

Copyright is owned by the Author of the thesis. Permission is given for a copy to be downloaded by an individual for the purpose of research and private study only. The thesis may not be reproduced elsewhere without the permission of the Author.

**Psychological Capital As A Positive Resource To Assist With
The Organisational Outcomes Of Work Family Conflict**

A thesis presented in partial fulfilment of the requirements for the degree of

**Master of Arts
in
Psychology**

Massey University, Albany
New Zealand.

Katherine Yardley

2012

Abstract

Psychological Capital (PsyCap) is a powerful positive personal resource with the ability to enhance an individual's success within a working environment. In this study the effect PsyCap has on the organisational outcomes of Work Family Conflict (WFC) was investigated, using a sample of working parents within New Zealand. The Job Demands-Resources model was used to focus on job stress, burnout and engagement stemming from WFC, and the effect of PsyCap has on these, within individuals returning to work. It was hypothesised that PsyCap would have a positive relationship with engagement, and a negative relationship with job stress and burnout. Additionally it was hypothesised that PsyCap would act as a mediator and moderator variable in relationships between WFC and engagement, job stress and burnout. As PsyCap is malleable, and therefore open to development within individuals, it provides an opportunity for organisations to enhance the success of employees, in particular people reintegrating into the workforce after a period of time away. A self report questionnaire was used to measure PsyCap, WFC, Engagement, Job Stress and Burnout within 108 parents or caregivers within professional occupations who had returned to work over the past 12 months. Analyses looking for correlation, mediation and moderation showed that PsyCap had a positive relationship with engagement, and a negative relationship with burnout and job stress. PsyCap was demonstrated to partially mediate the relationship between WFC and burnout, and additionally with job stress. PsyCap was not shown to mediate the relationship between WFC and engagement. PsyCap was found to moderate the WFC and engagement relationship, showing individuals with higher levels of PsyCap possess higher levels of engagement, even with increased levels of WFC; however PsyCap was not a moderating variable in the WFC and job stress or burnout relationships. This indicates that PsyCap has an effect upon some of the organisational outcomes of WFC, and is worthy of further

investigation to enhance the success, wellbeing and performance of employees returning to work after parental leave. This study emphasises the positive value of growing PsyCap in individuals returning to the workforce, and also those already within organisations.

Acknowledgements

I would like to thank my research supervisor Dr. Dianne Gardner for all the amazing knowledge, support and perspective provided throughout the completion of this study.

Thanks to all the hard working parents and care-givers who participated in this research, and to all my organisational contacts and colleagues who distributed information to anyone and everyone eligible to participate.

I would also like to thank all my friends and family for their contributions, feedback and endless conversations about this study.

Finally, special thanks to my favourite people: Craig, Jake and Ava. Thank you to Craig for providing me with countless quiet mornings and unwavering support; thanks to Jake and Ava for helping me build my own hope, optimism, resilience and self-efficacy every day.

I would like to acknowledge that approval for this research has been obtained by the Massey University Ethics Approval Committee, reference: MUHECN 12/005.

Table of Contents

Abstract	iii
Acknowledgements.....	v
List of Figures	viii
List of Tables	ix
Chapter One: Psychological Capital.....	10
1.1 Introduction to the current study	10
1.2 Introduction to PsyCap	11
1.3 The Malleability and Development of PsyCap	17
1.3.1 Malleability of PsyCap.....	17
1.3.2 The Development of PsyCap through Training.....	18
1.4 PsyCap in Organisational Settings	20
1.4.1 PsyCap and Employee Behaviours.....	21
1.4.2 PsyCap and Employee Attitudes.....	22
1.4.3 PsyCap and Employee Performance	23
1.5 Theoretical Model for this Research	24
Chapter Two: The Job Demands-Resources (JD-R) Model	27
2.1 Introduction to the JD-R Model	27
2.2 Assumptions of the JD-R Model	27
2.2.1 Job Demands.....	29
2.2.2 Job Resources.....	30
2.3 The JD-R Model, PsyCap and WFC.....	30
Chapter Three: Work Family Conflict	33
3.1 Work Family Conflict	33
3.2 WFC in Organisational Settings.....	37
3.3 The effects of WFC	38
3.4 PsyCap and Work Family Conflict Hypothesis.....	39
Chapter Four: Outcomes of Job Demands and Resources	41
4.1 Work Engagement.....	41
4.1.1 Introduction to Work Engagement.....	41
4.1.2 Engagement and the JD-R Model.....	43
4.1.3 Work Engagement and PsyCap	44
4.1.4 PsyCap and Work Engagement Hypotheses	45
4.2 Job Stress	47
4.2.1 Introduction to Job Stress	47
4.2.2 Stress within Organisations.....	47

4.2.3 Job Stress and PsyCap	49
4.3 Burnout	52
4.3.1 Introduction to Burnout.....	52
4.3.2 Burnout and PsyCap.....	53
4.3.3 Burnout and PsyCap Hypotheses	54
Chapter Five: Method	56
5.1 Participants	56
5.2 Measures	57
5.3 Procedure	59
5.4 Data Analysis	60
Chapter Six: Results	63
6.1 Factor Analysis.....	63
6.2 Demographic Differences	65
6.3 Bivariate Correlations	67
6.4 Hypotheses Testing.....	67
6.5 Mediation	69
6.6 Moderation	71
Chapter Seven: Discussion.....	73
7.1 Limitations	76
7.2 Implications for Research	79
7.3 Implications for Practice	81
7.4 Conclusion	83
References	84
Appendix 1: Factor Analysis Graphs	96

List of Figures

Figure 1: State-Trait Continuum.....	18
Figure 2: Positive Psychological Capital Intervention	20
Figure 3: Model of PsyCap and Employee Attitudes & Behaviours	21
Figure 4: Theoretical Model for this Research.....	25
Figure 5: The JD-R Model.....	28
Figure 6: WFC Role Pressure Incompatibilities.....	34
Figure 7: Six Dimensional Model of WFC	35
Figure 8: The JD-R Model of Engagement.....	43
Figure 9: Proposed model of PsyCap as a mediator between the WFC and engagement relationship.....	46
Figure 10: Proposed model of PsyCap as a mediator between the WFC and job stress relationship.....	51
Figure 11: Proposed model of PsyCap as a mediator between the WFC and burnout relationship	55
Figure 12: WFC measured by length of parental leave taken.....	66
Figure 13: Job Stress and Engagement measured in length of time since returning to work.....	66
Figure 14: The interaction of PsyCap and WFC in the prediction of Engagement ..	71
Figure 15: PsyCap Factor Analysis Scree Plot.....	96
Figure 16: WFC Factor Analysis Scree Plot	96
Figure 17: Engagement Factor Analysis Scree Plot	97
Figure 18: Job Stress Factor Analysis Scree Plot	97
Figure 19: Burnout Factor Analysis Scree Plot.....	98

List of Tables

Table 1: Participant Demographic Information	57
Table 2: Descriptive statistics for measures of PsyCap, WFC, Engagement, Job Stress and Burnout (N = 108)	61
Table 3: Pearson Product-moment Correlations Between PsyCap, WFC and Work Related Outcomes	67
Table 4: PsyCap as a mediator of the WFC and Engagement relationship	69
Table 5: PsyCap as a mediator of the WFC and Job Stress Relationship	70
Table 6: PsyCap as a mediator of the WFC and Burnout relationship	70
Table 7: PsyCap as a moderator of the relationship between WFC and Engagement, Burnout and Job Stress	72

Chapter One: Psychological Capital

1.1 Introduction to the current study

Returning to work after a period of parental leave can be stressful for individuals, both in work and family domains, and can produce negative effects as people try to juggle commitments which often conflict (Lu, Kao, Chang, Wu, & Cooper, 2011; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011). Adapting to the different dynamics of a new child, or children, can be a life changing event in itself. In addition, an individual can experience both expected and unexpected challenges upon returning to the workforce. This can create an emotional time for all involved as a successful balance is sought. Negative effects upon people may surface throughout this transition, such as increased stress (Grzywacz, Carlson, & Shulkin, 2008a; Rantanen, Mauno, Kinnunen, & Rantanen, 2011), burnout (Brauchli, Bauer, & Hämmig, 2011), absenteeism (Anderson, Coffey, & Byerly, 2002) and lowered personal wellbeing and engagement (Shankar & Bhatnagar, 2010). These undesirable effects of work family conflict can stem from a number of possible sources, such as an unsupportive work environment, either at departmental/team level or as an outcome of the wider organisational culture (Allen, 2001; Frone & Yardley, 1996; Lapierre et al., 2008) or an individual's motivation to return to work, i.e. wanting to return or needing to return (McRae, 1993). In addition increased demands on the person's time and energies may result in role strain (Greenhaus & Beutell, 1985; Lu et al., 2011; Voydanoff & Donnelly, 1989), and even personal confidence in ability to perform in a role that has not been practised for a period of time (Erdwins, Buffardi, Casper, & O'Brien, 2001).

Psychological Capital has been studied under a positive psychological framework, and has been seen to have a positive impact on an individual's success in the workplace (Luthans, Youssef, & Avolio, 2007). The elements that make up the

construct of Psychological Capital (i.e. hope, optimism, resilience and self efficacy), and even the higher order factor of Psychological Capital itself, can be seen as personal resources within an individual (Avey, Luthans, & Jensen, 2009). Psychological Capital is malleable, and therefore open to development (Luthans, Avey, Avolio, Norman, & Combs, 2006), which opens up an array of organisational opportunities to enhance wellbeing and personal success for employees, creating positive flow-on effects for the organisation, such as increased productivity (Avey, Reichard, Luthans, & Mhatre, 2011a). As the Job Demands-Resources model states, every job has its own set of demands that can exhaust an individual's mental and physical resources (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). The more resources an individual has the more likely they will be to combat job demands successfully, thereby experiencing higher motivation, job satisfaction and wellbeing (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2007).

From this it could be supposed that individuals who possess high levels of hope, optimism, resilience and self efficacy will have resources to combat the demands placed upon them as working parents. It would follow that the negative effects of work family conflict could be reduced. There are many precursors to an individual experiencing work family conflict and the outcomes associated with this, however if Psychological Capital can be shown to assist in the reduction of these in working parents it will provide a workable pathway for organisations to successfully assist their employee's wellbeing and engagement, along with ensuring that the company is also positively affected.

1.2 Introduction to PsyCap

Psychological Capital (or PsyCap) focuses on strengths within individuals (Demerouti, van Eeuwijk, Snelder, & Wild, 2010) and how people can grow and thrive in the workplace (Cheung, Tang, & Tang, 2011). It is characterised by the combination of four positive psychological aspects, namely hope, optimism, self

efficacy and resilience. The formal definition forwarded by Luthans et al. (2007, p.3) states “Psychological Capital is an individual’s positive psychological state of development, characterised by:

- 1) Having confidence (self efficacy) to take on and put in the necessary effort to succeed at challenging tasks;
- 2) Making a positive expectation (optimism) about succeeding now and in the future;
- 3) Persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed and;
- 4) When beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success.”

Hope covers a person’s perception of their own ability to create pathways to specific goals and then to motivate themselves via agency thinking in using these multiple pathways to succeed in their goals (Cheung et al., 2011). Hope can be defined as “a positive motivational state that is based on an interactively derived sense of successful (1) agency (goal-directed energy) and (2) pathways (planning to meet goals)” (Snyder, Irving, & Anderson, 1991, p. 287), with Snyder (2000) outlining hope as an empowering way of thinking for individuals. Agency is considered to be the motivation within an individual to begin working towards a goal and continue down the path of accomplishing the goal until complete (Snyder, 2000). Snyder, Lapointe, Crowson & Early (1998) exemplify the agentic element of hope within individuals through comments such as “I can do this” and other positive self affirmations about individual ability to succeed. Pathway thinking is demonstrated when an individual is progressing towards achieving a goal, and it becomes hindered in some way. Individuals who are capable of pathway thinking will be able to devise and utilise alternative pathways towards accomplishing their goal successfully. In a work environment employees who possess high levels of hope

show the ability to accomplish work related goals through motivation and contingency planning, resulting in increased performance. In addition the ability to hope for successful outcomes and the skill to utilise agentic and pathway thinking in times of organisational change or stress ensures employees retain higher levels of wellbeing (Avey, Wernsing, & Luthans, 2008).

Self efficacy encompasses the confidence in one's self to successfully complete challenging tasks (Bandura, 1997). Self efficacy is defined by Stadjkovic, Luthans & Slocum (1998, p.66) as "one's conviction (or confidence) about his or her abilities to mobilize the motivation, cognitive resources or courses of action needed to successfully execute a specific task within a given context". This is based on Social Cognitive theory (Bandura, 1997), which utilises the processes of task mastery, vicarious learning, modelling, social persuasion and psychological or physiological arousal to develop efficacy within individuals (Luthans, Avey, & Patera, 2008). Task mastery consists of an individual successfully accomplishing a given task, while vicarious learning, or modelling, is the observation of people creating a belief within the individual that they also able to succeed. Social persuasion is evident when relevant others try to persuade or convince an individual that they are also able to succeed in a task. Finally, physiological or psychological arousal is demonstrated through an individual's raised confidence by interpretation of physiological sensations that they are contributing towards the success of their goal (Avey, Wernsing, & Mhatre, 2011). Within organisations an individual can have high levels of self efficacy concerning a specific task or element of their job. Self efficacy is essentially a perception or belief about the process and results of applying individual abilities to succeed.

Resilience is the ability to bounce back, when faced with problems or adversity to attain success (Luthans, Vogelgesang, & Lester, 2006). Resilience originally stemmed from clinical psychology settings investigating child and adolescent coping

in turbulent times (Block & Kremen, 1996; Garnezy, 1971, 1974). Resilience, under a clinical framework, “refers to a class of phenomena characterized by patterns of positive adaptation in the context of significant adversity or risk,” which enables individuals to bounce back quickly and effectively from adverse events (Masten & Reed, 2002, p.75). People who are higher in resilience bounce back psychologically to levels at, or even beyond, their previous level of wellbeing after adversity (Richardson, 2002). This can be seen in the PsyCap definition of resilience as a “positive psychological capacity to rebound, to ‘bounce back’ from adversity, uncertainty, conflict, failure, or even positive change, progress and increased responsibility” (Luthans, 2002, p.702). Avey et al. (2011) differentiate resilience from the other three constructs under PsyCap as it is a reactive process, rather than proactive: “Resilience enables an individual to frame an event in such a way that he or she reacts positively, bouncing back to even higher levels of wellbeing than original homeostasis. To do so, for example, individuals find a way to interpret challenges and setbacks as contributions to their development and success” (p. 218). However Luthans et al. (2006) outline resilience under the PsyCap banner as the proactive assessment of risks and personal assets that affect employee outcomes, which identifies risk as any threat of undesirable outcomes, for example economic instability at a macro level, or workplace bullying at a micro level. Resilience in employees is important due to the turbulent economic climate experienced by many organisations currently. This can manifest in financial hardships faced by companies, resulting in downsizing or challenging and insecure working conditions. Individuals who possess high resilience have the ability to positively adapt and succeed in challenging working conditions (Avey et al., 2008).

Optimism refers to the positive attributional style (Cheung et al., 2011) an individual holds about their ability to succeed now and in the future (Luthans et al., 2006). Optimism is the positive expectation of future events: “Optimists are people who expect good things to happen to them; pessimists are people who expect bad things to happen to them” (Carver & Scheier, 2002, p.231). Seligman (1991) defines optimism through an attribution framework, suggesting that optimists are individuals who make internal, stable and global attributions when they are faced with positive events, such as goal achievement; and external, unstable and specific reasons when they experience negative events, e.g. a missed deadline. Carver and Scheier (2002) put forward an expectancy perspective for optimism, highlighting that optimistic individuals have an expectation that a desirable outcome will result from increased effort, and will continue to expend effort even when faced with challenge and setbacks. Optimism was described in dispositional trait like terms in early literature (Scheier & Carver, 1985), however it was later suggested that optimism can be developed, with Seligman (1998) coining the term ‘learned optimism’. Recent research (Carver & Scheier, 2002) has conceded that optimism does indeed have the potential to be developed, supporting the PsyCap stance that Optimism can be enhanced through training and intervention. The beneficial effect of high optimism within an organisational setting can be illustrated by individuals maintaining positive expectations about their ability to succeed within times of change or stress, regardless of previous setbacks or failure (Avey et al., 2008).

Although hope, self efficacy, resilience and optimism function as independent states within individuals they can combine to create a core multidimensional construct, PsyCap. Each of the four components of PsyCap (hope, optimism, resilience and self efficacy) have been researched independently of each other, and have had conceptual evidence linking them together. Luthans et al. (2007) supported PsyCap as a second order factor by modelling each dimension separately, in different

combinations together and then as an overall PsyCap model, providing empirical evidence that PsyCap should be considered a multidimensional construct. This encompasses the view that PsyCap is a state of mind involving beliefs, attributions and expectations about oneself (or others) in relation to a particular task or context (Avey et al., 2011) with the combined attributes predicting the way an individual will react to situations more accurately than any attribute in isolation (Roberts, Scherer, & Bowyer, 2011). The anagram H.E.R.O. has recently been applied to PsyCap (Luthans, 2012), as a way in which to recall the four elements that makes up this construct: Hope, Efficacy, Resilience and Optimism.

The concept of PsyCap stemmed from Positive Psychology and was formalised by Luthans, Youssef & Avolio (2007) in their book *Psychological Capital: Developing the Human Competitive Edge*. PsyCap has been increasingly researched since its initial introduction, and has found numerous applications within organisational settings. PsyCap has been studied in relation to positive organisational elements such as employee quality of life (Nguyen & Nguyen, 2011), performance (Luthans, Avolio, Walumbwa, & Weixing, 2005; Luthans, Norman, Avolio, & Avey, 2008; Peterson, Luthans, Avolio, Walumbwa, & Zhang, 2011), wellbeing (Avey et al., 2011), sense of humour (Hughes, 2008), organisational commitment (Luthans et al., 2008) and job satisfaction (Luthans & Youssef, 2007; Roberts et al., 2011). Further research has indicated that PsyCap is significantly related to team effectiveness (Walumbwa, Luthans, Avey, & Oke, 2011) and organisational change (Avey et al., 2008). Additionally PsyCap has been investigated in relation with negative organisational elements, such as undesirable employee behaviours (Avey, Luthans, & Youssef, 2010), stress (Avey et al., 2009; Cheung et al., 2011; Roberts et al., 2011), absenteeism (Avey, Patera, & West, 2006) and workplace deviance (Roberts et al., 2011). Despite extensive research into PsyCap within an

organisational setting very little literature is available linking Psychological Capital to Work Family Conflict.

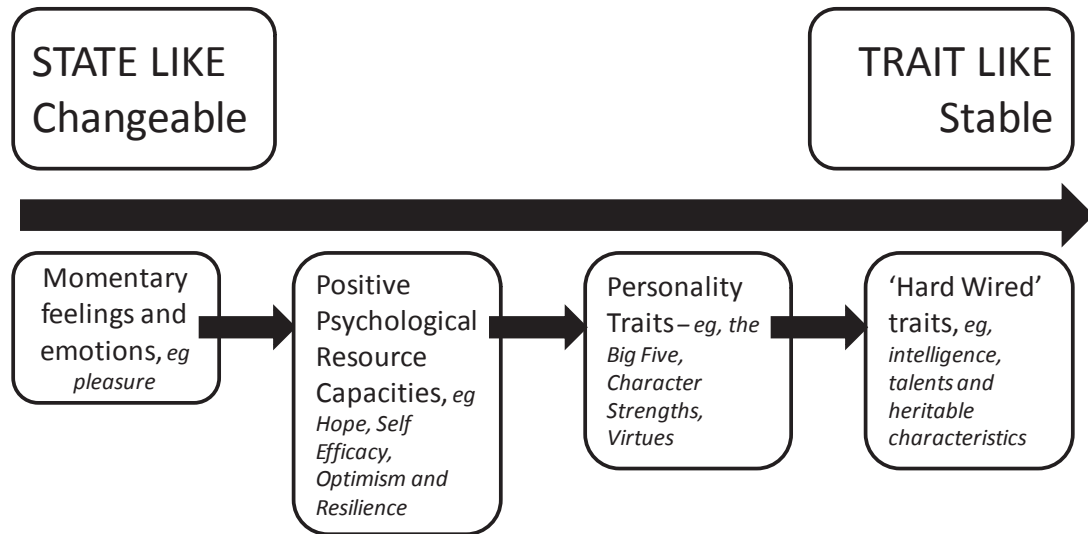
1.3 The Malleability and Development of PsyCap

1.3.1 Malleability of PsyCap

The malleability of PsyCap has been described on a state-trait continuum by Luthans et al. (2007). At one end of this continuum are pure state like feelings and emotions, such as pleasure or happiness, which can change from moment to moment (Avey et al., 2011). On the other end of this continuum exist all the more stable, non-changing traits an individual possesses, for example intelligence or inherited characteristics. Unlike these traits, which are relatively stable over time and applicable over different situations, PsyCap elements are more malleable and open to change and development. This state – trait continuum is depicted in figure 1, showing PsyCap placed toward the trait end of the spectrum (Luthans et al., 2007). Luthans et al. (2007) highlights the relevance of PsyCap's malleability within organisational environments, commenting that positive psychological resources which can be developed within individuals are pertinent for the fast paced and unpredictable work environment, with demands of swift, yet flexible, growth within the workforce.

The malleability of PsyCap is important for a number of reasons, as it provides a mechanism to increase employee wellbeing and performance, while lowering stress, undesirable workplace behaviours and absenteeism. Ways in which PsyCap can be altered within work environments have been studied and include being presented with consistent information such as repeated feedback by leaders, along with the organisational environment for example the amount of social support available (Peterson et al., 2011). In addition a short training intervention has been developed and effective in increasing employee levels of PsyCap within organisations (Luthans et al., 2006; Avey et al., 2008).

Figure 1: State-Trait Continuum



Source: Luthans, Avolio, Avey and Norman, 2007

1.3.2 The Development of PsyCap through Training

The ability to develop and enhance PsyCap within people is one of the key elements and benefits to the PsyCap construct, due to the production of positive outcomes for both the individual and the organisation with whom they are employed. Individual levels of wellbeing can be enhanced through the cognitive process that utilises all elements of PsyCap, by “taking different perspectives, appraising situations and circumstances in more positive, opportunistic, adaptive and promotion/approach focused ways” (Avey, Luthans, Smith, & Palmer, 2010, p.21). In addition, PsyCap can be used to explain an individual’s motivation and proactive actions to succeed, which draws on the agentic theories by Bandura stating that people are contributors or producers of their life circumstances, not just products of them (Bandura, 2006).

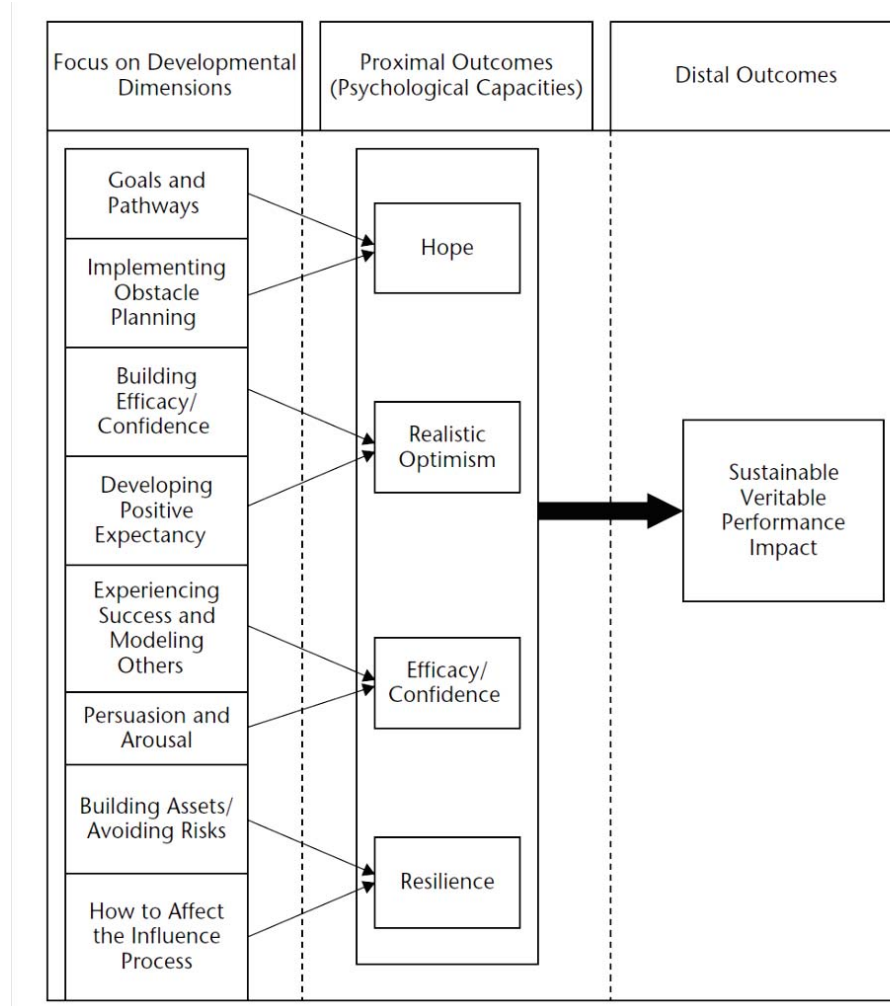
Developing PsyCap through training interventions has been shown to be successful both through face to face ‘micro interventions’ (Luthans et al., 2006) and short two hour web based training interventions (Luthans et al., 2008). The face to face micro intervention training strategy was shown to increase PsyCap in management students and practising managers (Luthans et al., 2006), with Luthans et al. (2007),

advocating training sessions of between one to three hours long. Furthermore, the success of the web based delivery of the PsyCap intervention highlighted the ease of implementation, delivery, cost and accessibility this approach offers (Luthans et al., 2008).

Training aimed at developing PsyCap includes exercises to enhance all four components. Luthans et al. (2010) conducted an investigation into the development and performance of PsyCap, with Figure 2 outlining the topics covered in a Positive Psychological Capital Intervention.

Luthans et al. (2010) outline the aspects of a PsyCap intervention as being short in duration to minimise the disruption upon the work environment, influential upon all four dimensions of PsyCap individually and also influential upon the overall positive psychological core construct through the design of the programme. A two stage training strategy is suggested by Luthans et al. (2010), which initially presents exercises aimed at enhancing each of the four components in PsyCap, and is followed by a more introspective writing, developing and reflecting set of exercises. This is done with the aim of raising awareness around each of the states that comprise PsyCap, and also to broaden understanding of the construct as a whole.

Figure 2: Positive Psychological Capital Intervention



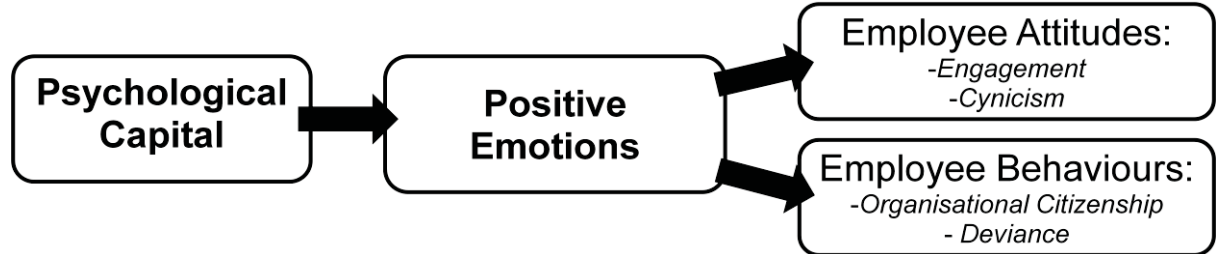
Source: Luthans, Avey, Avolio and Peterson, 2010

1.4 PsyCap in Organisational Settings

PsyCap can be directly related to the way in which people act and think within organisational settings. This, in turn, has an impact on how effective people are within their role, and how successfully they contribute to the organisation, i.e. their performance. Figure 3 outlines a model that Avey et al. (2008) propose to illustrate how PsyCap relates to positive emotions and employee attitudes and behaviours. Employees who possess high levels of PsyCap are able to experience more positive emotions within organisational environments, even when faced with challenging or stressful situations. Avey et al. (2008) outline the research that Lazarus & Folkman (1984) conducted to demonstrate that people can react

differently to the same event - one person may react with stressful emotions while another may not when encountering the same challenging situation. The positive emotions, which high levels of PsyCap can facilitate, assist an individual to navigate stressful organisational situations. This is done through positive expectations for goal achievement and successfully coping with change thereby experiencing positive feelings of confidence (optimism and self efficacy). These positive emotions are then able to enhance the ability to generate multiple pathways to deal with the situation, and if a setback does occur the ability to attribute it to an external one time circumstance and to instead consider alternative pathways to succeed (hope and resilience) (Avey et al., 2008). The way in which PsyCap interacts with employee attitudes, behaviours and resulting performance is examined in greater detail in the sections below.

Figure 3: Model of PsyCap and Employee Attitudes & Behaviours



Source: Adapted from Avey et al, 2008

1.4.1 PsyCap and Employee Behaviours

Avey et al. (2011a) found in a meta-analysis that research linking PsyCap and organisational behaviour or attitudes has focused on both positive and negative organisational behaviours.

Luthans et al. (2007) outlines positive organisational behaviours, termed Organisational Citizenship Behaviours (OCB) as encompassing conscientiousness, altruism, sportsmanship, civic virtue and courtesy using Organ's (1988, p. 4) definition of "individual behaviour that is discretionary, not directly or explicitly

recognised by the formal reward system, and that in the aggregate promotes the effective functioning of the organisation". Ilies et al. (2006) have shown that there is a link between how often and regularly people engage in OCB and individual levels of positive personality traits and states, such as PsyCap.

Avey et al. (2011a) link PsyCap to Fredrickson's (2003) broaden and build theory of positivity, suggesting that employees who have higher levels of positivity and PsyCap demonstrate more positive organisational behaviours than employees displaying negative responses. Psychological resources, such as PsyCap, can assist employees to act in a way that enhances positive organisational behaviour and increases chances for success.

In contrast to positive organisational behaviours, negative organisational behaviours may include workplace bullying, stealing, non-constructive ways of speaking and gossiping or spreading rumours. Individuals with higher levels of PsyCap appear to demonstrate fewer negative organisational behaviours (Avey et al., 2011a). Those individuals with higher PsyCap may refrain from displaying these negative behaviours more often as the resilience they possess ensures they can cope with adversity and these stressors more successfully than those who allow stress within the workplace to result in distress and frustration. Avey et al. (2009) illustrate that high levels of hope could be an enabling mechanism for employees to define and utilise alternative pathways to deal with stress, rather than resorting to negative organisational behaviours. In addition, if the stressors experienced do result in distress or frustration, high PsyCap will enable positive expectations about the current situation and ongoing future situations. In summary, a high level of PsyCap appears to buffer or combat against the stressors encountered within a work setting, that can lead to negative organisational behaviours.

1.4.2 PsyCap and Employee Attitudes

Employee attitudes can be linked positively to PsyCap (Luthans et al., 2007).

Individuals who have higher levels of PsyCap will expect good things to happen at

work (optimism), believe they create their own success (efficacy and hope) and are more able to bounce back from setbacks or adversity (resilience). Employees higher in PsyCap are more committed to their organisations (Luthans et al., 2008) and are more satisfied with their job (Luthans et al., 2007), which enhances enthusiasm and engagement within a work environment (Avey et al., 2008). Employees who demonstrate consistent positive attitudes may impact on other team members, creating a positive influence and further desirable employee attitudes within an organisation (Avey et al., 2008). PsyCap can also be negatively related to undesirable employee attitudes, such as cynicism, detachment, or negativity toward the organisation. Avey et al. (2010) outline the influence PsyCap has on undesirable attitudes, stating the motivational impact on an individual, created by PsyCap's agentic thinking, can increase determination and pathway thinking, thereby contradicting the characteristics of cynicism, such as despair and giving up.

1.4.3 PsyCap and Employee Performance

Performance has been the most extensively researched outcome in conjunction with PsyCap (Avey et al., 2011a). PsyCap acts as a motivating factor within individuals and results in increased efforts to succeed, along with a higher performance output. Campbell, McCloy, Oppler & Sager (1993) found that individuals with higher levels of PsyCap are more likely to be energized and extend the effort required for high performance over extended periods of time. Avey et al. (2011a) support this view stating that PsyCap will act as a facilitating mechanism to motivate agentic behaviour, ensuring individuals successfully accomplish goals and tasks. This will lead to enhanced performance for individuals high in PsyCap. Luthans et al. (2007) outline one research study they conducted yielded a 0.33 correlation between levels of PsyCap and performance, extending this to illustrate how a 270% return on development can be achieved utilising real-life and hypothetical business case scenarios from increased employee performance after PsyCap development interventions. Luthans, Avolio, Walumbwa and Li (2005)

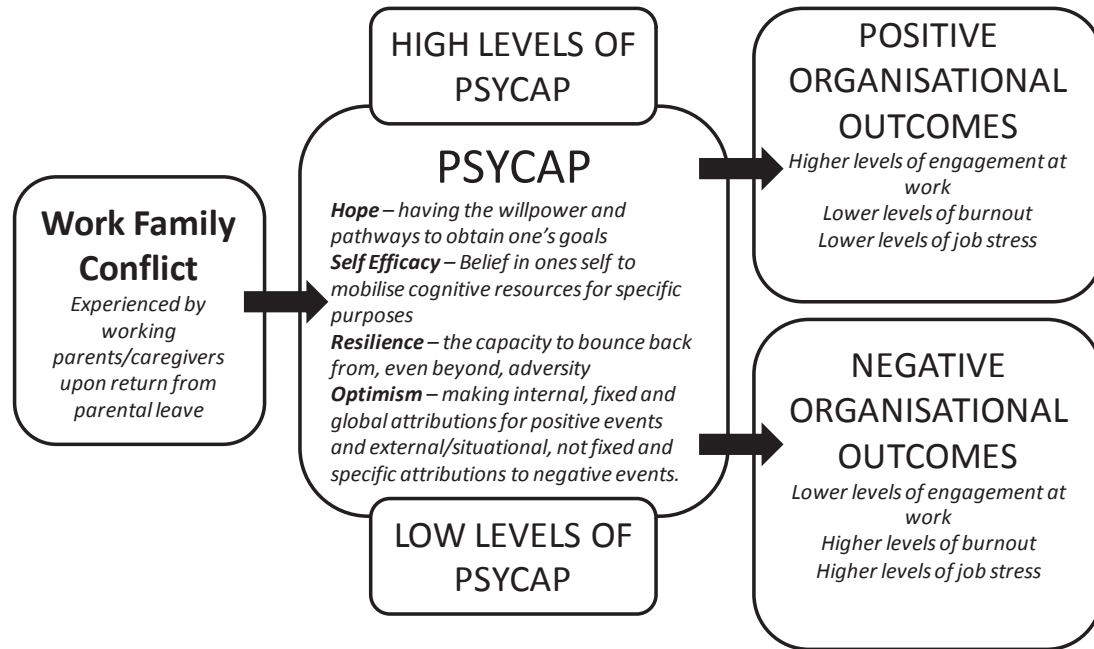
found empirical evidence through a study of Chinese factory workers that individuals levels of hope, optimism and resilience each related to performance at about the same level, but when combined had a higher relationship with performance than any one facet individually. Luthans et al. (2007) also found a positive relationship between PsyCap and performance and job satisfaction, suggesting that the higher order core construct of PsyCap represents an individual's "positive appraisal of circumstances and probability for success based on motivated effort and perseverance" (p. 550). This may provide individuals with either full or partial motivation and cognitive processing to be engaged with work performance at a higher level than those with lower levels of PsyCap.

This positive relationship between PsyCap and employee performance, along with the ability to enhance employee PsyCap through training interventions provides organisations with a clear path to obtain a competitive advantage, by leveraging and obtaining a high return on development (Luthans et al., 2006; Luthans et al., 2010; Luthans et al. 2007). Additionally Demerouti et al. (2010) outline the benefit of PsyCap training to enable coping mechanisms for fast changing environments along with enhancing performance, which then can be translated into organisational achievements.

1.5 Theoretical Model for this Research

The model proposed for this study illustrates that PsyCap will have an impact upon the levels of work family conflict and organisational outcomes a person experiences upon returning to work from parental leave. Figure 4 outlines how PsyCap is theorised to fit into the current study. After returning from parental leave an individual will experience differing levels of work family conflict and the outcomes of this, e.g. engagement, burnout and job stress. High levels of PsyCap link into positive organisational outcomes, and low levels of PsyCap flow onto negative organisational outcomes.

Figure 4: Theoretical Model for this Research



Avey et al. (2011a) argue that individuals who possess higher levels of PsyCap are “likely to be energized and put forth effort that is manifested in higher performance over extended periods of time” (p. 135). This theoretical underpinning of PsyCap links into the model for the current study, as an individual’s performance will be measured with either positive or negative organisational outcomes they demonstrate. It is proposed that the positive resources PsyCap provide will assist an individual to be motivated to successfully accomplish work tasks and balance family commitments, thereby resulting in positive organisational outcomes such as engagement and low levels of burnout and job stress. Avey et al. (2011a) stress this will be accomplished through having willpower and ability to generate multiple solutions to problems, for example dealing with childcare arrangements upon returning to work, (the hope component). Additionally being able to make internal attributions and possess positive expectations about the results from their efforts, such as believing efforts in a role on returning from work after parental leave will ensure smooth transition and good performance (the optimism facet) will contribute to this success. The ability to respond positively, while persevering in the face of adversity or setbacks (resilience) could be seen if demands between home and

work are more strenuous than initially anticipated, and an individual responds to these to ensure success rather than failure and stress. Finally, individuals will be able to attribute previous experience and successes in the role to their future success in an organisational setting after returning from parental leave, or be able to utilise others within the organisation who have transitioned successfully back into a role after a period of parental leave as a model for their own success (self efficacy).

Chapter Two: The Job Demands-Resources (JD-R) Model

2.1 Introduction to the JD-R Model

The Job Demands Resources (JD-R) model identifies predictors and outcomes of burnout and engagement (Bakker & Demerouti, 2007; Demerouti et al., 2001). The JD-R model was established in response to two other widely utilised job stress models – the Demand Control Model (Karasek, 1979) and the Effort Reward Imbalance Model (Siegrist, 1996). Bakker (2007) suggests that although these two models are functional they cannot be applied to a wide range of job settings or roles, hence the need for the JD-R Model which encompasses a wide range of working conditions. In addition, the JD-R model focuses on both negative and positive indicators of employee wellbeing, contrasting with the majority of previous models, which focused on negative outcome variables such as burnout, ill health and repetitive strain (Bakker, 2007, p. 310).

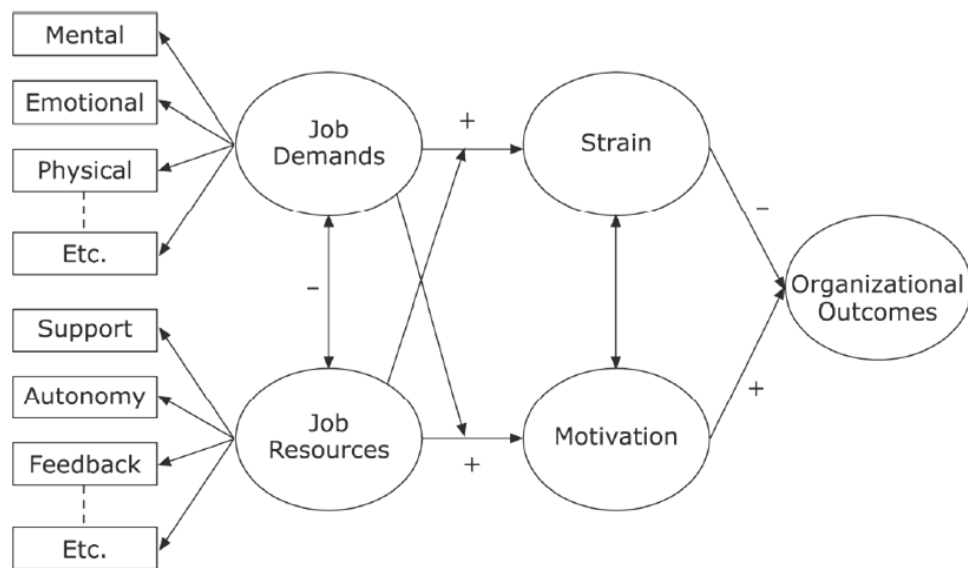
2.2 Assumptions of the JD-R Model

The JD-R Model proposes that whereas every occupation may have its own specific risk characteristics associated with job stress, these factors can be classified in two general categories - Job Demands and Job Resources (Bakker & Demerouti, 2007; Demerouti et al., 2001). Job strain and motivation are underpinned by two different psychological processes – the health impairment process and the motivational process (Llorens, Bakker, Schaufeli, & Salanova, 2006). Job demands, or poorly designed jobs, may exhaust employees' mental and physical resources, leading to reduced energy and health problems (Bakker, Demerouti, & Schaufeli, 2003). This is termed the Health Impairment Hypothesis (Demerouti et al., 2001). The second set of factors, job resources, can foster goal accomplishment and stimulate personal growth and development (Bakker et al., 2003), and can provide employees with higher organisational commitment and motivation. This is termed the Motivational Hypothesis. Job resources are posited to enhance engagement at work through a motivational process, which satisfies an individual's desire for autonomy,

relatedness and competence which then leads to an increased likelihood of achieving work goals. (Schaufeli, Bakker, & Van Rhenen, 2009, p.895).

A further assumption of the JD-R model is that job demands and job resources interact in many different combinations to determine employee wellbeing (Bakker & Demerouti, 2007; Bakker, Van Veldhoven, & Xanthopoulou, 2010). For example performance feedback and social support are job resources that may buffer job demands (Haines, Hurlbert, & Zimmer, 1991). The combination of high demands and high resources is the most effective for creating optimum levels of engagement within organisations (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007).

Figure 5: The JD-R Model



Source: Bakker & Demerouti, 2007

The key elements within the JD-R model are job demands and job resources. The various interactions between job demands and job resources within organisational settings can lead to either burnout (the strain component in Figure 5) or engagement (the motivation component in Figure 5) within employees. These then have an impact on both the employee and company through organisational outcomes such as performance or absenteeism.

2.2.1 Job Demands

Job demands refer to physical, psychological, social or organisational aspects of a job that require sustained physical or psychological (cognitive and emotional) effort or skill, and are therefore associated with certain physiological or psychological costs (Demerouti et al., 2001). Job demands can turn into stressors when meeting those demands requires high effort from which the employee has not adequately recovered (Meijman & Mulder, 1998). Examples of job demands include high work pressure, emotionally demanding interactions with clients, work load, time pressure, noise, heat, cold, other uncomfortable physical working environment conditions or lack of social support. Job demands can be linked back to Hockey's (1993) control model of demand management, whereby employees use a performance protection strategy under the influence of environmental stressors (Demerouti et al., 2001). Bakker et al. (2007) explain that "performance protection is achieved through the mobilization of sympathetic activation (autonomic and endocrine) and/or increased subjective effort (use of active control in information processing). Hence, the greater the activation and/or effort, the greater the physiological costs for the individual" (p. 313). High job demands can create stress within individuals and affect wellbeing negatively in both short term (Ilies et al., 2007) and long term situations (de Lange, Taris, Kompier, Houtman, & Bongers, 2003). In addition high job demands show a substantial bivariate correlation with poor psychological wellbeing, and often result in high health care costs (Sonnentag, Binnewies, & Mojza, 2010).

When job demands are high, employees experience increased exhaustion, but not disengagement (Demerouti et al., 2001). When job resources are lacking, high levels of disengagement (but not exhaustion) are experienced (Demerouti et al., 2001). However, when both high job demands and time limited job resources are experienced in a role, both exhaustion and disengagement will be experienced. Exhaustion and disengagement combined are referred to as the burnout syndrome.

Burnout in this situation is represented as a multifaceted trait, which can display low, medium or high levels within individuals (Demerouti et al., 2001).

2.2.2 Job Resources

Job resources are physical, psychological, social or organisational aspects of a job which function to achieve work goals, create a reduction in job demands and the associated physical and mental costs, while enhancing personal growth, learning and development (Bakker & Demerouti, 2007). Resources can be divided into organisational, interpersonal and task levels. Resources at the organisational level include salary, job security and opportunities for career advancement. Interpersonal and social resources encompass elements such as supervisor and co-worker support, the environment and culture of the team and peer/family group support. Resources included at the task level include skill variety, autonomy, feedback provided on performance, task identity and significance. Demerouti et al. (2001) outline that when the external environment does not provide adequate resources, individuals are unable to cope with the negative influences of their environmental demands, for example high workload, and cannot achieve their goals. This can result in a reduction of motivation within the individual, and the possibility of withdrawal from the job as a self protection mechanism. However, when resources are provided in adequate supply a positive relationship with work engagement has been demonstrated (Schaufeli et al., 2009). Bakker et al. (2010) highlight that job resources can play either an intrinsic motivational role, as they can assist employee growth, learning and development, or an extrinsic motivational role, as they can be utilised to achieve work goals, or both.

2.3 The JD-R Model, PsyCap and WFC

Studies investigating personal resources (Cheung et al., 2011; Xanthopoulou et al., 2007), work engagement and exhaustion (Saks & Gruman, 2011) have linked the JD-R model and PsyCap. The JD-R model has also been used as one of the ways

in which to explain how WFC may lead to negative organisational outcomes (Ford, Heinen, & Langkamer, 2007; Voydanoff, 2004, 2005). The present study utilises the JD-R model as the theoretical basis to examine whether PsyCap impacts upon the relationships of Work Family Conflict (WFC) and the organisational outcomes of engagement, job stress and burnout. Job demands such as WFC itself, or elements relate to WFC such as work overload, inflexible working conditions, unsupportive colleagues and managers, are thought to result in strain reactions, such as job stress or burnout. A lack of resources, such as social support or the personal resource of PsyCap, may further hinder an individual in accomplishing goals (Mauno, Kinnunen, & Ruokolainen, 2006). In addition, job resources have also been considered to buffer against the adverse effects of job demands on wellbeing and engagement (Bakker, Demerouti, & Euwema, 2005). PsyCap can be viewed as a job resource, with an individual's level of hope, optimism, self efficacy and resilience potentially acting as agents to assist in reducing the negative effects experienced as a result of job demands.

The JD-R model rests upon an assumption that job resources buffer the effects of job demands (Bakker et al., 2005; Bakker, Demerouti, & Verbeke, 2004; Bakker et al., 2007; Hakanen, Bakker, & Demerouti, 2005; Mauno et al., 2006), thereby affecting the organisational outcomes for individuals. In the present study PsyCap can be identified as a possible resource to buffer the organisational effects of WFC, the job demand. The current study will investigate PsyCap as a potential moderator between the WFC and engagement, job stress and burnout, based on the JD-R theoretical model assumptions. Literature around PsyCap has provided limited evidence that the personal resource of PsyCap has a moderating effect (Avey, Reichard, Luthans, & Mhatre, 2011b; Cheung et al., 2011) but strong evidence has been provided that PsyCap plays an important role in mediating organisational relationships (Liu, Chang, Fu, Wang, & Wang, 2012; Xanthopoulou et al., 2007).

For this reason the mediating role of PsyCap in the WFC and engagement, job stress and burnout relationships will also be investigated.

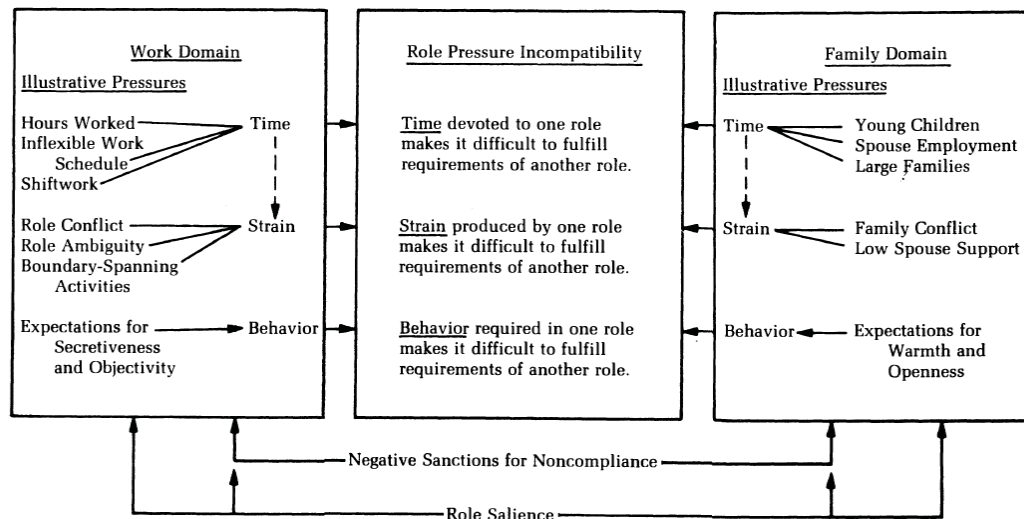
Chapter Three: Work Family Conflict

3.1 Work Family Conflict

Work Family Conflict (WFC) is “a form of inter-role conflict in which the role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985, p.77). Greenhaus et al. (1985) state that WFC can be viewed as a stressor in which work responsibilities clash with family responsibilities. WFC was originally conceptualised as a one way relationship, with no distinction made between work and family structures (Karimi, Karimi, & Nouri, 2011). However a multi-directional relationship between work and family domains was discovered (Gutek & Searle, 1991) and built into WFC research since the early 1990’s. WFC is now distinguished from Family Work Conflict (FWC), with WFC outlining the degree to which successfully participation in family life is hindered by work related requirements, and FWC demonstrating the opposite – how participation in work environments is hindered by family requirements. Work factors and outcomes have been demonstrated to have stronger relationships with WFC than FWC (Byron, 2005; Carlson, Kacmar, & Williams, 2000a) so this study has focused upon WFC. WFC can be seen to be time based, strain based and behaviour based (Greenhaus & Beutell, 1985). Time based conflict can occur when the time or attention that has been allocated to one domain makes role performance in the other domain difficult. An example of this is restricted childcare opening hours leading to a reduction in work performance by limiting the time available to be present in the work environment. Strain based conflict can happen when an individual experiences stress in one domain, which in turn hinders performance in the other domain, for example excessive hours at work limiting the available time to spend with family or creating feelings of guilt at the amount of time spent at work. Behaviour based conflict can occur when the behaviours present in one domain cannot be transposed into the other domain, for example when behavioural habits or role expectations cause stress in the other domain. This can be seen if an

individual in a managerial role is required to display self reliance, emotional stability, aggressiveness and objectivity in their work role, however family members expect the person to be warm, nurturing and emotionally available in their family role. If the individual is unable to adapt their behaviour to meet both these sets of expectations a conflict between the roles will occur. Greenhaus et al. (1985) outline how the incompatibility of these role pressures impact upon individuals, creating WFC, illustrated in Figure 6.

Figure 6: WFC Role Pressure Incompatibilities



Source: Greenhaus, 1985 p.78

Carlson, Kacmar and Williams (2000b) proposed a six dimensional model of WFC, illustrated in Figure 7, incorporating the three forms of conflict – time based, strain based and behaviour based – together with the two directions of conflict (WFC and FWC). This overcomes a number of limitations that previous models present as it considers both the nature and the direction of the conflict (Karimi et al., 2011).

Figure 7: Six Dimensional Model of WFC

		Directions of Work-Family Conflict	
		Work Interference with Family	Family Interference with Work
Forms of Work-Family Conflict	Time	Time Based Work Interference with Family	Time Based Family Interference with Work
	Strain	Strain Based Work Interference with Family	Strain Based Family Interference with Work
	Behavioral	Behavioral Based Work Interference with Family	Behavioral Based Family Interference with Work

Source: Carlson et al, 2000 p. 251

The primary sources of stress in WFC are considered to be role conflict, role ambiguity and role overload (Michel et al., 2011). Role conflict can be seen as the extent that an individual experiences incompatible role pressures (Beehr, 1995). Role ambiguity refers to an inadequate supply of information regarding responsibilities or duties required for a particular role (Beehr & Glazer, 2005). Role overload is experienced when an individual perceives themselves as having too many role tasks and not enough time in which to do them (Bacharach, Bamberger & Conley, 1990).

A number of different theories or models can be applied to the link between WFC and the stress experienced by an individual, for example role theory, resource drain theory, role conflict theory and the JD-R Model. Role Theory assumes that an individual's work and family role are the result of expectations from others, about what is considered to be appropriate behaviour for each role; and that work and family domains consist of numerous roles and demands faced by individuals (Michel et al., 2011). As an individual strives to succeed in the multiple role expectations placed upon them pressure is experienced and a drain of resources is the likely outcome. Gender is often given as an example of role theory, as while gender roles are beginning to balance, women are still stereotypically predominant in family

responsibilities, regardless of their increasing presence in work environments. Carlson et al. (2011) cite United States Bureau of Labor statistics in 2010, showing 71% of women with children under the age of 18 were working or looking for work. The competing role structures and demands faced by working women can result in WFC, especially in conjunction with low support or resources. However, Grzywacz and Bass (2003) highlight how the participation in multiple roles can also be enriching for women and improve the quality of life for individuals both at home and work.

The JD-R model has been used to examine the relationship WFC may have with job demands and resources and engagement or burnout at work (Ford et al., 2007; Voydanoff, 2004, 2005). One of the central assumptions of the JD-R model is that job resources provide benefits for the individual through motivating factors, while job demands provide negative outcomes through strain or stressors, which can contribute to WFC in working parents or caregivers. Mostert et al. (2011) outlines that high work demands alone are not sufficient to experience WFC, as long as there is a sufficient recovery period for individuals to renew their personal resources. However, if individuals experience high workloads and are also unable to recover adequately (due to family demands, or continued work demands after working hours for example) this can lead to stress, which turns into lowered levels of engagement or heightened levels of burnout and stress (Mostert et al., 2011). Job resources assist individuals to recover when faced with job demands and family demands. Resources which provide individuals with the opportunity to learn and develop contribute to the perception that the work role is beneficial for family life (Voydanoff, 2004). Individuals who experience high levels of autonomy will have positive effects spill over into family domains (Grzywacz & Butler, 2005). With sufficient recovery time an individual will be able to function more effectively at work while being able to utilise skills learned at work in the home environment, for

example time management skills assisting with planning family routines at home (Edwards & Rothbard, 2000). Job resources such as skill discretion, job security and schedule control are the most relevant for providing a satisfactory balance between work and family roles, while job demands such as inflexible work schedules and psychological demands predominately contribute to WFC (Carlson et al., 2011).

3.2 WFC in Organisational Settings

Research into WFC has focused on elements such as how work and family conflicts impact on each other (Buehler & O'Brien, 2011; Byron, 2005; Carlson, Grzywacz, & Zivnuska, 2009; Ford et al., 2007; Greenhaus & Beutell, 1985; Greenhaus, Collins, & Shaw, 2003; T. H. Hammer, Saksvik, Nytro, Torvatn, & Bayazit, 2004; Hill, 2005; Ilies et al., 2007; Lu et al., 2011; Michel et al., 2011; Rantanen et al., 2011; Van Steenbergen, Ellemers, & Mooijaart, 2007; Wayne, Grzywacz, Carlson, & Kacmar, 2007; Yavas, Babakus, & Karatepe, 2008). The negative effects of WFC can impact on individuals through stress (T. H. Hammer et al., 2004; Hill, 2005; Karimi et al., 2011; Rantanen et al., 2011), and organisations through absenteeism (Anderson et al., 2002). The outcome of much of the research into the WFC field has been for organisations to implement family friendly policies and procedures in an attempt to minimise the negative effects of WFC. Practical applications in the workforce that address WFC can include flexi-time or flexible schedules, on-site childcare, paid parental leave and opportunities to work remotely. A positive link has been found between the existence or quantity of policies addressing WFC issues and subsequent employee performance (Konrad & Mangel, 2000; Odle-Dusseau, Britt, & Greene-Shortridge, 2012; Perry-Smith & Blum, 2000). However, informal support structures and employee perception of a supportive organisation may be more important than the formal support offered (Kossek, Pichler, Bodner, & Hammer, 2011). It has been suggested that the perception of a family friendly organisation ties in to a wider organisational climate of family supportive behaviours (L. B.

Hammer, Kossek, Zimmerman, & Daniels, 2007). Family supportive behaviours indicate a context of informal support structures and a sense of organisational concern for employees (Casper & Harris, 2008), which in turn enhance individual employee well being. The extent to which an organisation is considered family supportive is gauged through global employee perceptions (Allen, 2001). Even though formal family friendly policies may be available within an organisation, people may not take advantage of them for a variety of reasons, including negative reactions by peers and supervisors, or restricted career development opportunities (Booth & Matthews, 2012). A negative relationship has been shown to exist between family friendly organisational perceptions and the six dimensions of WFC initially proposed by Greenhaus and Beutell (1985), in particular strain and time based WFC (Lapierre et al., 2008). The more employees perceive a supportive family friendly organisational climate, the more likely they are to experience positive attitudes, enhanced wellbeing and increased performance in both work and home domains (Booth & Matthews, 2012).

3.3 The effects of WFC

WFC has been related to job stress, and in particular the physical and mental health effects of this on individuals (Carlson et al., 2011). WFC is related to lowered mental and physical health over time (Carlson et al., 2011), with women experiencing greater stress and burnout when utilising multiple workplace flexibility programmes, when compared to men in the same situation (Grzywacz, Carlson, & Shulkin, 2008b). A negative relationship has been shown between WFC and job satisfaction (Bruck, Allen & Spector, 2002; Karimi et al., 2011), stating that individuals who experience high levels of conflict between work and family domains show lower levels of job satisfaction.

It has been postulated that some of the outcomes individuals can experience as a result of WFC may also have positive effects, as through multiple role participation

working parents can enhance skills in both working and home environments. An individual may gain energy, motivation and positive affect from resources in the workplace, which can then be translated to enable better fulfilment of family roles along with increased mental and physical health (Van Steenbergen & Ellemers, 2009). These positive effects can be linked back to family supportive organisations, through the social support mechanism (Booth & Matthews, 2012). Ruderman, Ohlott, Panzer and King (2002) outline that numerous roles for working women in managerial roles can be psychologically beneficial, both through increased mental and physical wellbeing, and also through increased work related skills such as leadership abilities. Multiple role commitment positively relates to life satisfaction, self esteem and self acceptance, in addition to enriched interpersonal skills and effectiveness in managerial roles (Ruderman et al., 2002). The way in which an individual frames up the challenges and multiple roles they are faced with upon return to the workforce after parental leave may be again strengthened by their positive personal resources of PsyCap, to enhance these outcomes even further.

3.4 PsyCap and Work Family Conflict Hypothesis

There is currently a lack of empirical evidence investigating a relationship between WFC and PsyCap. Liu, Chang, Fu, Wang and Wang (2012) conducted a study investigating whether PsyCap mediated the relationship between WFC and burnout, concluding that WFC was associated with burnout among Chinese doctors, mediated by PsyCap. Liu et al. (2012) suggest that when the construct of PsyCap is removed, or controlled for, individuals would experience similar levels of WFC, and PsyCap may be a positive resource which can be drawn upon to reduce the negative effects of WFC.

The motivational and strengthening components of PsyCap would indicate that it could be successfully utilised as a buffer between the negative effects of WFC, for example job stress and burnout, within individuals. In addition, an individual high in

hope, optimism, self efficacy and resilience may not experience such high levels of the conflicts between work and family domains as those with lower levels, due to the positive effects these personal resources provide.

The positive resource that PsyCap provides strengthens individual chances of success within organisational settings, while the negative demands of WFC weaken individual ability to succeed. Due to this it is hypothesised that PsyCap will be negatively correlated with WFC.

H1 PsyCap will be negatively correlated with WFC

In addition to this, research has indicated that WFC demonstrates relationships with organisational outcomes that individuals experience as a result of demands placed upon them by both work and family domains (Lu et al., 2011). This study investigated the outcomes of engagement, job stress and burnout in relation to WFC, all of which are discussed in greater detail in following chapters. WFC has been linked to lower levels of engagement (Rothbard, 2001; ten Brummelhuis, Bakker, & Euwema, 2010), along with higher levels of job stress (Ford et al., 2007; Hill, 2005; Michel et al., 2011) and burnout (ten Brummelhuis et al., 2010). For this reason it is hypothesised that as WFC increases an individual's level of engagement will decrease.

H2 WFC will be negatively correlated with engagement

Additionally it is hypothesised that WFC will be positively correlated with both job stress and burnout.

H3 WFC will be positively correlated with job stress

H4 WFC will be positively correlated with burnout

Chapter Four: Outcomes of Job Demands and Resources

4.1 Work Engagement

4.1.1 Introduction to Work Engagement

Engagement is a popular concept within organisations, with a Google search yielding 21,900,000 hits for the term “workplace engagement” and 29,600,000 hits for the term “employee engagement” when searched in May 2012. A number of approaches to engagement exist, and the popularity of engagement within work environments may be seen to primarily stem from the effect that it has on employees, which in turn ultimately impacts on organisational profits. The effects of engagement can be seen to impact individuals in positive ways, increasing overall wellbeing, thereby providing benefits not only for organisations but for the individuals themselves.

One approach views engagement as a set of factors, or resources, that motivate an individual, such as support, opportunities to learn/advance, performance feedback and the ability to utilise skills. Harter, Schmidt and Hayes (2002) conducted a meta analysis of studies utilising the Gallup12 Questionnaire, which is underpinned by this view of engagement, to demonstrate that employee engagement was an important driver for organisations to gain increased performance. Engagement has been shown to have a significant impact on numerous organisational outcomes, such as productivity, profit, turnover, health and safety issues and customer satisfaction (Harter et al., 2002). Van Rooy, Whitman, Hart and Caleo (2011) explain the link between employee engagement and organisational performance by stating that the higher employee engagement is the lower turnover will be, which then leads to the organisation experiencing greater efficiency. High employee engagement will also result in customer service levels also being higher and overall business performance flourishing at increased rates. In addition, Van Rooy et al. (2011) emphasise that employee engagement does not decrease due to external

factors, such as difficult economic times, making it highly relevant across all environments and a pathway for organisations to succeed even when facing financial hardship.

An alternative view has operationalised engagement as separate from job resources and positive work outcomes, and as the opposite of burnout. Work engagement under this approach has been defined as a “positive, fulfilling, work related state of mind” characterised by vigour, dedication and absorption (Schaufeli & Bakker, 2004, p.295), and refers to a state of mind that is not associated with any particular object, event, individual or behaviour. Vigour is related to high levels of energy and mental resilience at work, along with a willingness to expend effort and to persist in the face of difficulty (Sonnentag et al., 2010). Schaufeli et al. (2004) describe dedication as a sense of significance, enthusiasm, inspiration, pride and challenge, and emphasise that dedication and vigour are the opposite states to exhaustion and cynicism. Absorption is a further element of engagement (Bakker, Schaufeli, Leiter, & Taris, 2008), characterised by an individual being engrossed in their work, so that time passes quickly and detachment from work is difficult (Schaufeli & Bakker, 2004). Positioning engagement as the direct opposite of burnout has been disputed by some, as “not feeling burned out doesn’t necessarily mean that one feels engaged, and not feeling engaged doesn’t necessarily mean that one is burned out” (Schaufeli & Salanova, 2011, p.41).

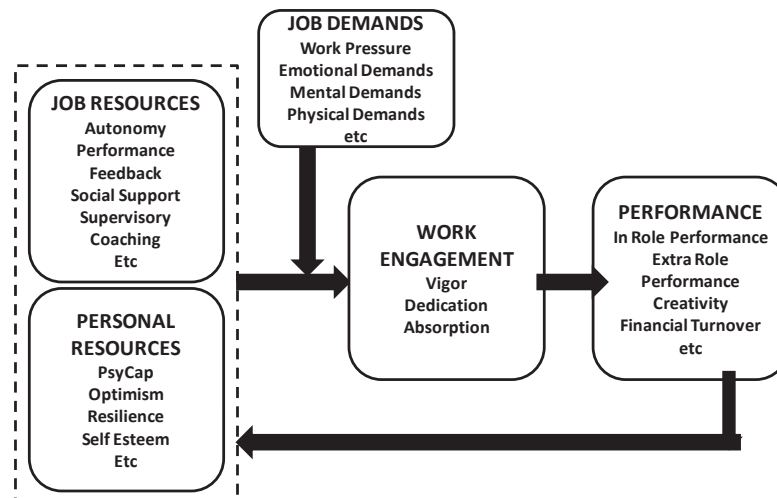
Despite differing theoretical assumptions around engagement, most researchers appear to agree that elements that indicate an engaged worker are high levels of energy and a strong sense of identification with their work (Kanste, 2011). Engagement affects individual indicators of well being, such as personal accomplishment, health, self efficacy, job satisfaction and turnover intention (Kanste, 2011). Engaged employees are less likely to demonstrate emotional exhaustion and depressive symptoms (Hallberg & Schaufeli, 2006), and appear to

experience more positive emotions such as happiness, joy, enthusiasm and enjoy better physical and psychological health (Kanste, 2011).

4.1.2 Engagement and the JD-R Model

Engagement can be integrated into the JD-R model as a motivational process which mediates the relationship between job resources and positive organisational outcomes (Schaufeli & Bakker, 2004). Job resources are seen to become more salient and gain motivation potential when employees are confronted with high job demands (e.g. workload, emotional demands and mental demands). Figure 8 outlines the JD-R Model of Engagement, with positive relationships between job and personal resources and engagement resulting in increased performance. Work engagement has been consistently predicted by job resources, for example autonomy, supervisory coaching, performance feedback, personal resources such as PsyCap, and active coping style (Kanste, 2011). In addition, both job resources and personal resources facilitate engagement at work (Bakker, Albrecht, & Leiter, 2010; Bakker & Demerouti, 2008), particularly when people are confronted with high job demands. These situations are termed ‘active jobs’ and are examples of when individuals become motivated to actively learn and develop their skills within a work environment (Karasek, 1979).

Figure 8: The JD-R Model of Engagement



Source: Based on Bakker & Demerouti, 2007

Job and personal resources are closely related, with personal resources able to be utilised as independent predictors of work engagement, or in conjunction with job resources (Xanthopoulou et al., 2007). Hobfoll et al. (2003) outlined personal resources as positive self evaluations linked to resiliency, one of the constructs of PsyCap. Personal resources refer to the way in which an individual perceives their ability to control and have an impact on their environment successfully (Hobfoll et al., 2003), with the importance stemming from the relationship between personal resources and work performance. The higher personal resources are the stronger self regard and clearer goal direction a person will possess. Personal resources are then utilised to control and impact upon work environments successfully and to achieve career success when an individual is engaged (Luthans et al., 2008).

4.1.3 Work Engagement and PsyCap

PsyCap can be related to Work Engagement through cognitive processes and the consequent positive outcomes these motivational states result in for individuals. The motivating personal resources of PsyCap have been shown to predict how engaged employees are within their work, with Kanste (2011) describing work engagement, when it is considered an affective motivational state, as an individual's cognitive ability to be energetic and resilient at work as well as persistent in difficult times. Engaged workers demonstrate high levels of self efficacy, shown through the ability to meet challenges they face in an array of working environments, and high levels of optimism, shown through the expectancy of good outcomes (Bakker et al., 2010). Xanthopoulou et al. (2007) studied elements of PsyCap in relation to engagement, while incorporating organisational based self esteem, to show that engaged individuals participate readily in roles within the organisation, again demonstrating high levels of the components of PsyCap. The personal resources that exist within the construct of PsyCap are able to explain how job resources are utilised to create work engagement (Xanthopoulou, Bakker, Demerouti, & Schaufeli, 2009). Employees who possess high levels of hope, optimism, resilience and self

efficacy demonstrate the ability to utilise any positive job resources available in a working environment in a positive way to motivate them to pursue goals and succeed, thereby leading to higher levels of work engagement and performance.

4.1.4 PsyCap and Work Engagement Hypotheses

PsyCap appears to be an important predictor of an individual's level of engagement, falling under the personal resources category of the JD-R model above. As both these elements are positively related, it can be hypothesised that as one increases, so will the other:

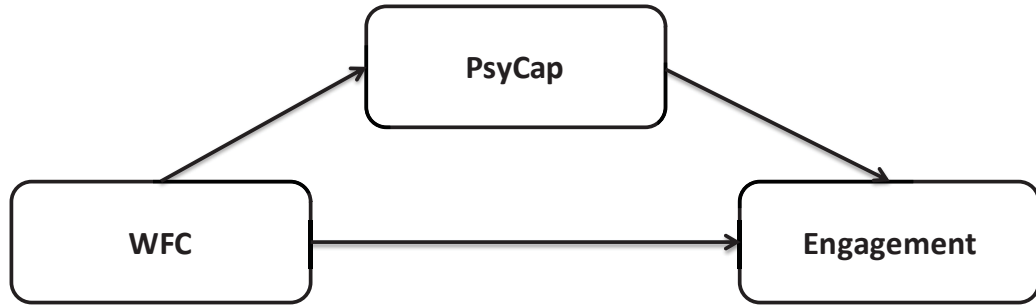
H5: PsyCap will be positively correlated with engagement

In the current study, it is hypothesised that an individual's PsyCap will affect the outcomes of work family conflict, which could lead to higher levels of engagement than if PsyCap was not controlled for. PsyCap may be said to function as a mediator to the extent that it accounts for the relation between the predictor, WFC, and the criterion, engagement (Baron & Kenny, 1986). PsyCap appears to be an important mechanism in the enhancement of engagement within individuals (Xanthopoulou et al., 2009), and can be viewed as a personal resource using the JD-R model. As WFC can be viewed as a job demand it is hypothesised that PsyCap will have the ability to affect the level of engagement caused by WFC experienced by parents returning to the workforce, thereby mediating the relationship between WFC and engagement.

H6: PsyCap will mediate the relationship between WFC and engagement

The proposed relationship between WFC and engagement, as mediated by PsyCap is illustrated in Figure 9.

Figure 9: Proposed model of PsyCap as a mediator between the WFC and engagement relationship



As both PsyCap and engagement are positive states within an individual it is also hypothesised that an individual's level of PsyCap will have a moderating effect on the strength of their engagement. A moderator is a variable that affects the direction and/or strength of the relation between a predictor variable (WFC) and a criterion variable (engagement) (Baron & Kenny, 1986). In this study an individual's level of PsyCap is hypothesised to affect the strength of the relationship between WFC and engagement. In particular individuals with higher levels of PsyCap will demonstrate higher levels of engagement than those with low levels of PsyCap, even as WFC increases, or the relationship between WFC and engagement will be stronger for those with high levels of PsyCap than those with low levels of PsyCap:

H7: PsyCap will moderate the relationship between WFC and engagement

4.2 Job Stress

4.2.1 Introduction to Job Stress

Stress can be defined in terms of the change in one's mental state in response to situations (stressors) that pose a challenge or threat (Colligan & Higgins, 2006).

Stressors are external factors which can impact upon a person in either positive (eustress) or negative (distress) ways, depending on the coping capacity, support or personal resources of the individual. The term 'stress' or 'stressor' is most commonly utilised to define external influences that have the potential to exert negative influences on most people in most situations (Demerouti et al., 2001). Stressors may create chronic emotional, psychological and physical complications when the individual does not have the capacity to adapt (Colligan & Higgins, 2006).

Stress has become an important and widely utilised concept to explain the reasons behind numerous health concerns such as fatigue, hypertension and heart disease (Kinman & Jones, 2005). In addition, it has been shown that the workplace is one of the main attributions for stress or strains that people experience (McCormick, 1997).

4.2.2 Stress within Organisations

Stress within the workplace has become a common phenomenon and a widely accepted reason for both mental and physical ailments that individuals experience.

The World Health Organisation has declared occupational stress to be a worldwide epidemic (Avey et al., 2009) and the American Psychological Association ("Stress In America," 2008) cites work as the most significant source of stress to Americans, due to heavy workloads, uncertain job expectations and long hours. Stress can take the form of health problems, absenteeism, lowered motivation and reduced performance (Dewe & O'Driscoll, 2002). Over half the participants in a New Zealand stress study perceived little or no control over the reasons that may cause workplace stress, however the majority felt that individuals are responsible for dealing appropriately with any workplace stress experienced rather than responsibility falling to managers or organisations (Dewe & O'Driscoll, 2002).

Workplace stress can occur when an individual perceives their abilities to cope with a situation are not sufficient, thereby resulting in a disturbance to their physical and psychological equilibrium (Colligan & Higgins, 2006). The way in which the individual then responds to the stressor is determined by the external resources available to the individual to cope (for example, social support within the work setting), and also the individual's own personal coping resources (for example, PsyCap). Workplace stress can stem from a variety of sources, for example high workload, pressure, workplace politics or bullying, and work family conflict. Some employees work within a toxic environment characterised by demands, pressure and ruthlessness, experiencing anxiety, fear and paranoia as a result (Gilbert, Carr-Ruffino, Ivancevich, & Konopaske, 2012). When an individual feels threat or harm can arise from high work demands and over-controlling or harassing environments this most often produces stress (Colligan & Higgins, 2006).

Workplace stress can be linked to physical and mental outcomes, which can then impact upon individual health or behaviour and the wider organisation. Physical health concerns that have been linked to workplace stress include heart disease, chronic pain, unstable blood pressure, increased cholesterol, ulcers and diabetes (Colligan & Higgins, 2006). Additionally, workplace stress can affect individuals' mental wellbeing through negative psychological states like anxiety, anger, irritability, pessimism, resentment and depression (Colligan & Higgins, 2006). Stress experienced by employees can have a negative impact on organisations through aspects such as absenteeism (Maltin, 2011), lowered productivity (Ongori & Evans Agolla, 2008; Tarafdar, Turagu-Nathan, & Ragu-Nathan, 2007), undesirable employee behaviours (Roberts et al., 2011) and burnout (Garrosa, Rainho, Moreno-Jiménez, & Monteiro, 2010; Grzywacz et al., 2008b).

Many organisations attempt to address organisational stress and assist employees experiencing stressful reactions through programs focusing on working conditions,

wellbeing and redesign of jobs (Avey et al., 2009). In addition, training for managers in organisational stress, encouraged participation in recreational activities or sport, paid 'mental health days' and birthdays off work are all examples of innovative schemes to combat work stress. A further avenue for reducing stress within the workplace is to focus and develop personal resources within employees, such as PsyCap, providing a more robust coping capacity for stressful situations.

4.2.3 Job Stress and PsyCap

Numerous studies have investigated the link between PsyCap and job stress (Avey et al., 2011; Cheung et al., 2011; Luthans et al., 2008; Roberts et al., 2011), with the conclusion that PsyCap can reduce the negative effects of job stress and increase overall wellbeing in individuals. Individuals higher in PsyCap experience lower levels of the negative symptoms of job stress, for example irritability, being unable to relax and agitation (Avey et al., 2009), and also thrive in environments of high job stress, as they are able to utilise their strengths in hope, optimism, resiliency and self efficacy (Roberts et al., 2011).

Each of the elements that make up PsyCap can be seen to combat levels of job stress and the negative effects job stress can create (Bandura, 2008; Snyder, 2000; Totterdell, Wood, & Wall, 2006; Tugade & Fredrickson, 2004). Self efficacy has been shown to buffer negative job stress outcomes as individuals with high levels of this construct are more confident in their own ability to succeed when faced with challenging situations. Most of the stress reactions experienced by humans are governed by beliefs about their coping ability and self efficacy (Bandura, 2008). Optimism, like self efficacy, is related to an employee's perception of stressful situations with people who demonstrate high levels of optimism being less likely to experience stress and the symptoms associated with stress in working environments (Totterdell et al., 2006). The construct of hope has been shown to provide individuals with a buffering mechanism in dealing with stressful work situations, through its negative correlation with anxiety and protection against

perceptions of vulnerability, uncontrollability and unpredictability (Snyder, 2000). Resilience has been suggested as the most important positive resource to navigate a turbulent and stressful workplace (Avey et al., 2009). The current economic climate is characterised by high uncertainty, with restructuring, redundancies and job redesigns all commonplace. This creates stress for both those directly impacted and also the 'surviving' employees who remain. The ability to recover from adversity and personal setbacks is imperative in dealing with the stresses of organisational change and an uncertain working environment. Individuals with high levels of resilience are more able to deal with stressors encountered in a fast paced and changing work environment (Tugade & Fredrickson, 2004), as they are open to new experiences, are flexible to changing demands, and show more emotional stability when faced with adversity (Avey et al., 2009).

As PsyCap is a positive personal resource, and job stress is a negative outcome of job demands, it can be hypothesised that as one increases the other will decrease, thereby showing a negative relationship.

H8: PsyCap will be negatively correlated with job stress

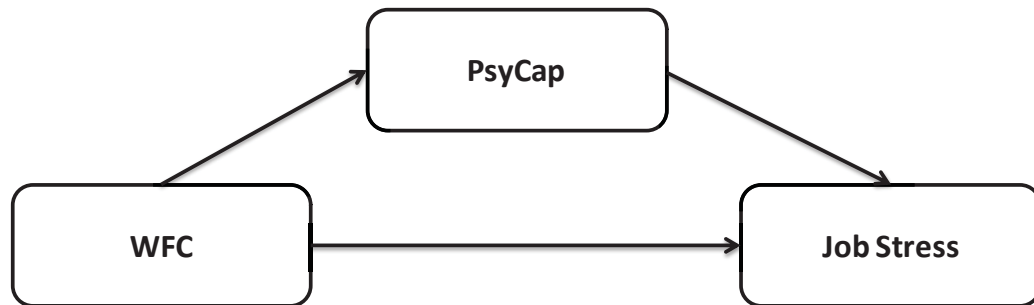
Evidence that PsyCap has an effect on job stress is important for organisations as a tool to incorporate in stress management programmes and also as a developmental opportunity to prevent or reduce workplace stress before it occurs. PsyCap appears to be an important mechanism in the reduction of job stress for individuals (Avey et al., 2009), as can be seen in parents or caregivers returning to work after parental leave with those high in PsyCap potentially adapting to the working environment with more ease and thereby having fewer negative effects from job stress. Employees who are high in PsyCap will be more hopeful when faced with negative situations, more confident (efficacious) in their ability to cope, optimistic that the situation will get better whilst demonstrating resilience when faced with stressors (Avey et al., 2009). It is hypothesised that PsyCap will affect level of job stress

caused by WFC experienced by parents returning to the workforce, thereby mediating the relationship between WFC and job stress.

H9: PsyCap will mediate the relationship between WFC and job stress

The proposed relationship between WFC and job stress, mediated by PsyCap is illustrated in Figure 10.

Figure 10: Proposed model of PsyCap as a mediator between the WFC and job stress relationship



Individuals with higher levels of PsyCap may experience lower levels of WFC, and the negative effects of this, such as job stress. PsyCap can be conceptualised as a set of cognitive resources (Cheung et al., 2011) which employees are able to use when facing challenges within the workplace. Cheung et al. (2011) outline that PsyCap would be expected to result in a moderating effect on cognitive related outcomes, such as job stress, due to a fit between the cognitive resources and cognitive demands. Due to this it is hypothesised that the higher an individual's level of PsyCap is, the lower their job stress (as a result of WFC) will be, therefore PsyCap will buffer the relationship between WFC and job stress.

H10: PsyCap will moderate the relationship between WFC and job stress

4.3 Burnout

4.3.1 Introduction to Burnout

One of the original definitions of burnout was proffered by Maslach (1982) who conceived it as a work related syndrome occurring most often within individuals who work with other people. Maslach's (1982) definition of burnout encompassed emotional exhaustion, depersonalisation and reduced personal accomplishment. Burnout has also been described more simply as "a work related stress reaction that can be found among employees in a wide variety of occupations" (Bakker, Van Emmerik, & Euwema, 2006, p.465). An employee who is experiencing burnout will commonly feel exhausted, hold negative cynical attitudes towards both their working environment and the people in it, and will have lowered confidence in their own abilities to competently fulfil the requirements of their role and be successful at work (Bakker et al., 2006).

Demerouti et al (2001) extended Maslach's (1982) initial research and provided two core dimensions to burnout: exhaustion and cynicism, proposing that the development of burnout follows two processes within the JD-R Model. Firstly demanding elements of work, for example work overload, can lead to constant overtaxing and then exhaustion within individuals. Emotional exhaustion is characterised by a feeling of chronic fatigue, stemming from continuous exposure to demanding working conditions (Bakker, Demerouti & Schaufeli, 2002; Maslach, Schaufeli & Leiter, 2001). The second process focuses on when resources are lacking within the workplace, which hinders employees from meeting the demands of their job, leading to withdrawal behaviour then depersonalisation and disengagement in the long term. This depersonalisation and detaching response is reflected in callous, distanced and cynical attitudes to work or other employees within the organisation (Bakker, Van Emmerik, & Van Riet, 2008). Essentially the combination of high job demands and a lack of resources will increase the potential for an individual to experience burnout. This definition of burnout included in the

JD-R Model, stemmed from studies within human service occupations (Demerouti et al., 2001), however it can be extended to relate to many other organisational settings.

Individuals are affected by burnout in work environments in negative ways. Burnout can affect employee performance negatively, with three ways in which this can occur (Singh, Goolsby, & Rhoads, 1994). Burnout can be illustrated by a reduction in energy an individual is able to expend in a role, and therefore the amount of effort required to perform effectively. Secondly, individuals experiencing burnout can become stuck within a cycle of not seeking out support or being motivated to adjust their current working situation, thereby showing a decline in performance. Finally an employee's self confidence in their ability may be hindered if experiencing burnout, again leading to a decline in performance (Bakker et al., 2008). Two differing schools of thought exist around the relationship between burnout and engagement. One view is that burnout and engagement are two opposite states on one continuum, believing that an individual experiencing high burnout will necessarily not possess high levels of engagement simultaneously. The second viewpoint is that work engagement and burnout are two independent states "that are, by their very nature, negatively, but not perfectly related" (Bakker et al., 2006, p.469). Although the literature remains largely unresolved this study has approached work engagement and burnout as two independent states, supporting the idea that individuals can be both engaged and burned out to varying degrees at any one time.

4.3.2 Burnout and PsyCap

Low levels of PsyCap can be linked with burnout in employees. When employees invest large amounts of effort and personal resource into their jobs without receiving appropriate outcomes such as learning or promotion opportunities or positive feedback, they may experience burnout due to this depletion of resources (Schaufeli & Salanova, 2011). If there is not a positive resource or mechanism such as

PsyCap, to buffer an individual who expends large quantities of energy (physical, emotional and mental) and faces a disappointing outcome, this will result in the inability to reframe negative situations into positive challenges (through the use of hope, optimism, resilience and self efficacy). The inability to reframe and change negative situations into positive challenges may then result in burnout.

4.3.3 Burnout and PsyCap Hypotheses

Burnout can be viewed as a result of an individual not possessing adequate positive personal resources, such as those found in PsyCap, to persevere in difficult circumstances or challenging work environments. It is hypothesised that a negative relationship will exist between PsyCap and burnout:

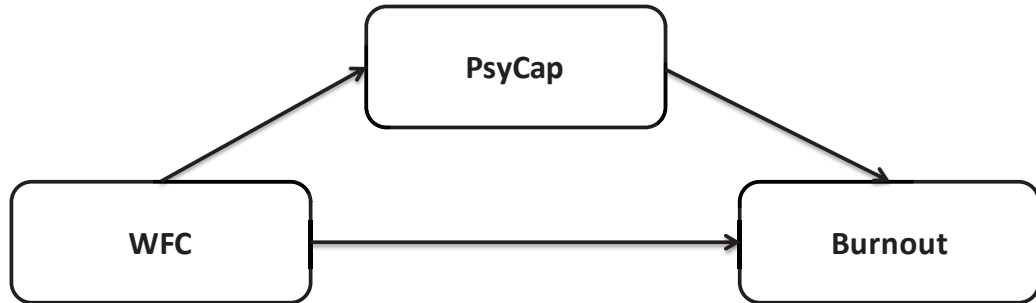
H11: PsyCap will be negatively correlated with burnout

In the current study, it is hypothesised that an individual's PsyCap will affect the negative effects of work family conflict, thereby leading to lower levels of burnout than if PsyCap was not controlled for. Evidence that PsyCap has the ability to reduce burnout in individuals is important for organisations as an opportunity to prevent or reduce burnout related to the workplace before it occurs. PsyCap appears to be an important mechanism in the reduction of burnout within individuals (Cheung et al., 2011), as can be seen with an individual's level of PsyCap enabling people to adapt to returning to work and coping with WFC with more ease, leading to reduced burnout. Utilising the JD-R model, WFC can be seen as a job demand upon individuals. Job demands have been shown to have a strong influence on burnout (Xanthopoulou et al., 2006), which in turn leads to negative outcomes, such as absenteeism and reduced performance (Bakker et al., 2003; Bakker et al., 2004). As PsyCap can be viewed as a personal resource within individuals, it is hypothesised that PsyCap will have the ability to affect the level of burnout caused by WFC experienced by parents returning to the workforce, thereby mediating the relationship between WFC and burnout.

H12: PsyCap will mediate the relationship between WFC and burnout

The proposed relationship between WFC and burnout, mediated by PsyCap is illustrated in Figure 11.

Figure 11: Proposed model of PsyCap as a mediator between the WFC and burnout relationship



Individuals with higher levels of PsyCap may experience lower levels the negative organisational outcomes stemming from WFC, such as burnout. As PsyCap can be viewed as a personal resource for individuals (Cheung et al., 2011) people will be able to draw upon this when facing difficulties when experiencing demands such as WFC. Due to this it is hypothesised that the higher an individual's level of PsyCap is, the lower their burnout (as a result of WFC) will be, therefore PsyCap will buffer the relationship between WFC and burnout.

H13: PsyCap will moderate the relationship between WFC and burnout

Chapter Five: Method

5.1 Participants

Participants in the current study consisted of 108 working women within New Zealand. The study was open to both males and females, however no males opted to complete the survey. Of the 108 women who completed the online survey, 68% (n = 73) were between the ages of 21-35 and 32% (n = 35) were between 36-45 years old. Both part time (52%) and full time (48%) roles were included, and 8% (n = 9) of the participants comprised a single parent household. The majority of participants cared for either 1 (42%) or 2 (50%) dependents, however participants caring for 3 (3%) and 4+ (5%) dependents were also represented (Table 1).

The majority of the participants in the current study took between 7-12 months off work on parental leave (55%, or 58 responses), while 11% (12) took 0-3 months of parental leave, 24% (n = 25) took between 4-6 months of parental leave and 10% (n = 11) took over one year off from work on parental leave. Fifty-five percent of the study (57 respondents) had been back in a working environment for over a year on completion of the survey, while 14% (15) had returned in the past three months, 10% (11) had returned 4-6 months ago, and 22% (24) had returned 7-12 months ago. Table 1 outlines participant demographic information.

All participants who disclosed role information were in professional occupations, consisting of both office and field based work environments. All participants were employed within the New Zealand workforce.

Any missing data was omitted from subsequent data analysis, utilising listwise deletion.

Table 1: Participant Demographic Information

		Count	Percentage
Gender	Female	108	100%
	Male	0	0%
Age	21-35	73	68%
	36-45	35	32%
Work Type	Part Time	56	52%
	Full Time	51	47%
	Missing	1	1%
Family Structure	Single Parent	9	8%
	Two Parent	98	91%
	Missing	1	1%
Dependents	1	45	42%
	2	53	49%
	3	3	3%
	4+	5	5%
	Missing	2	2%
Length of Parental Leave	0-3 Months	12	11%
	4-6 Months	25	23%
	7-12 Months	58	54%
	12 Months +	11	10%
	Missing	2	2%
Returned to Work	0-3 Months	15	14%
	4-6 Months	11	10%
	7-12 Months	24	22%
	12 Months +	57	53%
	Missing	1	1%

5.2 Measures

A number of measures were used to compile an online survey. Measures of PsyCap, Work Family Conflict, Engagement, Job Stress and Burnout were all included and a final survey consisting of 81 items was produced for this study. Items were presented in random order.

PsyCap was measured with the 24 item Psychological Capital Questionnaire (PCQ) (Luthans et al., 2007, p. 237-238). This can be downloaded free of charge at www.mindgarden.com with the proviso that the instrument is utilised for positive

psychological research only and is not altered in any way. Each domain of PsyCap was represented by 6 items: self efficacy (e.g. “I feel confident in representing my work area in meetings with management”), hope (e.g. There are lots of ways around any problem”), resilience (e.g. “I usually manage difficulties one way or another at work”) and optimism (e.g. “When things are uncertain for me at work, I usually expect the best”). Participants indicated their agreement with each item on a 6-Point Likert Scale (1 = Strongly Disagree, 6 = Strongly Agree). A high score indicated a high level of PsyCap. In the current study the Cronbach alpha coefficient was $\alpha = .94$ for the complete measure of 24 items. The Cronbach alpha coefficients for the efficacy scale (6 items) was $\alpha = .84$, for the hope scale (6 items) $\alpha = .83$, for the optimism scale (6 items) $\alpha = .79$ and for the resilience scale (6 items) $\alpha = .79$.

Items to measure Work Family Conflict were taken from Frone & Yardley’s (1996) 12 item measure. Two work family conflict subscales were used with six items in each – how much family interferes with work (e.g. “My personal demands are so great that it takes away from my work”) and how much work interferes with family (e.g. “My work takes up time that I’d like to spend with family/friends”). Participants indicated their agreement with each item on a 6-Point Likert Scale (1 = Strongly Disagree, 6 = Strongly Agree). A high score on the Frone & Yardley (1996) measure indicated a high level of Work Family Conflict. In the present study the Cronbach alpha coefficient was $\alpha = .83$.

To measure engagement at work the 17 item Utrecht Work Engagement Scale (UWES) (Schaufeli, Salanova, González-romá, & Bakker, 2002) was utilised, covering three subscales of vigour (e.g. “When I get up in the morning I feel like going to work”), dedication (e.g. “I am proud of the work that I do”) and absorption (e.g. “It is difficult to detach myself from my job”). Participants indicated their

agreement with items on a 6-point Likert scale (1 = Strongly Disagree, 6 = Strongly Agree). In the present study the Cronbach alpha coefficient was $\alpha = .88$.

Job Stress was measured using the 10 item Job Stress Questionnaire ("The Job Stress Questionnaire," 2009). Participants indicated their agreement with items on a 6-point Likert scale (1 = Strongly Disagree, 6 = Strongly Agree). Items included questions such as "I seldom receive adequate acknowledgment or appreciation when my work is really good". A high score on the Job Stress Questionnaire indicates a high level of job stress for the participant. In the present study the Cronbach alpha coefficient was $\alpha = .80$.

To measure participants level of burnout the 16 item Oldenburg Burnout Inventory (OBI) (Demerouti et al., 2001) was used. Eight items reflected the dimension of exhaustion (e.g. "there are days when I feel tired before I arrive at work") and 8 items reflected the dimension of disengagement (e.g. "It happens more and more often that I talk about my work in a negative way"). Participants indicated their agreement with items on a 6-point Likert scale (1 = Strongly Disagree, 6 = Strongly Agree). A high score on the OBI indicates that the participant has a high level of burnout. In the current study the Cronbach alpha coefficient was .87.

5.3 Procedure

Participants were recruited via a snowballing strategy of personal contacts, through blogs on New Zealand parenting websites (www.huggies.co.nz, www.kidspot.co.nz, www.ohbaby.co.nz and www.treasures.co.nz) and relevant Industrial/Organisational Psychology groups on www.linkedin.com. Emails were provided to all personal contacts to forward to prospective participants outlining the aim and structure of the study, eligibility requirements and a link to an online survey. Blogs and facebook (www.facebook.com) contacts were also provided with all relevant information on the study along with a link to the online survey. Pen and paper surveys were available; however these were not requested by any prospective participant. The

link to the online survey redirected participants to *www.Qualtrics.com*, a web based programme used to administer the survey. Participants were required to indicate their informed consent to participate in the research, and were provided with information around the purpose of the study, and confidentiality information. Participants were also advised that they were under no obligation to provide answers to any question they did not wish to. Participants were able to self select under the eligibility criteria of being a working parent or caregiver in a New Zealand, having returned from parental leave over the past year. Participants were then requested to answer a series of questions related to PsyCap, WFC, job stress, engagement and burnout while thinking of their current employment situation. In addition demographic information was obtained around gender, age, number of dependents, type of work, family structure, length of parental leave taken, and period of time since returning from parental leave. Upon completion of the online survey participants were thanked for their time, provided with contact information for the study and given information on how to obtain a summary of the research findings upon completion of the study.

5.4 Data Analysis

Principle component analyses were conducted for all measures in the study, with single scales identified for each measure. Table 2 outlines the descriptive statistics for each of the measures.

Preliminary assumption testing was conducted to check for normality, linearity, univariate and multivariate outliers, homogeneity of variance, covariance matrices and multicollinearity with none of the assumptions seriously violated. Levene's test of equality of error variances yielded significance values greater than .05, indicating that all assumptions of equality of variance have been met. Pearson product-moment correlations were computed to test the hypotheses that a positive relationship between PsyCap and engagement exists, and that negative relationships can be demonstrated between PsyCap and burnout, and job stress.

Table 2: Descriptive statistics for measures of PsyCap, WFC, Engagement, Job Stress and Burnout (N = 108)

	No. of items	<i>M</i>	<i>SD</i>	Skewness	Kurtosis	Alpha
Psychological Capital	24	4.59	.62	-.28	-.33	.94
WFC	12	3.04	.71	.12	-.05	.83
Engagement	17	4.14	.64	-.37	.02	.88
Job Stress	10	2.75	.75	.18	-.02	.80
Burnout	16	3.05	.67	.11	-.24	.87

As correlation analyses indicated the dependent variables in this study were related a one-way MANOVA was performed. Differences in the level of PsyCap (high PsyCap and low PsyCap) and WFC (high WFC and low WFC) were investigated with the dependent variables of engagement, job stress and burnout. Median splits for high and low levels of PsyCap and WFC were utilised in the MANOVA. The results from this test indicated there were significant differences between high and low PsyCap in terms of WFC outcomes, so were further investigated via mediation and moderation analyses. A univariate approach was utilised for regression analyses to identify PsyCap's impact upon relationships between WFC and engagement, job stress and burnout individually.

To test the study hypotheses that PsyCap would mediate the relationships between WFC and engagement, job stress and burnout the Baron and Kenny (1986) technique was used. This approach uses three equations, and was replicated for each of the three dependent variables (engagement, job stress and burnout). In the first equation the dependent variable (engagement, job stress or burnout) was regressed on the independent variable (WFC). In the second equation, the mediating variable (PsyCap) was regressed on the independent variable (WFC). In the third equation the dependent variable (engagement, job stress or burnout) was

regressed on both the independent variable (WFC) and the mediating variable (PsyCap). Mediation is supported, if the following conditions are met:

1. The first regression equation demonstrates that the independent variable relates to the dependent variable
2. The second equation shows that the independent variable relates to the mediating variable, and
3. The third regression shows that the mediating variable relates to the dependent variable and the relationship of the independent variable to the dependent variable is significantly lower in magnitude in the third equation than in the first.

Sobel tests were also conducted to provide support for this mediation model. The Sobel statistic measures the indirect effect of the independent variable (WFC) on the dependent variable (engagement, job stress or burnout) by way of the mediator (PsyCap). Significant *p*-values obtained from Sobel test statistics indicate support for mediation.

The role of PsyCap as a moderator between WFC and engagement, job stress and burnout was investigated with a series of moderated regression analyses. Utilising the technique proposed by Baron and Kenny (1986) the predictor and moderator variables were centred as the first step. The main effects of the predictor (WFC) and hypothesised moderator (PsyCap) were controlled for, before determining the moderating effect of the hypothesised moderator (PsyCap) on the predictor-outcome association (WFC and engagement, job stress or burnout). The main effects of WFC and PsyCap for each of the dependent variables (engagement, job stress and burnout) were entered first. This was followed by the interaction term of WFC and PsyCap. All main effects of predictors and moderators were centred before entering the regression analyses to create the interaction term.

Chapter Six: Results

6.1 Factor Analysis

A factor analysis was conducted for each of the measures used in this study. Single scales were found for each measure, with the results for each individual measure outlined below. Factor analysis scree plots for each measure are illustrated in Appendix 1.

Psychological Capital: Principal component analysis identified a single factor accounting for 42.73% of the variance. All 24 items loaded onto this factor at or above .33, the Kaiser-Meyer-Olkin measure of sampling adequacy was .90, above the recommended value of .60, and Bartlett's test of sphericity was significant, $\chi^2(276) = 1427.95, p < .05$, so a single PsyCap scale was computed from the sum of all items, rather than the four scales of Hope, Optimism, Resilience and Self Efficacy. Internal consistency was examined using Cronbach's alpha, with a single Psychological Capital scale reporting an alpha of .94.

Work Family Conflict: Principal component analysis identified a single factor accounting for 34.63% of the variance. All 12 items on the WFC measure loaded onto this factor at, or above .45, the Kaiser-Meyer-Olkin measure of sampling adequacy was .79, above the recommended value of .60, and Bartlett's test of sphericity was significant, $\chi^2(66) = 443.19, p < .05$, so a single work-family conflict scale was computed from the sum of all items. Internal consistency was examined using Cronbach's alpha, with a single Work Family Conflict scale reporting an alpha of .83.

Engagement: Principal component analysis identified a single factor accounting for 38.88% of the variance. Fifteen of the 17 items on the UWES loaded onto this factor at or above .32, the Kaiser-Meyer-Olkin measure of sampling adequacy was .87, above the recommended value of .60, and Bartlett's test of sphericity was

significant, $\chi^2 (136) = 782.00, p < .05$, so a single engagement scale was computed. Internal consistency was examined using Cronbach's alpha, with a single Engagement scale reporting an alpha of .88.

Job Stress: Principal component analysis identified a single factor accounting for 37.65% of the variance. All 10 items on the Job Stress Questionnaire loaded onto this factor at, or above .45, the Kaiser-Meyer-Olkin measure of sampling adequacy was .78, above the recommended value of .60, and Bartlett's test of sphericity was significant, $\chi^2 (45) = 268.61, p < .05$, so a single job stress scale was computed from the sum of all items. Internal consistency was examined using Cronbach's alpha, with a single Job Stress scale reporting an alpha of .80.

Burnout: Principal component analysis identified a single factor accounting for 36.49% of the variance. Fifteen of the 16 items on the Oldenberg Burnout Inventory loaded onto this factor at, or above .47, the Kaiser-Meyer-Olkin measure of sampling adequacy was .85, above the recommended value of .60, and Bartlett's test of sphericity was significant, $\chi^2 (120) = 653.01, p < .05$, so a single burnout scale was computed. Internal consistency was examined using Cronbach's alpha, with a single Burnout scale reporting an alpha of .87.

6.2 Demographic Differences

There were no significant differences on PsyCap, WFC, Engagement, Job Stress and Burnout for age, type of work (i.e., full or part time), number of dependents and the reason people chose to return to work. However, single parent households were lower on PsyCap: $F_{(1,105)}=4.77$, $p<.05$ ($\eta^2 = .04$), lower on engagement: $F_{(1,105)}=5.34$, $p<.05$ ($\eta^2 = .05$), and higher in burnout: $F_{(1,105)}=7.78$, $p<.05$ ($\eta^2 = .07$), than two-parent households. One-way analyses of variance tests were performed for PsyCap, engagement and burnout with family type entered as a predictor variable into the analysis. Effect sizes for PsyCap ($\eta^2 = .04$) and engagement ($\eta^2 = .05$) were small, and the effect size for burnout ($\eta^2 = .07$) was medium, utilising Cohen's (1988) criterion.

Individuals who took between 0 – 3 months of parental leave experienced significantly higher levels of WFC than those who took parental leave of 4-6 months, 7-12 months or more than 12 months: $F_{(3,102)}=3.98$, $p<.05$ ($\eta^2 = .11$), (Figure 12). A one-way analysis of variance test was performed for WFC with length of parental leave entered as a predictor variable into the analysis. The effect size was medium ($\eta^2 = .11$), indicating that 11% of the variance in WFC can be accounted for by the length of time taken for parental leave.

Individuals who returned to work from parental leave 0-3 months ago experienced higher job stress than those who returned 4-6 months ago, 7-12 months ago or more than 12 months ago: $F_{(3,103)}=3.58$, $p<.05$ ($\eta^2 = .09$), as shown in Figure 13. Those who returned between 7-12 months ago experienced higher engagement levels: $F_{(3,103)}=3.17$, $p<.05$ ($\eta^2 = .09$) (Figure 13). The length of time since returning to work was entered into a one-way analysis of variance as a predictor variable for both job stress and engagement. The effect sizes for both job stress ($\eta^2 = .09$) and engagement ($\eta^2 = .09$) were medium, indicating that 9% of the

variance in both job stress and engagement can be explained by how long ago an individual returned from parental leave.

As effect sizes were small (none exceeded Cohen's (1988) threshold of 0.14) demographic groups were not entered into any further regressions or analyses.

Figure 12: WFC measured by length of parental leave taken

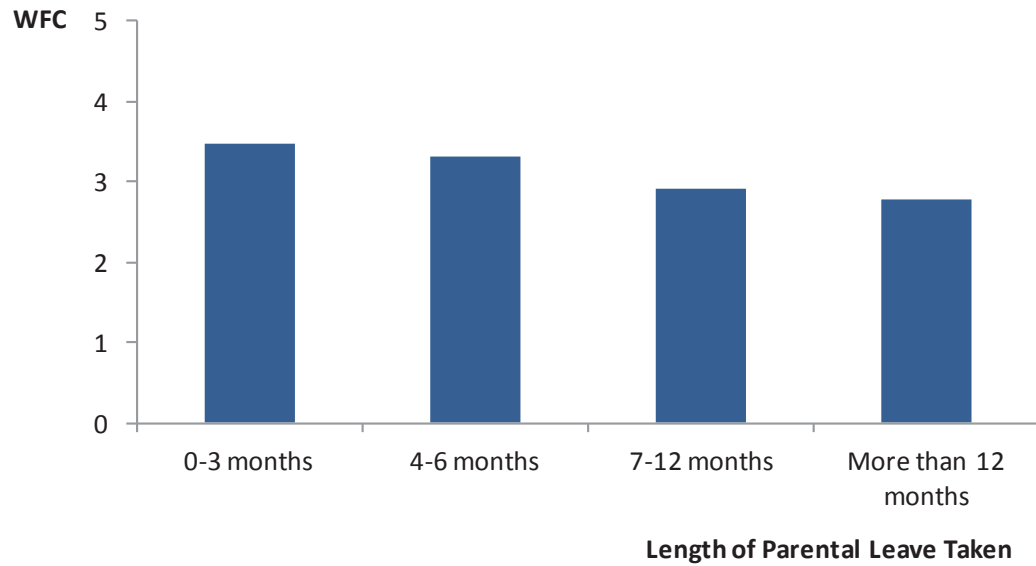
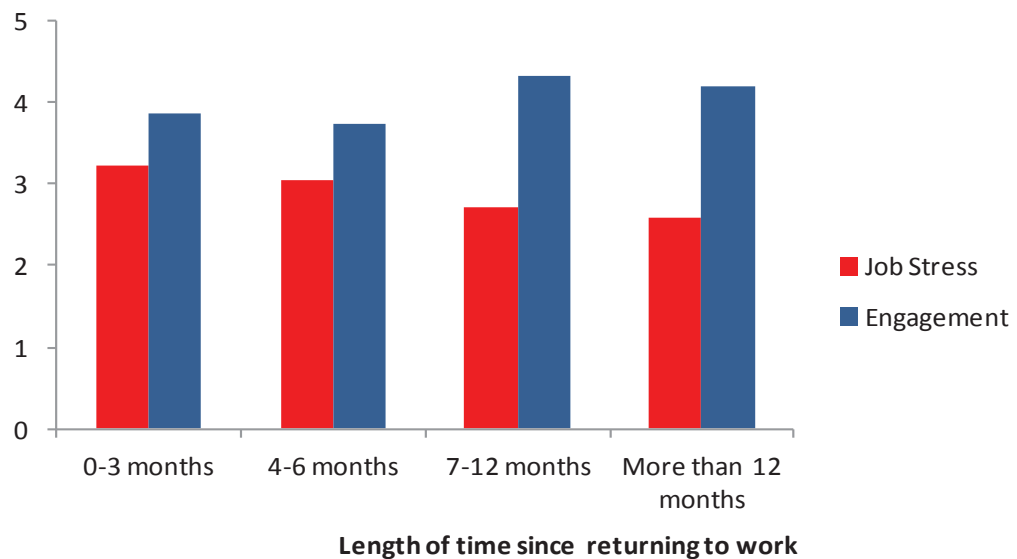


Figure 13: Job Stress and Engagement measured in length of time since returning to work



6.3 Bivariate Correlations

Table 3: Pearson Product-moment Correlations Between PsyCap, WFC and Work Related Outcomes

	1	2	3	4	5
1. PsyCap	-				
2. Engagement	.68*	-			
3. Job Stress	-.71*	-.47*	-		
4. Burnout	-.73*	-.74*	.78*	-	
5. WFC	-.50*	-.19**	.65*	.59*	-

* $p < .01$ (2-tailed) ** $p < .05$ (2-tailed)

There was a large negative correlation between PsyCap and WFC (Table 3), which provides support for Hypothesis 1. WFC demonstrated a large positive relationship with job stress and burnout, however only a small negative relationship was shown between WFC and engagement, indicating that higher levels of WFC were only mildly associated with lower levels of engagement. This provides support for Hypotheses 2, 3 and 4.

A strong positive relationship was shown between PsyCap and engagement which provides support for Hypothesis 5. Negative relationships were found between PsyCap and job stress and burnout providing support for Hypotheses 8 and 11 respectively.

6.4 Hypotheses Testing

One-way between groups multivariate analyses of variance were performed to investigate differences in level of PsyCap (high PsyCap and low PsyCap using a median split) and WFC (high WFC and low WFC using a median split) in the dependent variables of engagement, job stress and burnout.

There was a multivariate direct effect noted for WFC and the three dependent variables, and a direct effect noted for PsyCap and the three dependent variables; however there was no interaction between WFC and PsyCap.

Significant Wilks' Lambda values were obtained for both PsyCap: Wilks' $\lambda = .52$, $F(3, 104) = 32.01$, $p < .001$, partial eta squared = .48, and WFC: Wilks' $\lambda = .61$, $F(3, 98) = 20.54$, $p < .001$, partial eta squared = .39. This indicates that there is a statistically significant difference between high and low PsyCap in terms of the WFC organisational outcomes (i.e. combined engagement, job stress and burnout).

Statistically significant differences were reported between individuals with high and low levels of WFC for job stress $F(1, 100) = 40.89$, $p = .000$, partial eta squared = .29, and burnout $F(1, 100) = 34.93$, $p = .000$, partial eta squared = .26. Differences in WFC did not reach statistical significance for engagement however. An inspection of the mean scores indicated that individuals with low WFC reported lower levels of job stress ($M = 2.37$, $SD = .61$) than those with high WFC ($M = 3.19$, $SD = .68$), and individuals with low levels of WFC reported lower levels of burnout ($M = 2.71$, $SD = .61$) than individuals with high levels of WFC ($M = 3.40$, $SD = .58$).

Statistically significant differences were reported between individuals with high and low levels of PsyCap for all three dependent variables - engagement: $F(1, 106) = 53.54$, $p = .000$, partial eta squared = .34, job stress: $F(1, 106) = 61.15$, $p = .000$, partial eta squared = .37, and burnout $F(1, 106) = 71.17$, $p = .000$, partial eta squared = .40. An inspection of mean scores indicated that individuals higher in PsyCap reported higher levels of engagement ($M = 4.51$, $SD = .50$) than those with lower levels of PsyCap ($M = 3.77$, $SD = .55$); along with lower levels of job stress ($M = 2.30$, $SD = .62$) than those individuals with lower levels of PsyCap ($M = 3.20$, $SD = .58$). Additionally individuals who have higher levels of PsyCap indicated lower

levels of burnout ($M = 2.62$, $SD = .533$) than those with lower levels of PsyCap ($M = 3.48$, $SD = .51$).

These results indicate that PsyCap plays an important part in the relationship between WFC and engagement, job stress and burnout, therefore individual mediation and moderation regressions were utilised to test these findings further for each dependent variable separately.

6.5 Mediation

Regression analyses were conducted to investigate whether PsyCap mediated the relationship between WFC and Engagement, Job Stress and Burnout.

Hypothesis 6, investigating whether PsyCap mediated the relationship between WFC and engagement, was not supported. At step 3 the relationship between WFC (the IV) and engagement (the DV) remained significant, and increased, when controlling for PsyCap (Table 4). The Sobel value calculated for the dependent variable of engagement was a strong negative value (-5.09).

Table 4: PsyCap as a mediator of the WFC and Engagement relationship

	DV	IV	B	SE B	β	Adj. R^2	Sig	Sobel test
Step 1	Engagement	WFC	-0.17	0.09	-0.19	0.03	0.00	
Step 2	PsyCap	WFC	-0.44	0.07	-0.50	0.25	0.00	
Step 3	Engagement	WFC	0.19	0.07	0.21	0.49	0.00	
		PsyCap	0.81	0.08	0.79			-5.09

Hypothesis 9, investigating whether PsyCap mediated the relationship between WFC and Job Stress was partially supported. At step 3 the relationship between WFC (the IV) and Job Stress (the DV) was reduced but remained significant when controlling for PsyCap (Table 5). The Sobel value was significant showing that the relationship between WFC and job stress was significantly reduced by the inclusion of PsyCap as a mediating variable. As the relationship remained significant after

controlling for PsyCap, it indicates that PsyCap partially mediates relationship between WFC and Job Stress.

Table 5: PsyCap as a mediator of the WFC and Job Stress Relationship

	DV	IV	B	SE B	β	Adj. R ²	Sig	Sobel test
Step 1	Job Stress	WFC	0.69	0.08	0.65	0.42	0.00	
Step 2	PsyCap	WFC	-0.44	0.07	-0.50	0.25	0.00	
Step 3	Job Stress	WFC	0.42	0.07	0.40	0.61	0.00	
		PsyCap	-0.61	0.08	-0.51			4.70

Hypothesis 12, investigating whether PsyCap mediated the relationship between WFC and burnout, was partially supported. At step 3 the relationship between WFC (the IV) and burnout (the DV) was reduced but remained significant when controlling for PsyCap (Table 6). The Sobel value calculated for the dependent variable of burnout was significant, to yield a p-value of less than .05 demonstrating that mediation has been identified, i.e. burnout related to WFC was significantly reduced when PsyCap was included as a mediating variable. As the relationship remained significant after PsyCap was controlled for, it indicates that PsyCap partially mediates relationship between WFC and burnout.

Table 6: PsyCap as a mediator of the WFC and Burnout relationship

	DV	IV	B	SE B	β	Adj. R ²	Sig	Sobel test
Step 1	Burnout	WFC	0.56	0.07	0.59	0.34	0.00	
Step 2	PsyCap	WFC	-0.44	0.07	-0.50	0.25	0.00	
Step 3	Burnout	WFC	0.28	0.07	0.29	0.59	0.00	
		PsyCap	-0.63	0.08	-0.58			4.75

6.6 Moderation

Moderated regression yielded no significant effects for job stress or burnout, therefore no support was found for hypotheses 10 or 13 (Table 7).

Moderated regression analyses were also conducted to test Hypothesis 7: that an individual's level of PsyCap would moderate the relationship between WFC and engagement. The interaction term between WFC scores and PsyCap scores accounted for a significant proportion of the variance in engagement scores (Table 7): $R^2 = .50$, $F(3, 104) = 40.23$, $p = .001$, $b = -0.20$, $t(107) = -3.00$, $p = .003$. Figure 14 shows that for individuals with low levels of PsyCap, engagement was lower when WFC was high, than for individuals with high levels of PsyCap.

Figure 14: The interaction of PsyCap and WFC in the prediction of Engagement

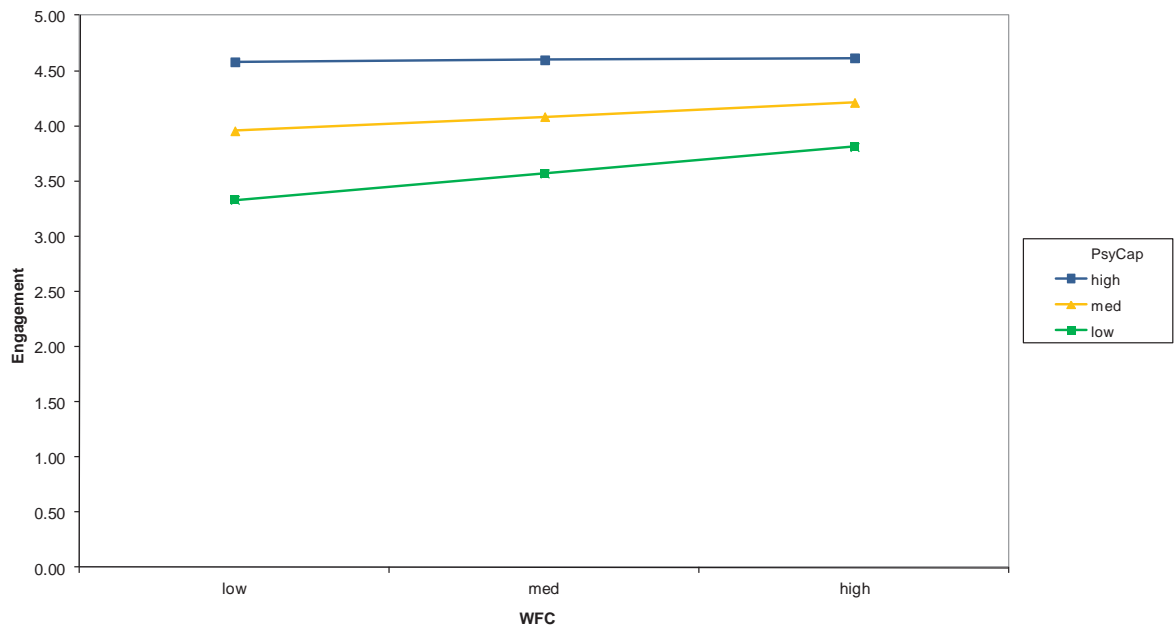


Table 7: PsyCap as a moderator of the relationship between WFC and Engagement, Burnout and Job Stress

DV	IV	B	SE B	β	Significance	Partial R ²	Adjusted R ²
Engagement	WFC	0.18	0.07	0.20	0.01		
	PsyCap	0.82	0.08	0.80	0.00		
	WFC*PsyCap	-0.25	0.08	-0.20	0.00	0.54	0.52
Job Stress	WFC	0.42	0.07	0.40	0.00		
	PsyCap	-0.61	0.08	-0.51	0.00		
	WFC*PsyCap	0.03	0.09	0.02	0.77	0.62	0.61
Burnout	WFC	0.28	0.67	0.30	0.00		
	PsyCap	-0.64	0.08	-0.59	0.00		
	WFC*PsyCap	0.14	0.08	0.11	0.08	0.61	0.60

Chapter Seven: Discussion

This study investigated whether PsyCap assisted individuals transitioning back into the workforce after parental leave, by reducing the outcomes of WFC such as engagement, job stress and burnout. The outcomes from this study have replicated and confirmed much of the literature around PsyCap as a positive personal resource which can assist individuals to succeed in the workplace, however some of the expected relationships were not supported.

PsyCap was expected to correlate positively with engagement, and negatively with job stress and burnout. It was anticipated that PsyCap would act as a mediating variable in relationships between WFC and engagement, job stress and burnout; showing that an individual's level of PsyCap affected their level of engagement, job stress or burnout stemming from WFC. It was also expected that PsyCap would enhance individual's engagement levels upon returning to work, highlighting that individuals possessing higher levels of PsyCap would hold higher levels of engagement, even when WFC levels increased. Additionally PsyCap was predicted to buffer the relationship between WFC and job stress and burnout, showing that individuals with higher levels of PsyCap would demonstrate lower levels of job stress and burnout, even when levels of WFC were higher.

This study found a positive relationship between PsyCap and engagement, showing that as PsyCap increases so does engagement. Additionally a negative relationship between both PsyCap and job stress and burnout was found, illustrating as PsyCap increases job stress and burnout decrease. No significant mediation relationship for PsyCap was found between WFC and engagement, with PsyCap potentially acting as a suppressor variable. PsyCap partially mediated the WFC and job stress and burnout relationships, showing that PsyCap is one of the elements contributing to reduction of job stress or burnout associated with WFC.

PsyCap was shown to be a moderating variable in the WFC and engagement relationship, illustrating that the level of PsyCap an individual holds affects the

strength and level of engagement they experience as a result of WFC. Additionally, the level of PsyCap an individual possesses was proposed to affect the levels and strength of job stress and burnout experienced resulting from WFC. This expectation was not supported however, as PsyCap was not shown to be a significant moderating variable in WFC and job stress or burnout relationships

In the present study, it appears that WFC is positively related to engagement when PsyCap is included in the mediation equation, rather than negatively related as would be predicted. This is consistent with personal resource and work family enrichment theory which outlines how an individual can experience enrichment by returning to work after parental leave (Greenhaus & Powell, 2006; Rothbard, 2001), and how personal wellbeing may be gained from multiple roles (Martire, Stephens, & Townsend, 2000). Those individuals who possess stronger personal resources may be better equipped to deal with the challenges and demands of both work and family domains. It is possible that for work and family commitments to result in engagement within individuals, rather than distress or negative outcomes, a high level of PsyCap is needed. These findings may indicate PsyCap acts as a suppressor variable between WFC and engagement. Suppression variables have been seen to increase the predictive validity of another variable when included in a regression equation (Baron & Kenny, 1986; Kenny, 2012; D. P. MacKinnon, Fairchild, & Fritz, 2007; Paulhus, Robins, Trzesniewski, & Tracy, 2004), such as is seen in the mediation regression in this study. Inconsistent mediation, as is caused by elements such as suppressor variables, is more common in multiple mediator models where mediated effects have different signs (D. P. MacKinnon et al., 2007). Suppression effects may be critical in evaluating the counterproductive or counterintuitive effects of studies, in particular when opposing mediation effects have resulted (D. P. MacKinnon et al., 2007). MacKinnon, Krull and Lockwood (2000) advice to treat suppression effects cautiously when significant results are

achieved however. As a significant result was achieved when investigating whether PsyCap mediated the relationship between WFC and engagement, the total effect of PsyCap as a suppressor variable in the WFC and engagement relationship must therefore be treated with caution.

PsyCap was also shown to moderate the relationship of WFC and engagement, illustrating that individuals with higher levels of PsyCap possessed higher levels of engagement, even when levels of WFC were higher. This provides support to the view that those individuals who hold high levels of PsyCap will have the resources to combat the demands placed upon them as working parents, even when levels of WFC are high, which in turn results in higher levels of engagement than those individuals with lower levels of PsyCap. As Bakker et al. (2007) state under the assumptions of the JD-R model, the combination of high demands (i.e. high WFC) and high resources (i.e. high levels of PsyCap) is the most effective for creating optimum levels of engagement within organisations. Therefore, this study's finding that the higher an individual's level of PsyCap is, the higher their level of engagement will be, even when the WFC they experience is high, is in agreement with JD-R theory. This provides a clear pathway for organisations to enhance employee wellbeing and success upon returning to work from parental leave, which will also provide benefits for the organisation in the form highly engaged employees and the higher productivity and lower absenteeism that stems from this.

The partial mediating role the PsyCap plays in the reduction of job stress and burnout caused by WFC may be restricted due to the numerous other challenges faced by individuals returning from parental leave, or the variety of resources an individual has to draw upon to combat these challenges. Items such as conflicting commitments (Lu et al., 2011, Michel et al., 2011), levels of support in both work and family environments (Allen, 2011; Frone et al., 1996; Lapierre et al., 2008), and personal motivations for returning to the workforce (McRae, 1993) may have impact

upon job stress and burnout experienced, in addition to an individual's level of PsyCap. The JD-R model can be used to interpret the findings of this study showing that PsyCap only partially mediates the relationships between WFC and job stress and burnout. It can be suggested that while PsyCap is indeed a positive psychological resource for individuals it is only one of many possible resources an individual can use to minimise the negative organisational effects of WFC. In addition the demands placed upon people returning to the workforce from parental leave may outweigh available resources, causing an exhaustion of mental, physical and personal resources (Demerouti et al., 2001), such as PsyCap.

Daniels and de Jonge's (2010) notion of resource and strain matching can be used to interpret the result that PsyCap was not a moderating variable in the WFC and job stress or burnout relationships. This states that moderating effects are more likely to occur when there is a match between the resource and strain components (Daniels & de Jonge, 2010), than when there is a mismatch, for example cognitive resources and emotional strain (Cheung et al., 2011). As PsyCap can be viewed as a set of cognitively related resources, and burnout and job stress considered emotional strains or demands, this may account for the lack of moderating effect for job stress and burnout stemming from WFC.

7.1 Limitations

One of the limitations encountered in this study was the lack of gender diversity among respondents, with only female participants responding. As gender roles regarding career and child caring duties become increasingly equal among men and women, it appears men may experience similar work family challenges and levels of WFC to women (Hill, 2005; Reddick, Rochlen, Grasso, Reilly, & Spikes, 2012; Voydanoff & Donnelly, 1999). Due to the blurring of traditional sex roles in relation to child caring duties and financial provisions or careers it would be valuable to glean insight into how PsyCap affects the relationship between WFC and

organisational outcomes for fathers and male caregivers returning to work after parental leave.

As only one measure of each of the variables were used there is a risk of mono-method bias within this study, a threat affecting the construct validity. A way in which this could have been addressed is the implementation of multiple measures for each variable across the study. For example, the utilisation of open ended interview questions would allow participants to detail their experience of engagement, burnout or job stress, within organisational settings. The subsequent qualitative data provided could have been interpreted utilising thematic coding to explore participant experiences of the variables within this study, and provide confirmation that the measure utilised relate to the self reported experiences by participants.

The use of a cross-sectional design is also a limitation within this study. The collection of data around WFC, PsyCap, Job Stress, Engagement and Burnout was all conducted within a short timeframe and from a limited group of participants - working parents within New Zealand who have returned from parental leave over the past year. The data obtained provides a snapshot of the variables included within this study over a particular point in time, however cannot measure change in any of these variables and cannot establish cause and effect. As the variables within the study are not static, and are relatively changeable within individuals over time, the findings within this study can only be generalised across a limited and defined population.

The construct of PsyCap itself holds a number of potential limitations, which may have implications upon this study. Luthans et al. (2007) outline the potential for an individual's level of PsyCap to decline over time or in certain situations. Due to the state like nature of PsyCap, it would be expected that levels would fluctuate over

time and depending on the conditions an individual is experiencing at the time of being assessed. An individual who has recently returned to work from parental leave may exhibit a drop in some or all of the facets of PsyCap due to the increased demands upon their time and energies. This would provide limitations to the current study, as the situation it is investigating is naturally one where people will have lower levels of PsyCap than normal. Depending on the individual transition process people may bounce back to their normal levels of PsyCap after a certain amount of time back at work, so those participants who have been back at work for longer may reflect a more consistent version of their level of PsyCap, than those who have recently returned (e.g. 0-3 months ago).

Another limitation of PsyCap itself is the reliance on support to achieve optimal benefits for individuals. Luthans et al (2007) cite the values an organisation holds will have an impact on the potential for individuals to build PsyCap. To a large extent all the elements of PsyCap rely on support at organisational, leader, social and family levels. If any of this support is limited or missing this will provide limitations in an individual's potential to increase their level of PsyCap upon returning to work from parental leave. Programmes aimed at increasing an individual's level of PsyCap will be beneficial, but only for those who have the required support. In particular, the support and buy-in from organisational executives and leaders is imperative for the benefits of increasing PsyCap. For example if the personal beliefs and values of organisational leaders and colleagues are not aligned with a family supportive organisational climate this can hinder individual's ability to bounce back from setbacks and increase their resilience upon returning from parental leave, through depleted support and available resources. If a mismatch between the support required and support provided to an individual from either organisational, leader, social or family sources then the resources and

expense of implementing courses aimed at increasing PsyCap will be futile and the consequent outcomes will be limited.

7.2 Implications for Research

This research has opened up a number of new avenues in which to explore the construct of PsyCap. Analysis of the data revealed that PsyCap partially mediates the relationship between WFC and job stress and burnout. It would be beneficial for both individuals and organisations for future research to explore what the factors are which combine with PsyCap to most successfully alleviate the negative organisational outcomes of WFC. This provides scope to test a number of different combinations to identify full mediation relationships between WFC and organisational outcomes. By investigating what it is that assists individuals combating WFC, along with PsyCap, this will thereby further minimise the job stress and burnout related to WFC, and reduce the negative outcomes of these on both individuals and organisations.

As the level of PsyCap an individual possesses does not affect how strong the negative organisational outcomes of WFC (job stress and burnout) this study focused on are, it would be beneficial to explore this further. This could be done by utilising different demographic groups of participants or different organisational outcomes. For example, although PsyCap does not moderate the WFC and job stress and burnout relationships, it may moderate relationships for alternative outcomes of WFC, such as lowered organisational commitment, or loss of identity with groups within organisations, for example colleagues or team members. As PsyCap is a positive resource individuals can utilise to succeed (Luthans et al. 2007) future research could explore varying relationships between WFC and positive organisational outcomes to identify if PsyCap can enhance the strength of the outcome experienced. Further to this, the utilisation of alternative demographic groups may expose valuable relationships PsyCap can be leveraged in. The

investigation of any individual returning to work after substantial periods away from an organisational environment may uncover further potential for PsyCap to be developed within individuals to enhance success. Possible alternative groups of participants returning to work may include individuals recovering from accidents on ACC, prison inmates upon release into society or people who have been unemployed for a period of time. The identification of situations in which PsyCap can make the maximum positive impact for both individuals and organisations would be valuable.

Single parent households are becoming more frequent as a family structure with anticipated increases in New Zealand from 219,000 in 2006 to 267,000 in 2031 (Bascand, 2010). Single parent households accounted for only 8% in this study. It would be useful to investigate whether this relatively low response rate was due to fewer single parents returning to the workforce, as it becomes increasingly difficult to juggle work and family duties, or whether it stems from alternative reasons, such as single parents within the workforce not having adequate time to complete surveys.

In addition, the mechanism of wider support structures available to working parents and caregivers, for example grandparents, whanau, extended family or community support able to help with child caring is another opportunity for future research. The level of support provided to people may influence the transition back into the workforce, thereby affecting the organisational outcomes of WFC. The demographic group comprising of single parents reported lower levels of PsyCap in this study, along with lower levels of engagement and higher burnout. The investigation of support and external or internal resources available to single parents returning to work is an avenue to investigate further to assist this growing group succeed within organisational environments.

Another implication that this study has provided for future research is the investigation of a potential natural life cycle which individuals move through upon returning to work after parental leave. As the results of this study showed, parents who returned to work 0-3 months ago reported significantly higher levels of job stress, while those who returned to work 7-12 months ago demonstrated higher levels of engagement. It would be worthwhile to research whether individuals naturally experience job stress as a result of WFC soon after returning to work, progressing to either burnout or engagement without any intervention, such as increasing PsyCap. This may be influenced by the organisational culture an individual works in, (for example how family supportive the organisation is), the length of parental leave taken, the number of dependents, the structure of the family (for example a single or two parent family) or the individual's age. The investigation of this would add value to both the WFC and PsyCap research fields, as it may uncover ideal situations and timeframes for organisations to increase personal resources, such as PsyCap, or intervene to enhance individual's working experiences.

7.3 Implications for Practice

There are practical applications for PsyCap in the workplace which will impact on both organisations and individuals stemming from some of the results of this study. While there have been no negative outcomes found from increasing PsyCap in employees, the construct of PsyCap does not appear adequate by itself to buffer job stress and burnout that individuals experience as a result of WFC. This study demonstrates that PsyCap assists in the reduction of job stress and burnout resulting from WFC, along with many other positive effects (Avey et al., 2009; Avey et al., 2011b; Cheung et al., 2011; Liu et al., 2012; Luthans & Youssef, 2007) but is unable to claim sole responsibility for easing job stress and burnout for individuals. As PsyCap demonstrated only limited success in assisting individuals with the negative organisational outcomes of WFC, an investment to increase individual

levels of PsyCap may only result in success (for both individuals and organisations) in limited organisational settings or situations. This will impact upon organisations financial and productivity gains unless optimal organisational settings and situations can be identified to invest in employee PsyCap development.

Although this study demonstrated only partial support for the success of PsyCap as a way in which to reduce the negative organisational outcomes of WFC, it confirmed that an individual's level of PsyCap affects the strength of engagement they experience, as WFC increases. This provides organisations with the potential to increase employee wellbeing and productivity upon returning from parental leave. Increasing an individual's level of PsyCap will have a direct effect on the level and strength of engagement they experience as a result of WFC, and will assist with decreased absenteeism and increased productivity of employees. This can translate into increased profits for an organisation, as Luthans et al. (2007) found.

In addition to these benefits, the investment into increasing positive resources, such as PsyCap, in individuals may have flow-on effects for organisations. These positive effects may not be have a direct impact in all situations, as has been found in this study with PsyCap's limited impact upon the negative outcomes of WFC, but an increase in levels of hope, optimism, self efficacy and resilience can provide increased personal wellbeing and satisfaction in both work and family domains Avey et al. (2011a). In addition individuals may experience a sense of belonging and loyalty to the organisation who invests in its people, through such strategies as courses aimed at increasing PsyCap (Larson & Luthans, 2006), and a feeling of personal accomplishment or satisfaction (Avey et al., 2011b; Cheung et al., 2011; Luthans et al., 2007; Luthans et al., 2008) For the organisation, the benefits of increasing employee PsyCap can be seen through the enhancement of the company's professional reputation (Mathe & Scott-Halsell, 2012), a loyal workforce, which is particularly pertinent in uncertain economic times, (Luthans et al., 2006;

Luthans et al., 2007), the provision of intrinsic motivation for employees (Luthans et al., 2007), and development of organisational sustainability, in terms of a high achieving skill and knowledge base with performing employees (Avey et al., 2011a, 2011b; Luthans et al., 2010; Luthans et al., 2008; Peterson et al., 2011). A resource based view of an organisation makes the point that the optimal use of human capital is a key source of competitive advantage, due to the difficulty for competitors to replicate it (Luthans et al., 2010).

7.4 Conclusion

This study has provided the scope for future research investigating the individual resource of PsyCap in other groups of people returning to the workforce after a period of time away, or employees in different demographic groups, such as fathers or male caregivers returning to work, and employees in operational or manual labour positions. There is also the opportunity to further investigate which elements combine with PsyCap most effectively to create a reduction in job stress or burnout stemming from WFC for individuals returning to work after parental leave.

This study demonstrated support for PsyCap as a moderating variable in the WFC and engagement relationship, providing organisations with clear benefits and a pathway in which to enhance employee wellbeing and productivity upon returning to work after parental leave. This may also impact positively upon an organisations competitive edge and economic advantage within a turbulent marketplace through increased productivity and happy employees. In an economic environment that has experienced worldwide recessions, and the effects of this such as redundancies, cutbacks, salary freezes and restructuring, a positive emphasis such as PsyCap can be important for the personal wellbeing of people and also for future organisational visions currently being formulated.

References

- Allen, T.D. (2001). Family-Supportive Work Environments: The Role of Organizational Perceptions. *Journal of Vocational Behavior*, 58, 414-435. doi: 10.1006/jvbe.2000.1774
- Anderson, S.E., Coffey, B.S., & Byerly, R.T. (2002). Formal Organizational Initiatives and Informal Workplace Practices: Links to Work-Family Conflict and Job-Related Outcomes. *Journal of Management*, 28(6), 787-810. doi: 10.1177/014920630202800605
- Avey, J.B., Luthans, F., & Jensen, S.M. (2009). Psychological capital: A positive resource for combating employee stress and turnover. *Human Resource Management*, 48(5), 677-693. doi: 10.1002/hrm.20294
- Avey, J.B., Luthans, F., Smith, R.M., & Palmer, N.F. . (2010). Impact of Positive Psychological Capital on Employee Well-Being Over Time. *Journal of Occupational Health Psychology*, 15(1), 17-28. doi: 10.1037/a0016998
- Avey, J.B., Luthans, F., & Youssef, C.M. (2010). The Additive Value of Positive Psychological Capital in Predicting Work Attitudes and Behaviors. *Journal of Management*, 36(2), 430-452. doi: 10.1177/0149206308329961
- Avey, J.B., Patera, J.L., & West, B.J. (2006). The Implications of Positive Psychological Capital on Employee Absenteeism. *Journal of Leadership & Organizational Studies*, 13(2), 42-60. doi: 10.1177/10717919070130020401
- Avey, J.B., Reichard, R.J., Luthans, F., & Mhatre, K.H. (2011a). Meta-Analysis of the Impact of Positive Psychological Capital on Employee Attitudes, Behaviors, and Performance. *Human Resource Development Quarterly*, 22(2).
- Avey, J.B., Reichard, R.J., Luthans, F., & Mhatre, K.H. (2011b). Meta-analysis of the Impact of Positive Psychological Capital on Employee Attitudes, Behaviors, and Performance. *Human Resource Development Quarterly*, 22(2), 127-152. doi: 10.1002/hrdq.20070
- Avey, J.B., Wernsing, T.S., & Luthans, F. (2008). Can Positive Employees Help Positive Organizational Change? Impact of Psychological Capital and Emotions on Relevant Attitudes and Behaviors. *The Journal of Applied Behavioral Science*, 44(1), 48-70. doi: 10.1177/0021886307311470
- Avey, J.B., Wernsing, T.S., & Mhatre, K.H. (2011). A Longitudinal Analysis of Positive Psychological Constructs and Emotions on Stress, Anxiety, and Well-Being. *Journal of Leadership & Organizational Studies*, 18(2), 216-228. doi: 10.1177/1548051810397368
- Bakker, A.B., Albrecht, S.L., & Leiter, M.P. (2010). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4-28. doi: 10.1080/1359432x.2010.485352

- Bakker, A.B., & Demerouti, E. (2007). The Job Demands-Resources Model: State of the Art. *Journal of Managerial Psychology*, 22(3), 309-328. doi: 10.1108/02683940710733115
- Bakker, A.B., & Demerouti, E. (2008). Towards a model of work engagement *Career Development International*, 13(3), 209-223. doi: 10.1108/13620430810870476
- Bakker, A.B., Demerouti, E., & Euwema, M.C. (2005). Job Resources Buffer the Impact of Job Demands on Burnout. *Journal of Occupational Health Psychology*, 10(2), 170-180. doi: 10.1037/1076-8998.10.2.170
- Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2003). Dual processes at work in a call centre: an application of the job demands-resources model. *European Journal of Work and Organizational Psychology*, 12(4), 393-417. doi: 10.1080/13594320344000165
- Bakker, A.B., Demerouti, E., & Verbeke, W. (2004). Using the job demands-resources model to predict burnout and performance. *Human Resource Management*, 43(1), 83-104. doi: 10.1002/hrm.20004
- Bakker, A.B., Hakanen, J.J., Demerouti, E., & Xanthopoulou, D. (2007). Job resources boost work engagement, particularly when job demands are high. *Journal of Educational Psychology*, 99(2), 274-284. doi: 10.1037/0022-0663.99.2.274
- Bakker, A.B., Schaufeli, W.B., Leiter, M.P., & Taris, T.W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200. doi: 10.1080/02678370802393649
- Bakker, A.B., Van Emmerik, H., & Euwema, M.C. (2006). Crossover of Burnout and Engagement in Work Teams. *Work and Occupations*, 33(4), 464-489. doi: 10.1177/0730888406291310
- Bakker, A.B., Van Emmerik, H., & Van Riet, P. (2008). How job demands, resources, and burnout predict objective performance: A constructive replication. *Anxiety, Stress & Coping*, 21(3), 309-324.
- Bakker, A.B., Van Veldhoven, M., & Xanthopoulou, D. (2010). Beyond the demand-control model: Thriving on high job demands and resources. *Journal of Personnel Psychology*, 9(1), 3-16. doi: 10.1027/1866-5888/a000006
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
- Bandura, A. (2006). Toward a psychology of human agency. *Perspectives on Psychological Science*, 1(2), 164-180. doi: 10.1111/j.1745-6916.2006.00011.x
- Bandura, A. (2008). An Agentic Perspective on Positive Psychology. In S. Lopez (Ed.), *Positive Psychology: Exploring The Best In People* (Vol. 1). Westport: Greenwood Publishing Group.
- Baron, R.M., & Kenny, D.A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182. doi: 10.1037/0022-3514.51.6.1173

- Bascand, G. (2010). Subnational Family and Household Projections: 2006(base) – 2031 update. Retrieved 15 June, 2012, from <http://www.stats.govt.nz/>
- Beehr, T.A. (1995). *Psychological Strain in the Workplace*. London: Routledge.
- Beehr, T.A., & Glazer, S. (2005). Organizational role stress. In J. Barling, E. K. Kelloway & M. R. Frone (Eds.), *Handbook of work stress* (pp. 7-33). Thousand Oaks, CA: Sage.
- Booth, S.M., & Matthews, R.A. (2012). Family-supportive organization perceptions: Validation of an abbreviated measure and theory extension. *Journal of Occupational Health Psychology, 17*(1), 41-51. doi: 10.1037/a0026232
- Brauchli, R., Bauer, G.F., & Hämmig, O. (2011). Relationship between time-based work-life conflict and burnout: A cross-sectional study among employees in four large Swiss enterprises. *Swiss Journal of Psychology/Schweizerische Zeitschrift für Psychologie/Revue Suisse de Psychologie, 70*(3), 165-173. doi: 10.1024/1421-0185/a000052
- Buehler, C., & O'Brien, M. (2011). Mothers' part-time employment: Associations with mother and family well-being. *Journal of Family Psychology, 25*(6), 895-906. doi: 10.1037/a0025993
- Byron, K. (2005). A meta-analytic review of work–family conflict and its antecedents. *Journal of Vocational Behavior, 67*(2), 169-198. doi: 10.1016/j.jvb.2004.08.009
- Campbell, J.P., McCloy, R.A., Oppler, S.H., & Sager, C.E. (1993). A Theory Of Job Performance. In N. Schmitt, W. C. Borman & associates (Eds.), *Personnel Selection in Organizations*. San Francisco: Jossey-Bass Publishers.
- Carlson, D.S., Grzywacz, J.G., Ferguson, M., Hunter, E.M., Clinch, C.R., & Arcury, T.A. (2011). Health and turnover of working mothers after childbirth via the work–family interface: An analysis across time. *Journal of Applied Psychology, 96*(5), 1045-1054. doi: 10.1037/a0023964
- Carlson, D.S., Grzywacz, J.G., & Zivnuska, S. (2009). Is work—family balance more than conflict and enrichment? *Human Relations, 62*(10), 1459-1486. doi: 10.1177/0018726709336500
- Carlson, D.S., Kacmar, K.M., & Williams, L.J. (2000a). Construction and Initial Validation of a Multidimensional Measure of Work–Family Conflict. *Journal of Vocational Behavior, 59*(249-276). doi: 10.1006/jvbe.1999.1713
- Carlson, D.S., Kacmar, K.M., & Williams, L.J. (2000b). Construction and Initial Validation of a Multidimensional Measure of Work–Family Conflict. *Journal of Vocational Behavior, 56*(2), 249-276. doi: 10.1006/jvbe.1999.1713
- Carver, C.S., & Scheier, M.F. (2002). The Hopeful Optimist. *Psychological Inquiry, 13*(4), 288-290. doi: 192.168.52.65
- Casper, W.J., & Harris, C.M. (2008). Work-life benefits and organizational attachment: Self-interest utility and signaling theory models. *Journal of Vocational Behavior, 72* 95-109. doi: 10.1016/j.jvb.2007.10.015

- Cheung, F., Tang, C.S., & Tang, S. (2011). Psychological capital as a moderator between emotional labor, burnout, and job satisfaction among school teachers in China. *International Journal of Stress Management*, 18(4), 348-371. doi: 10.1037/a0025787
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioural Sciences* (2nd ed.). Hills Dale, New Jersey: Lawrence Erlbaum Associates.
- Colligan, T.W., & Higgins, E. M. (2006). Workplace Stress. *Journal of Workplace Behavioral Health*, 21(2), 89-97. doi: 10.1300/J490v21n02_07
- Daniels, K., & de Jonge, J. (2010). Match making and match breaking: The nature of match within and around job design. *Journal of Occupational & Organizational Psychology*, 83(1), 1-16. doi: 10.1348/096317909X485144
- de Lange, A.H., Taris, T.W., Kompier, M.A.J., Houtman, I.L.D., & Bongers, P.M. (2003). "The very best of the millennium": Longitudinal research and the demand-control-(support) model. *Journal of Occupational Health Psychology*, 8(4), 282-305. doi: 10.1037/1076-8998.8.4.282
- Demerouti, E., Bakker, A.B., Nachreiner, F., & Schaufeli, W.B. (2001). The Job Demands Resources Model of Burnout. *The Journal of Applied Psychology*, 86(3), 499-512.
- Demerouti, E., van Eeuwijk, E., Snelder, M., & Wild, U. (2010). Assessing the effects of a "personal effectiveness" training on psychological capital, assertiveness and self-awareness using self-other agreement. *Career Development International*, 16(1), 60-81. doi: 10.1108/13620431111107810
- Dewe, P., & O'Driscoll, M.P. (2002). Stress management interventions: what do managers actually do? *Personnel Review*, 31(2), 143-165. doi: 10.1108/00483480210416847
- Edwards, J.R., & Rothbard, N.P. (2000). Mechanisms Linking Work and Family: Clarifying the Relationship between Work and Family. *The Academy of Management Review*, 25(1), 178-199. doi: 10.2307/1685265
- Erdwins, C.J., Buffardi, L.C., Casper, W.J., & O'Brien, A.S. (2001). The Relationship of Women's Role Strain to Social Support, Role Satisfaction, and Self-Efficacy. *Family Relations*, 50(3), 230-238. doi: 10.1111/j.1741-3729.2001.00230.x
- Ford, M.T., Heinen, B.A., & Langkamer, K. (2007). Work and Family Satisfaction and Conflict: A Meta-Analysis of Cross-Domain Relations. *Journal of Applied Psychology*, 92(1), 57-80. doi: 10.1037/0021-9010.92.1.57
- Frone, M.R., & Yardley, J.K. (1996). Workplace family-supportive programmes: Predictors of employed parents' importance ratings. *Journal of Occupational and Organizational Psychology*, 69(4), 351-366. doi: 10.1111/j.2044-8325.1996.tb00621.x
- Garrosa, E., Rainho, C., Moreno-Jiménez, B., & Monteiro, M.J. (2010). The relationship between job stressors, hardy personality, coping resources and burnout in a sample of nurses: A correlational study at two time points. *International Journal of Nursing Studies*, 47(2), 205-215. doi: 10.1016/j.ijnurstu.2009.05.014
- Gilbert, J.A., Carr-Ruffino, N., Ivancevich, J.M., & Konopaske, R. (2012). Toxic versus cooperative behaviours at work: the role of organizational culture and leadership in

- creating community-centred organizations. *International Journal of Leadership Studies*, 7(1), 29-47.
- Greenhaus, J.H., & Beutell, N.J. (1985). Sources of Conflict between Work and Family Roles. *The Academy of Management Review*, 10(1), 76-88. doi: 192.168.52.65
- Greenhaus, J.H., Collins, K.M., & Shaw, J.D. (2003). The relation between work–family balance and quality of life. *Journal of Vocational Behavior*, 63(3), 510-531. doi: 10.1016/s0001-8791(02)00042-8
- Greenhaus, J.H., & Powell, G. N. (2006). When Work and Family Are Allies: A Theory of Work-Family Enrichment. *The Academy of Management Review*, 31(1), 72-92. doi: 10.2307/20159186
- Grzywacz, J.G., & Butler, A.B. (2005). The Impact of Job Characteristics on Work-to-Family Facilitation: Testing a Theory and Distinguishing a Construct. *Journal of Occupational Health Psychology*, 10(2), 97-109. doi: 10.1037/1076-8998.10.2.97
- Grzywacz, J.G., Carlson, D.S., & Shulkin, S. (2008a). Schedule flexibility and stress: Linking formal flexible arrangements and perceived flexibility to employee health. *Community, Work & Family*, 11(2), 199-214. doi: 10.1080/13668800802024652
- Grzywacz, J.G., Carlson, D.S., & Shulkin, S. (2008b). Schedule flexibility and stress: Linking formal flexible arrangements and perceived flexibility to employee health. *Community, Work & Family*, 11(2), 199-214. doi: 10.1080/13668800802024652
- Gutek, B.A., & Searle, S. (1991). Rational Versus Gender Role Explanations for Work-Family Conflict. *Journal of Applied Psychology*, 76(4), 560-568.
- Haines, V.A., Hurlbert, J.S., & Zimmer, C. (1991). Occupational Stress, Social Support, and the Buffer Hypothesis. *Work and Occupations*, 18(2), 212-235. doi: 10.1177/0730888491018002005
- Hakanen, J. , Bakker, A., & Demerouti, E. (2005). How dentists cope with their job demands and stay engaged: the moderating role of job resources. *European Journal of Oral Science*, 113, 479-487.
- Hallberg, U.E., & Schaufeli, W.B. (2006). “Same Same” But Different? Can Work Engagement Be Discriminated from Job Involvement and Organizational Commitment? *European Psychologist*, 11(2). doi: 10.1027/1016-9040.11.2.119
- Hammer, L.B., Kossek, E.E., Zimmerman, K., & Daniels, R. (2007). Clarifying the construct of family supportive supervisory behaviours: A multilevel perspective. *Research in Occupational Stress and Wellbeing*, 6, 171-211. doi: 10.1037/1076-8998.12.3.266
- Hammer, T.H., Saksvik, P.O., Nytro, K., Torvatn, H., & Bayazit, M. (2004). Expanding the Psychosocial Work Environment: Workplace Norms and Work–Family Conflict as Correlates of Stress and Health. *Journal of Occupational Health Psychology*, 9(1), 83-97. doi: 10.1037/1076-8998.9.1.83
- Harter, J.K., Schmidt, F.L., & Hayes, T.L. (2002). Business-Unit-Level Relationship Between Employee Satisfaction, Employee Engagement, and Business Outcomes: A Meta-

- Analysis. *Journal of Applied Psychology*, 87(2), 268-279. doi: 10.1037/0021-9010.87.2.268
- Hill, E.J. (2005). Work-Family Facilitation and Conflict, Working Fathers and Mothers, Work-Family Stressors and Support. *Journal of Family Issues*, 26(6), 793-813. doi: 10.1177/0192513X05277542
- Hobfoll, S.E., Johnson, R.J., Ennis, R., & Jackson, A.P. (2003). Resource Loss, Resource Gain, and Emotional Outcomes Among Inner City Women. *Journal of Personality and Social Psychology*, 84(3), 632-643. doi: 10.1037/0022-3514.84.3.632
- Hughes, L.W. (2008). A Correlational Study of the Relationship Between Sense of Humor and Positive Psychological Capacities. *Economics and Business Journal*, 1(1), 46-56.
- Ilies, R., Schwind, K.M., Wagner, D.T., Johnson, M.D., DeRue, D.S., & Ilgen, D.R. (2007). When can employees have a family life? The effects of daily workload and affect on work-family conflict and social behaviors at home. *Journal of Applied Psychology*, 92(5), 1368-1379. doi: 10.1037/0021-9010.92.5.1368
- Ilies, R., Scott, B.A., & Judge, T.A. (2006). The Interactive Effects of Personal Traits and Experienced States on Intraindividual Patterns of Citizenship Behavior. *The Academy of Management Journal*, 49(3), 561-575. doi: 10.1037/0021-9010.49.3.561
- The Job Stress Questionnaire. (2009). Retrieved 20 January 2012, from <http://www.stress.org/topic-workplace.htm>
- Kanste, O. (2011). Work engagement, work commitment and their association with well-being in health care. *Scandinavian Journal of Caring Sciences*, 25(4), 754-761. doi: 10.1111/j.1471-6712.2011.00888.x
- Karasek, R.A., Jr. (1979). Job Demands, Job Decision Latitude, and Mental Strain: Implications for Job Redesign. *Administrative Science Quarterly*, 24(2), 285-308.
- Karimi, L., Karimi, H., & Nouri, A. (2011). Predicting employees' well-being using work-family conflict and job strain models. *Stress and Health*, 27(2), 111-122. doi: 10.1002/smi.1323
- Kenny, D.A. (2012, 3 April 2012). Mediation. Retrieved 1 June, 2012, from <http://davidakenny.net/cm/mediate.htm>
- Kinman, G., & Jones, F. (2005). Lay representations of workplace stress: What do people really mean when they say they are stressed? *Work & Stress*, 19(2), 101-120. doi: 10.1080/02678370500144831
- Konrad, A.M., & Mangel, R. (2000). Research notes and commentaries - the impact of work-life programs on firm productivity. *Strategic Management Journal*, 21, 1225-1237.
- Kossek, E.E., Pichler, S., Bodner, T., & Hammer, L.B. (2011). Workplace social support and work-family conflict: A meta-analysis clarifying the influence of general and work-family specific supervisor and organizational support. *Personnel Psychology*, 64(2), 289-313. doi: 10.1111/j.1744-6570.2011.01211.x

- Lapierre, L.M., Spector, P.E., Allen, T.D., Poelmans, S., Cooper, C.L., O'Driscoll, M.P., . . . Kinnunen, U. (2008). Family-supportive organization perceptions, multiple dimensions of work–family conflict, and employee satisfaction: A test of model across five samples. *Journal of Vocational Behavior*, *73*, 92-106. doi: 10.1016/j.jvb.2008.02.001
- Larson, M. , & Luthans, F. (2006). Potential Added Value of Psychological Capital in Predicting Work Attitudes. *Journal of Leadership & Organizational Studies*, *13*(2), 75-92. doi: 10.1177/10717919070130020601
- Liu, L., Chang, Y., Fu, J., Wang, J., & Wang, L. (2012). The mediating role of psychological capital on the association between occupational stress and depressive symptoms among Chinese physicians: a cross-sectional study. *BMC Public Health*, *12*(219). doi: 10.1186/1471-2458-12-219
- Llorens, S., Bakker, A.B., Schaufeli, W.B., & Salanova, M. (2006). Testing the robustness of the job demands-resources model. *International Journal of Stress Management*, *13*(3), 378-391. doi: 10.1037/1072-5245.13.3.378
- Lu, L., Kao, S.F., Chang, T.T., Wu, H.P., & Cooper, C.L. (2011). Work/family demands, work flexibility, work/family conflict, and their consequences at work: A national probability sample in Taiwan. *International Perspectives in Psychology: Research, Practice, Consultation*, *1*(S), 68-81. doi: 10.1037/2157-3883.1.s.68
- Luthans, F. (2002). The Need for and Meaning of Positive Organizational Behavior. *Journal of Organizational Behavior*, *23*(6), 695-706. doi: 10.1002/job.165
- Luthans, F. (2012). Psychological capital: Implications for HRD, retrospective analysis, and future directions. *Human Resource Development Quarterly*, *23*(1), 1-8. doi: 10.1002/hrdq.21119
- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological Capital development: toward a micro intervention. *Journal of Organizational Behavior*, *27*, 387-393. doi: 10.1002/job.373
- Luthans, F., Avey, J., & Patera, J. (2008). Experimental Analysis of a Web-Based Training Intervention to Develop Positive Psychological Capital. *Academy of Management Learning & Education*, *7*(2), 209-221.
- Luthans, F., Avey, J.B., Avolio, B.J., & Peterson, S.J. (2010). The development and resulting performance impact of positive psychological capital. *Human Resource Development Quarterly*, *21*(1), 41-67. doi: 10.1002/hrdq.20034
- Luthans, F., Avolio, B.J., Avey, J.B. , & Norman, S.M. (2007). Positive Psychological Capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, *60*(3), 541-572. doi: 10.1111/j.1744-6570.2007.00083.x
- Luthans, F., Avolio, B.J., Walumbwa, F.O., & Weixing, L. (2005). The Psychological Capital of Chinese Workers: Exploring the Relationship with Performance. *Management & Organization Review*, *1*(2), 249-271. doi: 10.1111/j.1740-8784.2005.00011.x

- Luthans, F., Norman, S. M., Avolio, B. J., & Avey, J. B. (2008). The mediating role of psychological capital in the supportive organizational climate—employee performance relationship. *Journal of Organizational Behavior*, 29(2), 219-238. doi: 10.1002/job.507
- Luthans, F., Vogelgesang, G.R., & Lester, P.B. (2006). Developing the Psychological Capital of Resiliency. *Human Resource Development Review*, 5(1), 25-44. doi: 10.1177/1534484305285335
- Luthans, F., & Youssef, C.M. (2007). Emerging Positive Organizational Behavior. *Journal of Management*, 33(3), 321-349. doi: 10.1177/0149206307300814
- Luthans, F., Youssef, C.M., & Avolio, B.J. (2007). *Psychological Capital: Developing the Human Competitive Edge*. New York: Oxford.
- MacKinnon, David P., Fairchild, Amanda J., & Fritz, Matthew S. (2007). Mediation Analysis. *Annual Review of Psychology*, 58(1), 593-614. doi: doi:10.1146/annurev.psych.58.110405.085542
- MacKinnon, DavidP, Krull, JenniferL, & Lockwood, ChondraM. (2000). Equivalence of the Mediation, Confounding and Suppression Effect. *Prevention Science*, 1(4), 173-181. doi: 10.1023/a:1026595011371
- Maltin, E. (2011). Workplace commitment and employee wellbeing: A meta-analysis and study of commitment profiles. *Thesis*.
- Martire, Lynn M., Stephens, Mary Ann Parris, & Townsend, Aloen L. (2000). Centrality of women's multiple roles: Beneficial and detrimental consequences for psychological well-being. *Psychology and Aging*, 15(1), 148-156. doi: 10.1037/0882-7974.15.1.148
- Maslach, C. (1982). *Burnout, the cost of caring*. Englewood Cliffs, N.J.: Prentice-Hall.
- Masten, A.S., & Reed, M-G.J. (2002). Resilience in development. In C. R. Snyder & S. Lopez (Eds.), *Handbook of Positive Psychology* (pp. 74-88). Oxford: Oxford.
- Mathe, K., & Scott-Halsell, S. (2012). The Effects of Perceived External Prestige on Positive Psychological States in Quick Service Restaurants. *Journal of Human Resources in Hospitality & Tourism*, 11(4), 354-372. doi: 10.1080/15332845.2012.690684
- Mauno, Saija, Kinnunen, Ulla, & Ruokolainen, Mervi. (2006). Exploring work- and organization-based resources as moderators between work–family conflict, well-being, and job attitudes. *Work & Stress*, 20(3), 210-233. doi: 10.1080/02678370600999969
- McCormick, J. (1997). An attribution model of teachers' occupational stress and job satisfaction in a large educational system. *Work & Stress*, 11(1), 17-32. doi: 10.1080/02678379708256819
- McRae, S. (1993). Returning to Work after Childbirth: Opportunities and Inequalities. *European Sociological Review*, 9(2), 125-138.
- Meijman, T.F., & Mulder, G. (Eds.). (1998). *Psychological Aspects of Workload*. Hove, East Sussex, UK: Psychology Press Ltd.

- Michel, J.S., Kotrba, L.M., Mitchelson, J.K., Clark, M.A., & Baltes, B.B. (2011). Antecedents of work–family conflict: A meta-analytic review. *Journal of Organizational Behavior*, 32(5), 689-725. doi: 10.1002/job.695
- Mostert, K., Peeters, M., & Rost, I. (2011). Work–home Interference and the Relationship with Job Characteristics and Well-being: A South African Study among Employees in the Construction Industry. *Stress and Health*, 27, 238-251. doi: 10.1002/smi.1374
- Nguyen, T.D., & Nguyen, T.T.M. (2011). Psychological Capital, Quality of Work Life, and Quality of Life of Marketers: Evidence from Vietnam. *Journal of Macromarketing*. doi: 10.1177/0276146711422065
- Odle-Dusseau, H.N., Britt, T.W., & Greene-Shortridge, T.M. (2012). Organizational Work–Family Resources as Predictors of Job Performance and Attitudes: The Process of Work–Family Conflict and Enrichment. *Journal of Occupational Health Psychology*, 17(1), 28-40. doi: 10.1037/a0026428
- Ongori, H., & Evans Agolla, J. (2008). Occupational Stress in Organizations and Its Effects on Organizational Performance. *Journal of Management Research*, 8(3).
- Paulhus, Delroy L., Robins, Richard W., Trzesniewski, Kali H., & Tracy, Jessica L. (2004). Two Replicable Suppressor Situations in Personality Research. *Multivariate Behavioral Research*, 39(2), 303-328. doi: 10.1207/s15327906mbr3902_7
- Perry-Smith, J.E., & Blum, T.C. (2000). Work-Family Human Resource Bundles and Perceived Organizational Performance. *The Academy of Management Journal*, 43(6), 1107-1117.
- Peterson, S.J. , Luthans, F., Avolio, B.J. , Walumbwa, F.O., & Zhang, Z. (2011). Psychological capital and employee performance: A latent growth modeling approach. *Personnel Psychology*, 64(2), 427-450. doi: 10.1111/j.1744-6570.2011.01215.x
- Rantanen, M., Mauno, S., Kinnunen, U., & Rantanen, J. (2011). Do individual coping strategies help or harm in the work–family conflict situation? Examining coping as a moderator between work–family conflict and well-being. *International Journal of Stress Management*, 18(1), 24-48. doi: 10.1037/a0022007
- Reddick, R.J., Rochlen, A.B., Grasso, J.R., Reilly, E.D., & Spikes, D.D. (2012). Academic fathers pursuing tenure: A qualitative study of work-family conflict, coping strategies and departmental culture. *Psychology of Men & Masculinity*, 13(1), 1-15. doi: 10.1037/a0023206
- Richardson, G.E. (2002). The metatheory of resilience and resiliency. *Journal of Clinical Psychology*, 58(3), 307-321. doi: 10.1002/jclp.10020
- Roberts, S.J., Scherer, L.L., & Bowyer, C.J. (2011). Job Stress and Incivility. *Journal of Leadership & Organizational Studies*, 18(4), 449-458. doi: 10.1177/1548051811409044
- Rothbard, N.P. (2001). Enriching or Depleting? The Dynamics of Engagement in Work and Family Roles. *Administrative Science Quarterly*, 46(4), 655-684.

- Ruderman, Marian N., Ohlott, Patricia J., Panzer, Kate, & King, Sara N. (2002). Benefits of Multiple Roles for Managerial Women. *The Academy of Management Journal*, 45(2), 369-386.
- Saks, A.M., & Gruman, J.A. (2011). Organizational socialization and positive organizational behaviour: implications for theory, research and practice. *Canadian Journal of Administrative Sciences / Revue Canadienne des Sciences de l'Administration*, 28(1), 14-26. doi: 10.1002/cjas.169
- Schaufeli, W.B., & Bakker, A.B. (2004). Job Demands, Job Resources, and Their Relationship with Burnout and Engagement: A Multi-Sample Study. *Journal of Organizational Behavior*, 25(3), 293-315. doi: 10.1002/job.248
- Schaufeli, W.B., Bakker, A.B., & Van Rhenen, W. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. *Journal of Organizational Behavior*, 30(7), 893-917. doi: 10.1002/job.595
- Schaufeli, W.B., & Salanova, M. (2011). Work engagement: On how to better catch a slippery concept. *European Journal of Work and Organizational Psychology*, 20(1), 39-46. doi: 10.1080/1359432x.2010.515981
- Schaufeli, W.B., Salanova, M., González-romá, V., & Bakker, A.B. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies*, 3(1), 71-92.
- Scheier, M.F., & Carver, C.S. (1985). Optimism, coping, and health: Assessment and implications of generalized outcome expectancies. *Health Psychology*, 4(3), 219-247. doi: 10.1037/0278-6133.4.3.219
- Seligman, M.E.P. (1991). *Learned Optimism*. New York: Alfred A. Knopf Inc.
- Seligman, M.E.P. (1998). *Learned Optimism*. New York: Pocket Books.
- Shankar, T., & Bhatnagar, J. (2010). Work Life Balance, Employee Engagement, Emotional Consonance/Dissonance & Turnover Intention. *Indian Journal of Industrial Relations*, 46(1), 74-87.
- Siegrist, J. (1996). Adverse health effects of high-effort/low-reward conditions. *Journal of Occupational Health Psychology*, 1(1), 27-41. doi: 10.1037/1076-8998.1.1.27
- Singh, J., Goolsby, J.R., & Rhoads, G.K. (1994). Behavioral and Psychological Consequences of Boundary Spanning Burnout for Customer Service Representatives. *Journal of Marketing Research*, 31(4), 558-569.
- Snyder, C.R. (Ed.). (2000). *Handbook of Hope: theory, measures and applications*. San Diego: Academic Press.
- Snyder, C.R., Irving, L.M., & Anderson, J.R. (1991). Hope and health *Handbook of social and clinical psychology: The health perspective*. (pp. 285-305): Elmsford, NY, US: Pergamon Press.
- Sonnentag, S., Binnewies, C., & Mojza, E.J. (2010). Staying Well and Engaged When Demands Are High: The Role of Psychological Detachment. *Journal of Applied Psychology*, 95(5), 965-976. doi: 10.1037/a0020032

- Stadjkovic, A.D., Luthans, F., & Slocum Jr, J. (1998). Social Cognitive Theory and Self-Efficacy: Going Beyond Traditional Motivational and Behavioral Approaches. *Organizational Dynamics*, 26(4), 62-74.
- . Stress In America. (2008). In H. I. I. P. A. a. Policy (Ed.): The American Psychological Association.
- Tarafdar, M., Turagu-Nathan, B.S., & Ragu-Nathan, T. S. (2007). The Impact of Technostress on Role Stress and Productivity. *Journal of Management Information Systems*, 24(1), 301-328.
- ten Brummelhuis, L.L., Bakker, A.B., & Euwema, M.C. (2010). Is family-to-work interference related to co-workers' work outcomes? *Journal of Vocational Behavior*, 77(3), 461-469. doi: 10.1016/j.jvb.2010.06.001
- Totterdell, P., Wood, S., & Wall, T. (2006). An intra-individual test of the demands--control model: A weekly diary study of psychological strain in portfolio workers. *Journal of Occupational & Organizational Psychology*, 79(1), 63-84.
- Tugade, M.M., & Fredrickson, B.L. (2004). Resilient Individuals Use Positive Emotions to Bounce Back From Negative Emotional Experiences. *Journal of Personality and Social Psychology*, 86(2), 320-333. doi: 10.1037/0022-3514.86.2.320
- Van Rooy, D., Whitman, D., Hart, D., & Caleo, S. (2011). Measuring Employee Engagement During a Financial Downturn: Business Imperative or Nuisance? *Journal of Business and Psychology*, 26(2), 147-152. doi: 10.1007/s10869-011-9225-6
- Van Steenbergen, E.F., & Ellemers, N. (2009). Is managing the work–family interface worthwhile? Benefits for employee health and performance. *Journal of Organizational Behavior*, 30, 617-642. doi: 10.1002/job.569
- Van Steenbergen, E.F., Ellemers, N., & Mooijaart, A.B. (2007). How work and family can facilitate each other: Distinct types of work-family facilitation and outcomes for women and men. *Journal of Occupational Health Psychology*, 12(3), 279-300. doi: 10.1037/1076-8998.12.3.279
- Voydanoff, P. (2004). The Effects of Work Demands and Resources on Work-to-Family Conflict and Facilitation. *Journal of Marriage and Family*, 66(2), 398-412.
- Voydanoff, P. (2005). Toward a Conceptualization of Perceived Work-Family Fit and Balance: A Demands and Resources Approach. *Journal of Marriage and Family*, 67(4), 822-836.
- Voydanoff, P., & Donnelly, B.W. (1989). Work and Family Roles and Psychological Distress. *Journal of Marriage and Family*, 51(4), 923-932.
- Voydanoff, P., & Donnelly, B.W. (1999). Multiple Roles and Psychological Distress: The Intersection of the Paid Worker, Spouse, and Parent Roles with the Role of the Adult Child. *Journal of Marriage and Family*, 61(3), 725-738.
- Walumbwa, F.O., Luthans, F., Avey, J.B., & Oke, A. (2011). Authentically leading groups: The mediating role of collective psychological capital and trust. *Journal of Organizational Behavior*, 32(1), 4-24. doi: 10.1002/job.653

- Wayne, J.H., Grzywacz, J.G., Carlson, D.S., & Kacmar, K.M. (2007). Work-family facilitation: A theoretical explanation and model of primary antecedents and consequences. *Human Resource Management Review*, 17(1), 63-76. doi: 10.1016/j.hrmr.2007.01.002
- Xanthopoulou, D., Bakker, A., Dollard, M.F., Demerouti, E., Schaufeli, W.B., Taris, T.W., & Schreurs, P. (2006). When do job demands particularly predict burnout? The moderating role of job resources. *Journal of Managerial Psychology*, 22(8), 766-786. doi: DOI 10.1108/02683940710837714
- Xanthopoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2007). The role of personal resources in the job demands-resources model. *International Journal of Stress Management*, 14(2), 121-141. doi: 10.1037/1072-5245.14.2.121
- Xanthopoulou, D., Bakker, A.B., Demerouti, E., & Schaufeli, W.B. (2009). Reciprocal relationships between job resources, personal resources and work engagement. *Journal of Vocational Behavior*, 74(3), 235-244. doi: 10.1016/j.jvb.2008.11.003
- Yavas, U., Babakus, E., & Karatepe, O. (2008). Attitudinal and behavioral consequences of work-family conflict and family-work conflict: Does gender matter? *International Journal of Service Industry Management*, 19(1), 17-39. doi: 10.1108/09564230810855699

Appendix 1: Factor Analysis Graphs

Figure 15: PsyCap Factor Analysis Scree Plot

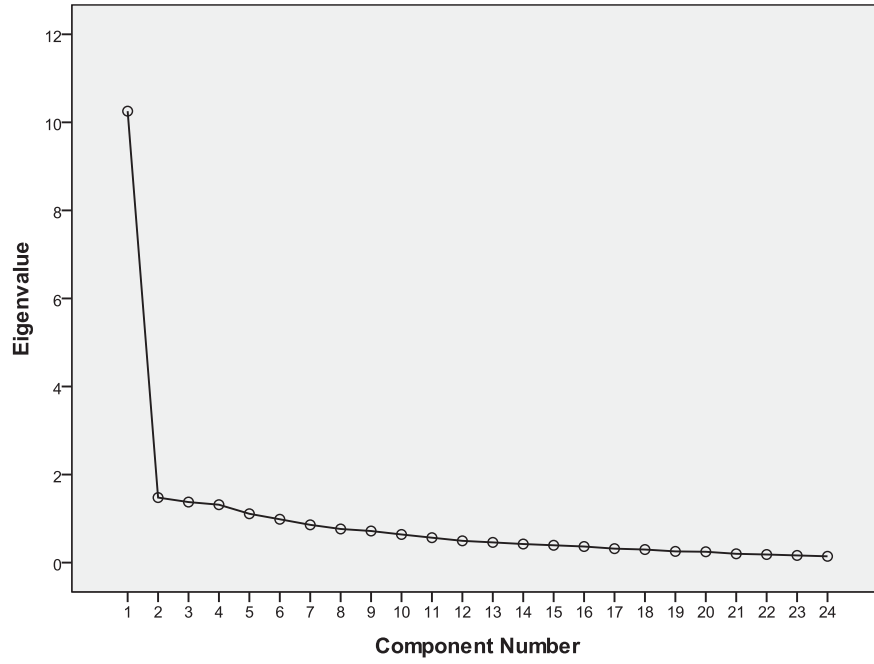


Figure 16: WFC Factor Analysis Scree Plot

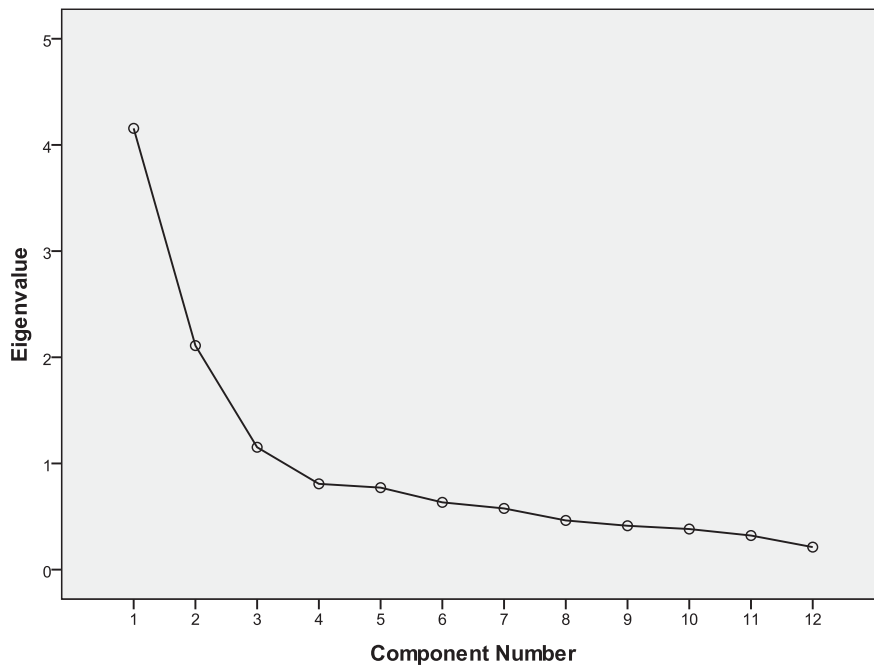


Figure 17: Engagement Factor Analysis Scree Plot

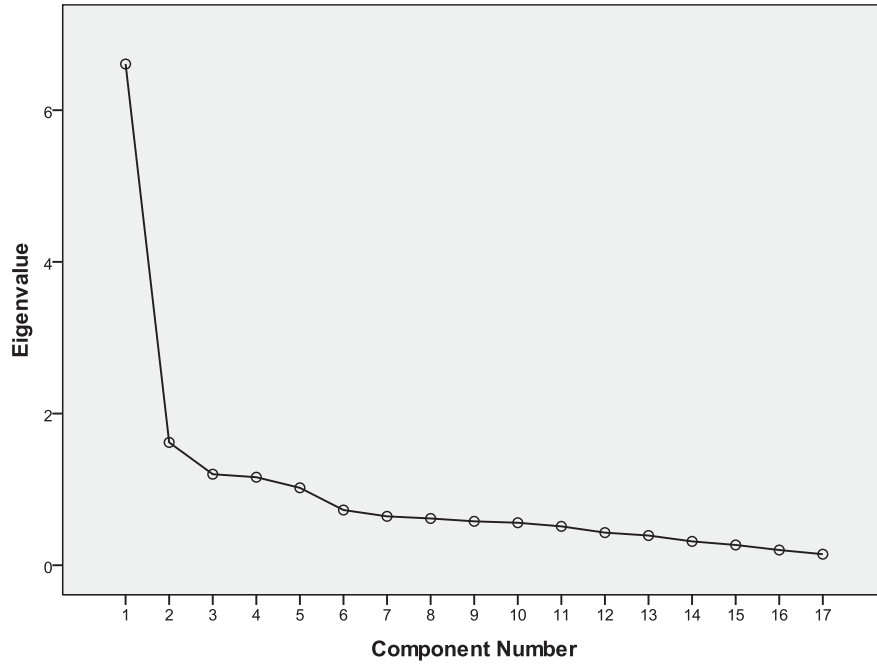


Figure 18: Job Stress Factor Analysis Scree Plot

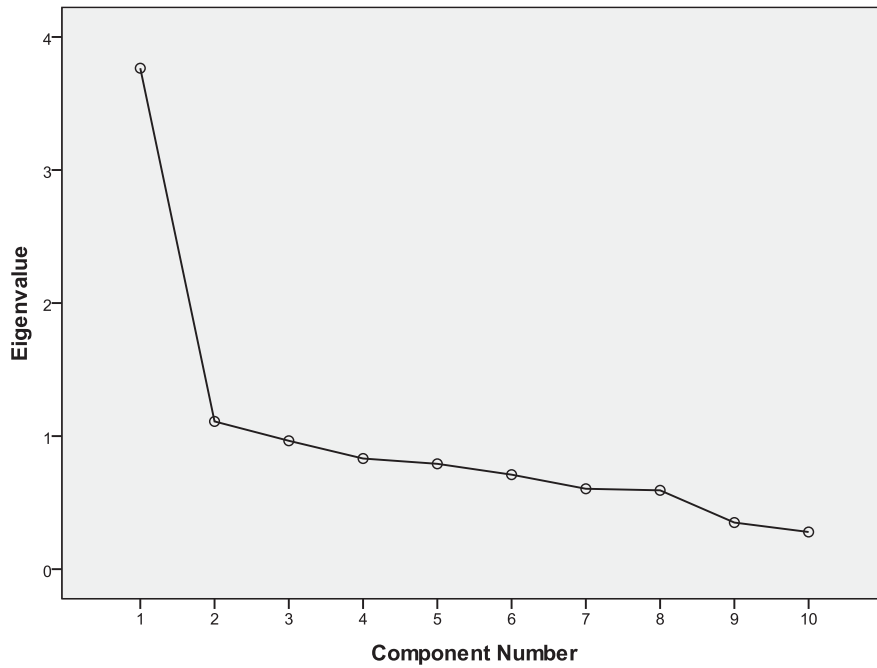


Figure 19: Burnout Factor Analysis Scree Plot

