HPWS influencing performance via factors such as employee outcomes is established (e.g., Becker et al., 1997; Boxall & Macky, 2009) it does not have wide empirical testing. Indeed, Boxall and Macky (2014) cautioned against assuming these relationships exist and encouraging greater testing of employee outcomes (like job satisfaction) to test these effects. Overall, there is empirical support for HPWS influencing job satisfaction

(Boselie et al., 2009; Garcia-Chas, Neira-Fontela, & Castro-Casal, 2014; Messersmith et al., 2011).

In their meta-analysis of HPWS to firm performance through employee mechanisms, Jiang, Lepak, Hu and Baer (2012) found HPWS influenced firm performance through employee motivation, which “was reflected by collective job satisfaction, organisational commitment, organisational climate, perceived organisational support, and organisational citizenship behavior. Voluntary turnover only represented the percentage of employees who quit or voluntarily left the organisations” (p. 1271). In addition, the links between HPWS and lower job stress are established (Boxall & Macky, 2014; Macky & Boxall, 2008), although a meta-analysis examining HPWS and wellbeing (Van De Voorde, Paauwe, & Van Veldhoven, 2012) found support for some outcomes but called for more exploration of these linkages. Overall, the literature supports HPWS having beneficial effects on the four broad work outcomes I explore, and thus I posit the following.

*Hypothesis 14: HPWS will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.*

There have been several meta-analyses on the influence of leadership on outcomes akin to those being tested here. For example, Burke, Stagl, Klein, Goodwin, Salas, and Halpin (2006) found team performance and effectiveness was related to different leadership types – such as task-focused leadership – and Ilies, Nahrgang, and Morgeson (2007) found positive links between leader-member exchange (a type of leadership) and OCBs. DeGroot,

Kiker, and Cross (2000) found charismatic leadership is positively related to performance and satisfaction, while Griffeth et al. (2000) found leadership was negatively related to turnover intentions. Finally, Kuoppala, Lamminpää, Liira, and Vainio (2008) found that leadership was positively related to wellbeing. (Yrle et al., 2002).

While there is broad support for the work outcomes examined here to be influenced by leadership, the links with leadership communication are less apparent. While there are some links between communication and employee outcomes like satisfaction and performance (Johansson et al., 2013; Mishra et al., 2014), communicating has been found to be an essential component of leadership (Kirkpatrick & Locke, 1996). Indeed, Mayfield and Mayfield (2009) specifically looked at communication and leader-member exchange and found it was a dominant antecedent of the exchanges between leader and follower. Hence, leadership communication may be considered a vital component of the various forms of leadership noted above and thus have a beneficial influence on work outcomes. Overall, the literature had beneficial effects on the work outcomes examined here, and I posit the following.

*Hypothesis 15: Leadership communication will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.*

The case for POS influencing the work outcomes examined here is well supported across the three meta-analyses (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017; Riggle et al., 2009). Overall, there is strong support for POS being positively related to job satisfaction and performance and negatively related to turnover intentions. For example, Kurtessis et al. (2017),



using 154 studies and over 64,000 employees, found a positive relationship between POS and job satisfaction with a corrected mean correlation of .65. That said, wellbeing studies are less frequent by far in the POS literature. The original meta-analysis (Rhoades & Eisenberger, 2002) had only five studies of strains, and this was a broad categorisation of wellbeing outcomes. The Kurtessis et al. (2017) meta-analysis has 16 studies and over 6,500 employees on stress and supports a strong negative relationship, with a corrected mean correlation of -.43. As such, I expect respondents reporting higher POS to report more beneficial work outcomes, with higher job satisfaction and performance, and less turnover intentions and job stress. Hence, I posit the following.

*Hypothesis 16: POS will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.*

The next section deals with the dispositional factors to work outcomes. Like POS, there is meta-analytic support for PsyCap influencing the outcomes examined here, with positive relationships towards job satisfaction and job performance and negative effects to turnover intentions and job stress (Avey et al., 2011). This meta-analysis produced corrected mean correlations of .54 with job satisfaction, .26 with job performance, -.32 with turnover intentions and -.29 with stress. Thus, there is enough evidence to expect these effects will hold. However, the literature on mindfulness is much more sporadic. Individual studies are supporting the relationships expected here, such as Dane and Brummel (2013) finding mindfulness positively linking with job performance and using a sample of Australian leaders and their managers’

rating of their performance, King and Haar (2017) found mindfulness was positively related to performance.

The links are stronger between mindfulness and job stress. For example, Roche et al. (2014) using four samples (managers and entrepreneurs) found mindfulness (and PsyCap) were beneficial to psychological wellbeing. Hülshager, Alberts, Feinholdt, and Lang (2013) found employee mindfulness was positively related to job satisfaction and negatively to emotional exhaustion, while Andrews, Kacmar, and Kacmar (2014) found mindfulness was positively related to job satisfaction and had a significant indirect effect on turnover intentions. Finally, in their review article on mindfulness, Sutcliffe et al. (2016) noted that there is strong support for mindfulness playing a beneficial role on outcomes, although they also called for more research. Overall, it is expected that employees with greater mindfulness and PsyCap will report more beneficial work outcomes, with higher job satisfaction and performance, and less turnover intentions and job stress. Hence, I posit the following.

*Hypothesis 17: PsyCap will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.*

*Hypothesis 18: Mindfulness will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.*

The links between work perceptions and work outcomes are relatively well established, albeit there are no meta-analyses like many of the other factors noted above. The evidence on work-life balance, job satisfaction and

psychological wellbeing is strong. Haar (2013) found that work-life balance was positively related to job satisfaction and negatively related to mental health problems and this was replicated across seven samples in Haar et al. (2014). Haar et al. (2018c) found work-life balance predicted job satisfaction in a sample of 873 low-income workers and suggested that work-life balance might be important to all workers. Haar et al. (2018a) found work-life balance was positively related to job satisfaction and was indirectly related to turnover intentions, while Brough et al. (2014) also found work-life balance was significantly and negatively related to turnover intentions.

The glaring omission in the literature is job performance. Beauregard and Henry (2009) argued that organisational practices could ultimately influence firm performance by enabling employees with greater balance to perform better. This aligns with Haar's (2013) conceptualisation of work-life balance and the ability of employees with greater work-life balance to have more energy and thus be able to invest more energy into work and be better performers. In their meta-analysis, Podsakoff, MacKenzie, Paine, and Bachrach (2000) showed that OCBs were predicted by employee role perceptions, such as conflict and ambiguity, which does highlight the importance of role freedom towards engaging in greater performance.

Given that work-life balance has been shown to be greater than work-family conflict (Haar et al., 2014, 2018b) it provides support for work-life balance potentially influencing job performance. Beyond work-life balance, the literature on meaningful work does have established links with the work outcomes explored here including higher job satisfaction (Sparks & Schenk, 2001), lower turnover intentions (Scroggins, 2008), job stress (Elangovan, Pinder, & McLean, 2010; Lopez & Ramos, 2017) and better psychological

wellbeing (Lips-Wiersma & Wright, 2012; Arnold et al., 2007). Also, there are beneficial links to positive workplace behaviours (Soane, Shantz, Alfes, Truss, Rees & Gatenby, 2013) including enhanced effort and performance (Tummers & Knies, 2013; Wrzesniewski, et al., 1997). Overall, I expect workers with higher work-life balance and reporting greater meaning from their work, to report more beneficial work outcomes. Hence, I posit the following.

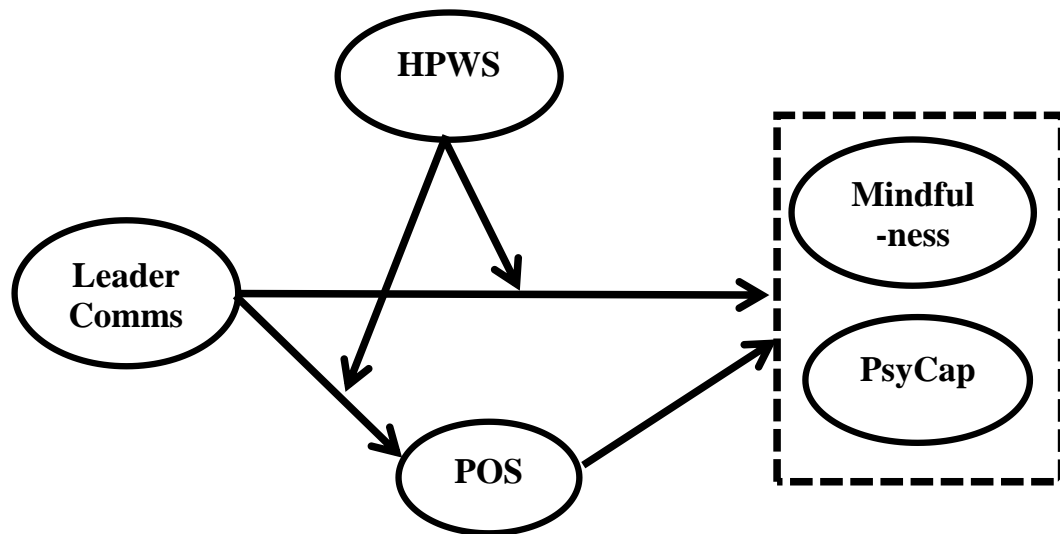
*Hypothesis 19: Work-life balance will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.*

*Hypothesis 20: Meaningful work will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.*

### **Moderation Hypotheses**

I now move beyond the whole thesis model (Figure 6 above) and focus just on the front end of the models – on Blocks 1 and 2. Here I am specifically interested in the roles that organisational factors (Block 1) will have on dispositional factors (Block 2). I focus specifically at this end of the model as I see mindfulness and PsyCap as core positive psychology constructs that can be developed (Luthans et al., 2007, Luthans et al., 2008; Gregoire & Lachance, 2015), and I want to explore the potential role of organisational factors in this development. These effects are represented in the following figure.

Figure 7. Moderation Study Model



As argued above, I am expecting HPWS and leadership communication to influence POS directly, and thus POS will act as a mediator of the influences of HPWS and leadership communication on outcomes – here, specifically the dispositional factors. In the above model, I expect HPWS to moderate the influence of leadership communication on the formation of POS. In their meta-analysis, Jiang and colleagues (2012) noted that moderating effects with HPWS are expected and should be explored more. For example, Neal, West, and Patterson (2005) found organisational climate and HPWS interacted to firm productivity.

On a sample of nurses, Bartram and colleagues (2012) found significant moderating effects from HPWS, and Jensen, Patel and Messersmith (2013) found HPWS interacted with job control to achieve favourable outcomes. Finally, Martin-Tapia, Aragon-Correa, and Guthrie (2009) found that environmental uncertainty interacted with HPWS towards exporting performance. Overall, in the present study, I expect HPWS will

interact with leadership communication towards both dispositional factors, as well as the mediator (POS). This is expected to enhance and leverage the benefits of leadership communication, leading to enhanced outcomes.

Beyond the two-way interaction effects, I tested HPWS as a boundary condition. Hayes (2018) notes that analysis using mediation and moderation are common throughout the behavioural sciences, and importantly these approaches can be combined to allow for the testing of boundary conditions via moderated mediation. Hayes (2017) calls this approach conditional process modelling, defining it as "an analytical strategy focused on quantifying the boundary conditions of mechanisms and testing hypotheses about the contingent nature of processes, meaning whether mediation is moderated" (p. 2). Moderated mediation seeks to analytically "address whether an indirect effect (mediation) is dependent on another variable (moderation)" (Hayes, 2017, p. 2).

Consequently, the mediating effect of POS on the relationships between leadership communication and dispositional factors (PsyCap and mindfulness) are likely to be contingent on the nature of HPWS. I suggest respondents perceiving fewer HPWS (a low score) will weaken the relationship between leadership communication and dispositional factors through POS. The moderating evidence suggests that high HPWS is most beneficial (e.g., Bartram et al., 2012; Jensen et al., 2013; Martin-Tapia et al., 2009) and thus I expect HPWS to act as a boundary condition, strengthening the mediating role of POS when HPWS is high. I posit the final set of hypotheses.

*Hypothesis 21: HPWS will moderate the influence of leadership communication on outcomes (a) POS, (b) mindfulness and (c) PsyCap, with higher outcomes being reported when HPWS are high.*

*Hypothesis 22: In addition, the indirect relationship between leadership communication and (a) mindfulness and (b) PsyCap via POS will be moderated by HPWS, such that the indirect relationship becomes stronger as HPWS becomes greater (moderated mediation).*

I summarise the Hypotheses below.

Table 1. Table of Hypotheses

Hypothesis 1:	<i>(a) HPWS and (b) leadership communication will be positively related to POS.</i>
Hypothesis 2:	<i>HPWS will be positively related to (a) mindfulness and (b) PsyCap.</i>
Hypothesis 3:	<i>Leadership communication will be positively related to (a) mindfulness and (b) PsyCap.</i>
Hypothesis 4:	<i>POS will be positively related to (a) mindfulness and (b) PsyCap.</i>
Hypothesis 5:	<i>HPWS will be positively related to (a) meaningful work and (b) work-life balance.</i>
Hypothesis 6:	<i>Leadership communication will be positively related to (a) meaningful work and (b) work-life balance.</i>
Hypothesis 7:	<i>POS will be positively related to (a) meaningful work and (b) work-life balance.</i>
Hypothesis 8:	<i>PsyCap will be positively related to (a) meaningful work and (b) work-life balance.</i>
Hypothesis 9:	<i>Mindfulness will be positively related to (a) meaningful work and (b) work-life balance.</i>
Hypothesis 10:	<i>(a) HPWS, (b) leadership communication and (c) POS will be positively related to work engagement.</i>
Hypothesis 11:	<i>(a) mindfulness and (b) PsyCap will be positively related to work engagement.</i>
Hypothesis 12:	<i>(a) meaningful work and (b) work-life balance will be positively related to work engagement.</i>
Hypothesis 13:	<i>The work engagement dimensions of (a) vigor and (b) dedication will be positively related to work engagement dimension of absorption.</i>
Hypothesis 14:	<i>HPWS will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.</i>
Hypothesis 15:	<i>Leadership communication will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.</i>
Hypothesis 16:	<i>POS will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.</i>
Hypothesis 17:	<i>PsyCap will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.</i>



<i>Hypothesis 18:</i>	<i>Mindfulness will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.</i>
<i>Hypothesis 19:</i>	<i>Work-life balance will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.</i>
<i>Hypothesis 20:</i>	<i>Meaningful work will be positively related to (a) job satisfaction and (b) job performance and negatively related to (c) turnover intentions and (d) job stress.</i>
<i>Hypothesis 21:</i>	<i>HPWS will moderate the influence of leadership communication on outcomes: (a) POS, (b) mindfulness and (c) PsyCap, with higher outcomes being reported when HPWS are high.</i>
<i>Hypothesis 22:</i>	<i>In addition, the indirect relationship between leadership communication and (a) mindfulness and (b) PsyCap via POS will be moderated by HPWS, such that the indirect relationship becomes stronger as HPWS becomes greater (moderated mediation).</i>

## **Chapter 4. Methods – Study One**

### ***Participants and Sample***

Data was collected in a large New Zealand manufacturing organisation with many sites across New Zealand. There were two samples collected in this one organisation: (1) pink-collar and white-collar office workers, and (2) blue-collar factory workers. Sample one includes a wide range of professional workers, including administrators and marketing and human resource staff. The majority came from the administrative Head Office located in Auckland, although data from administrative workers were collected across all sites. Sample two included blue-collar workers, mainly factory workers that manufactured the main product that the organisation sells. After the project was discussed with the CEO, an email was sent to all employees notifying them of the upcoming survey invitation.

Due to the lack of Internet access in the factory settings, the blue-collar workers were notified of the forthcoming survey in a physical monthly newsletter. Due to the specific work settings, sample one (office workers) were sent an anonymous survey link that linked to an online Qualtrics survey. Sample two (factory workers) had several physical surveys sent to all workplace settings, with pre-paid named envelopes which were addressed to my supervisor (Professor Jarrod Haar). Both the online and physical surveys were anonymous and did not require an employee's name or contact details, to ensure the responses were confidential. These surveys were identical. Full ethics was granted for the study (AUT 17/96 The effect of individual and organisational factors on employee engagement and performance). Appendix A has a copy of the ethics agreement. Appendix B provides a copy of the physical survey.

Overall, 431 office workers (sample one) were sent the email link, and two follow-up reminders were sent. In total, I received 210 who did the online survey. However, in doing data cleaning, it was shown that a few of the respondents had begun the survey but not completed most of it. These were dropped from further analysis. A total of 206 sample one surveys were used for the final analysis, representing a response rate of 47.7 percent. In total, approximately 275 factor workers (sample two) were delivered a physical survey and pre-paid envelope. In total, 140 survey envelopes were received by my supervisor. In total, seven of these were missing significant amounts of data and were dropped from further analysis. A total of 133 sample two surveys were used for analysis, representing a response rate of 48.3 percent.

According to the organisation's Human Resource Management Department, the samples were likely to be quite distinct. For example, I expected sample one (professional workers) would more likely to be educated, have longer tenure and receive a higher income. Sample two (factor workers) were more likely to be non-educated, be employed for shorter periods of time and earn less money.

Researchers face several concerns regarding empirical studies and statistical tests (Nuzzo, 2014), with Nuzzo arguing that significant findings in one study might be quite difficult to replicate. Thus, Tsang and Kwan (1999) and Nuzzo (2014) highlight the need for replication in empirical studies. Consequently, the present study responds to the need for greater replication to provide greater confidence than findings from a single study. Thus, it was the aim of the data collection to collect two samples – from the same organisation – of distinct employee groups, to test hypotheses.

Study demographics are shown in Table 2.

*Table 2. Study Demographics*

<b>Demographic</b>	<b>Sample 1 Professional Workers</b>	<b>Sample 2 Blue-Collar Workers</b>
Sample	N=206	N=133
Gender	68% male 32% female	94% male 6% female
Age	Average age band: 30-40 years (SD=1.2)	Average age band: 30-40 years (SD=1.2)
Hours Worked	48.2 (SD=5.7)	44.7 (SD=9.5)
Education	High School=52.0% Polytechnic Qualification=26.7% University Degree=13.6% Postgrad Qualification=7.7%	High School=32.3% Polytechnic Qualification=57.9% University Degree=6.8% Postgrad Qualification=3.0%
Job Tenure	5.2 (SD= 4.8)	6.6 (SD= 8.3)
Org Tenure	7.5 (SD= 6.0)	6.9 (SD= 6.6)
Ethnicity	New Zealand European= 74 % Maori= 12% Pacific peoples= 2% Asian= 4% Indian=2% Other= 6%	New Zealand European= 42% Maori= 13% Pacific peoples= 37% Asian= 3% Indian= 4% Other= 1%

Overall sample one has more males (68%) than females (32%). Sample two is similar, although the proportion of males is far greater (94%) than females (6%). Both samples have the same age band on average, with workers on average belonging to the 30-40 years of age group. The professional workers from sample one worked more hours (48.2 hours on average) than the factory workers from sample two (44.7 hours on average). There were strong differences across education. The office workers (sample one) had mainly high school education (52.0%) followed by polytechnic qualification

(13.6%), university degree (13.6%) and finally postgraduate qualification (7.7%).

The factory workers (sample two) had mainly polytechnic qualification (57.9%) reflecting that there is some training required for the work they predominantly do. The next big group was high school education (32.3%), followed by low levels of university degree and postgraduate qualifications. By tenure, the professional workers in sample one had higher organisational tenure (7.5 years) than job tenure (5.2 years), while these were more even for the factory workers in sample two (6.6 years for job tenure and 6.9 years for organisational tenure). Finally, New Zealand European was the dominant ethnicity in sample one while accounting for only 42% in sample two. Sample two had more ethnic diversity, with Pacifica peoples making up 37% and Maori making an additional 13%.

To confirm that these samples were distinct and thus better analysed separately than confirmed, I conducted a t-test on study variables. There were significant differences found in age also, with sample one ( $M = 3.97$ ) being significantly higher than sample two ( $M = 3.40$ ),  $t = 4.341(337)$ ,  $p = .000$ . So, while both groups had an average age in the 30-40-year-old age group, there were significant differences within these age bands. Sample one reported significantly more women (32%) than sample two (6%),  $t = 6.387(337)$ ,  $p = .000$ . While the composition of education is starkly different across sample one and two (high levels of high school education in sample one and high levels of polytechnic qualification in sample two), when I compared the mean scores, these differences were not significantly different from sample one ( $M = 1.878$ ) versus sample two ( $M = 1.67$ ):  $t = 1.230(337)$ ,  $p = .219$ .

Job tenure was significantly different, with sample one ( $M=5.2$ ) reporting significantly lower job tenure than sample two ( $M=6.6$ ):  $t = -1.969(337)$ ,  $p = .050$ . However, organisational tenure was not significantly different ( $t = .894$ ,  $p = .372$ ). There were significant differences between the samples in hours worked, with sample one ( $M=48.2$  hours) reporting higher work hours than sample two ( $M=44.7$ ),  $t = -4.929(337)$ ,  $p = .000$ . The HR Department confirmed that sample one has a lot of salaried positions where no paid overtime is the norm, blue-collar workers (sample two) do get paid overtime and thus their managers typically try to keep these hours contained.

Finally, there are significant differences in ethnicity: sample one reports far higher levels of New Zealand Europeans ( $M= 74\%$ ) versus sample two ( $M= 42\%$ ), and this difference is significant:  $t = 6.334(337)$ ,  $p = .000$ . These differences are reversed with respect to the Pacifica peoples, with sample one ( $M= 2\%$ ) reporting significantly less than sample two ( $M= 37\%$ ):  $t = -9.951(337)$ ,  $p = .000$ . Finally, by Maori ethnicity, there are no significant differences between sample one and sample two:  $t = -.150(337)$ ,  $p = .881$ . Overall, these large numbers of significant differences do align with the idea of separating the samples for testing. Beyond occupational differences, there are clearly differences in age, gender, ethnicity, job tenure and hours worked. Hence, I continued with analysing samples one and two distinctly.

### ***Measures***

The same measures were used in sample one and sample two. The reliabilities for both samples are provided.

High Performance Work Systems (HPWS) was measured with 15 items by Lepak and Snell (2002), coded 1=strongly disagree, 5=strongly agree. I focused on five dimensions (performance, compensation, recruitment and selection, training and job design), with three items per dimension. Following standard practice, I created a single factor (e.g., Datta et al., 2005), made up of all the items. This approach also aligns with the meta-analysis of Combs, Liu, Hall, and Ketchen (2006) who found that there was a stronger relationship when HR practices were combined rather than separate. The items and their mean scores are shown in Table 3 for both sample one and sample two. The measure had excellent reliability for both samples:  $\alpha = .93$  (sample one) and  $\alpha = .91$  (sample two).

Table 3. HPWS and Statistics

<b>Item</b> (coded 1=strongly disagree, 5=strongly agree) Item stem “Human Resource Practices in your organisation...”	<b>Sample One</b>		<b>Sample Two</b>	
	<b>Mean Score</b>	<b>SD</b>	<b>Mean Score</b>	<b>SD</b>
1. In my job I am empowered to make decisions	3.7	.84	3.2	1.2
2. I have a high degree of job security	3.3	.94	3.3	.94
3. My work includes a wide variety of tasks	4.1	.84	3.7	1.1
4. The recruitment/selection process for employees emphasizes promotion from within	3.2	1.1	3.0	.88
5. The recruitment/selection process for employees focuses on selecting the best all around candidate, regardless of the specific job	3.4	.91	3.2	1.0
6. The recruitment/selection process places priority on their potential to learn (e.g., aptitude)	3.4	.88	3.1	.94
7. Our training activities for employees are comprehensive	3.0	1.0	3.1	.93
8. Our training activities for employees are continuous	3.0	1.1	3.1	1.1
9. Our training activities strive to develop firm-specific skills/knowledge	3.1	1.0	3.2	1.0
10. Performance appraisals for employees are based on input from multiple sources	2.8	1.0	2.9	1.0
11. Performance appraisals emphasize employee learning	2.8	1.0	3.0	1.0
12. Performance appraisals include developmental feedback	3.1	1.0	3.0	1.1
13. Compensation/ rewards for employees provide incentives for new ideas	2.4	.98	2.9	1.2
14. Compensation/ rewards for employees include an extensive benefits package	2.6	1.1	2.7	1.1
15. Compensation/ rewards for employees place a premium on their industry experience	2.7	1.0	2.9	1.1

Note: items are shown in order.



Leadership Communication was measured with four items from Yrle et al., (2002), coded 1= strongly disagree, 5= strongly agree. Questions followed the stem “Your supervisor...” and the items used were “Informs about company rules”, “Informs about future company plans”, “Explains company problems when needed”, and “Explains the company vision in a language I can understand”. The measure had very good reliability ( $\alpha = .86$ ).

Perceived Organisational Support (POS) was measured with four items from Eisenberger, Huntington, Hutchison, and Sowa (1986), coded 1=strongly disagree, 5=strongly agree. These items had the introduction: “The following page contains questions that are related to your experience with your organisation. Your responses are anonymous. Please be honest and candid”. Questions followed the stem “My organisation...” and sample items are “Would fail to notice if I did the best job possible” and “Fails to appreciate any extra effort from me”. This construct is well established and has strong validity (e.g., Eisenberger, Stinglhamber, Vandenberghe, Sucharski, & Rhoades, 2002; Eisenberger, Armeli, Rexwinkel, Lynch, & Rhoades, 2001; Eisenberger, Cummings, Armeli, & Lynch, 1997). The measure has also been validated in its meta-analyses (e.g., Rhoades & Eisenberger, 2002; Riggle, Edmondson, & Hansen, 2009). The measure had excellent reliability for both samples:  $\alpha = .90$  (sample one) and  $\alpha = .96$  (sample two).

Psychological Capital (PsyCap) was measured with the 12-item PsyCap Questionnaire (PCQ-12) by Luthans, Youssef, and Avolio (2007a, 2015), coded 1=strongly disagree, 6= strongly agree. The PsyCap questionnaire consists of four subscales: (1) Hope, (2) Efficacy, (3) Resilience, and (4)

Optimism. PsyCap is a well validated instrument, for example, see Luthans, Avolio, Avey, and Norman (2007b), Luthans, Norman, Avolio, and Avey (2008), and Avey et al., (2011). While the original construct is 24 items, this shorter 12-item measure has also been well validated and shown to have good reliability. For example, Roche, Haar, and Luthans (2014) reported reliability on the PCQ-12 across four New Zealand samples as .85, .87, .83, and .86. Sample items include: “If I should find myself in a jam at work, I could think of many ways to get out of it” (Hope), “I feel confident presenting information to a group of colleagues” (Efficacy), “I usually take stressful things at work in stride” (Resilience), and “I always look on the bright side of things regarding my job” (Optimism).

I followed common practice in the literature and combined the four dimensions to determine the overall psychological capital score for respondents (see, Avey et al., 2011; Luthans et al., 2007a, 2007b; Roche et al., 2014). Hence, the present study considers PsyCap as four related but distinct constructs. The individual reliability scores were:

1. Hope:  $\alpha = .81$  (sample one) and  $\alpha = .90$  (sample two)
2. Efficacy:  $\alpha = .85$  (sample one) and  $\alpha = .88$  (sample two)
3. Resilience:  $\alpha = .79$  (sample one) and  $\alpha = .81$  (sample two)
4. Optimism:  $\alpha = .76$  (sample one) and  $\alpha = .75$  (sample two). ( $\alpha = .82$ )

The reliability for the combined construct was excellent for both samples:  $\alpha = .91$  (sample one) and  $\alpha = .94$  (sample two).

Mindfulness was measured using the Brown and Ryan (2003) Mindful Attention Awareness Scale (MAAS), coded 1= never, 5= all of the time. This particular scale (MAAS) was selected because Roche et al. (2014) suggest “it

is the dominant measure for mindfulness” (p. 480), and this is widely supported by the literature (e.g., Osman, Lamis, Bagge, Freedenthal, & Barnes, 2016; Jensen, Niclasen, Vangkilde, Petersen, & Hasselbalch, 2016; Allen & Kiburz, 2011; Hülshager et al., 2013; Leroy et al., 2013; Schutte & Malouff, 2011; Weinstein & Ryan, 2011). The present studies utilised the MASS short 5-item scale by Höfling, Moosbrugger, Schermelleh-Engel, and Heidenreich (2011) as this has strong similarities to the full measure. Sample items are “I do jobs or tasks automatically, without being aware of what I’m doing” and “I find myself listening to someone with one ear, doing something else at the same time”. All five items were reverse scored to produce a positive mindfulness scale. Thus, a higher score represents the respondent has higher mindfulness and awareness of the present. This measure had good reliability for both samples:  $\alpha = .78$  (sample one) and  $\alpha = .87$  (sample two).

Meaningful Work was measured using the three-item construct by Spreitzer (1995), coded 1=strongly disagree, 5= strongly agree. Sample items are “The work I do on this job is very important to me” and “The work I do on this job is meaningful to me”. This measure has been validated (e.g., Siegall & Gardner, 2000), and it had good reliability for both samples:  $\alpha = .94$  (sample one) and  $\alpha = .83$  (sample two).

Work-Life Balance (WLB) was measured using Haar’s (2013) three-item measure, coded 1=strongly disagree, 5= strongly agree. Items in this measure are “I am satisfied with my work-life balance, enjoying both roles”, “Nowadays, I seem to enjoy every part of my life equally well” and “I manage to balance the demands of my work and personal/family life well”. This

construct has been well validated (Haar et al., 2019; Haar, Roche, & Brougham, 2018a; Haar et al., 2018b; Haar et al., 2017), including in a seven culture, six country study (Haar, Russo, Sune, & Ollier-Malaterre, 2014). This measure had very good reliability for both samples:  $\alpha = .88$  (sample one) and  $\alpha = .85$  (sample two).

Work Engagement was measured using the work engagement scale by Schaufeli, Salanova, Gonzalez-Roma, and Bakker (2001), coded 1=never, 5=always. This was the short 9-item scale, as opposed to the 17-item full scale (Schaufeli & Bakker, 2003). A large-scale study by Seppälä, Mauno, Feldt, Hakanen, Kinnunen, Tolvanen, and Schaufeli (2009) confirmed the validity of the 9-item short scale. Sample items include “When I get up in the morning, I feel like going to work” (Vigor), “My job inspires me” (Dedication), and “I feel happy when I am working intensely” (Absorption). Common practice is to combine these factors into a single ‘global’ work engagement construct (e.g., Bakker & Xanthopoulou, 2009), because Schaufeli and Bakker (2010) argue that employees who are highly-engaged would be expected to be high on all three engagement dimensions.

However, Salanova and Schaufeli (2008) argued that the three dimensions of work engagement might not represent a single engagement construct, but rather that the dimension or factor of absorption might actually be viewed as a consequence of work engagement. Hence, vigor and dedication could be “considered the core dimensions of engagement” (p. 118) and thus they would predict the third dimension of absorption. This has been somewhat adopted in the literature, with many studies focusing only on the two dimensions (vigor and dedication) when examining work engagement

(e.g., Hakanen, et al., 2017; Salanova, Schaufeli, Martínez & Bresó, 2010; Rodríguez-Munõz, et al., 2014; Schmitt, et al., 2016).

Hence, while the combined construct had excellent reliability for both samples:  $\alpha = .91$  (sample one) and  $\alpha = .94$  (sample two), in the present study I followed Salanova and Schaufeli (2008) and tested the three dimensions separately. The reliability for each was very good: vigor,  $\alpha = .87$  (sample one) and  $\alpha = .89$  (sample two); dedication,  $\alpha = .87$  (sample one) and  $\alpha = .89$  (sample two); and absorption,  $\alpha = .73$  (sample one) and  $\alpha = .82$  (sample two).

Job Satisfaction was measured using three items by Judge, Bono, Erez and Locke's (2005), coded 1=strongly disagree, through to 5=strongly agree. This has been well tested and validated in New Zealand (e.g. Haar, 2013; Haar et al., 2014). Items in this measure are "Most days I am enthusiastic about my work", "I feel fairly satisfied with my present job" and "I find real enjoyment in my work". This 3-item version of the Judge construct has been well validated in New Zealand employee samples (e.g., Haar, 2013; Haar et al., 2014). This measure had very good reliability for both samples:  $\alpha = .87$  (sample one) and  $\alpha = .83$  (sample two).

Turnover Intentions was measured using a 4-item measure by Kelloway, Gottlieb and Barham (1999), coded 1=strongly disagree, 5=strongly agree. Sample items are "I intend to ask people about new job opportunities" and "I don't plan to be at my organisation much longer". This measure had excellent reliability for both samples:  $\alpha = .95$  (sample one) and  $\alpha = .89$  (sample two).

Job Stress was measured using a single item by Stanton, Balzer, Smith, Parra, and Ironson (2001): “On a scale of 1-10, how would you rate the amount of stress you feel in your job”, coded 1=no stress, 10=extreme stress. Stanton et al. (2001) found the 1-item measure correlated at 0.70 towards the Stress in General (Pressure), which was a 7-item measure. Similarly, Macky and Boxall (2008) found this measure correlated at 0.72 with another 7-item measure of job stress, and this single-item construct has been used successfully in employee research (Boxall & Macky, 2014; Boxall, Hutchison, & Wassenaar, 2015). Beal, Trougakos, Weiss, and Dalal (2013) assert that researcher interest in measuring stress as a global concept means the single-item construct approach is very applicable, with comparison studies of multi-item scales versus single-item scales finding little difference (Gardner, Cummings, Dunham, & Pierce, 1998).

Job Performance was measured with three items by Motowidlo and Van Scotter (1994). Each item has a unique scoring option. Item one is “Please rate yourself on meeting your job standards” and was coded 1= I do not meet the standards, 3=I meet the standards, and 5=I exceed the standards. Item two was “Please rate yourself compared to others of the same job level” and was coded 1= I perform at a low level, 3= 1. I perform at an average level, 5= I perform at a high level. The final item was “Please rate your contribution to your teams’ effectiveness” and was coded 1= I contribute less than most”, 3= I make an average contribution, 5= I contribute more than most. This measure had average reliability for both samples:  $\alpha = .64$  (sample one) and  $\alpha = .75$  (sample two).

Ideally, job performance would have been received by the supervisor or Human Resources Department of the organisation, but this was not possible as Ethics required total anonymity. However, in their meta-analysis, Judge et al. (2001) found the relationships between job satisfaction and job performance did not differ largely whether the job performance data was rated by the supervisor or the HR Department. In another meta-analysis, Judge, Jackson, Shaw, Scott, and Rich (2007) found different forms of work performance (objective versus subjective) were relatively similar also. The present study had to rely on self-reported data.

**Control Variables.** I controlled for factors typical of the various literature (Haar, Roche, & Taylor, 2012; Haar & Roche, 2010), focusing specifically on work engagement, job satisfaction, turnover intentions and job stress, due to these being the main outcomes of the study. I controlled for Age (in year-bands: 1=less than 20 years, 2=20-29 years, 3=30-39 years, 4=40-49 years, 5=50-59 years, 6=60 years and over), Minority Ethnicity (1= Maori or Pacifica peoples, 0=everyone else), Education (1=high school education only, 0= all other education), Gender (1=male, 2=female), Hours Worked (hours per week), and Job Tenure (in years).

I controlled age and job tenure because turnover intentions' meta-analyses (Griffeth et al., 2000; Ng & Feldman, 2009) found both these demographic factors to be amongst the strongest demographic factors related to turnover intentions. In effect, older workers and those working in their job longer are less likely to consider leaving. Furthermore, experience was found to be a significant demographic variable in a meta-analysis of job performance (Judge et al., 2007). I controlled for minority ethnicity due to

recent studies showing the effects of constructs on outcomes like those studied here can be stronger (more powerful) for Maori (Haar & Brougham, 2016). A meta-analysis by Blegen (1993), identified age (positive) and education (negative) as influencing job satisfaction. Similarly, Brown and Peterson (1993) in their meta-analysis, explored age and education, making these valuable control variables. Towards job stress, a meta-analysis by Kivimäki, Virtanen, Elovainio, Kouvonen, Väänänen, and Vahtera (2006) found links between age and gender, and Brummelhuis, Haar, and van der Lippe (2010) explored the role of time and work hours in employee stress.

### *Analysis*

Hypotheses were tested using two programs: (1) Structural Equation Modelling (SEM) in AMOS (version 24), and (2) using PROCESS version 3.0 (Hayes, 2013, 2017) in SPSS (version 24). SEM is a statistical program with advantages over normal regression analysis in SPSS. It draws a global CFA to ensure that the factors measure the constructs they are supposed to. Next it accounts for error values for all outcomes and enables multiple dependent variables, which is not possible in SPSS. SEM also provides a platform for analysis, especially mediation analysis, whereby various models can be tested including direct effects only: full mediation and partial mediation (e.g., Haar et al., 2014; Haar, de Fluiter, & Brougham, 2016). This provides a superior way to assess data.

However, there are some limitations with AMOS and specifically, moderating effects. Haar et al. (2014) noted the need to run potentially multiple models when there are multiple moderators due to potential issues of multi-collinearity. One solution is to do the mediation tests in AMOS and



the interaction tests in SPSS, and I followed Shang, O'Driscoll, and Roche (2017), utilising this approach.

For testing moderators, PROCESS was chosen because the PROCESS macros allow for more complex models to be analysed in SPSS, including moderation, and moderated mediation (Hayes, 2018; Hayes & Preacher, 2013). A number of models were utilised to examine the relationships between variables. Initially, model 1 (moderation only) was run to test the effects of constructs on PsyCap and mindfulness, and then model 15 was run as t-tests for moderated mediation effects. Appendix C shows the study models that were tested.

Within the PROCESS program, mediation analysis can be conducted and Lewis and Sznitman (2017) define this as “an SPSS macro that uses a path analytical framework for estimating direct and indirect effects based on OLS regression models. This approach involves bootstrapping the sampling distribution of the indirect effect and obtaining its confidence interval” (pp. 192-193). The bootstrapping analysis for mediation (and ultimately moderated mediation) is based on 5,000 bootstraps. Regarding the robustness of the PROCESS approach, Hayes, Montoya, and Rockwood (2017) compared SEM and PROCESS analysis of moderated mediation equations and found them to be practically identical.

### ***Measurement Model***

Using AMOS, I conducted a CFA on the study constructs and followed authors' suggestions for fit indices (e.g., Bentler & Bonett, 1980; Williams, Vandenberg & Edwards, 2009): (1) the comparative fit index ( $CFI \geq .90$ ), (2) the root-mean-square error of approximation ( $RMSEA \leq .08$ ), and (3) the

standardised root mean residual ( $SRMR \leq .10$ ). These were selected because they are not susceptible to issues when there are small sample sizes (William et al., 2009).

I made two choices to the constructs examined here: (1) I combined and used a single item regarding the HPWS construct, which is the approach of Datta et al. (2005). While this construct has three items across five factors, it is not in the *theoretical* or *empirical* interest to determine the strength of any one factor over another (for example, performance factor over job design factor). Indeed, the meta-analysis by Combs et al. (2006) suggests combination not separation is the key to the benefits of HPWS on outcomes like employee attitudes. I explored this potential using CFA in AMOS (v. 24), to test a higher order HPWS construct, and this was a good fit to the data:  $\chi^2$  (df) = 208.6 (90), CFI=.94, RMSEA=.08, and SRMR=.12.

However, when compared to the individual HPWS factors – where the five HRM practice bundles covary but are not part of a ‘higher-order’ construct – they are a superior fit to the data:  $\chi^2$  (df) = 117.0 (80), CFI=.98, RMSEA=.05, and SRMR=.04. Thus, the individual factors were found to be a better fit: ( $\Delta\chi^2$  ( $\Delta$ df) = 91.6 (10),  $p < .001$  (Hair, Black, Babin, & Anderson, 2010). Because I am interested in the total influence of HPWS I thought it was better to examine the HPWS in their *entirety* because the interest here is to examine the influence of HRM practices – as a whole – rather than a taking a ‘piece-meal’ approach to the HRM practices.

The other option (2) was to use a single item for PsyCap. While this has four factors, Sweetman, Luthans, Avey, and Luthans (2011) noted the PsyCap construct can be considered a second order factor, where each item loads on to each component (Hope, Efficacy, Resilience and Optimism) and

these four factors subsequently fit to the overall latent PsyCap factor. I explored this potential using CFA in AMOS (v. 24), to test the higher order PsyCap construct, and this was a good fit to the data:  $\chi^2$  (df) = 152.7 (53), CFI=.93, RMSEA=.10, and SRMR=.07.

However, when compared to the individual PsyCap factors – where the four factors covary but are not part of a ‘higher-order’ construct – they are a better fit to the data:  $\chi^2$  (df) = 117.3 (48), CFI=.95, RMSEA=.08, and SRMR=.05. Thus, the individual factors were found to be a better fit: ( $\Delta\chi^2$  ( $\Delta$ df) = 35.4 (5),  $p < .001$  (Hair et al., 2010). As such, the present study considers PsyCap as four related but distinct constructs. However, as with HPWS above, there is no interest in whether one factor (or more) of the four is a stronger predictor. Hence, I combined these items into a single PsyCap construct.

However, this approach (parcelling) is not without potential issues, with methods experts providing mixed support. Bagozzi and Heatherton (1994) suggest parcelling can optimise the variable to sample size ratio for smaller samples, resulting in more stable parameter estimates. In addition, the use of parcelling can help to minimise random error and item-specific biases (Matsunaga, 2008). Little, Cunningham, Shahar, and Widaman (2002) suggest therefore, that parcelling helps avoid under-identification of research models. However, Marsh, Lüdtke, Nagengast, Morin, and Von Davier (2013) argue that parcelling is problematic when researchers fail to conduct CFA *before* parcelling and retaining cross-loading items.

As noted above there were no issues with item cross-loadings within either the HPWS factors or the PsyCap factors and I conducted CFA on each construct separately and they were all good fit to the data. Thus, I

acknowledge that there are potential issues with parcelling (as per March et al., 2013) however, it was only on these two constructs that this was conducted. The hypothesised model and two alternative CFAs are shown in Table 4.

Table 4. Results of Confirmatory Factor Analysis

Model	Model Fit Indices					Model Differences			
	$\chi^2$	df	CFI	RMSEA	SRMR	$\chi^2$	$\Delta$ df	p	Details
Model 1 (sample 1)	877.1	577	.95	.05	.05				
Model 1 (sample 2)	903.2	577	.90	.07	.06				
Model 2 (sample 1)	1033.6	590	.92	.06	.06	156.5	13	.001	Model 1 to 2
Model 2 (sample 2)	1056.5	590	.86	.08	.07	153.5	13	.001	Model 1 to 2
Model 3 (sample 1)	991.9	602	.93	.06	.05	114.8	25	.001	Model 1 to 3
Model 3 (sample 2)	1028.1	602	.87	.07	.06	124.9	25	.001	Model 1 to 3
Model 4 (sample 1)	1242.5	590	.88	.07	.08	365.4	13	.001	Model 1 to 4
Model 4 (sample 2)	1007.7	590	.88	.07	.06	104.5	13	.001	Model 1 to 4

Key: HPWS=high performance work systems, Comms=leadership communication, POS=perceived organizational support, WLB=work-life balance, MFW=meaningful work.

Model 1=Hypothesized 14-factor model: HPWS (single item), Comms, POS, PsyCap (single item), mindfulness, MFW, WLB, work engagement: vigor, dedication and absorption, job satisfaction, turnover intentions, job stress and job performance.

Model 2=Alternative 10-factor model: as model 1 but with job satisfaction and job performance combined.

Model 3=Alternative 9-factor model: as model 1 but with work engagement dimensions: vigor, dedication and absorption combined.

Model 4=Alternative 10-factor model: as model 1 but with WLB and MFW combined.

The hypothesised measurement model was an excellent fit for sample one, meeting all requirements:  $\chi^2 (577) = 877.1$  ( $p = .000$ ), CFI = .95, RMSEA = 0.05 and SRMR = 0.05. Alternative CFAs were found to be poorer fits (all  $< .001$ ). The CFA for sample two (blue collar workers) was robust but only just met the thresholds around CFI:  $\chi^2 (577) = 903.1$  ( $p = .000$ ), CFI = .90, RMSEA = 0.07 and SRMR = 0.06. Similar to sample one, the alternative CFAs were found to be poorer fits (all  $< .001$ ). Overall, the findings provide robust support for the constructs to be utilised.

## **Chapter 5. Results – Study One**

Descriptive statistics for the study variables from sample one are shown in Tables 5 and 6.

Table 5. Correlations and Descriptive Statistics of Study Variables (Sample 1)

Variables	M	SD	1	2	3	4	5	6	7	8
1. Age	4.0	1.2	--							
2. Hours Worked	48.2	5.7	.03	--						
3. Job Tenure	5.2	4.8	.41**	-.08	--					
4. HPWS	3.1	.70	-.10	.16*	-.14*	--				
5. POS	3.5	.86	-.04	.13	-.17*	.62**	--			
6. Leader Comms	3.6	.84	-.15*	.19**	-.17*	.56**	.57**	--		
7. PsyCap	4.5	.75	.03	.20**	.02	.40**	.45**	.48**	--	
8. Mindfulness	4.2	.59	.06	.07	-.04	.27**	.25**	.25**	.39**	--
9. MFW	3.9	.80	.10	.18*	.09	.36**	.31**	.42**	.55**	.25**
10. Work-Life Balance	3.4	.93	.05	-.18*	.03	.34**	.34**	.20**	.46**	.16*
11. Vigor	4.0	.82	.16*	.15*	.05	.44**	.43**	.42**	.55**	.33**
12. Dedication	4.1	.86	.18*	.16*	.05	.46**	.42**	.46**	.54**	.36**
13. Absorption	4.0	.79	.04	.19**	-.01	.33**	.37**	.37**	.43**	.21**
14. Job Satisfaction	3.7	.80	.07	.11	-.03	.60**	.55**	.53**	.59**	.32**
15. Turnover Intentions	2.5	1.1	.07	-.14*	.10	-.59**	-.52**	-.50**	-.42**	-.32**
16. Job Stress	5.1	2.1	-.03	.26**	-.12	.09	.08	.07	-.03	-.01
17. Job Performance	3.8	.61	.05	.15*	.19**	-.12	.05	-.02	.36**	.09

N=206, \*p<.05, \*\*p<.01.

Note: Leader Comms=Leadership Communication



Table 6. Correlations and Descriptive Statistics of Study Variables (Sample 1 cont.)

Variables	9	10	11	12	13	14	15	16	17
1. Age									
2. Hours Worked									
3. Job Tenure									
4. HPWS									
5. POS									
6. Leader Comms									
7. PsyCap									
8. Mindfulness									
9. MFW	--								
10. Work-Life Balance	.40**	--							
11. Vigor	.54**	.38**	--						
12. Dedication	.65**	.42**	.77**	--					
13. Absorption	.50**	.24**	.62**	.68**	--				
14. Job Satisfaction	.61**	.55**	.71**	.75**	.54**	--			
15. Turnover Intentions	-.45**	-.41**	-.42**	-.54**	-.38**	-.60**	--		
16. Job Stress	.12	-.26**	-.08	.03	.09	.05	.01	--	
17. Job Performance	.25**	.14*	.18*	.21**	.24**	.10	.01	.05	--

N=206, \*p<.05, \*\*p<.01.

Note: Leader Comms=Leadership Communication

Tables 5 and 6 show that HPWS is significantly correlated with POS ( $r = .62$ ,  $p < .01$ ), leadership communication ( $r = .56$ ,  $p < .01$ ), PsyCap ( $r = .40$ ,  $p < .01$ ), mindfulness ( $r = .27$ ,  $p < .01$ ), meaningful work ( $r = .36$ ,  $p < .01$ ), work-life balance ( $r = .34$ ,  $p < .01$ ), vigor ( $r = .44$ ,  $p < .01$ ), dedication ( $r = .46$ ,  $p < .01$ ), absorption ( $r = .33$ ,  $p < .01$ ), job satisfaction ( $r = .60$ ,  $p < .01$ ), and turnover intentions ( $r = -.59$ ,  $p < .01$ ). There were no significant correlations with either job stress ( $r = .09$ ) or job performance ( $r = -.12$ ). POS is significantly correlated with leadership communication ( $r = .57$ ,  $p < .01$ ), PsyCap ( $r = .45$ ,  $p < .01$ ), mindfulness ( $r = .25$ ,  $p < .01$ ), meaningful work ( $r = .31$ ,  $p < .01$ ), work-life balance ( $r = .34$ ,  $p < .01$ ), vigor ( $r = .43$ ,  $p < .01$ ), dedication ( $r = .42$ ,  $p < .01$ ), absorption ( $r = .37$ ,  $p < .01$ ), job satisfaction ( $r = .55$ ,  $p < .01$ ), and turnover intentions ( $r = -.52$ ,  $p < .01$ ).

As with HPWS, there were no significant correlations with either job stress ( $r = .08$ ) or job performance ( $r = .05$ ). Leadership communication is significantly correlated with PsyCap ( $r = .48$ ,  $p < .01$ ), mindfulness ( $r = .25$ ,  $p < .01$ ), meaningful work ( $r = .42$ ,  $p < .01$ ), work-life balance ( $r = .20$ ,  $p < .01$ ), vigor ( $r = .42$ ,  $p < .01$ ), dedication ( $r = .46$ ,  $p < .01$ ), absorption ( $r = .37$ ,  $p < .01$ ), job satisfaction ( $r = .53$ ,  $p < .01$ ), and turnover intentions ( $r = -.50$ ,  $p < .01$ ). There were no significant correlations with either job stress ( $r = .07$ ) or job performance ( $r = -.02$ ).

Regarding the two dispositional factors, PsyCap is significantly correlated with mindfulness ( $r = .39$ ,  $p < .01$ ), meaningful work ( $r = .55$ ,  $p < .01$ ),

.01), work-life balance ( $r = .46, p < .01$ ), vigor ( $r = .55, p < .01$ ), dedication ( $r = .54, p < .01$ ), absorption ( $r = .43, p < .01$ ), job satisfaction ( $r = .59, p < .01$ ), turnover intentions ( $r = -.42, p < .01$ ), and job performance ( $r = .36, p < .01$ ). There was no significant correlation with job stress ( $r = -.03$ ). Mindfulness, was found to be significantly correlated with meaningful work ( $r = .25, p < .01$ ), work-life balance ( $r = .16, p < .05$ ), vigor ( $r = .33, p < .01$ ), dedication ( $r = .36, p < .01$ ), absorption ( $r = .21, p < .01$ ), job satisfaction ( $r = .32, p < .01$ ), and turnover intentions ( $r = -.32, p < .01$ ). Mindfulness was not significantly correlated with either job stress ( $r = -.01$ ) or job performance ( $r = .09$ ).

Meaningful work is significantly correlated with work-life balance ( $r = .40, p < .01$ ), vigor ( $r = .54, p < .01$ ), dedication ( $r = .65, p < .01$ ), absorption ( $r = .50, p < .01$ ), job satisfaction ( $r = .61, p < .01$ ), turnover intentions ( $r = -.45, p < .01$ ), and job performance ( $r = .25, p < .01$ ). There was no significant correlation with job stress ( $r = .12$ ). Work-life balance is significantly correlated with vigor ( $r = .38, p < .01$ ), dedication ( $r = .42, p < .01$ ), absorption ( $r = .24, p < .01$ ), job satisfaction ( $r = .55, p < .01$ ), turnover intentions ( $r = -.41, p < .01$ ), job stress ( $r = -.26, p < .01$ ) and job performance ( $r = .14, p < .05$ ).

Amongst the three dimensions of work engagement, vigor is significantly correlated with dedication ( $r = .77, p < .01$ ), absorption ( $r = .62, p < .01$ ), job satisfaction ( $r = .71, p < .01$ ), turnover intentions ( $r = -.42, p < .01$ ), and job performance ( $r = .18, p < .05$ ), but not job stress ( $r = -.08$ ). Similarly, dedication is significantly correlated with absorption ( $r = .68, p < .01$ ), job

satisfaction ( $r = .75, p < .01$ ), turnover intentions ( $r = -.54, p < .01$ ), and job performance ( $r = .21, p < .01$ ), but not job stress ( $r = .03$ ). Finally, absorption is significantly correlated with job satisfaction ( $r = .54, p < .01$ ), turnover intentions ( $r = -.38, p < .01$ ), and job performance ( $r = .24, p < .01$ ), but not job stress ( $r = .09$ ). Finally, job satisfaction and turnover intentions are significantly correlated ( $r = -.60, p < .01$ ). Neither outcome correlates significantly with job stress or job performance.

Descriptive statistics for the study variables from sample two are shown in Tables 7 and 8.

Table 7. Correlations and Descriptive Statistics of Study Variables (Sample 2)

Variables	M	SD	1	2	3	4	5	6	7	8
1. Age	3.4	1.2	--							
2. Hours Worked	44.7	9.5	-.07	--						
3. Job Tenure	6.6	8.3	.41**	.02	--					
4. HPWS	3.1	.65	.14	-.14	-.06	--				
5. POS	3.4	.95	-.01	.17	-.19*	-.03	--			
6. Leader Comms	3.5	.92	.03	-.02	-.02	.45**	-.10	--		
7. PsyCap	4.1	.97	.14	-.07	-.07	.30**	.04	.45**	--	
8. Mindfulness	3.4	.94	-.02	.13	-.07	.01	.31**	.21*	.32**	--
9. MFW	3.5	.94	.22*	-.03	-.10	.30**	.21*	.42**	.68**	.33**
10. Work-Life Balance	3.3	1.0	.14	-.08	-.10	.41**	.20*	.34**	.53**	.18*
11. Vigor	3.5	1.1	.08	-.05	-.16	.37**	.23*	.35**	.48**	.22*
12. Dedication	3.5	1.2	.18*	-.02	-.11	.34**	.27**	.38**	.52**	.38**
13. Absorption	3.4	1.1	.12	.00	-.07	.29**	.17	.33**	.45**	.22*
14. Job Satisfaction	3.4	.88	.21*	-.10	-.02	.40**	.23**	.48**	.63**	.31**
15. Turnover Intentions	2.8	1.1	-.17	-.11	-.01	-.32**	-.35**	-.30**	-.16	-.28**
16. Job Stress	5.1	2.3	-.03	-.04	-.04	-.14	-.25**	-.14	-.09	-.09
17. Job Performance	3.9	.79	.04	.08	-.01	-.02	-.09	.19*	.38**	.10

N=133, \*p<.05, \*\*p<.01.

Note: Leader Comms=Leadership Communication

Table 8. Correlations and Descriptive Statistics of Study Variables (Sample 2 cont.)

Variables	9	10	11	12	13	14	15	16	17
1. Age									
2. Hours Worked									
3. Job Tenure									
4. HPWS									
5. POS									
6. Leader Comms									
7. PsyCap									
8. Mindfulness									
9. MFW	--								
10. Work-Life Balance	.53**	--							
11. Vigor	.54**	.55**	--						
12. Dedication	.61**	.47**	.76**	--					
13. Absorption	.57**	.49**	.69**	.75**	--				
14. Job Satisfaction	.69**	.72**	.55**	.64**	.55**	--			
15. Turnover Intentions	-.33**	-.31**	-.34**	-.40**	-.21*	-.44**	--		
16. Job Stress	-.12	-.14	-.19*	-.11	-.03	-.13	.17	--	
17. Job Performance	.35**	.23**	.32**	.17	.28**	.21*	.04	.05	--

N=133, \*p<.05, \*\*p<.01.

Note: Leader Comms=Leadership Communication

Because sample two (n=133) is smaller than sample one (n=206), I have included significance at  $p < .1$  (specific p-value) – not to suggest this is significant per se, but to highlight that the level of significance was close to the standard  $p < .05$  and this might have been reflective more of the sample size.

Tables 7 and 8 show that HPWS is significantly correlated with leadership communication ( $r = .45, p < .01$ ), PsyCap ( $r = .30, p < .01$ ), meaningful work ( $r = .30, p < .01$ ), work-life balance ( $r = .41, p < .01$ ), vigor ( $r = .37, p < .01$ ), dedication ( $r = .34, p < .01$ ), absorption ( $r = .29, p < .01$ ), job satisfaction ( $r = .40, p < .01$ ), and turnover intentions ( $r = -.32, p < .01$ ). There were no significant correlations with either POS ( $r = -.03$ ), mindfulness ( $r = .01$ ), job stress ( $r = -.14$ ) or job performance ( $r = -.02$ ).

Leadership communication is significantly correlated with PsyCap ( $r = .45, p < .01$ ), mindfulness ( $r = .21, p < .05$ ), meaningful work ( $r = .42, p < .01$ ), work-life balance ( $r = .34, p < .01$ ), vigor ( $r = .35, p < .01$ ), dedication ( $r = .38, p < .01$ ), absorption ( $r = .33, p < .01$ ), job satisfaction ( $r = .48, p < .01$ ), turnover intentions ( $r = -.30, p < .01$ ) and job performance ( $r = .19, p < .05$ ). There was only no significant correlation between leadership communication and job stress ( $r = -.14$ ).

POS is significantly correlated with mindfulness ( $r = .31, p < .01$ ), meaningful work ( $r = .21, p < .05$ ), work-life balance ( $r = .20, p < .05$ ), vigor ( $r = .23, p < .05$ ), dedication ( $r = .27, p < .01$ ), job satisfaction ( $r = .23, p < .01$ ), turnover intentions ( $r = -.35, p < .01$ ) and job stress ( $r = -.25, p < .01$ ). There were no significant correlations between POS and leadership communication ( $r = -.10$ ), PsyCap ( $r = .04$ ), absorption ( $r = .17$  – although  $p = .51$ ) and job performance ( $r = -.09$ ).

Regarding the two dispositional factors, PsyCap is significantly correlated with mindfulness ( $r = .32, p < .01$ ), meaningful work ( $r = .68, p < .01$ ), work-life balance ( $r = .53, p < .01$ ), vigor ( $r = .48, p < .01$ ), dedication ( $r = .52, p < .01$ ), absorption ( $r = .45, p < .01$ ), job satisfaction ( $r = .63, p < .01$ ), and job performance ( $r = .38, p < .01$ ). There was no significant correlation with turnover intentions ( $r = -.16$ , although this is  $p = .064$ ) and job stress ( $r = -.09$ ). Mindfulness, was found to be significantly correlated with meaningful work ( $r = .33, p < .01$ ), work-life balance ( $r = .18, p < .05$ ), vigor ( $r = .22, p < .05$ ), dedication ( $r = .38, p < .01$ ), absorption ( $r = .22, p < .05$ ), job satisfaction ( $r = .31, p < .01$ ), and turnover intentions ( $r = -.28, p < .01$ ). Mindfulness was not significantly correlated with either job stress ( $r = -.09$ ) or job performance ( $r = .10$ ).

Meaningful work is significantly correlated with work-life balance ( $r = .53, p < .01$ ), vigor ( $r = .54, p < .01$ ), dedication ( $r = .61, p < .01$ ), absorption ( $r = .57, p < .01$ ), job satisfaction ( $r = .69, p < .01$ ), turnover intentions ( $r = -.33, p < .01$ ), and job performance ( $r = .35, p < .01$ ). There was no significant correlation with job stress ( $r = .12$ ). Work-life balance is significantly correlated with vigor ( $r = .55, p < .01$ ), dedication ( $r = .47, p < .01$ ), absorption ( $r = .49, p < .01$ ), job satisfaction ( $r = .72, p < .01$ ), turnover intentions ( $r = -.31, p < .01$ ), and job performance ( $r = .23, p < .01$ ). work-life balance was not significantly related to job stress ( $r = -.14$ ).

Amongst the three dimensions of work engagement, vigor is significantly correlated with dedication ( $r = .76, p < .01$ ), absorption ( $r = .69, p < .01$ ), job satisfaction ( $r = .55, p < .01$ ), turnover intentions ( $r = -.34, p < .01$ ), job stress ( $r = -.19, p < .05$ ), and job performance ( $r = .32, p < .05$ ). Dedication is significantly correlated with absorption ( $r = .75, p < .01$ ), job satisfaction ( $r =$



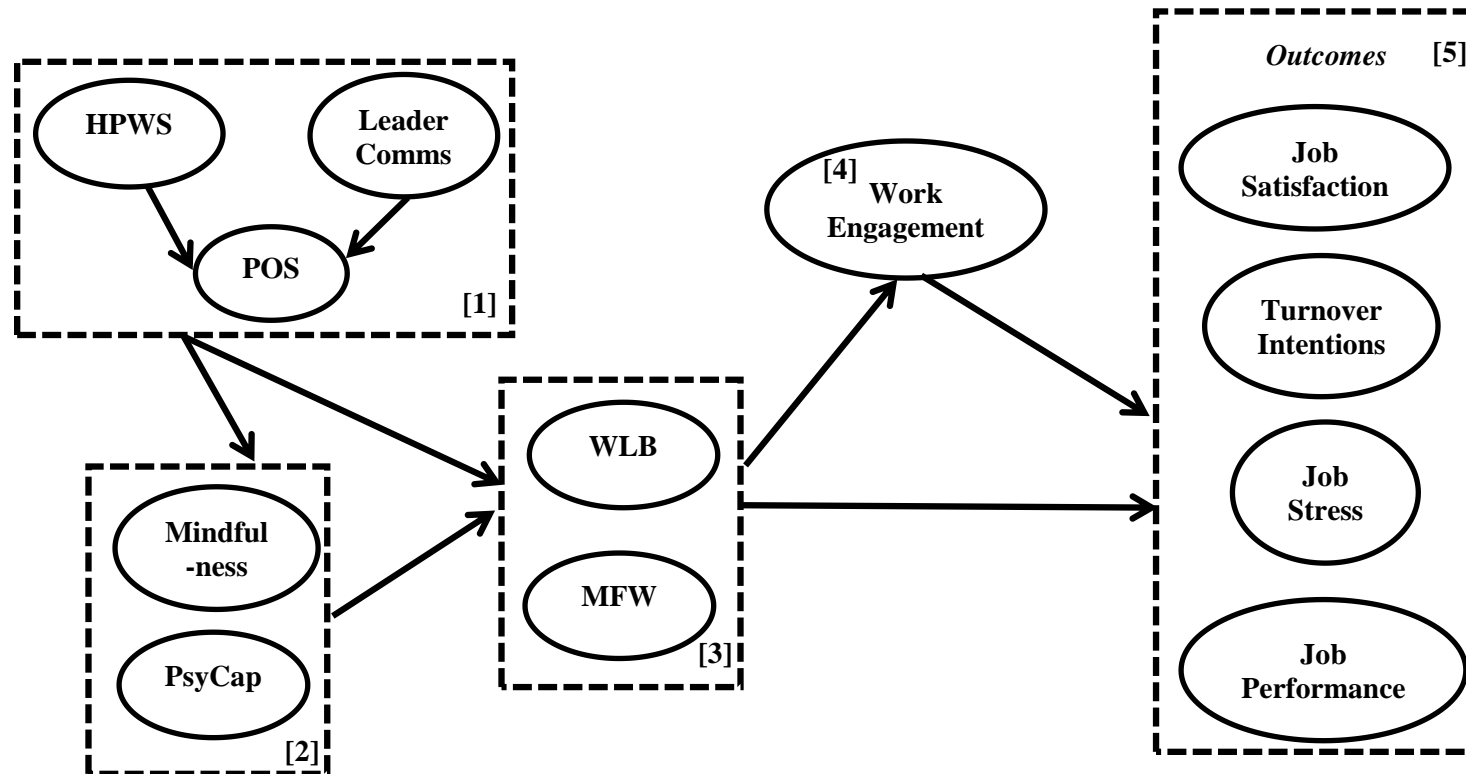
.64,  $p < .01$ ), and turnover intentions ( $r = -.40$ ,  $p < .01$ ), but not job stress ( $r = -.11$ ) and job performance ( $r = .17$ , although this is  $p = .054$ ). Finally, absorption is significantly correlated with job satisfaction ( $r = .55$ ,  $p < .01$ ), turnover intentions ( $r = -.21$ ,  $p < .01$ ), and job performance ( $r = .28$ ,  $p < .01$ ), but not job stress ( $r = -.03$ ). Lastly, job satisfaction is significantly correlated with turnover intentions ( $r = -.44$ ,  $p < .01$ ) and job performance ( $r = .21$ ,  $p < .05$ ), but not job stress ( $r = -.13$ ). Neither turnover intentions, job stress or job performance correlate significantly with each other.

Overall, the sample two data showed a number of significant correlations as might be expected, but also, a number of insignificant correlations as well. This suggests there are some significant differences between sample one and two and again, reiterates separating the samples for analysis.

### ***Structural Model***

Several alternative structural models were run to test the various potential effects. As a reminder, the study model is below, Figure 8.

Figure 8. Study Model



There are five components or groups of variables within the model, and these (and their numbers) are:

[1] = organisational factors (HPWS, leadership communication and POS)

[2] = dispositional factors (PsyCap and mindfulness)

[3] = work perceptions (meaningful work and work-life balance)

[4] = work engagement (vigor, dedication and absorption)

[5] = outcomes (job satisfaction, turnover intentions, job stress and job performance)

I ran three structural models to compare. These were:

**Model 1.** A direct effect model whereby model factor 1 (HPWS, POS and leadership communication) predicted all other factors [2] to [5]

**Model 2.** A full mediation model, where the blocks predicted each other sequentially only i.e. [1] predicts [2], and [2] predicts [3], [3] predicts [4], and [4] predicts [5]

**Model 3.** A partial mediation model, where the blocks predicted all other blocks, so [1] predicts [2] to [5], [2] predicts [3] to [5], and [4] predicts [5].

These models are shown in Figures 9, 10 and 11. The results are shown in Table 9 for sample one and sample two.

Figure 9. SEM Model 1 (Direct Effects Only)

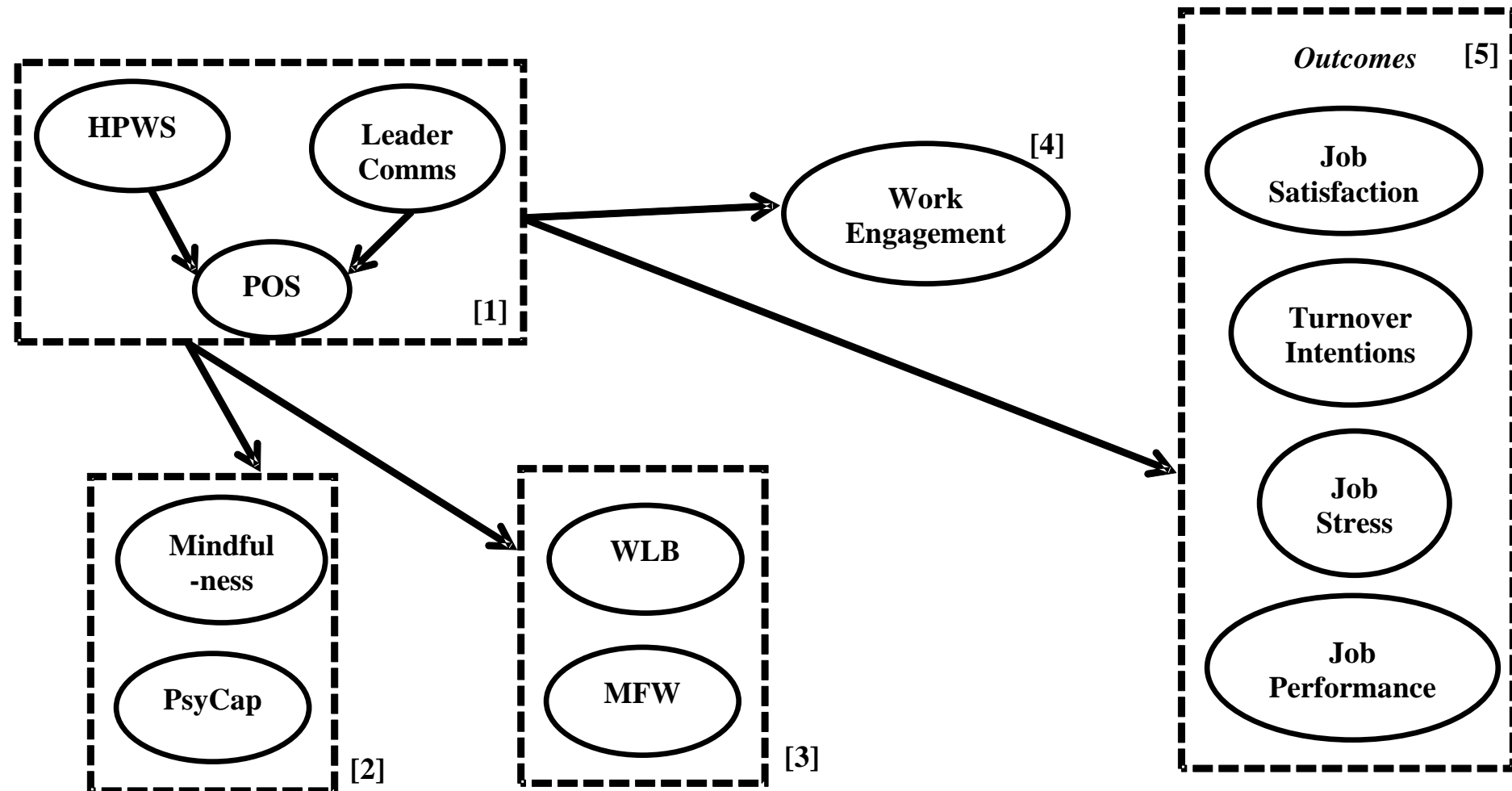


Figure 10. SEM Model 2 (Full Mediation)

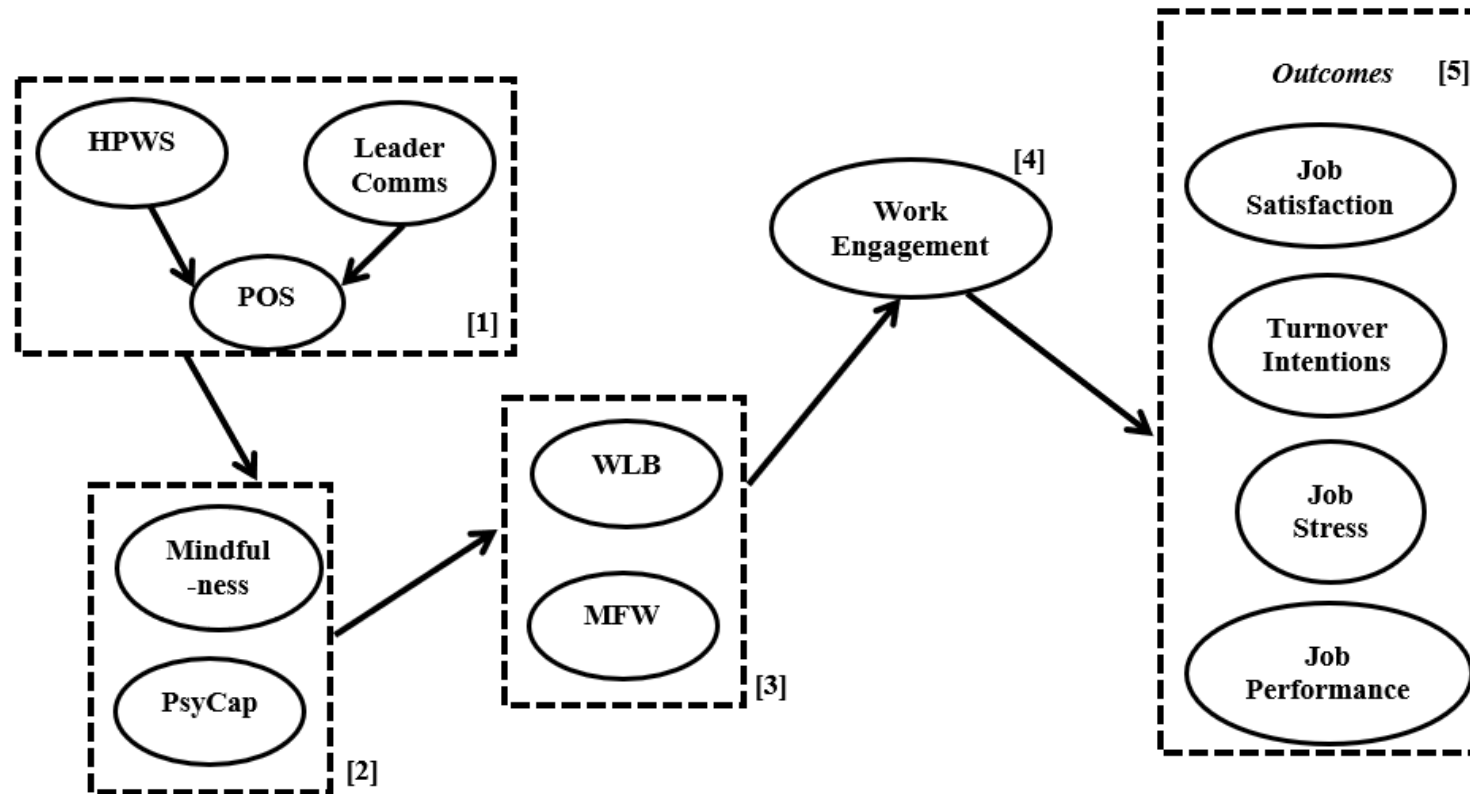


Figure 11. SEM Model 3 (Partial Mediation)

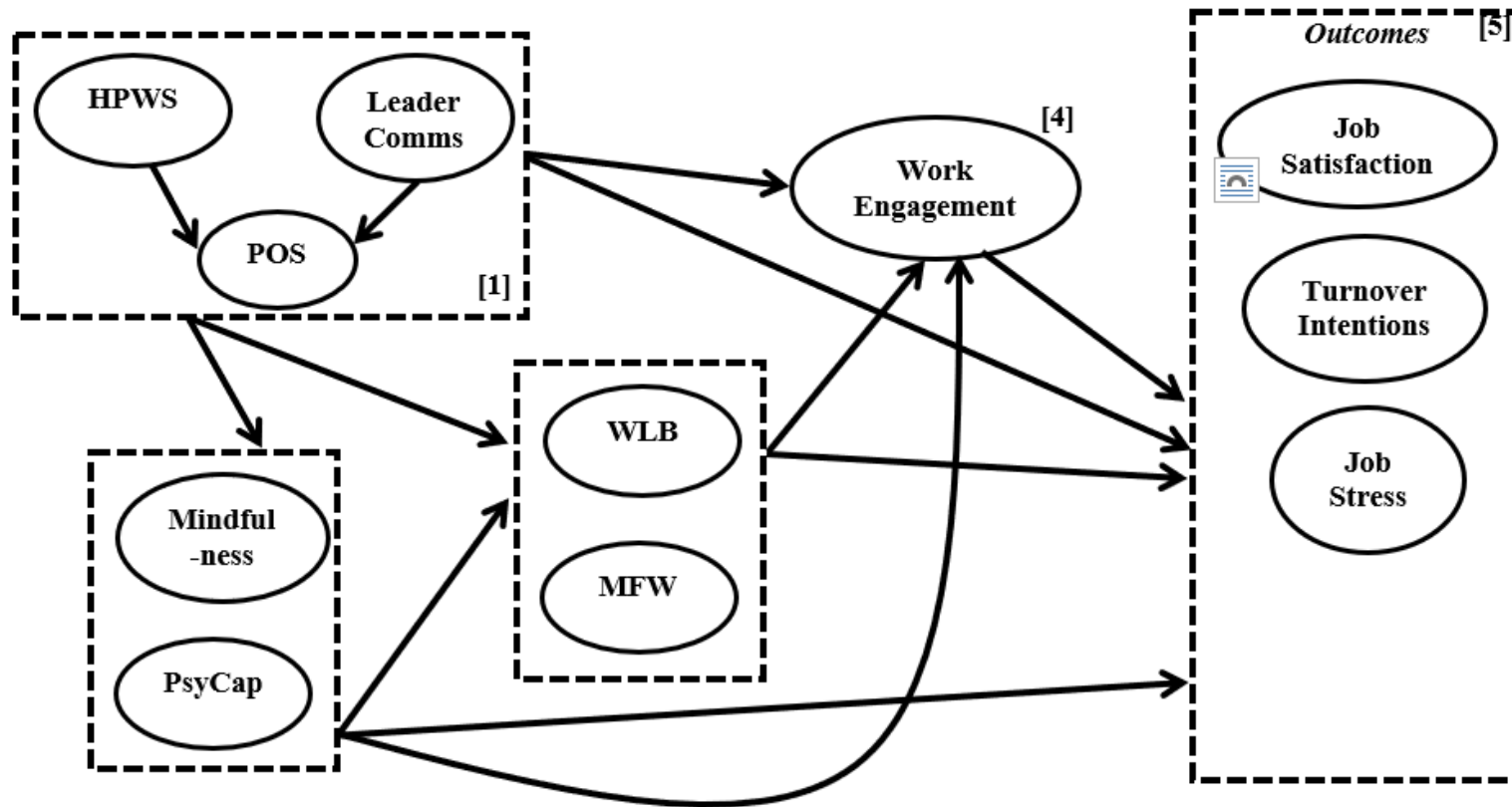


Table 9. Model Comparisons for Structural Models

Model	Model Fit Indices					Model Differences			
	$\chi^2$	df	CFI	RMSEA	SRMR	$\chi^2$	$\Delta$ df	p	Details
<b>Sample 1 (professional workers)</b>									
Model 1	1274.3	660	.89	.07	.07				
Model 2	1388.6	673	.87	.07	.13	114.3	13	.001	Model 2 to 1
Model 3	900.8	601	.95	.05	.05	373.5	59	.001	Model 1 to 3
						487.8	72	.001	Model 2 to 3
<b>Sample 2 (factory workers)</b>									
Model 1	1239.9	660	.83	.08	.08				
Model 2	1388.3	673	.87	.07	.14	148.4	13	.001	Model 2 to 1
Model 3	933.6	601	.90	.07	.05	306.3	59	.001	Model 1 to 3
						454.7	72	.001	Model 2 to 3

All models include control variables: All five control variables were included but only gender was significant. Thus, gender was included only. All models have outcomes (job satisfaction, turnover intentions, job stress and job performance) covary with each other.

Model 1 = A direct effects model where HPWS predicts POS & Leadership Communication, and they all predict all other constructs.

Model 2 = A full mediation model where HPWS predicts POS & Leadership Communication, in turn, they predict MFW and work-life balance, and they predict vigor and dedication, which then predict absorption, which then predicts the outcomes.

Model 3 = A partial mediation model where HPWS predicts POS & Leadership Communication, they all predict MFW, then work-life balance, then all predict vigor and dedication, and then absorption, and then all predict the outcomes.

The analysis showed that model 3 (partial mediation model) was the best fit to the data for both samples: sample one SEM:  $\chi^2(601) = 900.8$  ( $p = .000$ ), CFI= .95, RMSEA= 0.05 and SRMR= 0.05. The SEM for sample two (blue collar workers) was robust but only just met the thresholds around CFI:  $\chi^2(601) = 933.6$  ( $p = .000$ ), CFI= .90, RMSEA= 0.07 and SRMR= 0.05. In both samples, the partial mediation model was a superior fit to the direct effects model and the full mediation model (all  $p < .001$ , Hair et al., 2010).

I report unstandardised regression coefficients (Grace & Bollen, 2005) in Table 10 (sample one and sample two) and include the various model results to show the mediation effects across the models.



Table 10. Final Structural Model Path Results (Samples One and Two)

Variables	Unstandardized path coefficient	
	Sample One	Sample Two
HPWS → POS	.72***	.08
HPWS → PsyCap	.08	.24*
HPWS → Mindfulness	.08	-.20
HPWS → MFW	.12	.09
HPWS → WLB	.23*	.29*
HPWS → Vigor	.18*	.24
HPWS → Dedication	.18*	.20
HPWS → Absorption	-.15	-.07
HPWS → Job Satisfaction	.16*	.03
HPWS → Turnover Intentions	-.36**	-.18
HPWS → Job Stress	.32	.13
HPWS → Job Performance	.22**	-.41**
Leadership Communication → POS	.37***	-.13
Leadership Communication → PsyCap	.25**	.37***
Leadership Communication → Mindfulness	.08	.30**
Leadership Communication → MFW	.20*	.23**
Leadership Communication → WLB	-.31*	.06
Leadership Communication → Vigor	.02	-.02
Leadership Communication → Dedication	.17*	-.13
Leadership Communication → Absorption	.00	-.04
Leadership Communication → Job Satisfaction	-.00	-.04
Leadership Communication → Turnover Intentions	.00	-.15
Leadership Communication → Job Stress	-.04	-.03
Leadership Communication → Job Performance	-.12	-.36
POS → PsyCap	.22**	.05
POS → Mindfulness	.06	.34***
POS → MFW	-.06	.24**
POS → WLB	.23**	.06
POS → Vigor	.08	.10
POS → Dedication	.04	.03
POS → Absorption	.10	-.11
POS → Job Satisfaction	.10*	.03
POS → Turnover Intentions	-.30**	-.12
POS → Job Stress	.30	-.56

POS → Job Performance	.04	-.20
Mindfulness → MFW	.14	.07
Mindfulness → WLB	-.08	-.11
Mindfulness → Vigor	.27*	-.07
Mindfulness → Dedication	.40*	.14
Mindfulness → Absorption	-.16	-.06
Mindfulness → Job Satisfaction	-.08	-.04
Mindfulness → Turnover Intentions	-.12	.00
Mindfulness → Job Stress	.04	-.04
Mindfulness → Job Performance	.01	-.04
PsyCap → MFW	.38***	.60***
PsyCap → WLB	.37***	.02
PsyCap → Vigor	.19*	-.03
PsyCap → Dedication	.10	-.15
PsyCap → Absorption	.06	-.15
PsyCap → Job Satisfaction	.05	-.17
PsyCap → Turnover Intentions	-.02	.46
PsyCap → Job Stress	-.04	.36
PsyCap → Job Performance	.26***	-.03
MFW → WLB	.36**	.66*
MFW → Vigor	.36***	.72*
MFW → Dedication	.60***	1.0*
MFW → Absorption	.02	.35
MFW → Job Satisfaction	.07	.69
MFW → Turnover Intentions	.13	-.76
MFW → Job Stress	.60	-1.1
MFW → Job Performance	.09	.74
WLB → Vigor	.36***	.29
WLB → Dedication	.60***	-.03
WLB → Absorption	-.10	.10
WLB → Job Satisfaction	.16***	.48***
WLB → Turnover Intentions	-.12	-.26
WLB → Job Stress	-.94***	.21
WLB → Job Performance	-.01	-.09
Vigor → Absorption	.09	.15
Vigor → Job Satisfaction	-.04	-.05
Vigor → Turnover Intentions	-.88**	-.09
Vigor → Job Stress	-.20***	-1.3*
Vigor → Job Performance	-.00	.50*

Dedication → Absorption	.56**	.47**
Dedication → Job Satisfaction	.40*	.43
Dedication → Turnover Intentions	-1.2**	-1.0
Dedication → Job Stress	.91	-.25
Dedication → Job Performance	-.11	-.38
Absorption → Job Satisfaction	-.04	-.62
Absorption → Turnover Intentions	.11	1.5
Absorption → Job Stress	1.0	2.6
Absorption → Job Performance	.26*	-.28
Gender → Job Satisfaction	.00	.41
Gender → Turnover Intentions	.03	.35
Gender → Job Stress	-1.1***	3.0*
Gender → Job Performance	-.03	-.78*
Variance (r <sup>2</sup> ):		
POS r <sup>2</sup>	.47	.01
PsyCap r <sup>2</sup>	.25	.20
Mindfulness r <sup>2</sup>	.13	.18
WLB r <sup>2</sup>	.35	.55
MFW r <sup>2</sup>	.34	.74
Job Satisfaction r <sup>2</sup>	.86	1.0
Engagement - Vigor r <sup>2</sup>	.48	.55
Engagement - Dedication r <sup>2</sup>	.63	.64
Engagement - Absorption r <sup>2</sup>	.74	.91
Turnover Intentions r <sup>2</sup>	.60	.53

\*p< .05, \*\*\*p< .001

Table 10 shows the SEM results for both sample one and sample two. I present these together because they are quite different at times, providing quite unique results. I focus on the significant effects mainly although I do note when the other sample provides a non-significant effect.

In sample one, HPWS is significantly related to POS (path coefficient= .72, p<.001), while in sample two this is non-significant (path coefficient= .08). HPWS

is significantly related to PsyCap (path coefficient= .24,  $p < .05$ ) in sample two, while this is non-significant in sample one (path coefficient= .08). HPWS is significantly related to work-life balance in sample one (path coefficient= .23,  $p < .05$ ) and sample two (path coefficient= .29,  $p < .05$ ). HPWS is significantly related to vigor in sample one (path coefficient= .18,  $p < .05$ ) but not in sample two (path coefficient= .24), and this effect is repeated towards dedication: significant in sample one (path coefficient= .18,  $p < .05$ ) but not in sample two (path coefficient= .20).

HPWS is significantly related to job satisfaction in sample one (path coefficient= .16,  $p < .05$ ) but not in sample two (path coefficient= .03), and this is similar towards turnover intentions: significant in sample one (path coefficient= -.36,  $p < .01$ ) but not in sample two (path coefficient= -.18). Finally, HPWS are significantly related to job performance in sample one (path coefficient= .22,  $p < .01$ ) and sample two (path coefficient= -.41,  $p < .01$ ), although the effect on sample two is negative and against what was hypothesised. The correlation between HPWS and job performance in sample two was only  $r = -.02$ , so this significant effect is likely a statistical anomaly and not practically meaningful. Overall, there are several supports for Hypothesis 1, although these are quite mixed between both sample one and sample two.

In sample one, leadership communication is significantly related to POS (path coefficient= .37,  $p < .001$ ), while in sample two this is non-significant (path coefficient= -.13). Leadership communication is significantly related to PsyCap

(path coefficient= .25,  $p < .01$ ) in sample two, and similarly so in sample two (path coefficient= .37,  $p < .001$ ). Leadership communication is significantly related to mindfulness in sample two (path coefficient= .30,  $p < .01$ ) but not in sample one (path coefficient= .08). Leadership communication is significantly related to meaningful work in sample one (path coefficient= .20,  $p < .05$ ) and in sample two (path coefficient= .23,  $p < .01$ ). Leadership communication is significantly related to work-life balance in sample one (path coefficient= -.31,  $p < .05$ ) but not in sample two (path coefficient= .06). Although the effect on sample one is negative this is against what was hypothesised. The correlation between leadership communication and work-life balance in sample one was  $r = .20$  ( $p < .01$ ) so this significant effect is likely a statistical anomaly and not practically meaningful.

Leadership communication is significantly related to dedication in sample one (path coefficient= .17,  $p < .05$ ) but not in sample two (path coefficient= -.13). Finally, leadership communication is significantly related to job satisfaction in sample one (path coefficient= .37,  $p < .001$ ) but not in sample two (path coefficient= -.13). Overall, there are several supporting effects for Hypothesis 2 (around leadership communication), although like the Hypothesis 1 findings, these are quite mixed between both sample one and sample two.

In sample one, POS is significantly related to PsyCap (path coefficient= .22,  $p < .01$ ), while in sample two this is insignificant (path coefficient= .05). POS is significantly related to mindfulness in sample two (path coefficient= .34,  $p < .001$ ) but not in sample one (path coefficient= .06). Similarly, POS is significantly related

to meaningful work in sample two (path coefficient= .24,  $p < .01$ ) but not in sample one (path coefficient= -.06). POS is significantly related to work-life balance in sample one (path coefficient= .23,  $p < .01$ ) but not in sample two (path coefficient= .06). POS is significantly related to turnover intentions in sample one (path coefficient= -.30,  $p < .01$ ) but not in sample two (path coefficient= -.12). Overall, there are several supports for Hypothesis 3 (around POS), although like the other effects, there is a range of variations across both samples, with no common outcome significantly influenced by POS.

In sample one, mindfulness is significantly related to vigor (path coefficient= .27,  $p < .05$ ), while in sample two this is non-significant (path coefficient= -.07). Similarly, mindfulness is significantly related to dedication in sample one (path coefficient= .40,  $p < .05$ ) but not in sample two (path coefficient= .14). However, that is all the significant effects from mindfulness, providing limited support for Hypothesis 4 (around mindfulness). PsyCap is significantly related to meaningful work in both sample one (path coefficient= .38,  $p < .001$ ) and sample two (path coefficient= .60,  $p < .001$ ). PsyCap is also significantly related to work-life balance in sample one (path coefficient= .37,  $p < .001$ ) but not in sample two (path coefficient= .02). Finally, PsyCap is significantly related to job performance in sample one (path coefficient= .26,  $p < .001$ ) but not in sample two (path coefficient= -.03). Combined, this provides modest support for Hypothesis 5 (around PsyCap).

Meaningful work is significantly related to work-life balance in both sample

one (path coefficient= .36,  $p < .01$ ) and sample two (path coefficient= .66,  $p < .05$ ). Similarly, meaningful work is significantly related to vigor in both sample one (path coefficient= .36,  $p < .001$ ) and sample two (path coefficient= .72,  $p < .05$ ) and similarly dedication in both sample one (path coefficient= .60,  $p < .001$ ) and sample two (path coefficient= 1.0,  $p < .05$ ). However, apart from the three dimensions of work engagement, there are no other significant relationships. This provides some support for Hypothesis 6 (around meaningful work).

Work-life balance is significantly related to vigor in sample one (path coefficient= .36,  $p < .001$ ) but not in sample two (path coefficient= .29). This effect is replicated towards dedication – being significant in sample one (path coefficient= .60,  $p < .001$ ) but not in sample two (path coefficient= -.03). Work-life balance is significantly related to job satisfaction in both sample one (path coefficient= .16,  $p < .001$ ) and sample two (path coefficient= .48,  $p < .001$ ). Finally, work-life balance is significantly related to job stress in sample one (path coefficient= -.94,  $p < .001$ ) but not in sample two (path coefficient= .21). Combined, this provides solid support for Hypothesis 6 (around work-life balance).

Vigor is significantly related to turnover intentions in sample one (path coefficient= -.88,  $p < .01$ ) but not in sample one (path coefficient= -.09). Vigor is significantly related to job stress in both sample one (path coefficient= -.20,  $p < .001$ ) and sample two (path coefficient= -1.3,  $p < .05$ ). Finally, vigor is significantly related to job performance in sample two (path coefficient= .50,  $p < .05$ ) but not in sample one (path coefficient= -.00). Combined, this provides solid support for

Hypothesis 7 (around vigor). Dedication is significantly related to absorption for both sample one (path coefficient= .56,  $p<.01$ ) and sample two (path coefficient= .47,  $p<.01$ ). Dedication is significantly related to job satisfaction in sample one (path coefficient= .40,  $p<.05$ ) but not sample two (path coefficient= .43). Finally, dedication is significantly related to turnover intentions in sample one (path coefficient= -1.2,  $p<.01$ ) but not in sample two (path coefficient= -1.0). Combined, this provides solid support for Hypothesis 8 (around dedication).

Finally, absorption is significantly related to job performance, but only in sample one (path coefficient= .26,  $p<.05$ ) and not sample two (path coefficient= -.28). This provides minimal support for Hypothesis 9 (around absorption). Finally, from the only control variable, gender is significantly related to job stress in sample one (path coefficient= -1.1,  $p<.001$ ) and sample two (path coefficient= 3.0,  $p<.05$ ). Gender is also significantly related to job performance in sample two (path coefficient= -.78,  $p<.05$ ) but not sample one (path coefficient= -.03).

As noted in the analysis section above, the moderation and moderated mediated effects were then conducted in PROCESS. The theoretical model for hypotheses 10 and 11 is shown in Figure 12.



Figure 12. Theoretical Model

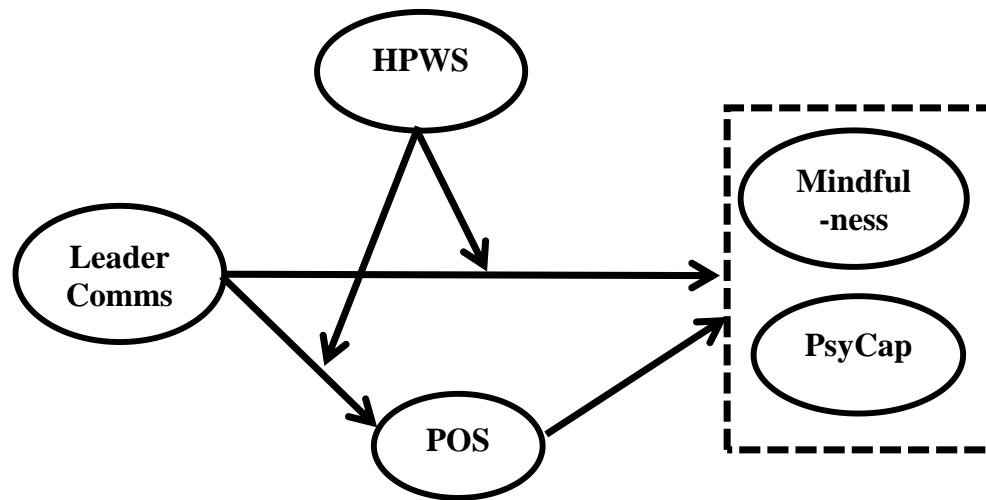


Table 11 presents the significant and insignificant interaction effects only. This represented the two-way moderated effects. In addition, it also presents the Index of moderated mediation (Hayes, 2018). This analysis focuses just upon the two dispositional factors (PsyCap and mindfulness) for both sample one and sample two. Mediation effects were confirmed using the Monte Carlo method using bootstrapping (5,000 times) in PROCESS (Hayes et al., 2017; Hayes, 2018).

Table 11. Summary of Moderation and Moderated Mediated Results (Samples One and Two)

Variables	Unstandardized path coefficient	
	Sample One	Sample Two
<i>To PsyCap:</i>		
HPWS x POS	<b>.20(.08)</b> , p= .0178 [LL= .04, UL= .37]	.17(.11), p=.1017 [LL= -.03, UL= .38]
HPWS x Leadership Comms	.13(.08), p= .1276 [LL= -.04, UL= .30]	.11(.09), p= .2352 [LL= -.07, UL= .30]
Index of Moderated Mediation	<b>.11(.06)</b> , p= .0232 [LL= .00, UL= .24]	-.01(.02), p= .2968 [LL= -.06, UL= .02]
<i>To Mindfulness:</i>		
HPWS x POS	.07(.08), p= .4075 [LL= -.09, UL= .23]	<b>.23(.10)</b> , p=.0188 [LL= .04 UL= .41]
HPWS x Leadership Comms	-.10(.08), p= .2032 [LL= -.27, UL= .06]	.05(.11), p= .6718 [LL= -.17, UL= .26]
Index of Moderated Mediation	.04(.04), p= .1892 [LL= -.03, UL= .16]	-.02(.03), p= .2366 [LL= -.10, UL= .03]

Values represent unstandardized coefficients and error values in brackets.  
Bolded values indicate significance (p< .05)

The results show that there is a significant interaction between HPWS and POS towards PsyCap in sample one ( $\beta = .20 (.08)$ , p= .0178 [LL= .04, UL= .37]), although not in sample two. Alternatively, there is a significant interaction between HPWS and POS towards Mindfulness in sample two ( $\beta = .23 (.10)$ , p= .0188 [LL= .04, UL= .41]), although not in sample one. These findings provide support for

Hypothesis 10 around moderating effects towards dispositional factors. The graphed interactions are shown in Figures 14 and 15.

Figure 13. Two-Way Interaction between HPWS & POS with PsyCap as Dependent Variable (sample one)

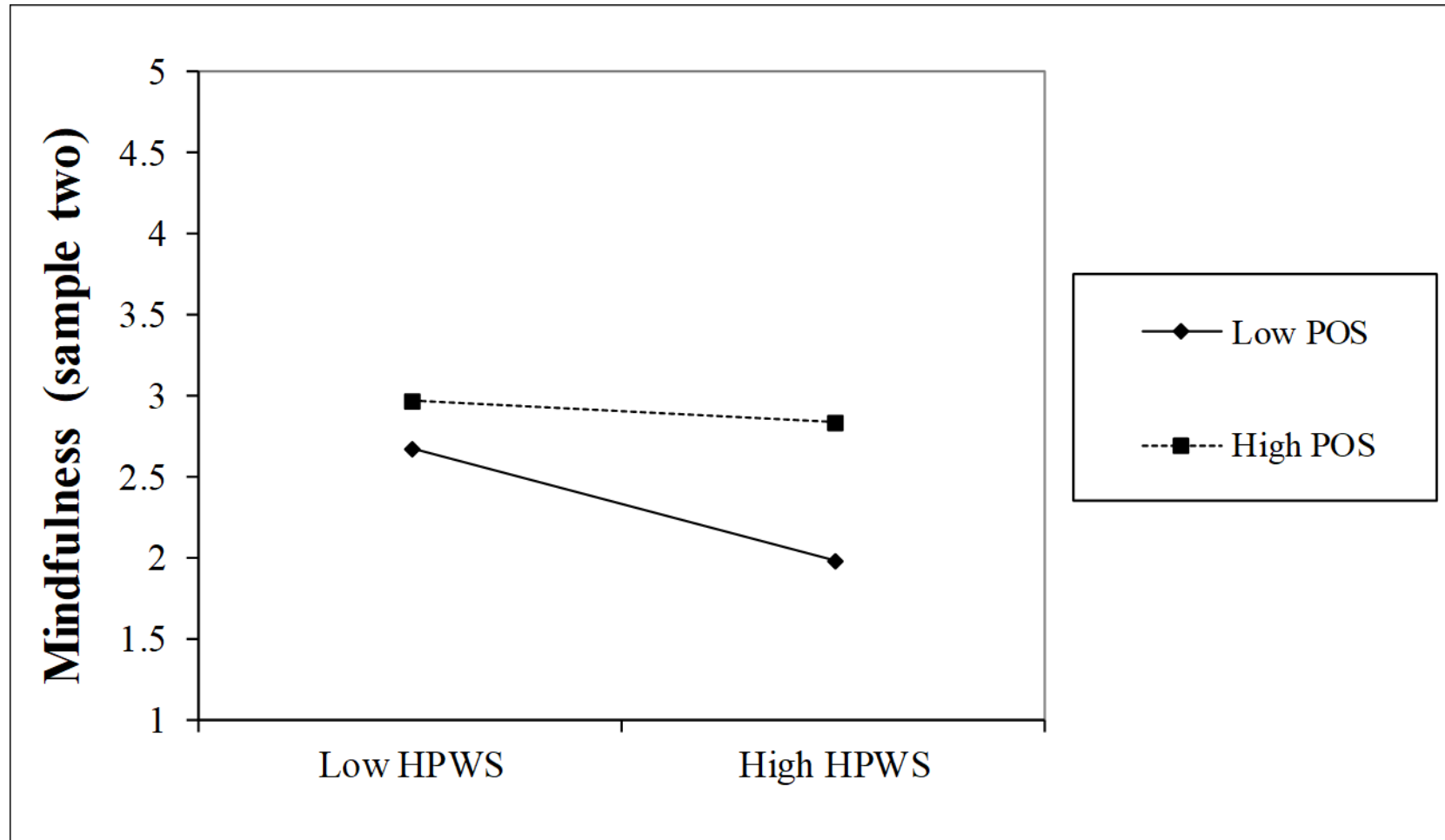


Figure 14. Two-Way Interaction between HPWS & POS with Mindfulness as Dependent Variable (sample two)

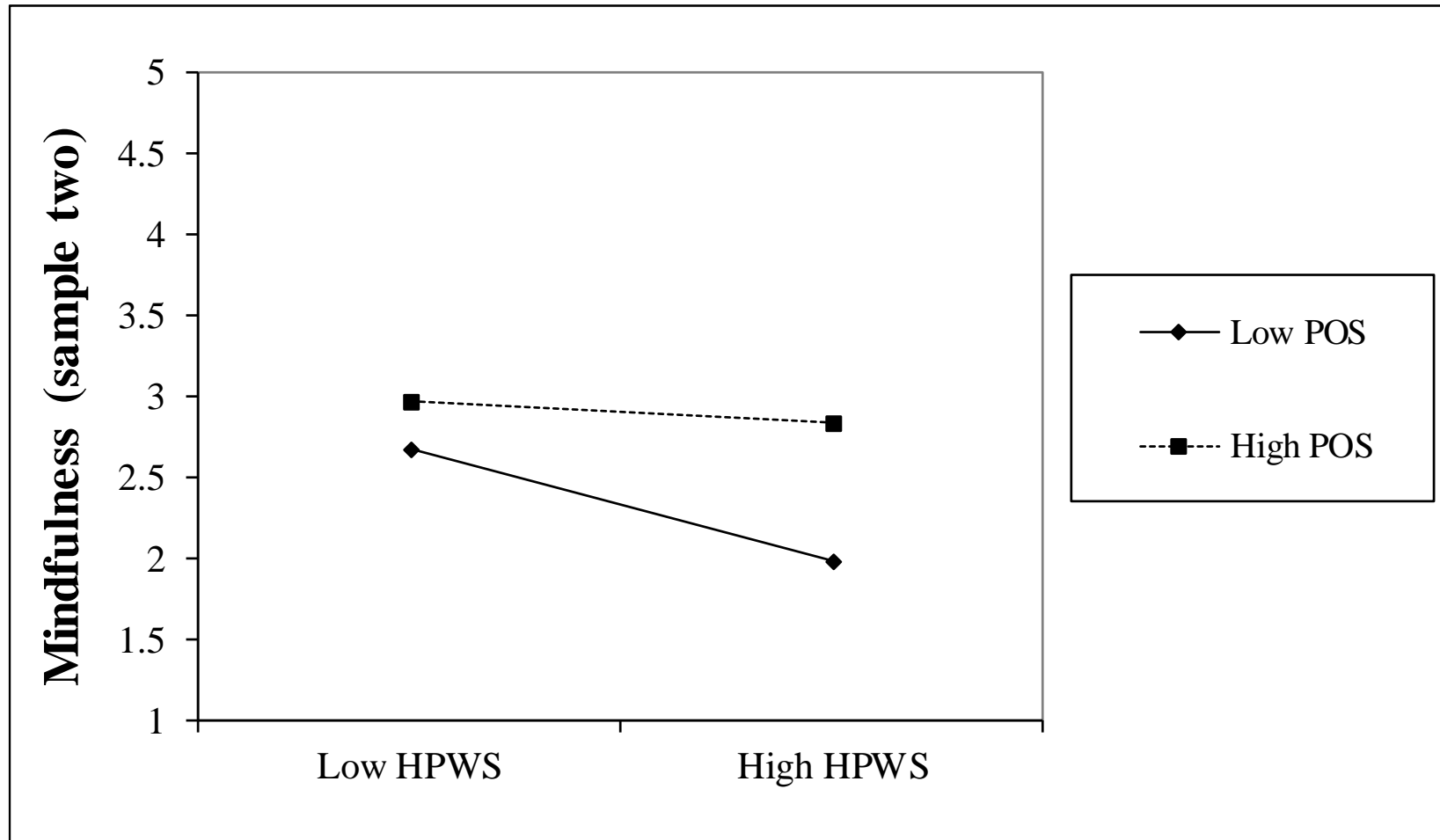
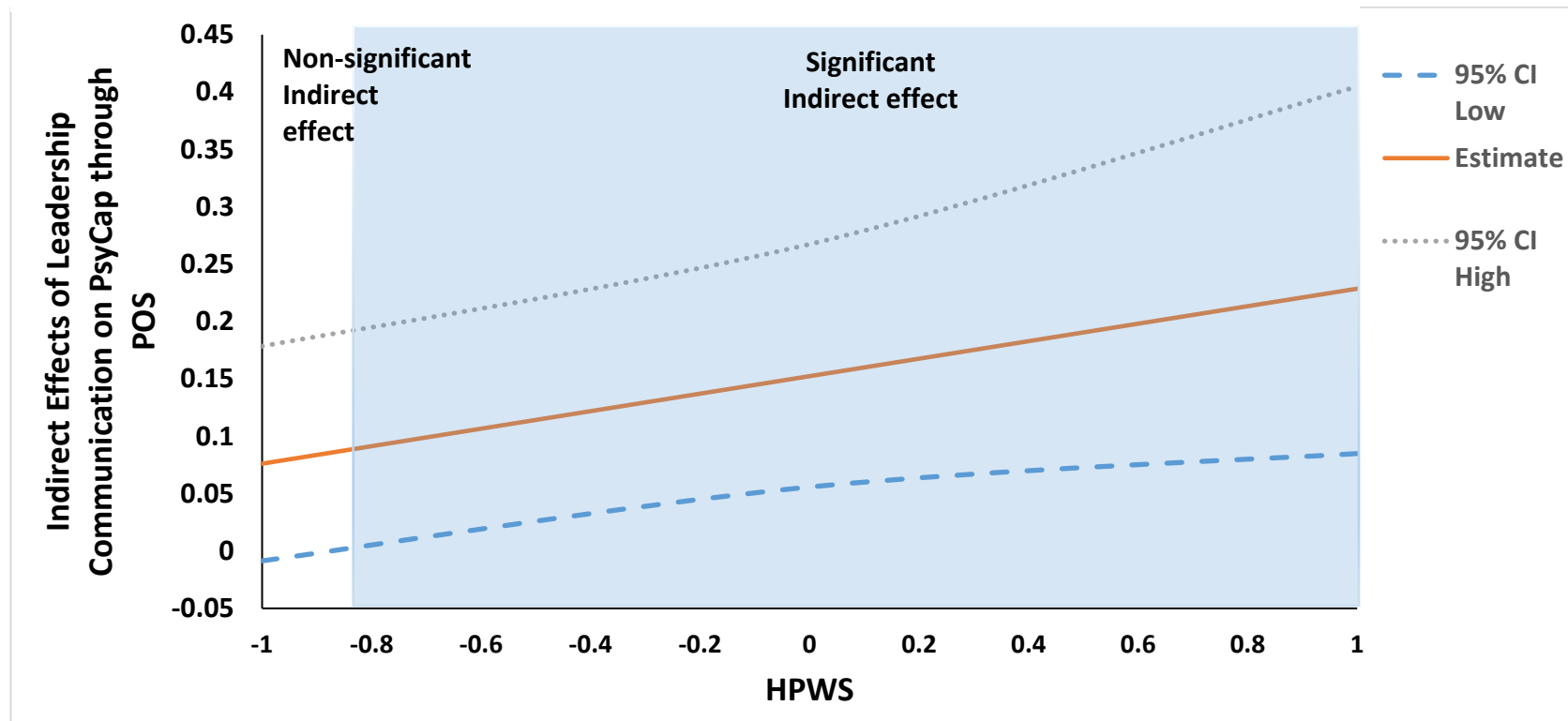


Figure 13 (sample one only) shows that at low levels of HPWS the influence on PsyCap is significantly higher for respondents with high POS compared to respondents with low POS. At high levels of HPWS these effects are exacerbated. Respondents with high POS report even higher PsyCap, while respondents with high HPWS but low POS also report increased PsyCap, but these levels are significantly lower than the high HPWS and high POS group of respondents.

Figure 14 (sample two only) shows that at low levels of HPWS the influence on mindfulness is similar at high and low levels of POS, although slightly higher for respondents with high POS compared to respondents with low POS. At high levels of HPWS these effects are exacerbated. Respondents with high POS report stable levels of mindfulness, while respondents with high HPWS but low POS report a significant decrease in mindfulness, with their levels of mindfulness significantly lower than the high HPWS and high POS group of respondents.

The results of the index of moderated mediation was found to be significant towards PsyCap in sample one only (Index= .11 (.06),  $p = .0232$  [LL= .00, UL= .24]). According to Hayes (2017) this is interpreted as meaning the indirect effect of POS on PsyCap (mediating the effects of leadership communication) differs between respondents working under different levels of HPWS. The graphed moderated mediation effects are shown in Figure 15.

Figure 15. Indirect Effects of HPWS on PsyCap Through POS conditional on Leadership Communication (sample one).



I followed the approach of Wayne, Lemmon, Hoobler, Cheung, and Wilson (2017) to probe the conditional indirect effect by examining the magnitude and significance of the indirect effect of leadership communication on employee PsyCap through POS at various levels of HPWS. Figure 15 shows the significant indirect effect of leadership communication  $\rightarrow$  POS  $\rightarrow$  PsyCap, conditional on the effects of HPWS (at -1SD, mean, and +1SD). I found that, for those employees who reported small HPWS, the effect of leadership communication on PsyCap vis-à-vis POS was positive and small but not statistically significant (estimate = .08,  $p = .0577$ ; LLCI = -.00; ULCI = .17) because the confidence interval crosses zero.

On the other hand, for those employees who reported high HPWS, the effect of leadership communication on PsyCap vis-à-vis POS was positive and moderate (estimate = .23,  $p = .0004$ ; LLCI = .08; ULCI = .39). This shows that respondents perceiving higher HPWS is associated with a stronger positive indirect effect from leadership communication to PsyCap through POS. The indirect effect was only significant when HPWS was at levels higher than -0.8 standard deviations above the mean. This provides support for Hypothesis 11 around moderated mediated effects.



## **Chapter 6. Discussion – Study One**

Forward thinking and proactive organisations see value in creating optimal environments and positive cultures that tap in to specific work types to obtain the benefits. These benefits may include increased job satisfaction, engagement and performance for individuals, work groups and organisations. The intention of this thesis was to discover if the influence of certain ‘positive’ or proactive systems, based on positive psychology - what I shall call *bundles of positive factors* – were able to make a difference to individuals, the way they ‘engage’ with their work and perform while at work.

These factors and engagement with them were expected to influence positively individuals’ job satisfaction, and job performance, as well as reduce turnover intentions and job stress. I tested this in one organisation and used two distinct samples within the organisation. This was because there is an obvious difference between samples one and two (detailed below), and the results show us that the different types of workers (white collar, blue collar) respond differently to internal organisational factors, leading to different influences on individual dispositional factors and other outcomes.

My research from study one (samples 1 and 2) found that the impact and outcomes of organisational factors and individual traits on engagement and performance, vary between white and blue-collar workers. In order to maximise outcomes such as the positive influence on engagement, job satisfaction, retention and performance, organisations would benefit if they were aware of these differences between the different ‘work types’ (professional white-collar workers versus more labourer blue-collar workers). Ideally time and care would be taken to ensure there are different designs

around work types, interventions, leadership styles and systems and processes.

Organisations also need to be aware of the most beneficial factors, how factors (organisational and individual) might entwine, and how the factors affect each other to obtain ideal outcomes. The present study findings give evidence that there is not a ‘magic recipe’ or ‘one size fits all’ approach or even a simple ‘bundle’ of factors that will ensure an increase to engagement and performance. There does however appear to be a requirement to develop and run specifically built initiatives that are specifically suited to each work type identified above. This research gives evidence for doing away with ‘broad brushing’ across an organisation and using a one size fits all method.

While the first study uses two samples from one organisation – as opposed to a wide range of ‘generalisable’ employees (discussed separately below) – the first study does provide the benefit of allowing the research to be directly compared across white and blue-collar workers, because they are employed within the same organisation (albeit across a wide geographical location). Often manufacturing (blue-collar) workers may be overlooked for development or promotions internally.

This might reflect the ease with which organisations can attract and hire such employees. They may work in less than ideal conditions, environments that might be too cold or too hot (because they are exposed to the elements), they may be physically tiring and exhausting roles, and often paid minimum wage or close to it. Indeed, in the current organisation the HR Manager suggested this does indeed reflect the reality in the organisation. The blue-collar workers in this study tend to work in hot dry and dusty conditions in the summer months and cold and damp conditions in the winter months.

The workers worksites are exposed to the elements, but this is part of the manufacturing locale of the work.

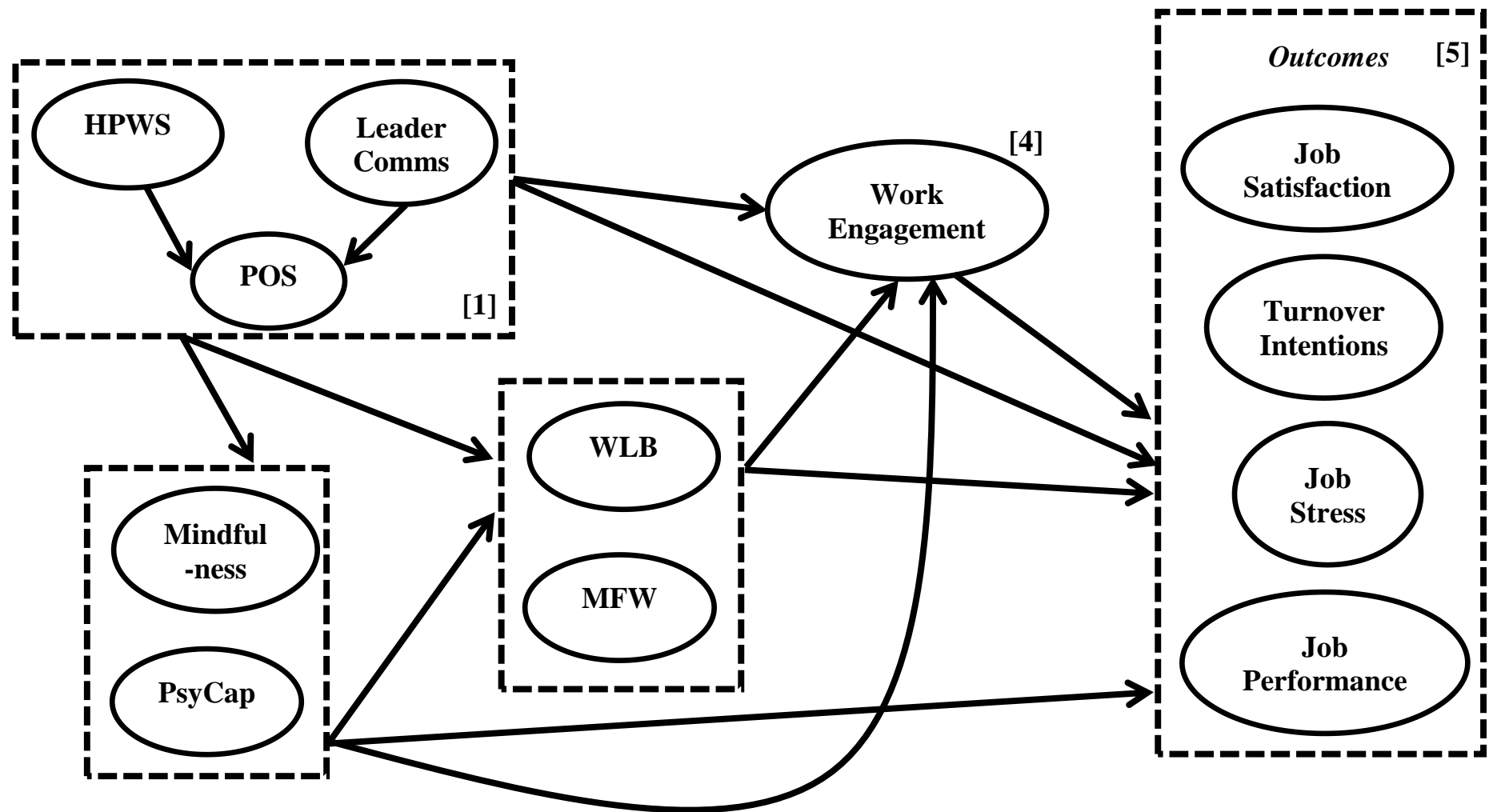
This research may give evidence that there is opportunity to design and develop systems and processes that could increase or decrease blue collar workers' important job factors, such as job satisfaction and job performance. The organisational-level factors covered in this research (HPWS, POS, and leadership communication) were found to be positive influencers on worker attitudes and ultimately productivity. This aligns with the broader literature around the efficacy and benefits of HR systems (Huselid, 1995), perceptions of organisational support (Shore & Shore, 1995) and leadership communication (Einwiller & Boenigk, 2012). I look at each factor distinctly below.

In addition, dispositional factors were included in the present study – specifically PsyCap (Luthans, et al., 2010) and mindfulness (Shapiro, et al., 2005) of individuals, and there is much support in the literature, and these can be important factors to explore because there is evidence these are developmental constructs (Luthans et al., 2008; Gregoire & Lachance, 2015). As such, an organisation might focus on such development and this could give employees tools and positive capabilities to use in their homes and communities, contributing to a more positive and productive workplace and world.

In the following sections, I address the specific factors and the findings found for each. When significant findings were found across both samples one and two, I combine the white and blue-collar workers together. I first revisit the study model – the best fitting model – (Figure 16 below) to

highlight the factors examined and then I present findings across the broad factors (one to five).

Figure 16. Final Study Model



## **Block 1. Organisational Factors**

In this discussion, I explore the role of the three organisational factors: (1) HPWS, (2) leadership communication and (3) POS. This section is the only one that also tests a relationship within the factors – specifically HPWS and leadership communication as antecedents of POS. This is because there is strong meta-analytics support for such relationships (e.g., Rhoades & Eisenberger, 2002). This is discussed more fully below.

### **HPWS**

Datta et al. (2005) defined HPWS as systems of HR practices that are designed to build employee productivity and does this through enhancing employees' skills and commitment to their organisation. Harley et al. (2007) adds that HPWS refers to a systematic use “of mutually reinforcing human resource management (HRM) practices”, which are used to ensure organisations selecting the best or right employees, and then develop their skills and have their work organised such that employees can work creatively and with enhanced performance. However, desired employee behaviours may not come about if HPWS is absent, and the present study explores the role of HPWS and its influence on engagement and performance – including through other factors like dispositional factors.

The results from the structural modelling for sample one (white collar workers only) showed that HPWS was significantly related with POS, leadership communication, mindfulness, meaningful work, work-life balance, vigor, dedication, absorption, job satisfaction and turnover intentions. However, there are differences in the HPWS significant

relationships from HPWS within sample two (blue collar workers only), because HPWS were only significantly related to PsyCap and work-life balance. Hence, for most of the factors included in the study (in both samples) I find only work-life balance is a shared common outcome from HPWS.

This finding is important because the same 15 HR practices are clearly viewed similarly by the two groups – they report similar levels of HPWS. For example, the white-collar group scored the HPWS higher ( $M = 3.1$ ) and so did the blue-collar group ( $M = 3.1$ ). They both correlate significantly to several factors, but clearly for the blue-collar workers, HPWS are not significant enough when other factors are included in the structural models, such as POS and leadership communication.

This may signify the need for an HRM system that is strong, clear and purposeful to influence the other areas of the organisation to positively influence work performance. When all aspects of a HPWS are effective, this creates a solid people management foundation for leaders to be guided by and follow. A HPWS across the organisation, should be created within the context of the types of people it will be used for. The findings from the present research show that a HPWS has the potential to positively influence other organisational and individual factors. However, the results have shown different impacts on the different samples. This might be due to other factors such as being more ‘at the coal face’ for blue collar workers.

For white collar workers, HPWS were significantly correlated to 7 of 12 relationships, but only acted as a significant predictor for three relationships and one of these (job performance) is against the expected direction and I will address this later. Clearly, this does highlight the

importance of testing a HPWS across different samples of workers – especially in the same organisation. In sample one, HPWS is significantly related to POS but not so in sample two. This is an important finding because the antecedents of POS are established (Rhoades & Eisenberger, 2002), and it was expected that significant linkages would be found between HPWS and POS in both samples.

In their meta-analysis, Rhoades and Eisenberger (2002) did not look specifically at HPWS towards shaping employee perceptions of wellbeing (POS). However, they did look at related factors like work policies and practices that target pay and rewards, which are typically practices included within HPWS (e.g., Datta et al., 2001). Beyond this meta-analytic support, there are specific studies that have supported links between HPWS and POS. Liao, Toya, Lepak and Hong, (2009) found HPWS and POS were positively related, and similarly Takeuchi, et al. (2009).

In a more recent meta-analysis of POS, Kurtessis et al. (2017) did not specifically test POS and HPWS but again, did find significant links to practices that relate to HPWS. These included developmental opportunities, job security, flexible work scheduling, enriching job characteristics, autonomy and participation in decision making – which does align to the HPWS construct used in the present study (Data et al., 2001). Hence, it would be expected that HPWS is positively linked to POS and while this was strongly supported in the white-collar worker sample it was not in the blue-collar worker sample.

The reasons are somewhat unclear, but perhaps within this organisation, HPWS do not influence or impact sample two (blue collar)



respondents in the same way as sample one (white collar). HPWS within this organisation may be more accessible and meaningful to white collar employees than the employees that work within the manufacturing environments (blue collar). Perhaps the manufacturing team members (blue collar) appear to be unable to see how HPWS relates directly to how these workers shape their perceptions of organisational support (POS).

Alternatively, blue-collar workers might be too far removed or are not communicated clearly to about the specifics within the HPWS, for HPWS to make a positive influence on POS or the links maybe are too vague to make a connection. Perhaps they are ‘aware’ of the HPWS (they had similar overall scores compared to the white-collar workers) but perhaps they fail to see how these practices become ‘actualised’ in the workplace context for them. However, there are several significant correlations between HPWS and the other study constructs which do correlate as expected in sample one (white-collar workers) and perhaps the failure to correlate significantly with POS in blue-collar workers presents something specific and I encourage further exploration of this effect.

It is important to note that while sample one (professional, white-collar workers) included employees across every site, the majority are in the Head Office in Auckland, where the Human Resource Management department is located. Hence, these workers are more likely to be exposed to HPWS – especially when they want specific details. Perhaps white-collar workers are better able to understand how HPWS illustrates the organisations commitment to employee wellbeing (Eisenberger et al., 1986), and again this encourages more nuanced (qualitative) research to examine these differences.

Although the literature suggests HPWS should play a role in improving job performance – and indeed this is a fundamental argument within the literature (e.g., Combs, et al., 2006; Huselid, 1995; Ketkar & Sett, 2009; Messersmith, et al., 2011) - in the present sample there were no significant links with job performance with either sample one or two.

It would appear though that the lack of such a linkage is not due to the construct. Other studies use larger measures for HPWS, some use up to 32 items (Vandenberg, Richardson & Eastman, 1999), but the present study only used 15 items (Lepak & Snell 2002), there are in fact shorter measures which have shown to measure HPWS effectiveness, including a 9-item measure (Beltran-Martin, Bou-Llugar, Roca-Puig, & Escrig-Tena, 2017). The choice was made to use only these 15 items as I was interested in looking at a range of factors in my study and not just a single factor based on HPWS.

However, in the present study I find that HPWS does strongly correlate to most factors in both samples, including job satisfaction, which is the strongest predictor of job performance (Judge et al., 2001). Overall, it could be concluded that there are links with HPWS to job performance, just not direct links, which is positive evidence that HPWS is important for both types of workers because it does influence factors which ultimately influence job performance. Here is the evidence of cascading factors, which influences a range of factors through its influence on other factors.

I also found similar evidence for HPWS relating significantly to PsyCap. In sample one, HPWS is not significantly related to PsyCap but is for sample two. Perhaps this is due to the team members in sample two (blue-collar workers) having to ‘get on’ with their work tasks, sometimes in

isolation. They have no option but to be self-driven to find hope, optimism, resilience and self-efficacy in their work therefore developing their own PsyCap, rather than their development being driven by the organisation. Thus, blue-collar employee group are more likely to be 'left to their own devices' and thus being more readily influenced by HPWS.

However, sample one employees (white-collar workers) perhaps rely less on HPWS to influence their psychological makeup, and hence the non-significant result. These results may also be due to the strength of HPWS within the organisation (which was weak overall, mean score  $M=3.1$  for both groups) and HPWS does not seem to be making a difference day-to-day for the white-collar worker employees. If the HPWS benefits are not clear or employees do not have access to HPWS available, they may continue their work existence, with little or no training, little or non-existent performance reviews, and no annual increases.

HPWS was found to relate significantly to work-life balance for both samples, and this might suggest that HPWS provides support as a policy and practice vehicle that allows workers to be better able to juggle their work and life roles (Haar, 2013). Importantly, a recent study acknowledged that antecedents of work-life balance have been sorely under explored (Haar et al., 2019). Indeed, within the work-life balance literature, it appears that factors like work and family support (Russo et al., 2016), leadership (Haar, Brougham, Roche, & Barney, 2017), job autonomy and work and family demands (Haar et al., 2019) have been explored, but not HPWS. Hence, this makes the present findings provide unique insights into the formation of work-life balance.

Results of the structural equation modelling analysis showed that HPWS was found to be significantly related to both vigor and dedication in sample one but not in sample two. This aligns with Truss et al., (2013) in the literature but again shows differences between the different worker cohorts. HPWS is significantly related to job satisfaction and to job performance in sample one, perhaps the opportunities for greater rewards and clearer direction are evident, but this was not replicated in sample two, with both outcomes not predicted by HPWS amongst the blue-collar workers.

As discussed previously above, HPWS does correlate to job satisfaction for sample two, and for this sample, job satisfaction goes on to relate directly to job performance so there are some positive linkages here. The analysis shows (and this is discussed more below) that other constructs predict job satisfaction instead of HPWS (e.g., work-life balance) and hence the direct effects of HPWS might become diluted or over-ridden by psychological constructs further along the chain of factors examined in this thesis. Overall, there is support for hypothesis one (HPWS and the relation to other factors), although these are quite mixed between sample one and sample two. This confirms previous discussions about separating the samples for comparison and allows a more direct comparison to our sample three. This evidence also reinforces the idea for designing different types of systems and environments depending on the type of employee and what would benefit them the most and influence positive work.

## **Leadership Communication**

It has been argued that leadership communication plays a central role in developing positive employee attitudes including job satisfaction and positive employee-organisation relationships, which in turn can increase productivity and profitability, as well as improve employee engagement and performance (Einwiller & Boenigk, 2012; Men, 2014; Gallup, 2012). The present study uses a measure of communication effectiveness, which focuses on the outcomes of communication effectiveness between supervisor or direct-line managers and their employees (Yrle et al., 2002).

Regarding sample one, leadership communication is significantly correlated to PsyCap, mindfulness, meaningful work, work life balance, vigor, dedication, absorption, job satisfaction and turnover intentions. There is also evidence within the literature that this factor relates to being able to set culture and solidify a vision (Kirkpatrick & Lock, 1996; Westley & Mintzberg, 1989), and in sample one, leadership communication was positively related to POS. Hence, this supports good leadership communication helping shape beliefs about the organisation as a whole – albeit only in the professional white-collar sample (sample one).

Sample two showed that leadership communication was significantly correlated with PsyCap, mindfulness, meaningful work, work-life balance, vigor, dedication, absorption, job satisfaction, turnover intentions and job performance. Considering that leadership communication significantly correlates with PsyCap in both sample one and sample two, this confirms strongly that leadership communication may be able to enhance various individual personality traits, contributing to shaping employees'

psychological resources such as hope, confidence and resilience, and mindfulness – being in the present moment.

This aligns with the importance of good leadership shaping PsyCap (Wang, Sui, Luthans, Wang, & Wu, 2014). Wang and colleagues (2014) asserted that a leader's leadership style can be transmitted to their followers and help build their psychological resources and thus PsyCap. Although leaders may assume they are communicating well enough and frequently, their communication may not be effective. It is important to ensure effectiveness of the leadership communication is identified and leaders are given development opportunities in this area and increase their awareness of how influential positive communication can be.

Leadership communication significantly correlates with mindfulness for sample two but not in sample one, with blue collar workers reporting effective leadership communication is likely to help them be more mindful. Compared to the professional white-collar sample, perhaps these types of workers (blue-collar) respond better to more frequent, 'obvious' communication from their leader, although further research is needed to clarify this mechanism – perhaps qualitative interviews – but this is outside the scope of the present study.

Leadership communication relates significantly to work-life balance for sample one, but not for sample two. Sample one employees may be able to take advantage of opportunities from their leaders that lead to improved work-life balance, for example, leaving or starting work at different times, and thus a leader may be the driver of these opportunities. Overall, there is a lack of empirical evidence around antecedents of work-life balance (Haar et

al., 2018) and thus this provides useful insights into how leadership shapes work-life balance. Haar et al. (2017) found servant leadership was significantly related to work-life balance and the findings from sample one also provides evidence that leadership communication might be an important factor.

Further research is required to determine the methods and types of leadership communication that would increase the effectiveness of leadership communication, including what leadership communication will have the most impact on different types of workers/employees. This also aligns with Yrle et al.'s (2002) construct about the leader communicating rules and procedures, asking for suggestions and seeking input. This might be less applicable to blue-collar workers and their work environment, with such employees needing to be at work for a set time to achieve their production goals which are often measured quantitatively (e.g. number of widgets manufactured).

Ultimately, this would leave little opportunity to change working times or have increased work-life balance flexibility due to shift work. Again, the construct was around leadership communication and not specifically work-family supervisor support – which is distinct and different (Haar, 2006). As such, this is only one potential reason why these linkages were not found between leadership communication and work-life balance in sample two. While leadership communication is significantly correlated to job satisfaction in both samples, in the structural model analysis it is a significant predictor for sample one only.

## **POS**

Eisenberger et al. (1986) defined perceived organisational support as an individual employee's perceptions of the extent to which they believe their organisation cares about their well-being and values their contributions to it. Fundamentally, the higher the POS score the greater the worker feels their organisation cares about them, and this should influence the way employees respond through greater work attitudes, behaviours and efforts. POS is usually associated with an organisational culture that values fairness, has supportive supervisors, and has favourable organisational rewards and job conditions (Eisenberger et al., 1986; Rhoades & Eisenberger, 2002).

POS can influence and affect other positive organisational outcomes such as employee job satisfaction, positive mood, organisational commitment, and job performance (Rhoades & Eisenberger, 2002). In the present study in sample one, POS was found to be significantly correlated with leadership communication, PsyCap, mindfulness, meaningful work, work-life balance, vigor, dedication, absorption, job satisfaction and turnover intentions in sample one. The literature discusses POS as foundational in setting 'a culture of support' within an organisation. POS may give a platform for individuals to feel safe at work, so they are able to explore, try new things and innovate (Eisenberger, Huntington, Hutchinson & Sowa, 1986; Eisenberger, Stinglhamber, Vandenberghe, Sucharski & Rhoades, 2002; Kossek et al., 2011; Rhoades & Eisenberger, 2002). POS may be cultivated through various methods or channels relative to the organisation context, what support 'looks' like in one organisation maybe different in another organisation, again no one size fits all. Above, I discussed the links between



HPWS and POS, although that was not supported for the blue-collar worker sample.

The study data shows similar correlations for sample two (blue collar) between POS and mindfulness, meaningful work, work-life balance, vigor, dedication, job satisfaction, turnover intentions, and job stress. However, this was not the case with POS, with it not being significantly correlated with leadership communication, PsyCap, absorption and job performance. These results may indicate that the organisation has incongruences between professional workers (including management) and employee's perceptions of how supportive the organisation is, and does highlight an area for development, to close the 'gaps' between these perceptions of white-collar and blue-collar workers.

This means that increasing leaders' understanding of the direct influence and importance of effective communication may play towards shaping and improving employee perceptions of the care the organisation has for their wellbeing (POS), may be important, especially when considering the flow-on effects may also influence the effect of PsyCap, absorption and job performance. It was expected that leadership communication would be positively related to POS in sample two, but this was not supported.

I surmise the reasoning for this lack of significant effect is due to these types of workers (blue collar) directly, perhaps reflecting an issue with blue collar workers facing leadership communication without a 'humane' or soft tone and hence while they feel they are communicated to by their leaders, this fails to reflect a soft or warmer tone that might subsequently influence and shape perceptions of being cared for by their organisation (i.e., POS).

Leadership communication may directly affect and maybe one avenue that is used to show POS as a tangible part of an organisation, for example, leaders can communicate to show their support and confidence in employee's decisions. It is important that organisations also find other vehicles to show perception of support for wellbeing, such as improved HPWS (as discussed in detail above) and increasing employee feedback mechanisms (and acting on feedback).

An interesting comparison shows POS as being significantly related to mindfulness for sample two but not for sample one. This may mean when perceptions of organisational support are prominent, they will contribute to and influence mindfulness for blue collar workers but not so for white collar workers. Further research is needed to determine why this is the case. This might be due to when blue collar workers feel supported by the organisation to complete their work tasks, they find themselves with the opportunity and space to be more present in their work. Another reason for this significant correlation may be due to the practicality or 'hands on' nature of the work tasks, which will naturally bring employees into the present moment, allowing them to be more mindful at work.

Again, POS influences meaningful work for sample two but not for sample one. It appears that depending on the employee work type, POS may have different influences on different constructs. Of course, this might just reflect the situation in the present organisation although POS is expected to influence factors like mindfulness and meaningful work similarly across work types. Given POS was positively correlated with PsyCap (another dispositional factor) across both samples, this might suggest this lack of

significant effects are quite real and thus POS might not influence some factors the same when comparing workers in the same organisation across blue-collar and white-collar work. This quite unique finding needs further research to understand it but is otherwise outside of the scope of the present thesis.

Further analysis shows that POS is significantly related to work-life balance for sample one but not for sample two (blue collar workers) and this is important because while work-life balance studies are in their infancy (e.g., Haar, 2013) there is little research on antecedents (Haar et al., 2019), although the few studies do show that support is important (Haar et al., 2019; Russo et al., 2016). Again, these effects may show differences in the predictors towards blue-collar workers.

Another relationship well established in the literature is POS to turnover intentions, and there was a significant influence on turnover intentions for sample one but not for sample two. This significant (and negative) effect supports the meta-analyses research conducted on POS (Rhoades & Eisenberger, 2002; Riggle et al., 2009; Kurtis et al., 2016), although clearly there is a lack of consistent support for (or effect on) the blue-collar worker sample. As discussed previously, this may be due to the lack of attention from the organisation towards these types of employees. Overall, there are several supports for hypothesis three but there is a range of variations across both samples with no common outcome significantly influenced by POS.

### ***Organisational Factors Summary***

In summary, the three organisational factors above (HPWS, POS and leadership communication) tested in this research, may be imperative to building a culture that is able to promote an individual's growth within the organisation (by increasing certain individual traits) and shaping attitudes. Creating and maintaining an organisational environment that is focused on incorporating these factors each day will give individuals the opportunity to flourish and build and develop their own positive traits increasing overall organisational success.

This research gives supporting evidence these three factors could be a minimum to building a people-centric culture, and the positive impact on the business performance is clear. If the factors are developed into interventions that are suited to the work type, this may also give individuals the opportunity to do their best work and tools to positively develop themselves as individuals, their families and communities at the same time.

The research findings from the present study show that there are many differences in the strength of relationships between the samples and each factor (HPWS, leadership communication and POS). This again shows evidence for businesses needing to have multiple strategies to engage all types of people within the organisations. Initiatives should be 'tailor-made' to the type of worker to ensure the effectiveness of the initiative, to ensure that both employees and the organisation are benefiting. Regarding each factor, there appears a need to 'check in' with employees to ensure initiatives are achieving the desired result. This could be through researching (surveying) and seeking feedback to gain understanding of effectiveness.

## **Block 2: Dispositional Factors**

The present study included two dispositional factors – PsyCap and mindfulness. While causality cannot be determined in the single-source and single-time study that I conducted, I was interested in these two, positive, psychological, disposition factors because they have been found to relate to the outcomes examined in the thesis (e.g., Roche et al., 2014). I now look at these two factors and their linkages to outcomes.

### **PsyCap**

PsyCap is a construct made up of a combination of four psychological resources: hope, optimism, self-efficacy and resilience (Luthans et al., 2007). PsyCap was found to significantly correlate with mindfulness, meaningful work, work-life balance, vigor, dedication, absorption, job satisfaction and job performance in both samples, and shows that PsyCap is a strong influencing factor for both white collar and blue-collar workers. PsyCap results show it is as a positive influencing factor for both white and blue-collar workers, the only difference is that it had a significant effect on turnover intentions for sample one but not for sample two.

Despite the wide support for PsyCap as being significantly correlated with outcomes in both samples, its effects on outcomes in the structural equation models were more modest. In sample one, PsyCap was found to relate significantly to meaningful work, work-life balance, vigor and job performance, but only meaningful work in sample two. The findings from the present study for PsyCap are similar to the current literature in which the impact of PsyCap across different work types and employee types has been

found to have a direct effect on employee attitudes, behaviours and performance (including 51 samples, and over 12 thousand employees) (Avey et al., 2011).

Research shows that job performance was highest when employees reported high scores on both PsyCap and job satisfaction (Luthans, Avey, Clapp-Smith & Li, 2008; Luthans & Yossef, 2007). There was significant evidence in the meta-analysis that PsyCap relates directly to employee performance (Avey et al., 2011), with a slightly stronger effect size for the studies in the service sector rather than manufacturing. This suggests PsyCap may be more (or less) important on its influence depending on the type of work or role, which is a common theme through the results of the present thesis.

Indeed, while the present study expands the outcomes influenced by PsyCap – especially meaningful work (both samples) and work-life balance (sample one only) – which builds the antecedents of these outcomes, it is important to note that it is unusual that PsyCap was found to not relate to job stress across both worker types. Indeed, there is strong meta-analytic support for PsyCap being related negatively to job stress (Avey et al., 2011). While the present construct used to test job stress is a single item construct, there is support for its efficacy in measuring job stress, including empirical comparisons for the construct (see Stanton et al., 2001; Macky & Boxall, 2008) suggesting it is a robust construct. Furthermore, other studies have used this construct to adequately test for job stress (Boxall & Macky, 2014; Boxall et al., 2015). As such, I suggest the lack of significant links might highlight

something specific about the organisation and the context of work rather than any measurement issue.

Despite that lack of significant links to job stress, the overall findings that PsyCap was more dominant to white-collar versus blue collar-workers has empirical support. For example, it has been argued that PsyCap may have a stronger impact on service work which relies on social interactions that require the expression of positive emotion, although a study of Chinese manufacturing workers (Luthans., et al, 2005) found initial evidence that each of the PsyCap states were positively associated with performance outcomes. A study completed by Bonner (2016) which focuses on nurses' work engagement and PsyCap, found nurses with high levels of PsyCap reported having higher levels of engagement, and those with higher PsyCap and engagement were more likely to have positive work outcomes.

This relationship has been confirmed in a study completed by 312 hotel workers in Korea. This study showed employee work engagement as one of the positive outcomes of PsyCap and gave evidence that the positive emotions created by the link between PsyCap and work engagement are the foundation of the strong relationship between the two (Paek et al., 2015). In a South African study that used a cross sectional survey of 106 call centre workers, Simons and Buitendach (2013) found significant positive relationships between PsyCap, work engagement and organisational commitment. Hence, the lack of linkages to some constructs, especially job stress and job satisfaction, defy the meta-analytic evidence (Avey et al., 2011).

The present study also found PsyCap to be significantly related to meaningful work for both sample one and sample two, and it is also significantly related to work-life balance in sample one but not for sample two. These results provide modest support for Hypothesis five. Current literature is lacking in evidence of significant correlations between PsyCap and meaningful work for either work types, as well as evidence for PsyCap significantly relating to work-life balance (sample one, white-collar workers) therefore this is an interesting finding, as both meaningful work and work-life balance significantly positively contributes to job satisfaction, engagement and performance within the literature. This gives support to explore further the viability of interventions to increase employees' PsyCap. These interventions that focus on increasing PsyCap may have the ability to make an impact on organisational outcomes.

PsyCap significantly relates to job performance for sample one, but not for sample two so there is alignment with the meta-analysis (Avey et al., 2011) and this also supports that analysis that some job types would benefit more from PsyCap than others. This may be similar reasoning for turnover intentions, white collar workers may have the tools to manage themselves and their emotions towards their work and willingness to stay in their jobs, and this may have little impact in a manufacturing environment, where the work is possibly less challenging and enriching, leaving no influence from PsyCap to turnover intentions. Another explanation is that PsyCap influences meaningful work, which in turn influences the work engagement factors of vigor and dedication, and these are both negatively related to turnover intentions. Thus, while sample one (white-collar workers) does have PsyCap



significantly correlated to turnover intentions, it does not predict turnover directly – instead working indirectly through meaningful work.

### **Mindfulness**

Brown and Ryan (2003) defined mindfulness as “enhanced attention to and awareness of current experiences or present reality” (p.823). Mindfulness has been tied to positive psychological and physiological well-being (Baer, 2003; Avey, et al., 2008) and claims to provide greater non-judgmental awareness of one’s internal and external environment (Avey et al., 2008). Mindfulness did have significant correlations in sample one (white-collar workers), with meaningful work, work-life balance, the work engagement dimensions of vigor, dedication, absorption, as well as job satisfaction and turnover intentions. Sample two (blue-collar workers) shows mindfulness was significantly correlated with meaningful work, work-life balance, absorption, job satisfaction and turnover intentions.

Dane (2011) found that mindfulness may contribute to task performance in a variety of ways but goes on to discuss that it would be hasty to say that mindfulness was always beneficial without a cost, as the overall impact of mindfulness on task performance depends on both the environment and the employee’s ability to perform the task. Mindfulness can be considered as a state of consciousness that may help or hinder dependent on conditions. This point is especially apparent in the present research, as I found that with both samples, mindfulness did not significantly correlate to job performance. The literature also shows us that mindfulness is effective depending on work type as I discussed in the literature review, that mindful effectiveness was

apparently dependent on the work type and environment. Again, confirming that although mindfulness can be expected to be beneficial to many job types, the role it plays in performance largely depends on the task and contextual features of the work (Glomb et al., 2011).

In the structural equation modelling results, I found that mindfulness was only a significant predictor of two work engagement dimensions, vigor and dedication, in sample one (white-collar workers), with no significant influence towards outcomes in sample two. This highlights that other mechanisms might be at play. While Roche et al. (2014) found PsyCap and mindfulness were both significantly related to wellbeing outcomes of managers, it might be that in the present study (where mindfulness and PsyCap covaried) that PsyCap dominated the influence of mindfulness towards all outcomes in sample two, and all but the work engagement dimensions in sample one.

Additional analysis [not shown] did suggest that if I re-ran models and removed PsyCap the influence of mindfulness was more apparent (that is, more significant direct effects), so this might suggest that in the context of these samples and PsyCap, mindfulness was not a sufficiently strong enough predictor to influence outcomes beyond PsyCap. While Roche et al. (2014) included both mindfulness and PsyCap in their analyses, and found consistent significant effects with both predictors, the present study also includes a number of other factors – including three organisational factors (HPWS, leadership communication and POS) which might also remove some of the significant influence.

Dane (2011) does discuss the differences between static task environments (such as manufacturing) and dynamic task environments (such as service industries). Overall Dane argues that mindfulness may contribute to job performance in dynamic task environments, this is not so in static task environments due to the stability and predictability of the environment, and task performance may require ‘filtering out’ a number of present moment stimuli and focusing more narrowly on the task at hand rather than a breath of attention to everything happening within the environment, almost a narrowing of the senses, and my research results are consistent with these findings.

Gregoire and Lachance (2015) found a mindfulness intervention reduced psychological distress for call centre workers in a financial institution. However, the present study found no links between mindfulness and job stress which is also counter to the findings of Roche et al. (2014). Given that study focused on managers and entrepreneurs, perhaps the benefits of mindfulness towards wellbeing are limited. More research on employee samples is required.

However, while it may be expected that those who are more mindful report less job stress, that isn’t the case in the present samples, but it is a consistent finding. Perhaps the types of work done in this single organisation accounts for this lack of effect. While the two samples report quite different samples by job type (white-collar versus blue-collar) perhaps the industry setting accounts for this. This is a high-pressure work environment and perhaps that shows that being mindful simply isn’t ‘sufficient’ to reduce job stress. More research on this is required.

Overall, there is limited (to no) support for Hypothesis four, again this may be due to the types of environments and the work tasks that sample two workers (blue collar) are exposed to. Dane (2013) also found mindfulness to be significantly related to some factors of engagement (vigor and dedication) in dynamic work environments rather than static work environments. Further research is needed in different environments to understand the effect the environment has on these factors.

### ***Dispositional Factors Summary***

In summary, the two dispositional factors above (PsyCap and Mindfulness) tested in this research, may give employees the tools that contribute to a positive organisational culture. The research gives supporting evidence these two factors could enhance not only the workplace but individuals. These factors can be developed into interventions that are suited to work type, and again give individual's the tools to positively develop themselves as individuals, and their families and communities at the same time.

### **Block 3: Work Perceptions**

This block relates to the work experiences and perceptions of employees and specifically focuses on two self-reported factors that relate specifically to self-perceptions. Haar (2013) noted that work-life balance is a self-perception and thus needs the respondents to be reporting their perceptions themselves. This also relates to meaningful work (Spreitzer, 1995) which similarly asks employees their perceptions around how important and meaningful their work is. Hence, aligned with the previous study model, I expect organisational

factors (Block 1) to shape dispositional factors (Block 2), and in turn, both organisational and dispositional factors to influence these work perceptions (Block 3), which then influence work engagement (Block 4) and job outcomes (Block 5).

### **Meaningful work**

Meaningful work relates to what Spreitzer (1995) calls the “fit between the requirements of a work role and beliefs, values, and behaviours” (p. 1443). Those who perceive greater fit or meaning in their work, are expected to do better than those with poorer fit or less meaning. In sample one (white-collar workers), meaningful work was found to significantly correlate with work-life balance, vigor, dedication, absorption, job satisfaction, turnover intentions, job stress and job performance – showing it to be a strong influencing factor on the various work outcomes for white-collar workers. In sample two (blue-collar workers), I found meaningful work correlating with work-life balance, vigor, dedication, absorption, job satisfaction, turnover intentions and job performance.

These effects are similar to those found within the literature, as meaningful work has been found to relate positively to employee engagement (Shuck et al., 2011; May, et al., 2004), job performance (Scroggins, 2008), motivation and personal growth (May, et al., 2004). When an employee considers their work a calling and of importance this will also contribute to greater work satisfaction (Bunderson & Thompson, 2009; Wrzesniewski, et al., 1997).

Beyond the correlation analysis, the structural equation modelling showed that meaningful work is significantly related to work-life balance for both sample one and sample two. Hence, workers who feel their work has greater meaning are better able to manage their work and life roles (Haar, 2013). This is the first time such an effect has been found and extends the burgeoning literature around antecedents of work-life balance (e.g., Haar et al., 2019, 2018a). This does reinforce the theory of role balance (Haar, 2013) and would – under that theory – indicate that work that has greater meaning is less of a drain on resources and creates greater harmony, which should build work-life balance.

Importantly, I found consistent effects, for both white-collar and blue-collar workers, highlighting the importance that meaningful work can play towards factors like work-life balance in workers, irrespective of whether they are professional workers, or those in perhaps less-desirable fields or professions. This aligns with Lips-Wiersma et al. (2016) who found similarities across meaningful work when they compared different worker types, including white-collar and blue-collar workers.

In addition, meaningful work was also found to be a significant predictor of vigor in both samples, and again dedication is the same relating to sample one and sample two. This supports the limited examination of meaningful work and work engagement (Lips-Wiersma & Wright, 2012). However, there were no significant influences towards the third (and final) dimension of work engagement (absorption), although this might reflect that dedication does predict the absorption dimension in both samples, and thus, this might reflect a mediation effect. Overall, despite the broad number and

consistent correlations with meaningful work, it did not predict any further outcomes. Overall, there is some support for Hypothesis six around meaningful work influencing outcomes although this appears limited to only the other perception (work-life balance) and engagement.

### **Work-life balance**

Haar (2013) defined work-life balance as “the extent to which an individual is able to adequately manage the multiple roles in their life, including work, family and other major responsibilities” (p. 3308). As noted above, the antecedents of work-life balance are relatively new to exploration and while some job and wellbeing outcomes are more established (e.g., job satisfaction – see Haar, 2013; Haar et al., 2014), others are rarer. Work-life balance was found to be significantly correlated to vigor, dedication, absorption, turnover intentions, job satisfaction and job performance in both sample one and sample two. It also correlates negatively to job stress in sample one but not sample two.

Regarding the structural equation models, work-life balance was found to be far more important a construct in sample one (white-collar workers) than sample two. It was found to have a significant influence on vigor and dedication (but not absorption), which aligns with findings from Haar et al. (2017), although in that study, they found work-life balance significantly predicted all three work engagement dimensions (thus including absorption). That said, that study did not use the engagement dimensions of vigor and dedication to predict absorption, which might account for the influences found here. Similarly, the lack of any influence towards

engagement dimensions in sample two might similarly indicate other factors at play for that worker cohort.

In the structural analyses, work-life balance was significantly related to job satisfaction for both samples, and supports several studies (e.g., Haar et al., 2018c; Haar, 2013) – including a multi-country study (e.g., Haar et al., 2014) around work-life balance influencing job satisfaction. While I found no direct effect on turnover intentions, there is support in the literature for such effects. For example, Carlson, Grzywacz, and Zivnuska (2009) found work-family balance was negatively related to turnover intentions. Similarly, Brough, Timms, O'Driscoll, Kalliath, Siu, Sit and Lo, (2014) found work-life balance was significantly and negatively related to turnover intentions (using a time-delay between predictor and outcomes).

Haar et al. (2018a) did find work-life balance was negatively related to turnover intentions, but this effect was fully mediated by job satisfaction, and hence the lack of direct effects might be accounted for by other factors. This is especially true given the strong meta-analytic support for factors towards turnover intentions (e.g., Griffeth et al., 2000; Tett & Meyer, 1993; Rhoades & Eisenberger, 2002). Finally, there was support from sample one (only) for work-life balance being a significant influence on wellbeing, with a significant direct effect (negative) on job stress. This aligns with other wellbeing outcomes (e.g., Haar, 2013; Haar et al., 2014; Haar et al., 2018b), although job stress has specifically been untested, so this adds to our understanding of psychological health outcomes.

Lastly, there has been little research within the literature on the connection between work-life balance and job performance, so this is a



positive contribution to the literature, just one of the many benefits of work-life balance. While the significant correlations were supported across both samples, in either sample, work-life balance was not a significant predictor, although this likely represents the influence of other key factors – such as absorption (sample one) and vigor (sample two) – and these are discussed more below. Overall, the above relationships show solid support for Hypothesis six regarding the effects of work-life balance.

#### **Block 4: Work engagement**

The final block related to the influence of the various work engagement dimensions on the remaining work outcomes (Block 5). In the broad engagement literature, engagement is a ‘fuzzy’ term – mainly due to the conflagration between academic and practitioners around ‘what’ engagement, but there is commonality about engagement being a positive influence on performance and other work outcomes (e.g., Bakker et al., 2011; Kahn, 1990; May et al., 2004; Newman & Harrison, 2008; Saks, 2006; Schaufeli & Bakker, 2010; Schaufeli et al., 2002; Thompson, et al., 2015).

As previously discussed, work engagement (Schaufeli et al., 2002) is made up of three dimensions: vigor, dedication and absorption. Within sample one and two, each dimension was significantly and highly correlated with each other:  $.78 < r > .61$  ( $p < .01$ ) in sample one (white-collar workers) and  $.77 < r > .68$  ( $p < .01$ ) in sample two (blue-collar workers). Amongst the significant correlations, in sample one the three engagement dimensions are correlated significantly with job satisfaction and turnover intentions and job performance (in expected directions), but not job stress (across any of the

three engagement dimensions). In sample two, the three engagement dimensions are correlated significantly with job satisfaction and turnover intentions and largely job performance (all but dedication). These are also in the expected directions. However, only vigor is significantly correlated to job stress and the other two engagement dimensions are not.

Regarding the structural equation findings, towards predicting absorption, in both samples, dedication was the dominant predictor of absorption, with vigor being directly not significantly related. Ad hoc analysis (not shown) indicates that vigor is a significant predictor if dedication is not included in the model towards absorption. This approach supports the more recent approaches towards work engagement, with vigor and dedication seen as antecedents of absorption (Salanova & Schaufeli, 2008). Hence, this finding (supported from both samples) does align itself with changes in the engagement literature (e.g., Hakanen et al., 2017; Salanova et al., 2010; Rodríguez-Munõz et al., 2014; Schmitt et al., 2016). There is a similar effect towards job satisfaction, with dedication being a significant predictor in sample one (only), and no direct effect from vigor.

There is also a significant direct effect from both vigor and dedication towards turnover intentions, which aligns with the literature (Saks, 2006; Harter et al., 2012), although only in sample one (white-collar workers). There is more consistency with vigor towards job stress, as it is significant and negatively related in both samples. Again, this aligns with studies, argument for engagement and wellbeing to be explored (Schaufeli & Taris, 2014), and supports the links found or suggested by researchers (e.g., Truss

et al., 2013; Bakker, van Emmerik, & Euwema, 2006; Bakker & Leiter, 2010; Fairlie, 2011).

Absorption is significantly related to job performance but only in sample two (blue-collar workers) but not sample one (white-collar workers), although in that sample, there are significant effects from absorption towards job performance. This supports the literature around engagement and performance (e.g., Harter et al., 2012). Overall, these effects provide useful support for the study Hypotheses, although this is more minimal for Hypothesis nine around the influence of absorption.

This may be because absorption has been previously argued as a consequence of work engagement rather than a dimension (Salanova & Schaufeli, 2008). Schaufeli et al. (2002) define work engagement as "a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption" (p.74). Christian et al. (2011) completed a meta-analysis on research that looked at conceptualising engagement, and engagement's relationship to performance, the authors found evidence that engagement is related to job performance thus the key theme of the current thesis.

Christian et al. (2011) also state that managers may be able to increase engagement by designing jobs that include motivating characteristics, therefore are able to set the stage for engagement by creating an environment that facilitates employees' perceptions of meaningful work. Further research in a New Zealand context around the three forms of engagement – and especially the role of absorption – is needed before conclusions can be made about generalisability.

The final part of this discussion chapter from study one relates to the moderated mediation effects tested for. Here I argued that the dispositional factors (PsyCap and mindfulness) might be influenced not just directly by the organisational factors of HPWS, leadership communication and POS, but also via two-way moderation or even a moderated mediation effect. Here I suggested that since HPWS and leadership communication are expected to predict POS and in turn predict the dispositional factor, this allows the testing of POS as a mediator and the other two factors (leadership communication and HPWS) to be tested as an interaction effect.

The work of Hayes and colleagues (Hayes, 2018; Hayes & Preacher, 2013; Hayes et al., 2017) highlights that moderated mediation effects are growing in popularity in the management sciences. Such effects allow for a greater understanding and nuanced effects, and this is especially relevant in the present study. Here I specifically tested HPWS as a moderator of the leadership communication → POS → dispositional factors relationship. Ultimately, two significant two-way interaction effects were found (one in each sample) and one significant moderated mediation effect (sample one only).

A significant interaction between HPWS and POS towards PsyCap was found for sample one (white-collar workers) but not for sample two. This supports the hypothesis around the potential moderating effects towards dispositional factors and shows that, as expected, those with higher perceptions of support (POS) would report highest PsyCap when they also perceive high HPWS. The effect shows that these two otherwise positive factors (individually) can be cumulatively beneficial and enhance (positively

influence) the PsyCap of white-collar workers when they perceive both factors are high. In their meta-analysis, Rhoades and Eisenberger (2002) highlighted the need to test for moderating effects including POS, and there are studies finding significant moderating effects with POS (e.g., Eisenberger et al., 2002; Farh, Hackett & Liang, 2007).

While the effects towards PsyCap in sample one supported the effects of HPWS intensifying the beneficial effects of POS, there were more modest effects towards mindfulness in sample two (blue-collar workers). Here I found that at high levels of POS, there is a flat or stable level of mindfulness at high levels of HPWS. However, those respondents reporting low POS report a drop or decrease in mindfulness, so there are clear benefits to having high POS and high HPWS. This finding might reflect and mirror the earlier findings where effects on sample two (blue-collar workers) are quite different from those of the white-collar workers in sample one. Combined, these two-way moderating effects do help our understanding of how organisational factors can help shape and inform individual employee dispositional factors.

Finally, a significant moderated mediation effect was found. Hayes (2018) argued that more sophisticated analytical tools now allow these more sophisticated statistical techniques to be applied and in the present study, I found a significant moderated mediation effect in sample one only (white-collar workers). This approach is important because boundary conditions – which moderated mediation effects can highlight (Hayes, 2018) – are an important process in understanding how a construct might operate to gain fuller insights. In this moderated mediation effect, it was shown that at low levels of HPWS, the effect of leadership communication on PsyCap vis-à-vis

POS was not statistically significant. While the effect was positive, POS no longer played a mediating role.

However, for white-collar workers reporting high HPWS, the effect of leadership communication on PsyCap vis-à-vis POS was positive and moderate. Hence, this effect shows that the influence of POS as a mediator is conditional on the strength of HPWS. Indeed, the indirect effect was only significant when HPWS was at levels greater than -0.8 standard deviations above the mean. This finding highlights that HPWS might play a valuable boundary condition role whereby the effect of POS as a mediator becomes conditional. Again, this reinforces calls for moderating effects on POS (Rhoades & Eisenberger, 2002) and highlights the importance of testing for moderated mediation (Hayes, 2018).

## **Chapter 7. Methods – Study Two**

### **Participants and Sample**

The present study (study two) builds on the relationships from study one. This study enabled performance data to be gathered to allow for specific performance relationships to be tested that included external-sourced performance data. Data was collected in a large New Zealand retail organisation, with over 70 workplace sites across New Zealand. In this study, data was collected from three sources: (1) employees working in teams in each store; (2) performance data from the store manager; and (3) store data from the Head Office. Overall, stores are located across New Zealand, although mainly in the North Island (75%). Initially, the project was discussed with the CEO, and an email invitation was sent through to all employees notifying them of the upcoming survey invitation.

Because it might not have been possible to complete the survey while at work (as retaining this would depend on customer demand), Head Office provided a decent prize for participation (a stereo speaker for pairing with a phone – value \$299). Ultimately, staff were sent an anonymous survey link that linked to an online Qualtrics survey. Store managers were similarly sent an anonymous survey link that linked to an online Qualtrics survey, which focused on the performance outcomes of the study. Head Office supplied independent performance ratings for their stores as well. All surveys were anonymous and did not require an employee or manager's name or contact details, to ensure the responses were confidential. They were required to name their store so that the individual store employee scores could be linked with

performance indicators from the manager or Head Office. Full ethics was granted for the study (AUT 17/96 The effect of individual and organisational factors on employee engagement and performance). Appendix A has a copy of the ethics agreement.

Overall, approximately 570 store employees were sent the email link, and two follow-up reminders being sent. In total, I received 253 completed online survey responses. A few of the responses (eight) had begun the survey but not completed most of the survey, and these were subsequently dropped from further analysis. Overall, a total of 245 surveys were used for the final analysis, representing a response rate of 43.0 percent. In total, approximately 75 store managers were emailed a survey link, although a small number manage multiple stores. These supervisors were asked to complete the survey multiple times and score each store, although this was not completed often. In total, 50 store surveys were completed, representing a response rate of 66.7 percent.

Again, I used the same logic from study one (which used two employee samples) to bolster the confidence in findings regarding the thesis topics and hypotheses. Hence, study two is seen as providing a different but related test of constructs towards work outcomes but also including independent job performance data. The focus on replication is because empirical studies and statistical tests need verification and replication (Nuzzo, 2014; Tsang & Kwan, 1999) and this study two is seen as an extension and replication of the two studies in study one. Importantly, it provides two distinct and non-self-reported sources of performance data, further aiding the



ability of replication (at least towards performance) and confidence in any significant findings. Study demographics are shown in Table 11.

*Table 12. Study 2 Demographics*

<b>Demographic</b>	<b>Employee Sample</b>	<b>Manager Sample</b>
Sample	N=245	N=50
Gender	81.6% female 18.4% male	84% female 16% male
Age	Average age band: 20-25 years (SD= 1.1)	Average age band: 26-30 years (SD= 0.70)
Hours Worked	30-34 hours/week band (SD= 2.3)	No data
Education	High School=37.1% Polytechnic Qualification=9.8% University Degree=32.7% Postgrad Qualification=20.4%	No data
Job Tenure	2.7 (SD= 1.5)	3.6 (SD= 1.4)
Ethnicity	New Zealand European= 22% Maori= 14% Pacific peoples= 7% Asian= 29% Indian=25% Other= 3%	No data

Overall, the study two sample is dominated by females: 81.6% females in the employee sample, and 84% amongst the store manager respondents. The sample of employees were in a young age band (20-25 years of age), while managers were on average, in the next age group (26-30 years of age). Due to limitations in survey size for managers, our last data for this group was tenure as a supervisor. This was 3.6 years (SD= 1.4). The job tenure for the

employee sample was 2.7 years ( $SD = 1.5$ ). The employee sample worked on average 30-34 hours/week. By education, high school education was most common (37.1%) followed by university degree (32.7%) and postgraduate qualification (20.4%), with polytechnic qualification quite distant (9.8%). The organisation's HR Department confirmed that the demographic spread of respondents (female and young) did represent their typical worker. The high education level highlights that many employees are studying and hence their high qualifications.

Finally, the ethnicity of employee respondents was varied: Asians (29%) and Indians (25%) were the most dominant ethnicities, followed closely by New Zealand European (22%). This was followed by Maori (14%) and Pacific peoples (7%), with other ethnicities (3%) making up the rest. Because Store Managers were reluctant to provide their personal details (education, ethnicity etc.) these were not asked. Indeed, the main focus of their participation was to provide data on store performance.

## **Measures**

The same measures were used in study two as study one (samples one and two). Specifically, these were.

High-Performance Work Systems (HPWS) was measured with 15 items by Lepak and Snell (2002), coded 1=strongly disagree, 5=strongly agree. I focused on five dimensions (performance, compensation, recruitment and selection, training and job design), with three items per dimension. Following standard practice (e.g., Datta et al., 2005), I created a single factor made up

of all the items, which follows meta-analysis advice (Combs et al., 2006). The items and their mean scores are shown in Table 12 for the employee sample. The measure had excellent reliability ( $\alpha = .92$ ).

*Table 13. HPWS and Statistics*

<b>Item</b> (coded 1=strongly disagree, 5=strongly agree) Item stem “Human Resource Practices in your organisation...”	<b>Employee Sample</b>	
	<b>Mean Score</b>	<b>SD</b>
1. In my job I am empowered to make decisions	3.0	1.1
2. I have a high degree of job security	3.0	1.0
3. My work includes a wide variety of tasks	3.9	1.1
4. The recruitment/selection process for employees emphasizes promotion from within	3.2	1.1
5. The recruitment/selection process for employees focuses on selecting the best all around candidate, regardless of the specific job	3.1	1.1
6. The recruitment/selection process places priority on their potential to learn (e.g., aptitude)	3.3	1.0
7. Our training activities for employees are comprehensive	3.1	1.1
8. Our training activities for employees are continuous	3.0	1.1
9. Our training activities strive to develop firm-specific skills/knowledge	3.1	1.1
10. Performance appraisals for employees are based on input from multiple sources	3.1	1.0
11. Performance appraisals emphasize employee learning	3.2	1.0
12. Performance appraisals include developmental feedback	3.0	1.1
13. Compensation/ rewards for employees provide incentives for new ideas	2.8	1.2
14. Compensation/ rewards for employees include an extensive benefits package	2.6	1.1
15. Compensation/ rewards for employees place a premium on their industry experience	2.7	1.1

Note: items are shown in order.

Perceived Organisational Support (POS) was measured with 4 items from Eisenberger et al. (1986), coded 1=strongly disagree, 5=strongly agree. Items followed the stem: "The following page contains questions that are related to your experience with your organisation. Your responses are anonymous. Please be honest and candid. My organisation..." and sample items are "Shows very little concern for me" and "Would ignore any complaint from me." This construct is well established and has strong validity (e.g., Eisenberger et al., 2002; Eisenberger et al., 2001; Eisenberger et al., 1997) and enjoys strong meta-analytic validity (e.g., Rhoades & Eisenberger, 2002; Riggle et al., 2009). The measure had excellent reliability ( $\alpha = .90$ ).

Leadership Communication was measured with four items from Yrle et al., (2002), coded 1= strongly disagree, 5= strongly agree. Questions followed the stem "Your supervisor..." and a sample item is "Explains company problems when needed." The measure had very good reliability ( $\alpha = .86$ ).

Psychological Capital (PsyCap) was measured with the 12-item PsyCap Questionnaire (PCQ-12) by Luthans et al. (2007a, 2015), coded 1=strongly disagree, 6= strongly agree. The PsyCap questionnaire consists of four subscales: (1) Hope, (2) Efficacy, (3) Resilience, and (4) Optimism. The PsyCap instrument is well validated (e.g., Luthans et al., 2007b; Luthans et al., 2008; Avey et al., 2011), including the shorter 12-item measure in New Zealand (e.g., see Roche et al., 2014 as they report on PCQ-12 across four New Zealand samples). Sample items include: "Right now I see myself as being pretty successful at work" (Hope), "I feel confident in representing my

work area in meetings with management" (Efficacy), "I can get through difficult times at work because I've experienced difficulty before" (Resilience), and "I'm optimistic about what will happen to me in the future as it pertains to work" (Optimism). Individually, the reliability scores for the four PsyCap dimensions were Hope ( $\alpha = .87$ ), Efficacy ( $\alpha = .80$ ), Resilience ( $\alpha = .64$ ), and Optimism ( $\alpha = .69$ ). Aligned with the standard approach, I combined these items to create a single PsyCap construct (e.g., Avey et al., 2011; Luthans et al., 2007a, 2007b; Roche et al., 2014), which was found to have very good reliability ( $\alpha = .85$ ).

Mindfulness was measured using the Brown and Ryan's (2003) Mindful Attention Awareness Scale (MAAS), coded 1= never, 5= all of the time, due to it being the dominant measure for mindfulness (Roche et al., 2014; p. 480), and widely supported by the literature (e.g., Weinstein & Ryan, 2011; Allen & Kiburz, 2011; Schutte & Malouff, 2011; Hülshager et al., 2013; Osman et al., 2016; Jensen et al., 2016; Leroy et al., 2013). The present studies utilised the MASS short 5-item scale by Höfling et al. (2011) and a sample item is "I find it difficult to stay focused on what's happening in the present." All five items are reverse scored to produce a mindfulness scale which is positive – that is, the higher the score, the better or stronger the mindfulness is (greater awareness of the present). This measure had adequate reliability ( $\alpha = .76$ ).

Meaningful Work was measured using the three-item construct by Spreitzer (1995), coded 1=strongly disagree, 5= strongly agree. A sample item is "My job activities are personally meaningful to me." This measure has been

validated (e.g., Siegall & Gardner, 2000), and had excellent reliability ( $\alpha = .91$ ).

Work-Life Balance (WLB) was measured using Haar's (2013) three-item measure, coded 1=strongly disagree, 5= strongly agree. A sample item is "Nowadays, I seem to enjoy every part of my life equally well." This construct has been well validated (e.g., Haar et al., 2019, 2018a, 2018b, 2017), including in a multi-country, multi-culture study (Haar et al., 2014). This measure had very good reliability ( $\alpha = .86$ ).

Job Satisfaction was measured using three items by Judge, Bono, Erez and Locke's (2005), coded 1=strongly disagree, through to 5=strongly agree. This has been well tested and validated in New Zealand (e.g., Haar, 2013; Haar et al., 2014). A sample item is "Most days I am enthusiastic about my work." This version of the construct using three items has been well validated in New Zealand employee samples (e.g., Haar, 2013; Haar et al., 2014), and had very good reliability ( $\alpha = .86$ ).

Employee Engagement was measured using the three-dimensional work engagement scale by Schaufeli and colleagues (2001), coded 1=never, 5=always. The original scale has 17 items, although in this study I used the shorter 9-item (short work engagement) scale (Schaufeli & Bakker, 2003). The validity of the 9-item scale has been confirmed (e.g., Seppälä et al., 2009). Sample items include "At my job I feel strong and vigorous" (Vigor), "I am proud of the work that I do" (Dedication), and "I get carried away when

I am working” (Absorption). The literature is divided regarding combining these three dimensions or examining them separately. The single ‘global’ work engagement construct has favour (e.g., Bakker & Xanthopoulou, 2009) because Schaufeli and Bakker (2010) argue that employees who are highly-engaged would be expected to be high on all three engagement dimensions.

As per the earlier approach, it has been argued by Salanova and Schaufeli (2008) that the three dimensions of work engagement might not represent a single engagement construct per se, but instead, the absorption factor might be viewed as a consequence of the other work engagement factors (specifically vigor and dedication). Hence, vigor and dedication could be “considered the core dimensions of engagement” (p. 118), and thus they would predict the third dimension of absorption.

This approach has been used in the literature, with many studies focusing only on the two dimensions (vigour and dedication) when examining work engagement (e.g., Salanova et al., 2010; Rodríguez-Munõz et al., 2014; Schmitt et al., 2016; Hakanen et al., 2017). Overall, the combined work engagement construct had excellent reliability ( $\alpha = .92$ ), but in the present study I followed Salanova and Schaufeli (2008) and tested the three dimensions separately. The reliability for each was very good: vigor ( $\alpha = .88$ ); dedication ( $\alpha = .86$ ) and absorption ( $\alpha = .74$ ).

Turnover Intentions was measured using a 4-item measure by Kelloway et al. (1999), coded 1=strongly disagree, 5=strongly agree. Sample items are "I am thinking about leaving my organisation" and "I am planning to look for a new job." This measure had excellent reliability ( $\alpha = .94$ ).

Job Stress was measured using a single item by Stanton et al. (2001): “On a scale of 1-10, how would you rate the amount of stress you feel in your job”, coded 1=no stress, 10=extreme stress. Stanton et al. (2001) found the one-item measure correlated at 0.70 towards the Stress in General (Pressure), which was a seven-item measure. Similarly, Macky and Boxall (2008) found this measure correlated at 0.72 with another seven-item measure of job stress. Overall, these findings provide sufficient validity for the single-item measure. Single-item approaches to examining stress have support (e.g., Beal et al., 2013; Gardner et al., 1998) and have been utilised in employee studies successfully (e.g., Boxall & Macky, 2014; Boxall, Hutchison, & Wassenaar, 2015).

Unlike study one (samples one and two) where job performance was measured with a self-reported scale (Motowidlo & Van Scotter, 1994), the present study (study two) uses several performance constructs rated by the supervisor and the Head Office’s HR Department. While the meta-analysis by Judge et al. (2001) found the relationships between job performance and job satisfaction were similar if job performance data was self-rated or supervisor-rated, there is an acceptance that supervisor-rated performance is likely to be ‘better’ or ‘more accurate’ (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003). Specifically, Podsakoff et al. (2003) suggests this is because of issues of common method variance, where answers to one set of questions (e.g., HPWS) might influence outcome answers (e.g., job performance).



This is despite another meta-analysis (Judge et al., 2007) finding objective versus subjective work performance similar. The present study was able to source supervisor data and Head Office performance data to provide different outcomes from Study one. These are specifically detailed below.

In-Role Performance was measured using three items from Williams and Anderson (1991), coded 1=strongly disagree, 6=strongly agree. Due to the nature of workers shifts etc. I asked supervisors to focus on their store as a whole and not individual workers, with questions following the stem “Overall, my store...”. The three items used were “Meets formal performance requirements of the job”, “Fulfil responsibilities specified in the job description” and “Performs tasks that are expected of them”. This measure had very good reliability ( $\alpha = .86$ ).

Store Organisational Citizenship Behaviours (Store OCBs) was measured with four items based on Lee and Allen (2002), coded 1=strongly disagree, 6=strongly agree. Supervisors were asked to rate their store on the following items, following the stem “Employees within your store...” and the four items were: “Willingly give time to help other employees who have work-related problems”, “Adjust their work schedule to accommodate other employees’ requests”, “Shows genuine concern and courtesy toward other store employees, even under the most trying business or personal situations”, and “Gives up their time to help others who have work or non-work problems”. To ensure this new construct was a good fit, I conducted an exploratory factor analysis (principal components, varimax rotation) which confirmed the items

all loaded onto a single factor with eigenvalues greater than 1 (3.024), accounting for sizeable amounts of the variance (75.6%) and achieving very good reliability ( $\alpha=.89$ ).

Service Performance was measured using four items based on Liao and Chuang (2004), coded 1=strongly disagree, 6=strongly agree. The original scale focuses on hairdressers, so the items were modified to be more generic to a retail setting. Again, supervisors were asked to rate their store on the following items, following the stem “Employees within your store...” The items were “Are friendly and helpful to customers”, “Ask good questions and listens to find out what a customer wants”, “Are able to help customers when needed” and “Suggest items customers might like but did not think of”.

Because the items and context are entirely different from the original, I conducted an exploratory factor analysis (principal components, varimax rotation) to ensure that the items were a good fit. This was confirmed as all the items loaded onto a single factor with eigenvalues greater than 1 (3.048), accounting for sizeable amounts of the variance (76.2%) and achieving very good reliability ( $\alpha=.89$ ).

Store Sales Performance was provided by the HR Department which focused on sales performance data. Because this data was proprietary, they were asked to score the sales performance of each store in context to their size (dollar sales divided by total employees) and provide this score on a 1-10 scale, where 1= worse performing store/s, and 10= best performing store/s. Hence, the store sales performance data is ranked from the worse performing to the

best performing stores. Because there were 75 stores in total, roughly 7-8 stores were captured in each category. From this full performance list, the data was pooled to align with the 50 stores who ultimately participated in the research.

In discussion with the HR Department, they also noted that some stores suffered significantly more HR issues than others; for example, problems around pay, holiday pay, leave, and staff issues (including personal grievances). As such, Store HR Performance was provided by the HR Department which focused on the overall HR performance of each store. This was determined by HR staff and was scored on a 1-10 scale, where 1= store/s with the most HR/performance issues worse performing store/s, and 10= store/s with no HR/performance issues.

I controlled for factors typical of the various literature (e.g., Haar et al., 2012; Haar & Roche, 2010), focusing specifically on work and wellbeing outcomes. These were Age (in year-bands: 1=less than 20 years, 2=20-29 years, 3=30-39 years, 4=40-49 years, 5=50-59 years, 6=60 years and over), Minority Ethnicity (1= Maori or Pacific peoples, 0=everyone else), Education (1=high school education only, 0= all other education), Gender (1=male, 2=female), Hours Worked (hours per week), and Job Tenure (in years).

I controlled age and job tenure because turnover intentions meta-analyses (Griffeth et al., 2000; Ng & Feldman, 2009) found both these demographic factors to be amongst the strongest demographic factors related to turnover intentions. In effect, older aged workers and those working in their

job longer are less likely to consider leaving. Furthermore, experience was found to be a significant demographic variable in a meta-analysis of job performance (Judge et al., 2007). I controlled for minority ethnicity due to recent studies showing the effects of constructs on outcomes like those studied here can be stronger (more powerful) for Maori (Haar & Brougham, 2016).

A meta-analysis by Blegen (1993), identified age (positive) and education (negative) as influencing job satisfaction. Similarly, Brown and Peterson (1993) in their meta-analysis, explored age and education, making these valuable control variables. Towards job stress, a meta-analysis by Kivimäki et al. (2006) found links between age and gender, and ten Brummelhuis et al. (2010) explored the role of time and work hours in employee stress.

## **Analysis**

Hypotheses were tested using three programs: (1) Structural Equation Modelling (SEM) in AMOS (version 25), (2) using PROCESS version 3.1 (Hayes, 2013, 2017) in SPSS (version 25), and (3) multi-level analysis in MLwiN (version 2.30). SEM is a statistical program with advantages over normal regression analysis in SPSS. It draws a global CFA to ensure that the factors measure the constructs they are supposed to. Next, it accounts for error values for all outcomes and enables multiple dependent variables, which is not possible in SPSS. SEM also provides a platform for analysis, especially mediation analysis, whereby various models can be tested including direct

effects only: full mediation and partial mediation (e.g., Haar et al., 2014; Haar et al., 2016). This provides a superior way to assess data.

However, there are some limitations with AMOS and in particular, the analysis of moderating effects, with Haar et al. (2014) noting the need to run potentially multiple models when there are multiple moderators due to potential issues of multi-collinearity. One solution is to do the mediation tests in AMOS and the interaction tests in SPSS, and I followed recent researcher approaches who utilised this strategy (e.g., Shang et al., 2017).

For testing moderators, PROCESS was chosen because the PROCESS macros allows for more complex models to be analysed in SPSS, including moderation, and moderated mediation (Hayes, 2018; Hayes & Preacher, 2013). Several models were utilised to examine the relationships between variables. Initially, model 1 (moderation only) was run to test the effects of constructs on PsyCap and mindfulness, and then model 8 was run as this allows the testing of moderated mediation effects. Appendix C shows the study models that were tested.

Within the PROCESS program, mediation analysis can be conducted, and Lewis and Sznitman (2017) define this as “an SPSS macro that uses a path analytical framework for estimating direct and indirect effects based on OLS regression models” (pp. 192-193). This approach involves bootstrapping the sampling distribution of the indirect effect and obtaining its confidence interval” (pp. 192-193). The bootstrapping analysis for mediation (and ultimately moderated mediation) is based on 5,000 bootstraps. Regarding the robustness of the PROCESS approach, Hayes et al. (2017) compared SEM

and PROCESS analysis of moderated mediation equations and found them to be practically identical.

Finally, the store and HR data is all nested in stores and thus requires multi-level analysis. In this programme, control variables are entered in one block, and then the remaining factors (e.g., organisation, dispositional, perception, and engagement) are entered into the model. Because the data is all nested at the firm level, I conducted in the analysis focusing on the store level, with control variables mean centred. The factors are thus all centred at the store level to account for the store level influence on performance.

### **Measurement Model**

Using AMOS, I conducted a CFA on the study constructs and followed authors' suggestions for fit indices (e.g., Bentler & Bonett, 1980; Williams et al., 2009): (1) the comparative fit index ( $CFI \geq .90$ ), (2) the root-mean-square error of approximation ( $RMSEA \leq .08$ ), and (3) the standardised root mean residual ( $SRMR \leq .10$ ). These were selected because they are not susceptible to issues when there are small sample sizes (William et al., 2009).

As with study one, I made two choices to the constructs examined here specifically around constructs that might be viewed as being higher-order constructs. In the first instance, I combined and used a single item (combined-scale) regarding the HPWS construct, which is the approach of Datta et al. (2005). While this construct has three items across five factors, it is not the *theoretical* or *empirical* interest to determine the strength of any one factor over another (for example, the HPWS performance factor over the HPWS job design factor). Indeed, the meta-analysis by Combs et al. (2006)

suggests combination not separation is the key to the benefits of HPWS on outcomes like employee attitudes. I explored this potential using CFA in AMOS (v. 25), to test a higher order HPWS construct, and this was a good fit to the data:  $\chi^2$  (df) = 219.7 (90), CFI=.95, RMSEA=.08, and SRMR=.15. However, when compared to the individual HPWS factors – where the five HRM practice bundles covary but are not part of a ‘higher-order’ construct – they are a superior fit to the data:  $\chi^2$  (df) = 150.9 (80), CFI=.97, RMSEA=.06, and SRMR=.04. Thus, the individual factors were found to be a better fit: ( $\Delta\chi^2$  ( $\Delta$ df) = 68.8 (10),  $p < .001$  (Hair et al., 2010). Because I was interested in the total influence of HPWS I thought it was better to examine the HPWS in their *entirety* because the interest here is to examine the influence of HRM practices (as a whole single construct) rather than taking a ‘piece-meal’ approach to the HRM practices.

The other construct where I used a similar approach to the HPWS construct was PsyCap. While this has four factors, Sweetman et al. (2011) noted the PsyCap construct can be considered a second order factor, where each item loads onto each component (Hope, Efficacy, Resilience, and Optimism) and these four factors subsequently fit the overall latent PsyCap factor. I explored this potential using CFA in AMOS (v. 24), to test the higher order PsyCap constructs, and this was a good fit to the data:  $\chi^2$  (df) = 194.5 (53), CFI=.88, RMSEA=.11, and SRMR=.08.

However, when compared to the individual PsyCap factors – where the four factors covary but are not part of a ‘higher-order’ construct – they are a better fit to the data:  $\chi^2$  (df) = 166.2 (48), CFI=.90, RMSEA=.10, and SRMR=.08. Thus, the individual factors was found to be a better fit: ( $\Delta\chi^2$

( $\Delta df$ ) = 28.3 (5),  $p < .001$  (Hair et al., 2010). As such, the present study considers PsyCap as four related but distinct constructs. Despite this, I used the same logic with the HPWS construct (noted above) and combined them into a single construct. This is because there is no interest in whether one factor (or more) of the four is a stronger predictor. Hence, I combined these items into a single PsyCap construct.

However, this parcelling approach is not without its supporters and critics, and I acknowledge them presently. For example, Bagozzi and Heatherton (1994) suggest parcelling can optimise the variable to sample size ratio for smaller samples, resulting in more stable parameter estimates. Also, the use of parcelling can help to minimise random error and item-specific biases (Matsunaga, 2008). Little et al. (2002) suggest, therefore, that parcelling helps avoid under-identification of research models.

In counter to this support for parcelling, Marsh et al. (2013) argue that parcelling is problematic when researchers fail to conduct CFA *before* parcelling and retaining cross-loading items. However, as I noted above, there were no issues with item cross-loadings whether for HPWS item factors or PsyCap item factors, and I conducted CFA on each construct separately, and they were all a good fit to the data. Thus, I acknowledge that there are potential issues with parcelling (as per March et al., 2013) however, it was only on these two constructs that this was conducted.

The hypothesized model and two alternative CFAs are shown in Table 14.



Table 14. Results of Confirmatory Factor Analysis

Model	Model Fit Indices					Model Differences			
	$\chi^2$	df	CFI	RMSEA	SRMR	$\chi^2$	$\Delta$ df	p	Details
Model 1	1080.2	595	.92	.06	.05				
Model 2	1364.8	611	.88	.07	.06	284.6	16	.001	Model 1 to 2
Model 3	1212.9	628	.91	.06	.05	132.7	33	.001	Model 1 to 3
Model 4	1492.3	612	.86	.08	.07	412.1	17	.001	Model 1 to 4

Key: HPWS=high performance work systems, Comms=leadership communication, POS=perceived organizational support, WLB=work-life balance, MFW=meaningful work. I include the five performance indicators (in-role performance, store OCBs and service performance and store sales performance and store HR performance) because these are analysed although not in the SEM model – because that data is nested in stores ad thus needs multi-level analysis.

Model 1=Hypothesized 15-factor model: HPWS (single item), Comms, POS, PsyCap (single item), mindfulness, MFW, WLB, work engagement: vigor, dedication and absorption, job satisfaction, turnover intentions, job stress and performance indicators: in-role performance, store OCBs and service performance and store sales performance and store HR performance.

Model 2=Alternative 17-factor model: as model 1 but with job satisfaction and in-role performance combined.

Model 3=Alternative 16-factor model: as model 1 but with work engagement dimensions: vigor, dedication and absorption combined.

Model 4=Alternative 17-factor model: as model 1 but with WLB and MFW combined.

The hypothesized measurement model was an excellent fit for sample one, meeting all requirements:  $\chi^2 (617) = 1117.6$  ( $p = .000$ ), CFI = .92, RMSEA = 0.06 and SRMR = 0.05. Alternative CFAs were found to be poorer fits (all  $< .001$ ). Overall, the findings provide robust support for the constructs to be utilised.

## **Chapter 8. Results – Study two**

Descriptive statistics for the study variables are shown in Tables 15 and 16.

Table 15. Correlations and Descriptive Statistics of Study Variables

Variables	M	SD	1	2	3	4	5	6	7	8	9
1. Age	2.5	1.2	--								
2. Hours Worked	5.1	2.3	.35**	--							
3. Job Tenure	4.0	3.2	-.07	-.16*	--						
4. HPWS	3.1	.74	.05	.11	.08	--					
5. POS	3.1	1.1	.08	.09	.08	.54**	--				
6. Leader Comms	3.6	.95	-.05	.20**	-.02	.51**	.46**	--			
7. PsyCap	4.3	.85	.14*	.25**	.07	.40**	.25**	.27**	--		
8. Mindfulness	4.2	.68	.12	.16**	-.02	.25**	.27**	.24**	.22**	--	
9. MFW	3.4	1.0	.20**	.27**	.03	.37**	.33**	.32**	.43**	.27**	--
10. Work-Life Balance	3.2	1.0	.10	-.10	.11	.42**	.42**	.22**	.37**	.27**	.40**
11. Vigor	3.6	1.1	.26**	.29**	.01	.43**	.31**	.28**	.47**	.29**	.41**
12. Dedication	3.5	1.2	.26**	.27**	.01	.48**	.42**	.25**	.52**	.32**	.55**
13. Absorption	3.5	1.0	.23**	.25**	.02	.35**	.30**	.23**	.49**	.30**	.56**
14. Job Satisfaction	3.2	.98	.12	.16**	.06	.52**	.50**	.40**	.46**	.37**	.60**
15. Turnover Intentions	3.2	1.2	-.22**	-.20**	-.09	-.45**	-.46**	-.29**	-.27**	-.29**	-.43**
16. Job Stress	5.6	2.5	-.01	.12	-.14*	-.31**	-.29**	-.19**	-.13*	-.13*	-.12

N=245, \*p<.05, \*\*p<.01.

Note: Leader Comms=Leadership Communication.

*Table 16 (cont). Correlations and Descriptive Statistics of Study Variables*

Variables	M	SD	1	2	3	4	5	6	7	8	9
17. In-Role Perf.	4.7	1.1	.10	-.02	.04	-.00	.16*	.11	.07	.06	.17**
18. Store OCBs	4.7	.80	.17**	.02	.06	.02	.16*	.07	.08	.02	.17**
19. Service Perf.	5.1	.66	.08	-.13	.11	-.02	.03	.10	.10	.18**	.08
20. Store Sales Perf.	5.2	2.1	.11	.13*	-.02	.10	.06	.12	.11	-.04	.08
21. Store HR Perf.	6.8	2.5	.16*	.05	.04	.13*	.16*	.17**	.11	.02	.13*

N=245, \*p<.05, \*\*p<.01.

Note: Perf. = Performance.

Table 17. Correlations and Descriptive Statistics of Study Variables (Cont.)

Variables	10	11	12	13	14	15	16	17	18	19	20	21
1. Age												
2. Hours Worked												
3. Job Tenure												
4. HPWS												
5. POS												
6. Leader Comms												
7. PsyCap												
8. Mindfulness												
9. MFW												
10. Work-Life Balance	--											
11. Vigor	.36**	--										
12. Dedication	.45**	.75**	--									
13. Absorption	.35**	.70**	.77**	--								
14. Job Satisfaction	.61**	.68**	.71**	.66**	--							
15. Turnover Intentions	-.41**	-.41**	-.52**	-.37**	-.53**	--						
16. Job Stress	-.43**	-.28**	-.22**	-.19**	-.25**	.30**	--					

N=245, \*p<.05, \*\*p<.01.

Note: Leader Comms=Leadership Communication.

*Table 18 (cont.). Correlations and Descriptive Statistics of Study Variables (Cont.)*

Variables	10	11	12	13	14	15	16	17	18	19	20	21
17. In-Role Perf.	.14*	-.03	.02	.08	.08	-.20**	-.06	--				
18. Store OCBs	.17**	.06	.03	.12	.10	-.16*	-.12	.80**	--			
19. Service Perf.	.20**	.04	.01	.03	.08	-.09	-.09	.56**	.56**	--		
20. Store Sales Perf.	.08	.09	.08	.13*	.14*	-.01	-.06	-.02	.04	-.02	--	
21. Store HR Perf.	.18**	.14*	.10	.11	.09	-.20**	-.19**	.37**	.37**	.18**	.03	--

N=245, \*p<.05, \*\*p<.01.

Note: Perf. = Performance.

Tables 15 and 16 show that HPWS is significantly correlated with POS ( $r = .54, p < .01$ ), leadership communication ( $r = .51, p < .01$ ), PsyCap ( $r = .40, p < .01$ ), mindfulness ( $r = .25, p < .01$ ), meaningful work ( $r = .37, p < .01$ ), work-life balance ( $r = .42, p < .01$ ), vigor ( $r = .43, p < .01$ ), dedication ( $r = .48, p < .01$ ), absorption ( $r = .35, p < .01$ ), job satisfaction ( $r = .52, p < .01$ ), turnover intentions ( $r = -.45, p < .01$ ) and job stress ( $r = -.31, p < .01$ ). Regarding the performance indicators, HPWS was not significantly correlated with in-role performance, store OCBs, service performance or store sales performance, but it was with store HR performance ( $r = .13, p < .05$ ).

Leadership communication is significantly correlated with PsyCap ( $r = .27, p < .01$ ), mindfulness ( $r = .24, p < .01$ ), meaningful work ( $r = .32, p < .01$ ), work-life balance ( $r = .22, p < .01$ ), vigor ( $r = .28, p < .01$ ), dedication ( $r = .25, p < .01$ ), absorption ( $r = .23, p < .01$ ), job satisfaction ( $r = .40, p < .01$ ), turnover intentions ( $r = -.29, p < .01$ ) and job stress ( $r = -.19, p < .01$ ). Regarding the performance indicators, leadership communication was not significantly correlated with in-role performance, store OCBs, service performance or store sales performance, but it was with store HR performance ( $r = .17, p < .01$ ).

POS is significantly correlated with leadership communication ( $r = .46, p < .01$ ), PsyCap ( $r = .25, p < .01$ ), mindfulness ( $r = .27, p < .01$ ), meaningful work ( $r = .33, p < .01$ ), work-life balance ( $r = .42, p < .01$ ), vigor ( $r = .31, p < .01$ ), dedication ( $r = .42, p < .01$ ), absorption ( $r = .30, p < .01$ ), job satisfaction ( $r = .50, p < .01$ ), turnover intentions ( $r = -.46, p < .01$ ) and job stress ( $r = -.29, p < .01$ ). POS is significantly correlated with either in-role performance ( $r = .16, p < .01$ ), store OCBs ( $r = .16, p < .01$ ), and store HR performance ( $r = .16,$



$p < .01$ ), although there is no significant correlation with either service performance or store sales performance.

Regarding the two dispositional factors, PsyCap is significantly correlated with mindfulness ( $r = .22$ ,  $p < .01$ ), meaningful work ( $r = .43$ ,  $p < .01$ ), work-life balance ( $r = .37$ ,  $p < .01$ ), vigor ( $r = .47$ ,  $p < .01$ ), dedication ( $r = .52$ ,  $p < .01$ ), absorption ( $r = .49$ ,  $p < .01$ ), job satisfaction ( $r = .46$ ,  $p < .01$ ), turnover intentions ( $r = -.27$ ,  $p < .01$ ), and job stress ( $r = -.13$ ,  $p < .05$ ). There was no significant correlation with in-role performance, store OCBs, service performance, store sales performance, or store HR performance.

Mindfulness, was found to be significantly correlated with meaningful work ( $r = .27$ ,  $p < .01$ ), work-life balance ( $r = .27$ ,  $p < .05$ ), vigor ( $r = .29$ ,  $p < .01$ ), dedication ( $r = .32$ ,  $p < .01$ ), absorption ( $r = .30$ ,  $p < .01$ ), job satisfaction ( $r = .37$ ,  $p < .01$ ), turnover intentions ( $r = -.29$ ,  $p < .01$ ) and job stress ( $r = -.13$ ,  $p < .05$ ). Mindfulness was not significantly correlated with in-role performance, store OCBs, store sales performance, or store HR performance, but it was with service performance ( $r = .18$ ,  $p < .01$ ).

Meaningful work is significantly correlated with work-life balance ( $r = .40$ ,  $p < .01$ ), vigor ( $r = .41$ ,  $p < .01$ ), dedication ( $r = .55$ ,  $p < .01$ ), absorption ( $r = .56$ ,  $p < .01$ ), job satisfaction ( $r = .60$ ,  $p < .01$ ), and turnover intentions ( $r = -.43$ ,  $p < .01$ ), but not job stress. Meaningful work was also significantly correlated with in-role performance ( $r = .17$ ,  $p < .01$ ), store OCBs ( $r = .17$ ,  $p < .01$ ), and store HR performance ( $r = .13$ ,  $p < .05$ ), but not service performance or store sales performance. Work-life balance is significantly correlated with vigor ( $r = .36$ ,  $p < .01$ ), dedication ( $r = .45$ ,  $p < .01$ ), absorption ( $r = .35$ ,  $p < .01$ ), job satisfaction ( $r = .61$ ,  $p < .01$ ), turnover intentions ( $r = -.41$ ,  $p < .01$ ), and job

stress ( $r = -.43, p < .01$ ). Work-life balance is also significantly correlated with in-role performance ( $r = .14, p < .05$ ), store OCBs ( $r = .17, p < .01$ ), service performance ( $r = .20, p < .01$ ), and store HR performance ( $r = .18, p < .01$ ), but not store sales performance.

Amongst the three dimensions of work engagement, vigor is significantly correlated with dedication ( $r = .75, p < .01$ ), absorption ( $r = .70, p < .01$ ), job satisfaction ( $r = .68, p < .01$ ), turnover intentions ( $r = -.41, p < .01$ ), and job stress ( $r = -.28, p < .01$ ). Vigor was not significantly correlated with in-role performance, store OCBs, service performance, or store sales performance, but it was with store HR performance ( $r = .14, p < .05$ ). Dedication is significantly correlated with absorption ( $r = .77, p < .01$ ), job satisfaction ( $r = .71, p < .01$ ), turnover intentions ( $r = -.52, p < .01$ ), and job stress ( $r = -.22, p < .01$ ), but not with any of the performance indicators.

Finally, absorption is significantly correlated with job satisfaction ( $r = .66, p < .01$ ), turnover intentions ( $r = -.37, p < .01$ ), and job stress ( $r = -.19, p < .01$ ). Absorption was not significantly correlated with in-role performance, store OCBs, service performance, or store HR performance, but it was with store sales performance ( $r = .13, p < .05$ ).

Job satisfaction is significantly correlated with turnover intentions ( $r = -.53, p < .01$ ), and job stress ( $r = -.25, p < .01$ ), but not any of the performance indicators (in-role performance, store OCBs, service performance, or store HR performance) except store sales performance ( $r = .14, p < .05$ ). Turnover intentions is significantly correlated with job stress ( $r = .30, p < .01$ ), as well as performance indicators of in-role performance ( $r = -.20, p < .01$ ), store OCBs ( $r = -.16, p < .05$ ), and store HR performance ( $r = -.20, p < .01$ ). Turnover

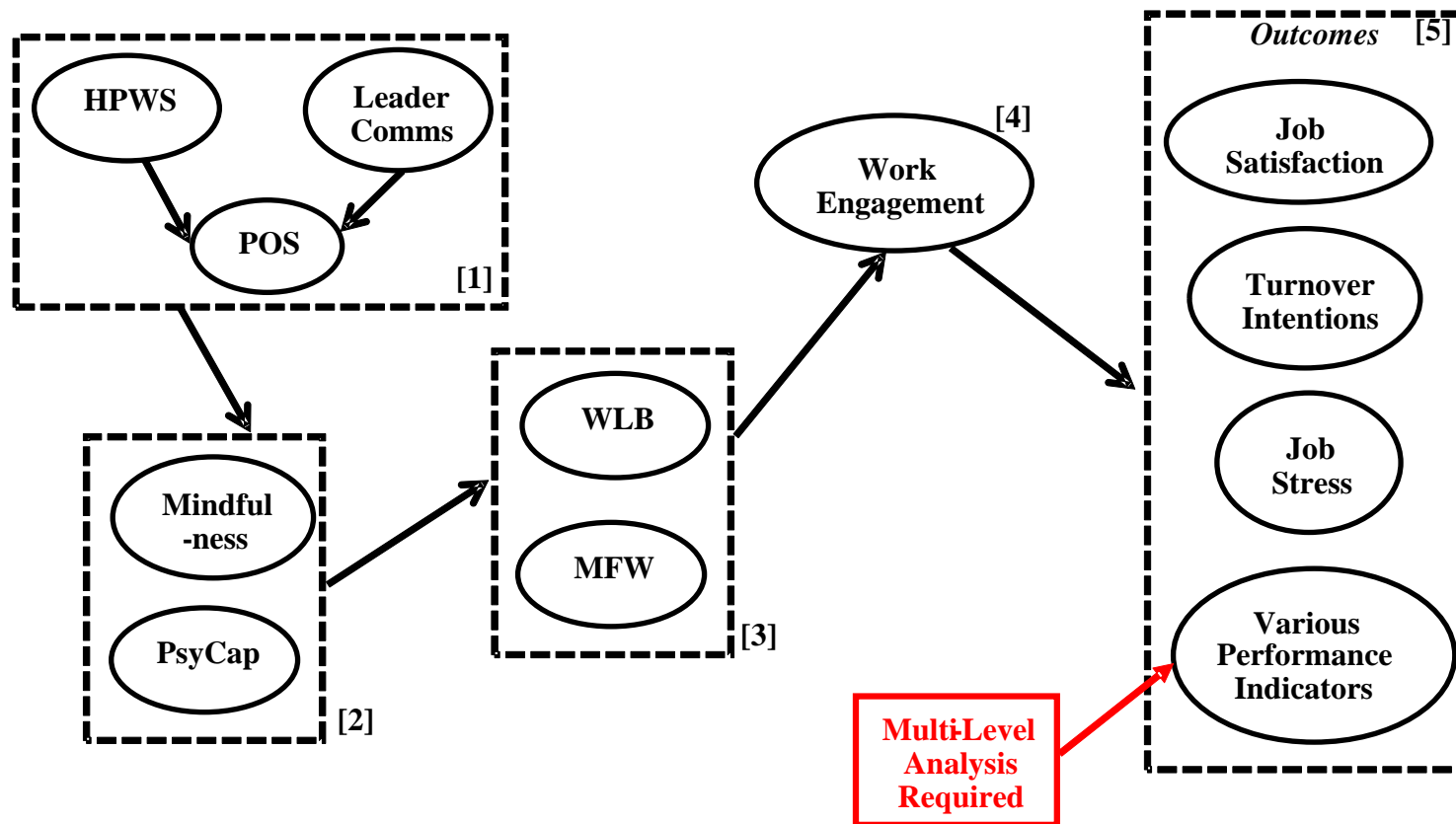
intentions is not significantly correlated with service performance, or store sales performance. Job stress is significantly correlated with only store HR performance ( $r = -.19, p < .01$ ), and not any of the other performance indicators (in-role performance, store OCBs, service performance, or store sales performance).

Amongst the performance indicators, in-role performance is significantly correlated with store OCBs ( $r = .80, p < .01$ ), service performance ( $r = .56, p < .01$ ), and store HR performance ( $r = .37, p < .01$ ). It is not significantly correlated with store sales performance. Store OCBs is significantly correlated with service performance ( $r = .56, p < .01$ ), and store HR performance ( $r = .37, p < .01$ ), but not store sales performance. Finally, store sales performance is only significantly correlated with store HR performance ( $r = .18, p < .01$ ), and not store sales performance, which is also not significantly correlated to store HR performance.

### **Structural Model**

Several alternative structural models were run to test the various potential effects. As a reminder, Figure 17 has the study model.

Figure 17. Study Model



There are five components or groups of variables within the model, and these (and their numbers) are:

[1] = organisational factors (HPWS, POS and leadership communication)

[2] = dispositional factors (PsyCap and mindfulness)

[3] = individual work perceptions (meaningful work and work-life balance)

[4] = work engagement (vigor, dedication, and absorption)

[5] = work outcomes (job satisfaction, turnover intentions, and job stress). In this block, I also include the multiple performance indicators (in-role performance, store OCBs, service performance, store HR performance, and store sales performance) although acknowledge they are tested in multi-level analysis below and not in the structural model.

I ran three structural models to compare. These were:

**Model 1.** A direct effect model whereby model factor 1 (HPWS, POS and leadership communication) predicted all other factors [2] to [5 – excluding multiple performance indicators];

**Model 2.** A full mediation model, where the blocks predicted each other sequentially only, i.e. [1] predicts [2], [2] predicts [3], [3] predicts [4], and [4] predicts [5 – excluding multiple performance indicators];

**Model 3.** A partial mediation model, where the blocks predicted all other blocks, so [1] predicts [2] to [5], [2] predicts [3] to [5], and [4] predicts [5 – excluding multiple performance indicators].

These models are shown in Figures 18, 19 and 20. The results of comparing the various models are shown in Table 17 for study two.

Figure 18. SEM Model 1 (Direct Effects Only)

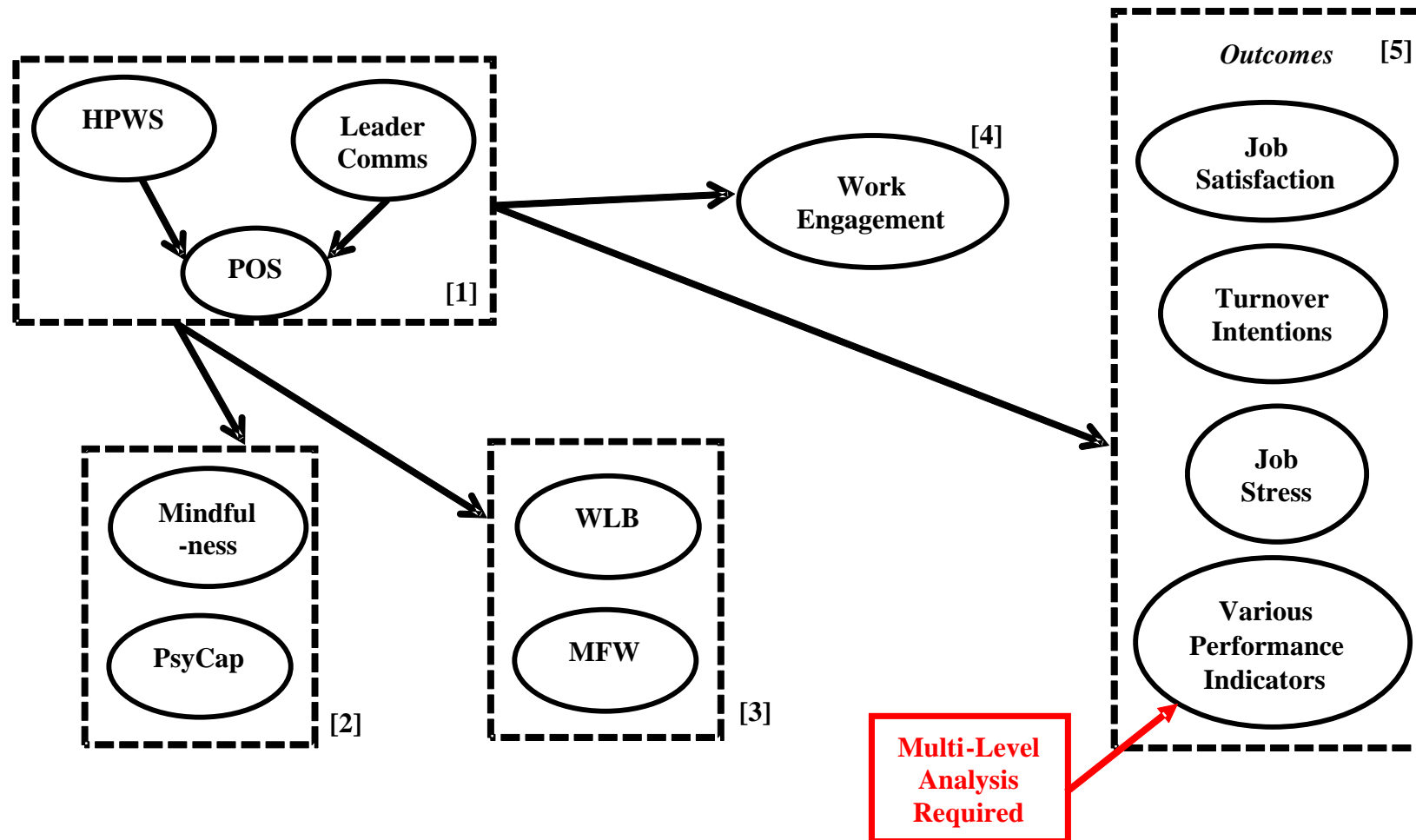


Figure 19. SEM Model 2 (Full Mediation)

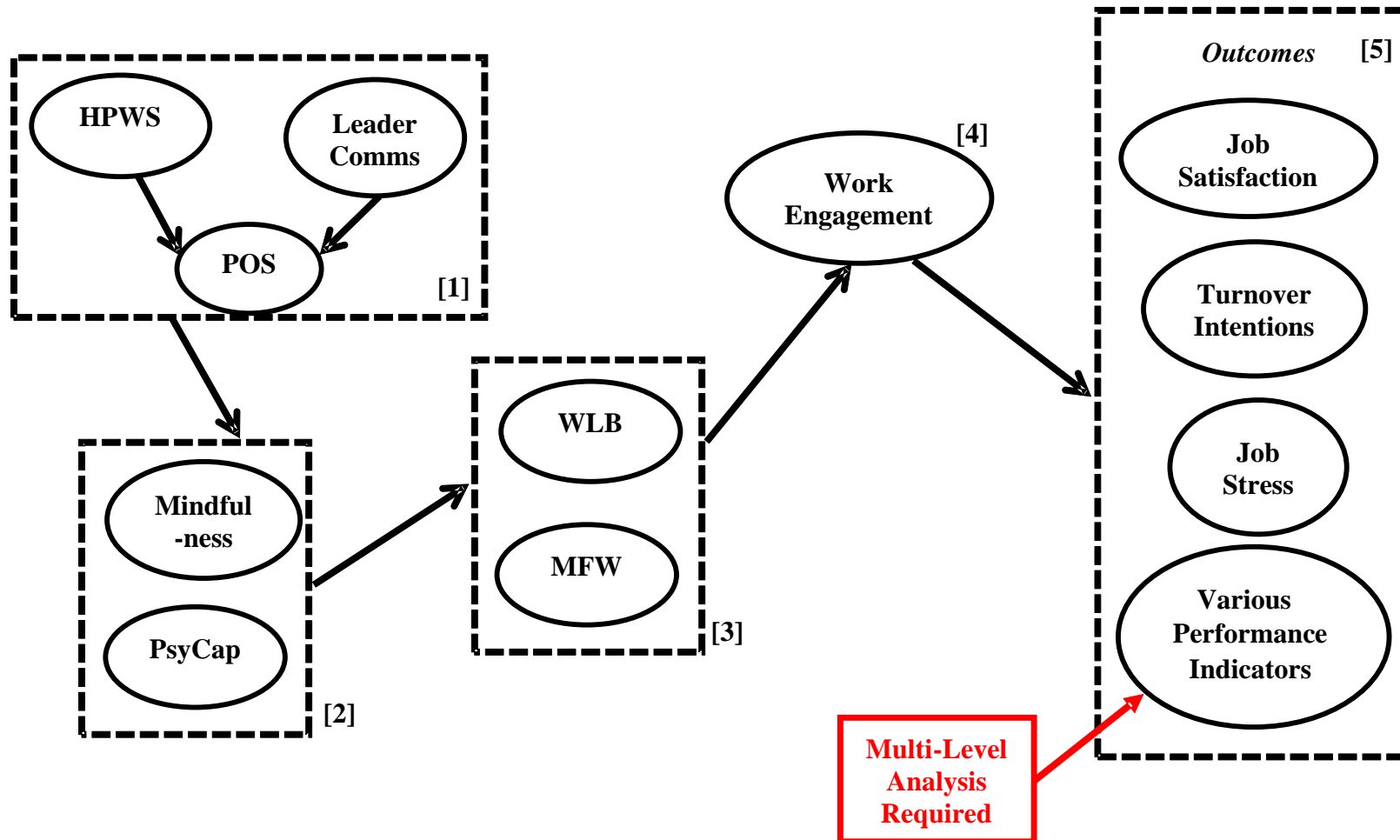


Figure 20. SEM Model 3 (Partial Mediation)

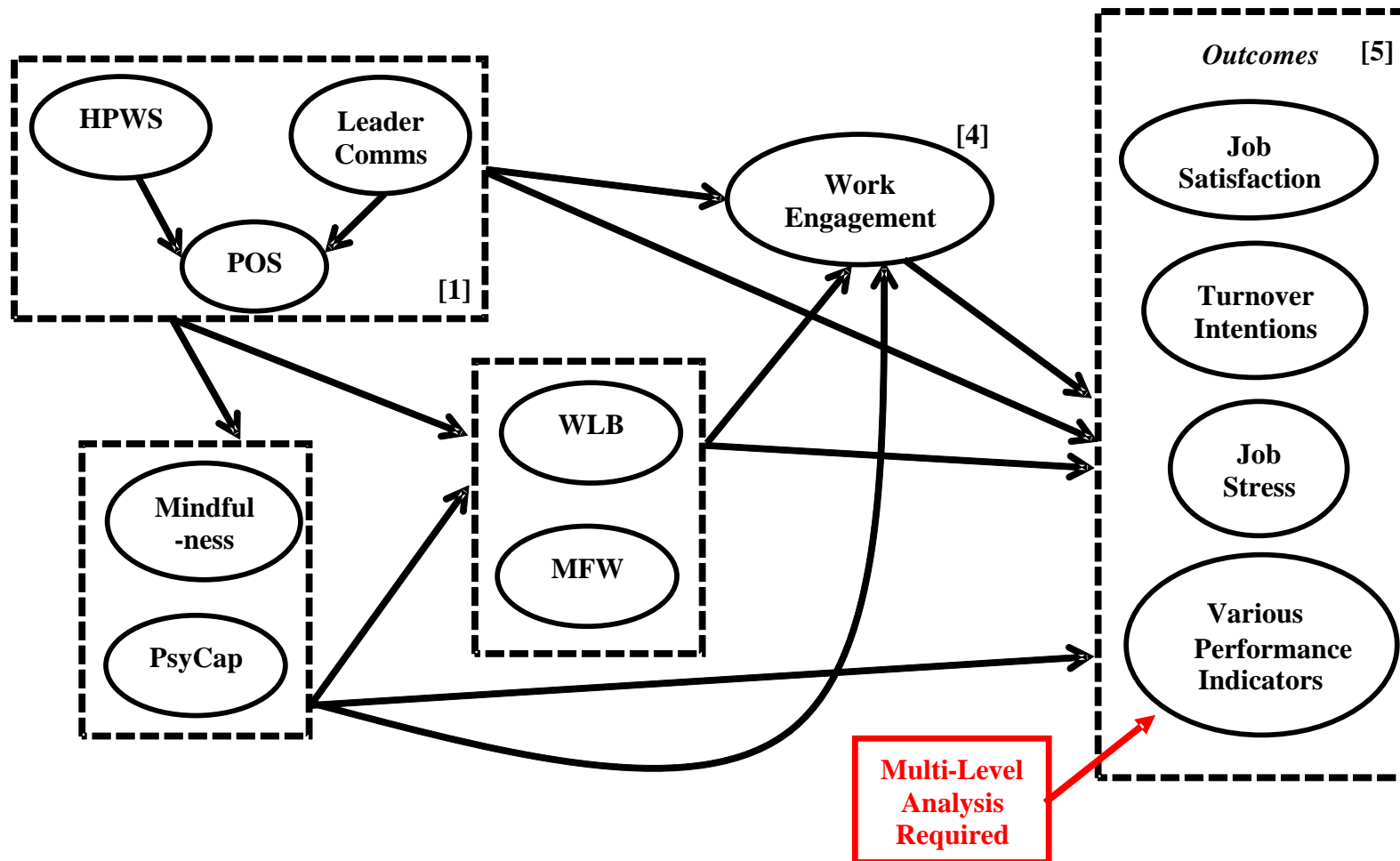




Table 19. Model Comparisons for Structural Models

Model	Model Fit Indices					Model Differences			
	$\chi^2$	df	CFI	RMSEA	SRMR	$\chi^2$	$\Delta$ df	p	Details
Sample of Retail Workers									
Model 1	1360.5	566	.87	.08	.11				
Model 2	1229.3	573	.89	.07	.11	131.2	-7	n/a	Model 2 to 1
Model 3	990.7	529	.92	.06	.05	369.8	37	.001	Model 1 to 3
						238.6	44	.001	Model 2 to 3

All models include control variables: All five control variables were included but only age and education were significant. To make the models more parsimonious, I thus included only age and education in this analysis. All models have outcomes (job satisfaction, turnover intentions, job stress) covary with each other. In addition, mindfulness and PsyCap covary as does meaningful work and work-life balance, and vigor, dedication and absorption.

Model 1 = A direct effects model where HPWS predicts POS & Leadership Communication, and they all predict everything other construct.

Model 2 = A full mediation model where HPWS predicts POS & Leadership Communication, in turn, they predict MFW and work-life balance, and they predict vigor and dedication, which then predict absorption, which then predicts the outcomes.

Model 3 = A partial mediation model where HPWS predicts POS & Leadership Communication, they all predict MFW, then work-life balance, then all predict vigor and dedication, and then absorption, and then all predict the outcomes.

The analysis showed that model 3 (partial mediation model) was the best fit to the data: SEM:  $\chi^2(529) = 990.7$  ( $p = .000$ ), CFI= .92, RMSEA= 0.06 and SRMR= 0.05. Overall, the partial mediation model was a superior fit to the direct effects model and the full mediation model (all  $p < .001$ , Hair et al., 2010). Below I report unstandardised regression coefficients (following recommendations from Grace & Bollen, 2005) in Table 18.

Table 20. Final Structural Model Path Results

Variables	Unstandardized path coefficient
HPWS → POS	.81***
HPWS → Leadership Communication	.54***
HPWS → PsyCap	.39***
HPWS → Mindfulness	.03
HPWS → Meaningful Work	.11
HPWS → Work-Life Balance	.28**
HPWS → Vigor	.27*
HPWS → Dedication	.36**
HPWS → Absorption	.04
HPWS → Job Satisfaction	.03
HPWS → Turnover Intentions	.33
HPWS → Job Stress	-.61
Leadership Communication → POS	.41***
Leadership Communication → PsyCap	.16†
Leadership Communication → Mindfulness	.05
Leadership Communication → Meaningful Work	.14
Leadership Communication → Work-Life Balance	-.14
Leadership Communication → Vigor	.06
Leadership Communication → Dedication	-.21
Leadership Communication → Absorption	.01
Leadership Communication → Job Satisfaction	.08
Leadership Communication → Turnover Intentions	-.38
Leadership Communication → Job Stress	.19
POS → PsyCap	-.03
POS → Mindfulness	.07*
POS → Meaningful Work	.12†
POS → WL Work-Life Balance B	.29***
POS → Vigor	.01
POS → Dedication	.17*
POS → Absorption	.03
POS → Job Satisfaction	.12†
POS → Turnover Intentions	.00
POS → Job Stress	-.46
Mindfulness → Meaningful Work	.20
Mindfulness → Work-Life Balance	.51*
Mindfulness → Vigor	.31
Mindfulness → Dedication	.38

Mindfulness → Absorption	.39*
Mindfulness → Job Satisfaction	-.02
Mindfulness → Turnover Intentions	-.56
Mindfulness → Job Stress	.80
PsyCap → Meaningful Work	.33***
PsyCap → Work-Life Balance	.28***
PsyCap → Vigor	.33***
PsyCap → Dedication	.39***
PsyCap → Absorption	.22***
PsyCap → Job Satisfaction	-.04
PsyCap → Turnover Intentions	.19
PsyCap → Job Stress	.17
Meaningful Work → Work-Life Balance	.29***
Meaningful Work → Vigor	.13
Meaningful Work → Dedication	.40***
Meaningful Work → Absorption	.27***
Meaningful Work → Job Satisfaction	.13
Meaningful Work → Turnover Intentions	-.37
Meaningful Work → Job Stress	.42
Work-Life Balance → Vigor	.12
Work-Life Balance → Dedication	.15†
Work-Life Balance → Absorption	.06
Work-Life Balance → Job Satisfaction	.32***
Work-Life Balance → Turnover Intentions	-.10
Work-Life Balance → Job Stress	-1.2***
Vigor → Absorption	.16†
Vigor → Job Satisfaction	.11
Vigor → Turnover Intentions	-.48
Vigor → Job Stress	-.78
Dedication → Absorption	.46***
Dedication → Job Satisfaction	-.13
Dedication → Turnover Intentions	-1.8
Dedication → Job Stress	1.4
Absorption → Job Satisfaction	.65
Absorption → Turnover Intentions	3.3
Absorption → Job Stress	-1.5
Age → Job Satisfaction	-.06
Age → Turnover Intentions	-.07
Age → Job Stress	.21
Education → Job Satisfaction	.01
Education → Turnover Intentions	.16
Education → Job Stress	-.36

Variance ( $r^2$ ):	
POS $r^2$	.37
PsyCap $r^2$	.19
Mindfulness $r^2$	.21
WLB $r^2$	.41
MFW $r^2$	.32
Job Satisfaction $r^2$	.86
Engagement - Vigor $r^2$	.42
Engagement - Dedication $r^2$	.61
Engagement - Absorption $r^2$	.96
Turnover Intentions $r^2$	.61

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† $p < .1$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table 18 shows that the SEM results and I focus on the significant effects only. HPWS is significantly related to POS (path coefficient= .81,  $p < .001$ ), Leadership Communication (path coefficient= .54,  $p < .001$ ), PsyCap (path coefficient= .39,  $p < .05$ ) but not mindfulness or meaningful work. HPWS is significantly related to work-life balance (path coefficient= .28,  $p < .01$ ) and vigor (path coefficient= .27,  $p < .05$ ) and dedication (path coefficient= .36,  $p < .01$ ) but not absorption. HPWS is not significantly related to job satisfaction, turnover intentions or job stress. Overall, these effects provide support for Hypothesis 1. Leadership communication is significantly related to POS (path coefficient= .41,  $p < .001$ ) and PsyCap (path coefficient= .16,  $p < .1$ ), although that a modest level of  $p < .1$ . Leadership communication is not significantly related to any other factor, providing weak support for Hypothesis 2.

POS is significantly related to mindfulness (path coefficient= .07,  $p < .05$ ) and meaningful work (path coefficient= .12,  $p < .1$ ), albeit weakly. POS is significantly related to work-life balance (path coefficient= .29,  $p < .001$ ) and dedication (path coefficient= .17,  $p < .05$ ) but not the other work engagement dimensions. POS is weakly related to job satisfaction (path

coefficient= .12,  $p < .1$ ) but not turnover intentions or job stress. Overall, there is some support for Hypothesis 3 (around POS). Mindfulness is significantly related to work-life balance (path coefficient= .51,  $p < .05$ ) and absorption (path coefficient= .39,  $p < .05$ ) but that is all. This provides limited support for Hypothesis 4 (around mindfulness).

PsyCap is significantly related to meaningful work (path coefficient= .33,  $p < .001$ ) and work-life balance (path coefficient= .28,  $p < .001$ ), as well as vigor (path coefficient= .33,  $p < .001$ ), dedication (path coefficient= .39,  $p < .001$ ) and absorption (path coefficient= .22,  $p < .001$ ). It was not directly related to the outcomes (job satisfaction, turnover intentions, and job stress). Overall, these findings provide support for Hypothesis 4 (around PsyCap).

Regarding meaningful work, it is significantly related to work-life balance (path coefficient= .29,  $p < .001$ ), as well as dedication (path coefficient= .40,  $p < .001$ ) and absorption (path coefficient= .27,  $p < .001$ ), although not vigor. Like PsyCap, it was not directly related to the outcomes (job satisfaction, turnover intentions, and job stress). Overall, these findings provide support for Hypothesis 5.

Work-life balance is significantly related to dedication (path coefficient= .15,  $p < .1$ ), but only weakly so. It is significant towards job satisfaction (path coefficient= .32,  $p < .001$ ) and job stress (path coefficient= -1.2,  $p < .001$ ) but not turnover intentions. Combined, this provides support for Hypothesis 6 (around work-life balance).

Overall, the engagement dimensions were poor predictors of the outcomes in this sample. Vigor was significantly related to absorption (path coefficient= .16,  $p < .1$ ), and weakly, but that was all. Dedication was

significantly related to absorption (path coefficient= .46,  $p < .001$ ), but again, that dimension was not significant towards any outcomes. Finally, absorption was not significantly related to any outcomes. Combined, this provides no support for Hypotheses 7 (vigor), 8 (dedication) or 9 (absorption). Finally, while the two control variables were significant in the direct effects model, all effects became non-significant in the final partial mediation model.

In summary, the models accounted for various amounts of variance, but overly these were, at a minimum, robust, and at the other end, exceptionally strong. Specifically, by size, the models accounted for modest amounts of variance towards PsyCap (19%) and mindfulness (21%), although more moderate amounts of variance towards meaningful work (32%) and POS (37%). There were larger amounts of variance towards work-life balance (41%) and vigor (42%) and even better levels towards dedication (61%) and turnover intentions (61%). There were exceptionally robust models towards job satisfaction (86%) and absorption (96%).

As noted in the analysis section above, the moderation and moderated mediated effects were then conducted in PROCESS. The theoretical model for hypotheses 10 and 11 is shown in Figure 21.

Figure 21. Theoretical Model

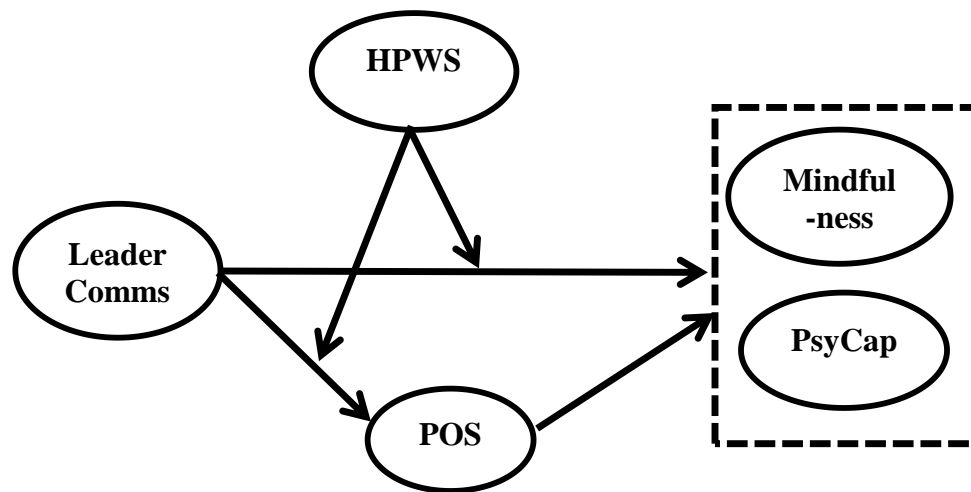


Table 19 presents the significant and insignificant interaction effects only. This represented the two-way moderated effects and also the Index of moderated mediation (Hayes, 2018). This analysis focuses upon the two dispositional factors (PsyCap and mindfulness) only. Mediation effects were confirmed using the Monte Carlo method using bootstrapping (5,000 times) in PROCESS (Hayes et al., 2017; Hayes, 2018).



Table 21. Summary of Moderation and Moderated Mediated Results

Variables	Unstandardized path coefficient Sample One
<i>Mindfulness Model</i>	
HPWS x Leadership Comms → POS	<b>.24(.07)</b> , p= .0003 [LL= .13, UL= .35]
HPWS x Leadership Comms → Mindfulness	.07(.05), p= .1540 [LL= -.01, UL= .15]
Index of Moderated Mediation	<b>.02(.01)</b> , p= .0228 [LL= .00, UL= .05]
<i>PsyCap Model:</i>	
HPWS x Leadership Comms → POS	<b>.24(.07)</b> , p= .0003 [LL= .13, UL= .35]
HPWS x Leadership Comms → PsyCap	.04(.06), p= .6533 [LL= -.06, UL= .14]
Index of Moderated Mediation	.00(.02), p= .4679 [LL= -.03, UL= .02]

The results show that there is a significant interaction between HPWS and Leadership Communication towards the mediation POS ( $\beta = .24 (.07)$ ,  $p = .0003$  [LL= .13, UL= .35]). However, there were no significant interaction effects towards mindfulness ( $\beta = .07 (.05)$ ,  $p = .1540$  [LL= -.01, UL= .15]) or PsyCap ( $\beta = .04 (.06)$ ,  $p = .6533$  [LL= -.06, UL= .14]). This finding provides modest support for Hypothesis 10 around moderating effects towards dispositional factors. The graphed interactions are shown in Figure 22 to illustrate effects.

Figure 22. Two-Way Interaction between HPWS & Leadership Communication with POS as Dependent Variable

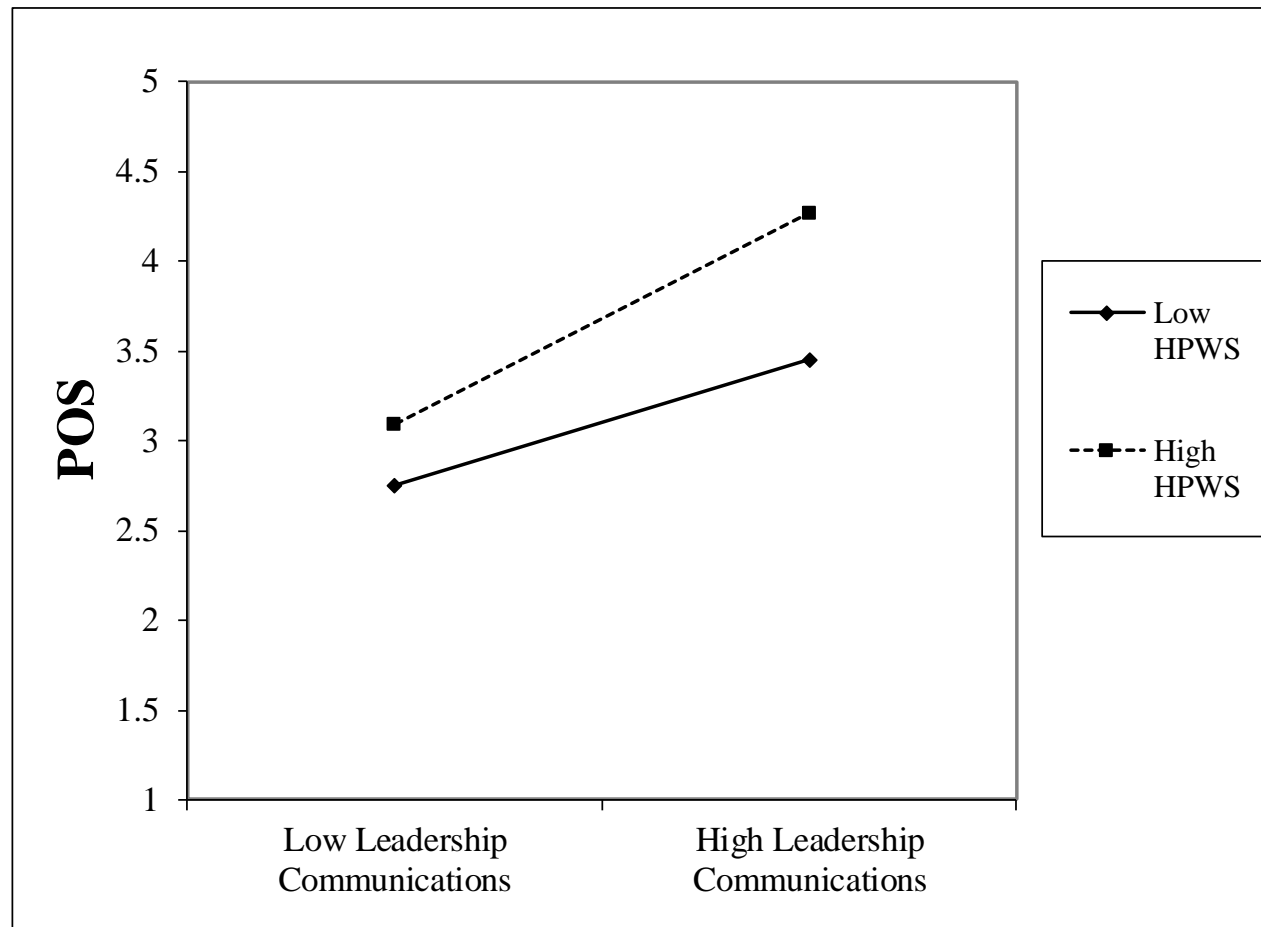
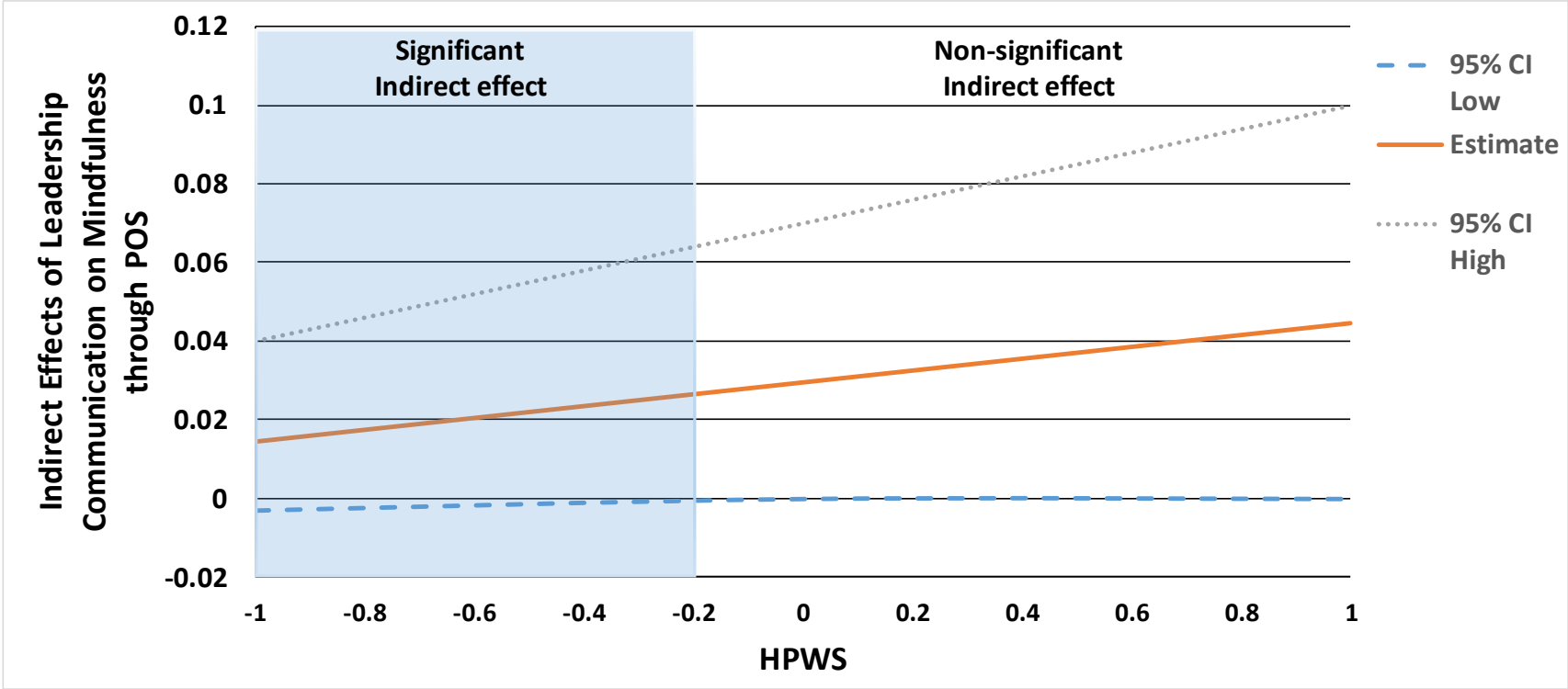


Figure 22 shows that at low levels of Leadership Communication the influence on POS is significantly higher for respondents with high HPWS compared to respondents with low HPWS. At high levels of Leadership Communication these effects are exacerbated. Respondents with high HPWS report a significant increase in POS, while respondents with high Leadership Communication but low HPWS also report increased POS, but these levels are significantly lower than the high Leadership Communication and high HPWS group of respondents.

The results of the index of moderated mediation was found to be significant towards mindfulness (Index= .02 (.01),  $p = .0228$  [LL= .00, UL= .05]). According to Hayes (2017), this is interpreted as meaning the indirect effect of POS on mindfulness (mediating the effects of leadership communication) differs between respondents working under different levels of leadership communication. The graphed moderated mediation effects are shown in Figure 23.

Figure 23. Indirect Effects of Leadership Communication on Mindfulness Through POS conditional on HPWS



I followed the approach of Wayne et al. (2017) to probe the conditional indirect effect by examining the magnitude and significance of the indirect effect of leadership communication on employee mindfulness through POS at various levels of HPWS. Figure 23 shows the significant indirect effect of leadership communication  $\rightarrow$  POS  $\rightarrow$  mindfulness, conditional on the effects of HPWS (at -1SD, mean, and +1SD). The diagram shows that, for those employees who reported small HPWS, the effect of leadership communication on mindfulness vis-à-vis POS was positive and small but not statistically significant (estimate = .01,  $p = .4700$ ; LLCI = -.01; ULCI = .04) - because the confidence interval crosses zero.

On the other hand, for those employees who reported high HPWS, the effect of leadership communication on mindfulness vis-à-vis POS was positive and small (estimate = .04,  $p = .0499$ ; LLCI = .00; ULCI = .10). This shows that respondents perceiving higher HPWS are associated with a stronger positive indirect effect from leadership communication to mindfulness through POS. The indirect effect was only significant when HPWS was at levels higher than -0.2 standard deviations above the mean. This provides support for Hypothesis 11 around moderated mediated effects.

Finally, the analysis regarding the multi-level data are shown in Table 20 for study two.

Table 22. Multilevel Results towards Various Performance Indicators

	Performance Indicators				
	In-Role Performance	Store OCBs	Service Performance	Store Sales Performance	Store HR Performance
	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)	$\beta$ (SE)
Intercept	4.85(.11)***	4.87(.11)***	5.18(.08)***	5.42(.24)***	7.23(.32)***
<b>Controls (Individual-level):</b>					
Age	-.03(.12)	.06(.10)	.03(.09)	.55(.25)*	.17(.34)
Minority Ethnicity	-.07(.37)	-.04(.30)	.02(.27)	1.4(.78)*	-.54(1.1)
Education	.03(.12)	-.03(.10)	.05(.09)	-.14(.26)	.09(.35)
Tenure	-.08(.10)	-.04(.08)	-.10(.07)	-.07(.22)	-.12(.30)
Hours Worked	.03(.07)	.03(.06)	.01(.05)	.14(.14)	.17(.20)
<b>Factors (store-level):</b>					
HPWS	.50(.30)*	.18(.25)	.20(.22)	.07(.64)	.42(.88)
Leadership Communications	.03(.18)	.06(.16)	-.08(.14)	.96(.41)**	-.18(.57)
POS	-.12(.20)	.01(.15)	.03(.13)	-.19(.38)	.43(.53)
Mindfulness	-.19(.25)	.02(.21)	-.25(.18)	-.16(.53)	-.42(.57)
PsyCap	.17(.22)	.04(.18)	-.03(.16)	-.12(.46)	.21(.63)
Meaningful Work	.11(.20)	-.10(.16)	.09(.15)	-.41(.42)	.27(.58)
Work-Life Balance	-.01(.17)	.05(.14)	.17(.12) †	.44(.36) †	-.37(.50)
Vigor	.32(.25)	.36(.21)*	.09(.18)	.40(.54)	-.29(.74)
Dedication	.95(.26)***	.79(.21)***	.53(.19)***	1.3(.55)***	.66(.76)
Absorption	.59(.23)**	.52(.19)**	.42(.17)**	.36(.50)**	.59(.68)
Variance level 2(store)	0.73(.12)***	0.49(.08)***	0.39(.07)***	3.31(.555)***	6.28(1.05)***

†p< .1, \*p< .05, \*\*p< .01, \*\*\* p< .001

Table 20 shows the results of the multi-level analysis, where the constructs are nested at the store level and used to predict the various performance indicators. I focused on the significant effects only. Towards the in-role performance of the store (rated by the supervisor), HPWS is significantly related (path coefficient= .50,  $p<.05$ ), as is dedication (path coefficient= .95,  $p<.001$ ) and absorption (path coefficient= .59,  $p<.01$ ). Towards store OCBs (rated by the supervisor), the work engagement factors are the only significant predictors: vigor (path coefficient= .36,  $p<.05$ ), dedication (path coefficient= .79,  $p<.001$ ) and absorption (path coefficient= .52,  $p<.01$ ).

Towards service performance of the store (rated by the supervisor), work-life balance is significantly (but modestly) related (path coefficient= .17  $p<.1$ ), as is dedication (path coefficient= .53,  $p<.001$ ) and absorption (path coefficient= .42,  $p<.01$ ). The store sales performance (using a Head Office rating), found that leadership communication was significantly related (path coefficient= .96  $p<.1$ ), as was work-life balance (but modestly) (path coefficient= .44  $p<.1$ ), as is dedication (path coefficient= 1.3,  $p<.001$ ) and absorption (path coefficient= .36,  $p<.01$ ).

Finally, the store HR performance (using a Head Office rating), found no significant factors predicted this. Overall, the findings provide support for the study factors predicting the various performance indicators (except store HR performance), supporting Hypothesis 12.

## **Chapter 9. Discussion – Study Two**

In the following sections, I address the specific factors and the findings for each. I follow the template from study one and discuss the findings in the various blocks. Initially, I address the correlation findings and then structural findings and how these relate to the literature.

### **Block 1. Organisational Factors**

In this discussion, I explore the role of the three organisational factors: (1) HPWS, (2) leadership communication and (3) POS. As per study one, this section is the only one that also tests a relationship within the three factors, specifically HPWS and leadership communication as antecedents of POS. This is because there is strong meta-analytics support for such relationships (e.g., Rhoades & Eisenberger, 2002). This is discussed more fully below.

#### **HPWS**

The results for study two show HPWS as significantly correlated with POS, leadership communication, PsyCap, mindfulness, meaningful work, work-life balance, vigor, dedication, absorption, job satisfaction, turnover intentions, and job stress. In the structural equation modelling results, HPWS was found to be positively related to POS, which aligns with the meta-analyses around antecedents of POS (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017). While being significantly correlated to both PsyCap and mindfulness, in the structural equation modelling results, HPWS was found to be positively related to the dispositional factor of PsyCap only and not mindfulness.



That said, POS is related to mindfulness and given HPWS predicts POS, this might represent a mediation effect from POS. The finding of HPWS influencing POS is important because Avey (2014) notes that despite the growth in empirical studies of PsyCap, there has not been a broad analysis of antecedents. Indeed, the 2011 meta-analysis reported there were very few studies on what might form and influence (be antecedents of) PsyCap (Avey et al., 2011). The links of HPWS to PsyCap also align with the theoretical work of Newman, Ucbasaran, Zhu, and Hirst (2014), who called for empirical examinations of these linkages.

The structural model also showed that HPWS was positively related to work-life balance, vigor and dedication, further building on the literature. It has been suggested that HPWS might act as a policy and practice vehicle that allows workers to be better able to juggle their work and life roles (Haar, 2013), and this confirms findings from study one, building our understanding of how HPWS can shape work-life balance. This also adds to the understudied antecedents of work-life balance (Haar et al., 2019) and adds HR practices to the list of known antecedents around work and family support (Russo et al., 2016; Haar et al., 2019), leadership (Haar et al., 2017), and work and family factors (Haar et al., 2019).

Cooke, Cooper, Bartram, Wang, and Mei (2016) found that HPWS were directly related to engagement, and similarly, Boon and Kalshoven (2014) found positive links between HPWS and engagement. While relatively unexplored, these findings do provide support to these findings in the literature and expand our understanding of relationships, including in the retail sector.

However, HPWS was not significantly correlated with in-role store performance, store OCB, service performance or store sales performance, but it was significantly correlated with store HR performance. This is an important finding because the majority of the HPWS literature is focused on firm performance (e.g., Datta et al., 2005; Combs et al., 2006; Huselid, 1995). Furthermore, there is meta-analytic support for HPWS influencing firm performance (Combs et al., 2006). Thus, I did not find the linkages I might expect from the literature.

One reason for this might be due to the lack of HPWS within the business, so the effects of the HPWS were minimal or of limited effect. The stores that were 'linked' in with the HR teams seemed to have more access to managing the team from an HR perspective, and thus there were positive links to HR Performance but only that performance outcome. Another reason might be the retail focus. In their meta-analysis of HPWS and firm performance, Combs et al. (2006) found a significant difference in the influence of HPWS on performance, with manufacturing firms outperforming service firms. Hence, within the context of this retail setting, it might be that HPWS are not important enough directly to influence performance, and instead, acts more indirectly through other factors (explored more below).

Despite these findings **at the individual level**, results were different at the team or store level of analysis. With the nested level of analysis (individual respondent's perceptions of HPWS) at the store level, HPWS were indeed found to be positively related to store in-role performance, as rated by the store managers. Hence, at the store level, I do find support for Combs et al.'s (2006) assertion that HPWS will aid firm-level performance,

and this highlights that the ability to analyse data from the individual level to the store level appears to uncover aspects that might remain unearthed from study one.

### **Leadership Communication**

Leadership communication is significantly correlated with POS, PsyCap, mindfulness, meaningful work, work-life balance, vigor, dedication, absorption, job satisfaction, turnover intentions, and job stress. In the structural model, I found leadership communication is significantly related to POS, and this aligns with those scholars who argue that leadership communication relates to being able to set culture and solidify a vision (Kirkpatrick & Lock, 1996; Westley & Mintzberg, 1989). While the two meta-analyses of POS did not specifically explore leadership communication (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017), they both did show that leadership is an important antecedent of POS.

Furthermore, there is empirical evidence to support leadership communication forming POS (Allen, 1992), and thus the present study adds to that literature. Beyond the significant correlations though, leadership communication is only partially significantly related to one other factor – PsyCap. This aligns with earlier suggestions that strong leadership communication may enhance and shape an employee's psychological resources (hope, confidence, resilience, and optimism), and reinforces findings around leadership shaping PsyCap (Wang et al., 2014). However, the lack of any other significant effects at the individual level might indicate other

mechanisms at play – such as POS mediating these effects, which has meta-analytic support (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017).

While leadership communication was not significantly correlated with in-role performance, store OCBs, service performance or store sales performance, it was with HR performance. At the multi-level analysis, there was one significant effect found, with leadership communication being positively related to the firm's Head Office rating of store sales. Thus, there is support found for leadership communication – at the collective (employee) level – to be important towards making more sales.

## **POS**

POS was found to significantly correlate with leadership communication, PsyCap, mindfulness, meaningful work, work-life balance, vigour, dedication, absorption, job satisfaction, turnover intentions, and job stress. The findings from the structural model show that POS is significantly related to mindfulness, which builds on the antecedents of mindfulness, which are at times poorly explored in workplace studies (e.g., Roche et al., 2014). Similarly, the positive links with meaningful work and work-life balance both add to our understanding of the antecedents of these constructs, which again, have been limited (e.g., Haar et al., 2019; Lips-Wiersma & Wright, 2012; Lips-Wiersma, Haar, & Wright, 2018).

There is empirical support for POS influencing the work engagement dimension of dedication, which aligns with the literature (Gillet, et al., 2013; Caesens & Stinglhamber, 2014), and finally, support for POS to job satisfaction (albeit statistically weakly), which also aligns with the literature

including POS meta-analyses (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017). Consequently, while a number of relationships are found to be important at the correlation level of analysis, the structural analysis shows that POS – in this retail setting – has less influence on direct effects.

In addition to the above relationships, POS was found to be significantly correlated with in-role performance, store OCBs and store HR performance; however, there is no significant correlation with service performance or store sales performance. POS is about the connection with the employee rather than the customer, and this is shown regarding the lack of affect POS has on service performance and sales performance. Importantly, towards answering the lack of HPWS and performance outcomes, these findings suggest that the influence of HPWS might be through POS, as HPWS enhanced these perceptions, and ultimately POS did predict outcomes.

Despite these positive links to performance, at the store-level of analysis, POS was not a significant predictor of any performance outcome. This lack of findings does run counter to the meta-analytic support for POS and performance (Rhoades & Eisenberger, 2002; Kurtessis et al., 2017), although in the present study this is at the store level. Furthermore, the multi-level study effects show that engagement appears to be the dominant predictor of store performance (aligning with Harter et al., 2012) and this is especially prevalent to the influence of the dedication dimension. Given that POS is related to dedication, it might represent a mediation effect (through engagement).

### ***Organisational Factors Summary***

In summary, the three organisational factors above (HPWS, leadership communication, and POS) tested in this research, appear to be critical towards building an overall culture that is able to promote an individual's growth within the organisation (by increasing certain individual traits) and shaping attitudes. An organisation that is focused on incorporating positive factors as part of their environments and cultures will give individuals the opportunity to flourish, build and develop their positive traits increasing overall organisational success. The research gives supporting evidence that both HPWS and leadership communication are building blocks to POS, and together, these three factors can help build a people-centric culture, ultimately leading to positive business benefits.

### **Block 2: Dispositional Factors**

The present study included two dispositional factors: PsyCap and mindfulness. As discussed previously, these two dispositional factors were chosen due to their positive psychological nature and because they have been found – separately and in combination (e.g., Roche et al., 2014) – to be important for understanding employee outcomes. I now look at these two factors and their linkages to outcomes.

#### **PsyCap**

PsyCap was found to be significantly correlated with mindfulness, meaningful work, work-life balance, vigor, dedication, absorption, job satisfaction, turnover intentions, and job stress. In the structural model, these

effects broadly hold with significant effects towards meaningful work and work-life balance, which builds on the influences of PsyCap. While there is meta-analytic evidence of the consequences of PsyCap (Avey et al., 2011), the study of meaningful work and work-life balance has been neglected. Shuck et al. (2011) defined meaningful work as “job and other workplace characteristics that facilitate the attainment or maintenance of one or more dimensions of meaning” (p. 510), and I find that employees with greater PsyCap are more likely to find meaning in their work, which aligns with this and other conceptualisations of meaningful work (e.g., Spreitzer, 1995; Lips-Wiersma & Wright, 2012; Lips-Wiersma et al., 2018).

In addition, the significant linkages with work-life balance also align with Haar’s (2013) definition of work-life balance, being “the extent to which an individual is able to adequately manage the multiple roles in their life, including work, family and other major responsibilities” (p. 3308). Having higher PsyCap means the individual has greater psychological resources (Luthans et al., 2007) and thus will be able to manage and balance their work and non-work roles better.

The other main effects from PsyCap in the structural model were being significantly related to all three engagement dimensions. This finding aligns with theoretical linkages posed by Sweetman and Luthans (2010), and the empirical evidence of Simons and Buitendach (2013), who found PsyCap related to all three work engagement dimensions. Similarly, Paek et al. (2015), with a sample of hospitality workers, found that PsyCap was positively related to work engagement and Avey et al. (2008) found PsyCap was a significant predictor of work engagement. Finally, there was no

significant correlation between PsyCap and in-role performance, store OCBs, service performance, store sales performance or HR performance, and these effects held when PsyCap was analysed at the store level.

### **Mindfulness**

Regarding mindfulness, it was found to be significantly correlated to meaningful work, work-life balance, vigor, dedication, absorption, job satisfaction, turnover intentions, and job stress. However, in the structural model, only two significant effects were found: towards work-life balance and the work engagement dimension of absorption. There is a distinct lack of empirical works exploring dispositional factors towards work-life balance, and in this study's contribution, those who are more mindful report being better able to balance their work and life roles (Haar, 2013). While Allen et al., (2012) reported on a meta-analysis of dispositional factors towards work-family conflict, there has not been similar research on work-life balance. There is a handful of studies, such as Michel et al., (2014) who found a mindfulness intervention was positively related with satisfaction with work-family balance.

Similarly, Allen and Kiburz (2012) found mindfulness was related to work-family balance. Importantly, none of these studies include *additional* dispositional factors – like PsyCap – in the present study. Thus, although mindfulness has little predictive power in the present study, it does provide additional insights through testing itself and other factors (e.g., PsyCap) in combination.



Overall, mindfulness was not significantly related to in-role performance, store OCBs, store sales performance, or store HR performance but it was with service performance, which relates to employee actions that enhance customer service and making better sales beyond the customer's initial interest or demands (Liao & Chuang, 2004). Despite this, there are no multi-level significant effects from mindfulness towards any of the performance outcomes, including service performance. Again, the dominance of work engagement likely accounts for any dispositional variables.

### ***Dispositional Factors Summary***

Overall, study two showed that PsyCap and mindfulness were significantly correlated to several study constructs, although the effects on performance outcomes were largely (and noticeably) absent.

### **Block 3: Work Perceptions**

This block relates to the work perceptions of employees, specifically relating to meaningful work (Spreitzer, 1995) and work-life balance (Haar, 2013). Both these constructs reflect self-perception and thus need to be self-reported. Aligned with the study model, I expect organisational factors (Block 1) to shape dispositional factors (Block 2), and in turn, both organisational and dispositional factors to influence these work perceptions (Block 3). Such effects have been discussed above. In this section, I detail how meaningful work and work-life balance influence work engagement (Block 4) and job outcomes (Block 5) including performance outcomes.

## **Meaningful Work**

Meaningful work was significantly correlated with work-life balance, vigor, dedication, absorption, job satisfaction, turnover intentions, but not job stress. According to the theory of meaningful work (Spreitzer, 1995) those feeling a greater fit between their work role and their values, beliefs, and behaviours (high meaningful work) are more likely to report being engaged and satisfied in their work, and less likely to want to leave their job (Spreitzer, 1995; Lips-Wiersma & Wright, 2012, Lips-Wiersma et al., 2016).

In the structural model, meaningful work was found to predict work-life balance significantly. While work-life balance has not been explored as an outcome of meaningful work, it is like personal growth, for which linkages with meaningful work have been established (May et al. 2004). Hence, those who find meaning in their work are better able to balance all components of their life – including work, which aligns with Haar (2013). In addition, it was found to significantly predict dedication and absorption, which similarly aligns with the literature of meaningful work positively relating to employee engagement (Shuck et al. 2011; May, et al., 2004), job performance (Scroggins, 2008).

Meaningful work was also found to be significantly correlated with in-role performance, OCBs and store HR performance, but was not correlated with service performance, or store sales performance. However, in the multi-level analysis, there were no significant effects from meaningful work, suggesting that findings towards performance (Scroggins, 2008) might be limited, or at least in the context of the many variables examined here.

## **Work-Life Balance**

Finally, within the work perceptions, work-life balance was found to be significantly correlated with vigor, dedication, absorption, job satisfaction, turnover intentions, and job stress. Work-life balance was also significantly correlated with in-role performance, store OCBs, service performance, and store HR performance, but not store sales performance. In the retail environment, the flexibility of picking up shifts or working less shifts is a draw card and positive focus of the industry and attracting potential employees. Hence, work-life balance appears to be a strong construct within the present study as it predicts many outcomes.

In the structural model, there were positive links between work-life balance and dedication, as well as job satisfaction and strong negative effect on job stress. These findings support the existing literature around work-life balance influencing engagement (Haar et al., 2017) and job satisfaction (Haar, 2013; Haar et al., 2014, 2018c). Also, the links to job stress reinforce the negative influence work-life balance has on detrimental wellbeing outcomes (Haar, 2013; Haar et al., 2014, 2018b), thus reinforcing the general theme of influence, while also broadening the effects specifically to job stress.

Regarding performance and the multi-level analysis, there are two significant effects – albeit that these are statistically modest effects ( $p < .1$ ). I find that work-life balance – at the store level – is significantly and positively related to service performance, and overall store sales performance, which reflects greater sales. These are important findings because, although the links between work-life balance and performance have been alluded to (e.g., Haar, 2013), they remain poorly tested. The present study thus adds to the study of

effects in testing whether the interface between work and non-work roles – such as work-family conflict and enrichment (e.g., Odle-Dusseau, Britt & Greene-Shortridge, 2012) – play a role in job performance. At the store level, these findings suggest that they may play some role – although perhaps with direct effects being largely mediated by engagement.

### ***Work Perceptions Summary***

In summary, work perceptions play an important and interesting role, although it does appear that work-life balance is the more valuable of the two constructs when compared to meaningful work.

### **Block 4: Work Engagement**

The final block relates to the influence of the various work engagement dimensions on the remaining work outcomes (Block 5) including the externally scored performance data.

Work engagement (Schaufeli et al., 2002) is made up of three dimensions: vigor, dedication and absorption and, within study two, each dimension was significantly and highly correlated with each other:  $.78 < r > .69$  ( $p < .01$ ). Amongst the significant correlations, vigor, dedication, and absorption were all found to be significantly correlated with job satisfaction, turnover intentions, and job stress. Regarding the structural equation findings, towards predicting absorption, both vigor and dedication were significantly related, although vigor was only modestly significant (at  $p < .01$ ).

However, these effects support the more recent assertions that they are antecedents of absorption (Salanova & Schaufeli, 2008), and this aligns itself with the engagement literature (e.g., Hakanen et al., 2017; Salanova et al., 2010; Rodríguez-Munõz et al., 2014; Schmitt et al., 2016). Despite this, the lack of significant effects towards work outcomes (job satisfaction, turnover intentions and job stress) are all counter to prevailing findings (Caesens & Stinglhamber, 2014; Saks, 2006; Harter et al., 2012; Truss et al., 2013; Bakker et al., 2006; Bakker & Leiter, 2010; Fairlie, 2011). Indeed, while there have been calls for greater research on these aspects (e.g., Schaufeli & Taris, 2014) it is still counter to the prevailing literature that significant effects were not found.

While these effects are unusual, it is worth noting that few (if any) studies have explored the number of factors examined here. Specifically, three organisational factors, two dispositional factors and two work perceptions *in addition* to engagement towards these work outcomes. Hence, any potential direct effect might be accounted for by the influence of other constructs or confounding effects through having so many variables in the models.

Finally, the linkages between engagement and performance were only modestly supported, with vigor being significantly correlated with store HR performance only and absorption with sales performance only. The dedication dimension was not significantly correlated. However, these effects are at the individual level. When I consider the multi-level analysis, it shows that engagement supports the linkages towards unit and firm performance well,

which aligns itself with the meta-analysis findings – at the business unit level – of Harter and colleagues (2002).

At the store level, store vigor is significantly related to store OCBs, and thus the way that store members engage and help each other, over and above their job descriptions (Lee & Allen, 2002). However, dedication and absorption were significantly related to in-role performance, store OCBs, service performance, and store sales performance, but not store HR performance. Thus, there is overwhelming and robust support for engagement playing a strong and positive effect towards store performance (across a broad array of performance indicators). Again, this is at the store level and not individual level. This supports the notion that employees who are engaged have additional resources to enable them to perform better (Bakker & Albrecht, 2018; Bakker et al., 2011; Bakker & Xanthopoulou, 2009).

### **Moderating Effects**

As per study one, I tested for potential moderating effects towards the dispositional factors (PsyCap and mindfulness) only. A significant interaction between HPWS and leadership communication towards POS was found, and this shows that both HPWS and leadership communication shaped POS and when both factors are high, respondents report the highest levels of POS. Although not previously tested for, such effects align with the meta-analysis and need for moderating effects by Rhoades and Eisenberger (2002). Finally, a significant moderated mediation effect was found, and Hayes (2018) suggested these sophisticated statistical techniques can provide useful insights, and the findings here support this.

The findings of the significant moderated mediation effect highlighted that a boundary condition (Hayes, 2018) existed, which is an essential process in understanding how constructs operate. In this moderated mediation effect in the mindfulness model, it was shown that at low levels of HPWS, the effect of leadership communication on mindfulness vis-à-vis POS was not statistically significant. While the effect was positive, POS does not play a mediating role when HPWS are weak. However, for employees reporting high HPWS, the effect of leadership communication on mindfulness vis-à-vis POS was positive and significant, albeit small in effect size.

Overall, this effect shows that the influence of POS as a mediator is conditional on the strength of HPWS. Indeed, the indirect effect was only significant when HPWS was at levels greater than -0.2 standard deviations above the mean. This finding highlights that HPWS might play a valuable boundary condition role whereby the effectiveness of POS as a mediator becomes conditional. Again, this reinforces calls for moderating effects on POS (Rhoades & Eisenberger, 2002) and highlights the importance of testing for moderated mediation (Hayes, 2018).

## **Chapter 10. Implications, Limitations, Future Research and Conclusion**

### **Implications**

This study included two separate studies, using three sample groups, each group reporting significant correlations between the various positive factors and the positive work outcomes. Importantly, across the three samples, they showed significant differences between correlations, reinforcing that in the present study with a strong positive psychology approach, it might be that with these factors 'not one size fits,' and this reinforces the need to explore them across different work groups and employee types. Also, there are some insignificant correlations for sample two, and this may show incongruences between what the 'organisation' thinks is working and what reaches or makes a difference with the workforce. This is because sample two in study one specifically targeted blue-collar workers in manufacturing.

Overall, the three different structural models did produce a consistent effect overall, with the partial mediation model (Figure 2C) being consistently the best fit for both samples across the three studies. Hence, while differences were found, there were many similarities in my study, especially regarding the research literature. Building initiatives to suit the different work types would be a positive step in the direction of consciously creating the environments for employees to flourish.

Organisations should not assume that their actions (for example, specific HR practices), are viewed similarly by all employees across different job types. This might be especially true in workplaces (like study one) where



white-collar, and blue-collar workers do consistently different work while under the single ‘umbrella’ of the same organisation.

One implication from these findings is the challenge for business leaders to introduce the factors from my studies into their workplaces, specifically looking forward to building positive and proactive cultures, initiatives and systems, in order to get the best out of their people. The results do suggest that putting workers’ well-being, growth, and development on an equal standing to the importance of profit might be beneficial and ultimately enriching for both employer and employee.

The evidence from the present research shows that positive cultures and environments will bring rewards to those who offer them. This is especially relevant given the organisational factors – like HPWS – were generally quite low (largely at the mid-level score or thereabouts) and thus reflect employees having a modest perception around HR practices in their New Zealand workplaces.

Increasing the positive factors discussed in my study (e.g., HPWS, leadership communication, and POS) will also increase an individual’s capacity to develop and grow, learn about themselves, find meaning in their work, and this correlates directly with their sense of self and satisfaction with work. This is likely to have positive impacts on workplaces, individuals, their homes, communities, and society at large. Businesses have the influence (power) to have a direct impact on creating a more prosperous world for workers now and in future generations.

Recently, researchers have noted that the businesses of the future not only hold profit in high regard but equal to the emphasis on contributing to

an employee's self-development as an individual (Cooper, 2005). However, the question is, are businesses ready for this challenge? More research is needed to understand these factors, but the present study's focus on positive psychology shows that certain factors (e.g., POS, PsyCap) appear vital to creating a more engaged and vital workforce.

### **Limitations**

The present study has several limitations consistent with the types of research methods it used. For example, problems around common method variance (CMV), self-reported data, and the overall generalisability of findings need to be considered when interpreting findings (Podsakoff, et al., 2003). While the data is cross-sectional, such an approach is typical of the literature (e.g., Boxall & Macky, 2014; Haar, 2013), but this does raise the potential of CMV (Podsakoff et al., 2003). This relates to potential issues where relationships are inflated (or deflated) because respondents answer questions at the same time. Although I was unable to conduct data collection at different times to enable temporal separation – that is, IVs at time 1 and DVs at time 2, I did follow the recommendation by Podsakoff et al. (2003) around survey design and spaced out my key constructs in different orders and locations in my surveys.

In addition, I did conduct analyses (CFA and structural models) using SEM, which provides robust analysis that should highlight potential CMV issues (Haar et al., 2014). In this regard, conducting various alternative CFAs should highlight high factor loadings across items that reflect (and indicate) CMV. However, my analyses did not highlight such issues and thus provides

a useful indication that CMV issues are either non-existent or very minor. Furthermore, Evans's (1985) Monte Carlo simulations showed that moderation effects are rare if CMV is an issue. I found significant two-way moderation effects and significant moderated mediation effects, which suggests CMV is unlikely.

While the data is mostly cross-sectional, one benefit of the three empirical samples is that it improves generalisability (Nuzzo, 2014) but this also highlights that there is a lack of qualitative data. Thus, how these factors influence and change individual perspectives and the organisational landscape, is missing in a rich and descriptive manner. This would mean including different research methods and obtaining feedback from employees what differences leadership communication styles/strategies can make to their everyday work. So, while this is outside of the current thesis, it is a useful suggestion for future research.

Exploring different communication methods is also a strategy that might produce different findings from those found in the present research. Indeed, several different leadership styles or communication approaches could have been included, such as leader-member exchange or transformational leadership or a more general communication climate. It was felt that the present selection of constructs could be useful for tapping into various positive organisational factors, but clearly, many other options could have been utilised. A broader range of organisational factors would contribute to determining an overall leadership effectiveness model for different workgroups, but such a specific focus (on leadership) was not the intent of the present study.

Furthermore, the moderated mediation findings were confirmed using bootstrapping, which provides enhanced confidence on these effects. Beyond the statistical analysis, my approach of using multiple samples of quite distinct worker-types within a single organisation (study one) does make a useful contribution. This is especially true where the effects on the blue-collar workers (sample two) appear to be more complex than the white-collar workers (sample one). This is then countered by the study two sample, which explores one organisation but across a large geographical area. In addition, the use of secondary sourced data – including data sourced from store managers and the HR Department at Head Office – with actual sales data, provides much needed external data to eliminate concerns around CMV (Podsakoff et al., 2003). Thus, the second study was able to explore different performance criteria and at the store level rather than individual employee level.

### **Future Research**

This research gives support for future research into the broad area of positive psychology. Specifically, organisational culture initiatives that support a culture of positive development and people flourishing could be explored more. It may be useful to develop further understanding of the overarching antecedents that contribute to positive organisational culture, more specifically what works for different types of work groups and job types. Initiatives and interventions that increase positive dispositional factors in the workplace that individuals can use in other areas of their lives to make improvements may be useful. Although I examined both mindfulness and

psychological capital, it was the latter that appeared to be the stronger of the two dispositional factors. More studies comparing these factors – or perhaps exploring them in combination (interacting effects) – might prove fruitful.

Future research might include other forms of perceptions. For example, while the present thesis used Spreitzer's (1995) meaningful work construct, there have been further developments in that field. For example, the work of Lips-Wiersma et al. (2012) provided a new multi-dimensional construct that was not selected because the seven dimensions would be too complex with the present study's theoretical models, but future researchers might focus more upon this approach to meaningful work. The same can be said with work engagement, with a different construct being offered by Rich, Lepine, and Crawford (2010).

Studies comparing positive organisational and dispositional factors to different engagement constructs might be worth considering. Furthermore, while Bailey et al. (2017) found that the Utrecht Group's work engagement construct is the dominant approach (e.g. Schaufeli et al., 2002) in the engagement literature, a study examining which construct – Rich et al. (2010) engagement versus the Utrecht Group's construct (e.g. Schaufeli et al., 2002) would be an interesting study. In this way, organisations might be able to address some of the complexities around 'what' type of engagement they should address. This is important, because organisations have the power to influence communities and societies, promoting the tools used in the workplace to create more fulfilling lives.

## **Conclusion**

Overall, this thesis sought to examine a host of positive factors – some targeting the organisational level – others the dispositional and perceptions of employees – and how these ultimately influenced engagement and job outcomes, including performance. In study two, this performance was extended to the store level of analysis. In summary, the thesis sought to show the importance of systemic overarching factors that can make a positive difference to organisational culture, and positive dispositional factors that, when accepted and acknowledged in the workplace, are important and skills that can be used to enhance workplaces and individuals. It is my hope this research will encourage organisations to consider their employees and especially realise that different job types (e.g., blue-collar, white-collar) might mean there are quite different effects being felt within an organisation. Not assuming homogeneity is a good place to start, as is then researching employees to better understand where they are at.

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## Appendices

Appendix A. Full ethics was granted for the study (AUT 17/96 The effect of individual and organisational factors on employee engagement and performance).

### AUTEC Secretariat

Auckland University of Technology  
D-88, WU406 Level 4 WU Building City Campus  
T: +64 9 921 9999 ext. 8316  
E: [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)  
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15 December 2017

Jarrod Haar  
Faculty of Business Economics and Law

Dear Jarrod

Re Ethics Application: **17/96 The effect of individual and organisational factors on employee engagement and performance**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 5 December 2020.

#### Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/researchethics>.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. If the research is undertaken outside New Zealand, you need to meet all locality legal and ethical obligations and requirements. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)

Yours sincerely,

A handwritten signature in black ink, appearing to read 'K O'Connor'.

Kate O'Connor  
Executive Manager  
Auckland University of Technology Ethics Committee

Appendix B provides a copy of the physical survey.

## Business Workplace Behaviour Survey

Dear employee,

My name is Professor Jarrod Haar and I am conducting a study of employees exploring a number of aspects relating to work and I am asking for your participation. Your participation involves completing the following survey, which is expected to take most people approximately 10 minutes to complete.

Your participation in the research is completely voluntary. I am NOT collecting your personal name or workplace so you will never be personally identified – so you will be totally anonymous – and your anonymity will not be compromised.

Please be aware there are no right or wrong answers to the questions asked – just click the response that corresponds closest to what you feel or agree/disagree with.

Below is a link to a document: Participant Information Sheet – which provides more details around the study.

[Participant Information Link](#)

With thanks,

Professor Jarrod Haar (PhD)  
Auckland University of Technology (AUT)

To begin the survey, please click >> below

### Demographics

#### D1. What is your age?

Less than 20 years ▼

#### D2. What is your gender?

Male ▼

#### D3. What is the highest education level achieved?

High School ▼



**D4. What is your ethnicity (tick as many boxes as relevant):**

- ☐ New Zealand European
- ☐ Maori
- ☐ Pasifika
- ☐ Asian
- ☐ Indian
- ☐ European
- ☐ South African
- ☐ Other

**D5. How many years have you worked in your current role?**

Less than 1 ▼

**D6. How many years have you worked in your organisation?**

Less than 1 ▼

**D7. Average hours worked per week**

20 or less hours ▼

**Section B: Your Organisation and Supervisor**

The following page contains questions that are related to your experience with your organization and with your immediate supervisor. Your responses are anonymous. Please be honest and candid.

**QB1. Your organization...**

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Fails to appreciate any extra effort from me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Would ignore any complaint from me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Would fail to notice even if I did the best job possible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Shows very little concern for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Section B: Your Organisation and Supervisor

The following page contains questions that are related to your experience with your organization and with your immediate supervisor. Your responses are anonymous. Please be honest and candid.

### QB. 2. Your supervisor...

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. Asks for suggestions about how to improve work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Explains changes in work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Informs about company rules	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Informs about future company plans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Explains company problems when needed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Explains the company vision in a language I can understand	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### QB3. To what extent do you agreed with specific statements related to Human Resource practices in your workplace

	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
1. In my job I am empowered to make decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I have a high degree of job security	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. My work includes a wide variety of tasks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. The recruitment/selection process for employees emphasizes promotion from within	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. The recruitment/selection process for employees focuses on selecting the best all around candidate, regardless of the specific job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. The recruitment/selection process places priority on their potential to learn (e.g., aptitude)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Our training activities for employees are comprehensive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Our training activities for employees are continuous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Our training activities strive to develop firm-specific skills/knowledge	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Performance appraisals for employees are based on input from multiple sources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Performance appraisals emphasize employee learning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Performance appraisals include developmental feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Compensation/ rewards for employees provide incentives for new ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Compensation/ rewards for employees include an extensive benefits package	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Compensation/ rewards for employees place a premium on their industry experience	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**QC1. Below is a collection of statements about your everyday experience. Please indicate how frequently or infrequently you currently have each experience. Please answer according to what really reflects your experience rather than what you think your experience should be.**

	Never	Some of the Time	Much of the Time	Most of the Time	All of the Time
1. I find it difficult to stay focused on what's happening in the present	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. It seems I am "running on automatic" without much awareness of what I'm doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I do jobs or tasks automatically, without being aware of what I'm doing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I find myself listening to someone with one ear, doing something else at the same time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I find myself doing things without paying attention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**QC2. Respond to the following questions about how you feel “right now”.**

	Strongly Disagree	Disagree	Somewhat Disagree	Somewhat Agree	Agree	Strongly Agree
1. I feel confident in representing my work area in meetings with management	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I feel confident contributing to discussions about the company's strategy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I feel confident presenting information to a group of colleagues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. If I should find myself in a jam at work, I could think of many ways to get out of it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Right now I see myself as being pretty successful at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I can think of many ways to reach my current work goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. At this time, I am meeting the work goals that I have set for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I can be “on my own” so to speak at work if I have to	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I usually take stressful things at work in stride	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I can get through difficult times at work because I've experienced difficulty before	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. I always look on the bright side of things regarding my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I'm optimistic about what will happen to me in the future as it pertains to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Section D: Job Attitudes and Behaviours

The following relates to your job and work.

**QD1. Read the following statements and indicate the extent to which you experience the following statements:**

	Never	A few times a Year	A few times a Month	A few times a Week	Everyday
1. When I get up in the morning, I feel like going to work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. At my work, I feel bursting with energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. At my job I feel strong and vigorous	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. My job inspires me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I am proud of the work that I do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I am enthusiastic about my job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I get carried away when I am working	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am immersed in my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I feel happy when I am working intensely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**QD2. Indicate the extent to which you agree/disagree with the following:**

	Strongly Disagree	Disagree	Neither Disagree or Agree	Agree	Strongly Agree
1. Most days I am enthusiastic about my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I feel fairly satisfied with my present job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. I find real enjoyment in my work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I am satisfied with my work-life balance, enjoying both roles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Nowadays, I seem to enjoy every part of my life equally well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I manage to balance the demands of my work and personal/family life well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I am thinking about leaving my organization	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. I am planning to look for a new job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. I intend to ask people about new job opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. I don't plan to be at my organisation much longer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. If I were to quit my job, I could find another job that is just as good	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. I would have no problem finding an acceptable job if I quit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

12. I would have no problem finding an acceptable job if I quit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. The work I do on this job is very important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. My job activities are personally meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. The work I do on this job is meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**QD3.1 Please rate yourself on meeting your job standards.**



1. I do not meet the standards ▼

**QD3.2 Please rate yourself compared to others of the same job level.**



1. I perform at a low level ▼

**QD3.3 Please rate your contribution to your teams effectiveness.**



1. I contribute less than most ▼

**QF2. Overall, how would you rate your stress from 0 (no stress) through to 10 (extreme stress)? [move the slider on the left or right]**

	0	1	2	3	4	5	6	7	8	9	10
Stress Sliding Scale											

The following is the survey used by store managers in Study Two.

## XYZ Manager Survey

Dear employee,

My name is Professor Jarrod Haar and I am conducting a study of XYZ employees exploring a number of aspects relating to work and I am asking for your participation. Your participation involves completing the following survey - where you rate your store's employees - and is expected to take most Managers 3 minutes only.

Your participation in the research is completely voluntary. Your workplace will not know whether you completed the survey or not, but this research may help with understanding your employees. Your responses will be anonymous. Please be aware there are no right or wrong answers to the questions asked - just click the response that corresponds closest to what you feel or agree/disagree with. With thanks,

Professor Jarrod Haar, AUT

Below is a link to a document: Participant Information Sheet - which provides more details around the study.

[Participant information sheet qualtrics prof haar 21 5 2018](#)

### Demographic 1. Your gender

Male ▼

### Demographic 2. Your age

Under 18 years ▼

### Demographic 3. How long have you been in your manager role?

Less than 3 months ▼

**Q1. The following sets of questions relate to your personal evaluation of ALL the employees you oversee.**

**Overall, employees in my store...**

	Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
Meets formal performance requirements of the job	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fulfills responsibilities specified in job description	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Performs tasks that are expected of the team	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Exhibits punctuality in arriving at work station on time after breaks	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Begin their work on time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has attendance at work that is above the norm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Willingly gives time to help other teams who have work-related problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Adjust their work schedule to accommodate other employees' requests	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shows genuine concern and courtesy toward other teams, even under the most trying business or personal situations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Gives up their time to help others who have work or non-work problems	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Are a good source of creative work ideas	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Comes up with new and practical ideas to improve work performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Often have new and innovative ideas at work	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is friendly and helpful to customers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Asks good questions and listens to find out what a customer wants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is able to help customers when needed	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Suggests items customers might like but did not think of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has prepared for the productivity aspect of the trail well	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



## Appendix C. PROCESS models

### *Moderation*

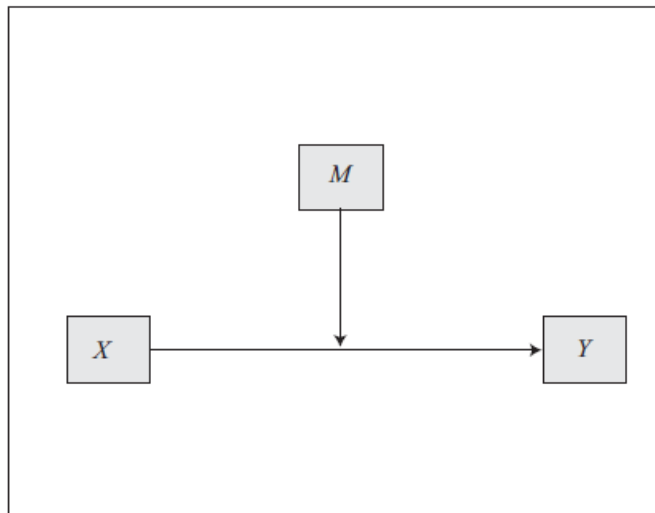
---

Model Templates for PROCESS for SPSS and SAS  
©2013 Andrew F. Hayes, <http://www.afhayes.com/>

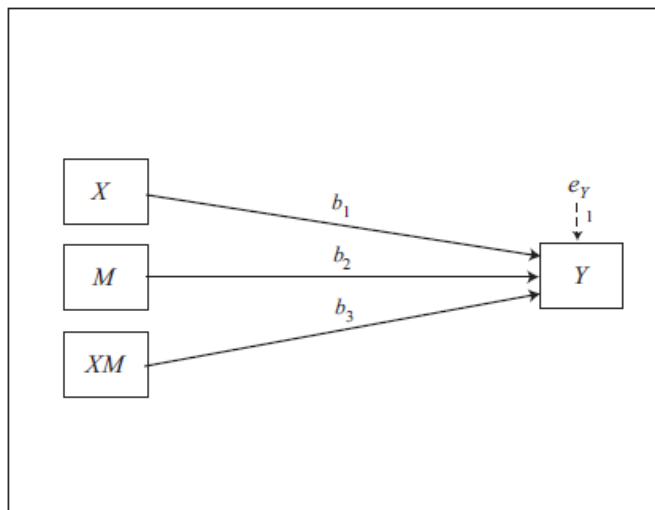
---

#### Model 1

Conceptual Diagram



Statistical Diagram



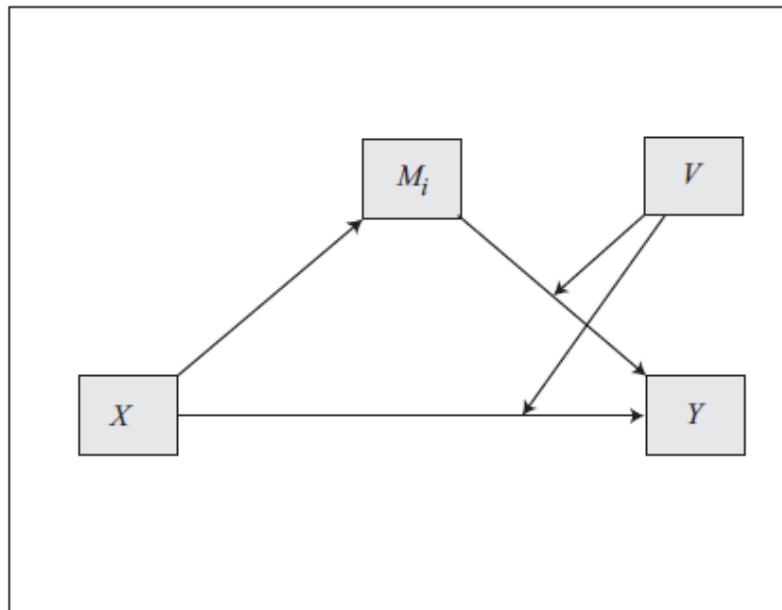
Conditional effect of  $X$  on  $Y = b_1 + b_3M$

## Moderated Mediation

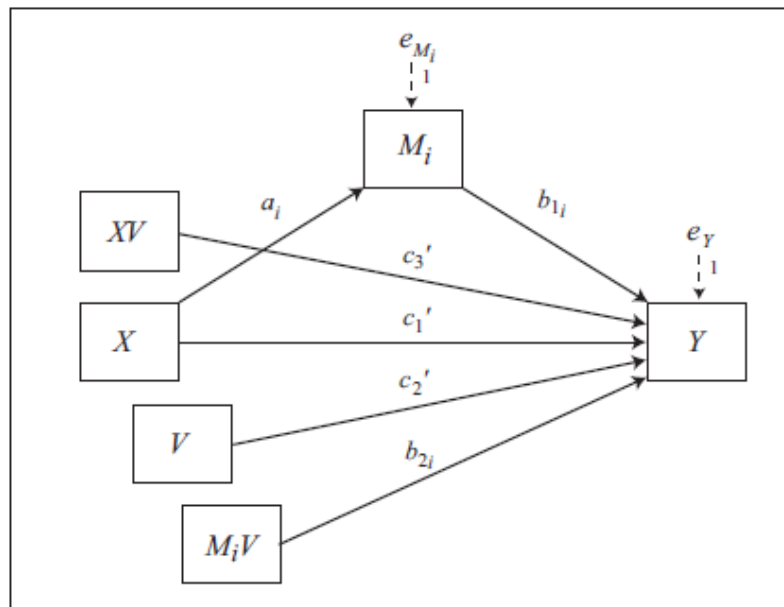
Model Templates for PROCESS for SPSS and SAS  
 ©2013 Andrew F. Hayes, <http://www.afhayes.com/>

### Model 15

Conceptual Diagram



Statistical Diagram



Conditional indirect effect of  $X$  on  $Y$  through  $M_i = a_i (b_{1i} + b_{2i}V)$

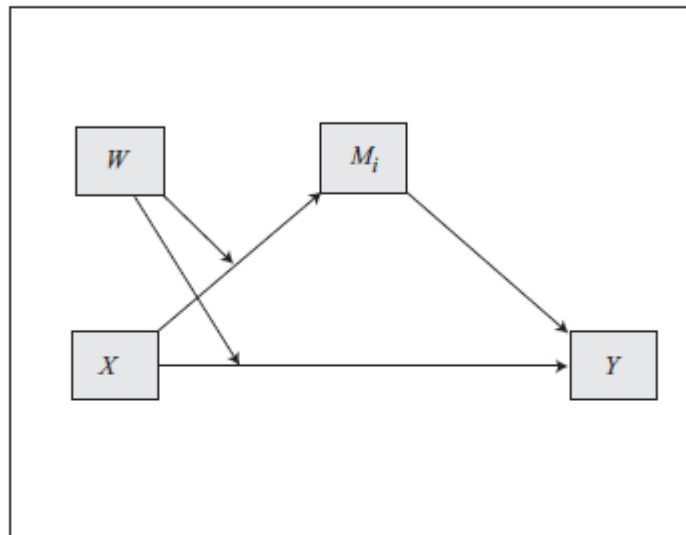
Conditional direct effect of  $X$  on  $Y = c_{1i}' + c_{3i}'V$

## Moderated Mediation

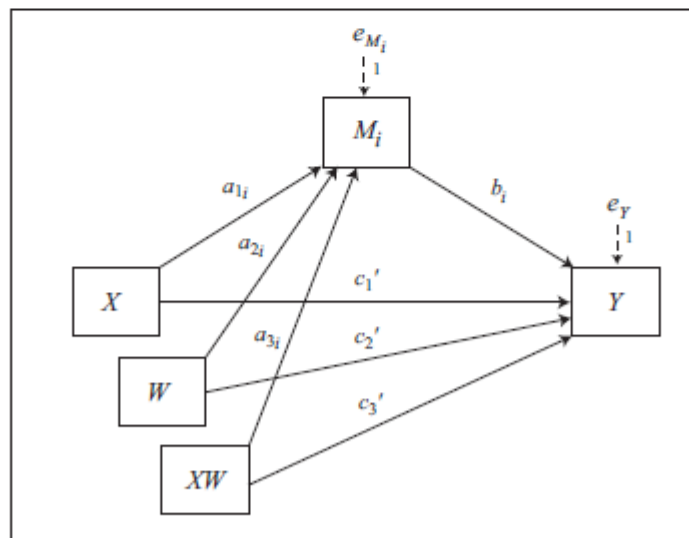
Model Templates for PROCESS for SPSS and SAS  
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### Model 8

Conceptual Diagram



Statistical Diagram



Conditional indirect effect of  $X$  on  $Y$  through  $M_i = (a_{1i} + a_{3i}W)b_i$

Conditional direct effect of  $X$  on  $Y = c_1' + c_3'W$

\*Model 8 allows up to 10 mediators operating in parallel