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Subjective Well-Being in New Zealand Teachers: An Examination of the Role of Psychological Capital

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

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### Abstract

This study examines the relationship between psychological capital and well-being in a sample of 1,502 teachers. Teaching has been consistently identified as one of the most stressful occupations, a situation that inherently raises questions about teacher wellbeing. This study explores the extent to which psychological capital can act as a protective factor against stress and also examines the role of appraisal and coping in the stress-strain relationship. Teachers across New Zealand and from a range of teaching levels completed surveys measuring psychological capital, challenge and threat appraisal, task-focussed and emotion-focussed coping, affect, perceived stress, and life satisfaction. Data analysis identified direct and indirect effects of psychological capital on outcome measures of well-being and stress. Teachers with higher levels of psychological capital reported higher levels of well-being and lower levels of stress. Psychological capital was positively related to life satisfaction ( $r = .47, p < .01$ ) and positive affect ( $r = .63, p < .01$ ), and negatively related to perceived stress ( $r = -.66, p < .01$ ) and negative affect ( $r = -.61, p < .01$ ). In addition, psychological capital was a significant predictor of outcome measures. Psychological capital was also positively related to challenge appraisal and task-focussed coping, and negatively related to threat appraisal and emotion-focussed coping. Task-focussed coping was found to mediate the relationship between challenge appraisal and measures of well-being. Teachers high in psychological capital were more likely to appraise a situation as a challenge than a threat, and as a partial mediator, task-focussed coping explained some of the relationship between challenge appraisal and well-being.

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Approval for this research has been obtained from the Massey University Ethics Committee (Northern), reference 15/011

## Contents

Abstract.....	iii
Acknowledgements .....	iv
Table of Contents .....	v
List of Tables .....	
Introduction .....	1
Chapter One      Teacher Stress and Well-Being .....	4
1.2      Contributing Factors to Teacher Well-Being.....	5
1.3      The Job-Demands-Resources Model .....	6
Chapter Two      Psychological Capital .....	10
2.2      Developing Psychological Capital.....	13
2.3      Psychological Capital and the Current Study.....	14
Chapter Three    The Transactional Model of Stress and Coping .....	18
3.2      Appraisals .....	18
3.3      Coping .....	20
3.4      The Transactional Model and the Current Study .....	23
Chapter Four     Subjective Well-Being .....	25
4.2      Subjective Well-Being and the Context of Work .....	29
4.3      Subjective Well-Being and the Current Study .....	30
The Present Study .....	32
Chapter Five     Method.....	33
5.1      Participants .....	33
5.2      Measures.....	35
5.3      Procedure.....	38
5.4      Data Analysis.....	39
Chapter Six      Results.....	42
6.1      Group Differences.....	42
6.2      Bivariate Correlations .....	44

6.3	Hypothesis Testing .....	46
6.4	Mediation Analysis .....	49
Chapter Seven	Discussion.....	52
7.2	Implications for Research .....	55
7.3	Implications for Practice .....	57
7.4	Limitations .....	58
7.5	Conclusion.....	60
References.....		61
Appendices.....		
Appendix 1.	Questionnaire .....	83
Appendix 2.	Letter to School Principals.....	91
Appendix 3.	Invitation to Participate .....	92
Appendix 4.	Ethics Approval.....	93

**List of Figures**

Figure 1.	Job-Resources-Demands Model.....	6
Figure 2.	Conceptual framework for the Current Study.....	17



### List of Tables

Table 1.	Demographic Information... ..	33
Table 2.	Bivariate Correlations... ..	44
Table 3.	Multiple Regression: Dependent Variable = Life Satisfaction... ..	46
Table 4.	Multiple Regression: Dependent Variable = Positive Affect ... ..	47
Table 5.	Multiple Regression: Dependent Variable = Perceived Stress ... ..	48
Table 6.	Multiple Regression: Dependent Variable = Negative Affect	49
Table 7.	Mediation Analysis: Psychological Capital as a mediator between Challenge Appraisal and Task-Focussed Coping	50
Table 8.	Mediation Analysis: Task-Focussed Coping as a mediator between Challenge Appraisal and Life Satisfaction	50
Table 9.	Mediation Analysis: Task-Focussed Coping as a mediator between Challenge Appraisal and Positive Affect	51

### **Introduction to the Current Study**

Teaching is consistently identified as one of the most stressful occupations that leads to negative outcomes which include high levels of attrition (Boe, Bobbitt, Cook, Whitener, & Weber, 1997), burnout (Hakanen, Bakker, & Schaufeli, 2006), and diminished mental and physical health (Darr & Johns, 2008). The economic, social and emotional costs of high stress levels is significant. With evidence that teacher well-being has at least indirect effects on student academic performance and socio-emotional adjustment (Malmberg & Hagger, 2009; Roth, Assor, Kanat-Maymon, & Kaplan, 2007) it is important for research to identify positive supports for well-being and potential buffers of workplace stress. Creating school contexts that foster teacher commitment and well-being is imperative if dropout rates and levels of occupational stress are to be reduced. Additionally, exploring and identifying individual differences that either buffer the effects of stress or play a direct role in promoting well-being and life satisfaction may help contribute to further understanding stress and well-being within the education sector and inform interventions.

Previously, researchers have identified relationships between coping styles and levels of well-being (Lapierre & Allen, 2006). Different types of coping can be more or less effective depending on situational factors and individual differences. Coping strategies may include resolution-focussed actions, changing how one engages on an emotional level with the problem, or attempts at avoiding it altogether (Lazarus & Folkman, 1984). Each of these strategies can be regarded as beneficial or detrimental to well-being depending on how and when they are used. For example, a student with an upcoming exam may initially avoid the required study which can alleviate the pressure (at least temporarily). However, if they use avoidant coping for a prolonged period this is likely to lead to an increased feeling of strain if

they do not then adopt some form of task-focused strategy, i.e. revision and exam preparation.

Types of coping may be influenced by how an individual perceives the situation. Not all demands act in the same way for all individuals; two people may face similar demands but appraise, and subsequently address, the difficulty in different ways. One may perceive that the demand poses a threat to their well-being, perhaps because they believe they do not possess the resources, skills, or support required to be successful in overcoming the difficulty. The other may appraise the demand as a situation which poses a challenge; something they believe they can overcome and which may simultaneously develop a sense of achievement, mastery or accomplishment. The event or demand in itself is not independent of the appraisal process; it is this process which gives meaning to the event (Lazarus & Folkman, 1984).

In the face of a demanding situation, what is required is a balance between the demand and the available resources to tackle it effectively. It has been suggested that an imbalance in demands and resources (i.e. high level of demands with low resources) plays a contributing role in work-place strain, regardless of occupation (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001). It may be that the better equipped with resources teachers are, the more likely they are to perceive a situation positively rather than as a threat. In turn, this may relate directly to the type of coping selected and ultimately influence emotional and psychological well-being.

Available resources for teachers may be found across a range of levels. At a policy level, curriculum documents, professional development and support resources may provide direction and guidance, while at the level of the employing organisation, leadership skills,

managerial approaches and school-wide decision making have been shown to be protective factors (Leithwood, 2005). In addition to the organisational, interpersonal and environmental resources are the individual characteristics that teachers bring with them to the role. Such characteristics may include personality, a sense of purpose and meaningful work, and motivational attributes which facilitate achievement of goals. Four such characteristics have been found to contribute to a multidimensional construct known as psychological capital. Psychological capital is made up of self-efficacy, hope, resilience and optimism (Luthans, Luthans, & Luthans, 2004). Higher levels of psychological capital can result in positive outcomes such as improved performance (Clapp-Smith, Vogelgesang, & Avey, 2009; Gooty, Gavin, Johnson, Frazier, & Snow, 2009), lower levels of absenteeism and intentions to quit (Avey, Luthans, & Jensen, 2009), and better psychological well-being (Avey, Luthans, Smith, & Palmer, 2010). The present study will investigate psychological capital as an individual difference that plays a role in outcomes of well-being. Those teachers with higher levels of psychological capital may consider themselves to have a resource which can be drawn upon when faced with a difficult situation and additionally, may have a stronger propensity towards positive appraisals and effective coping strategies. This study proposes therefore that psychological capital may be a protective factor for well-being, both directly and indirectly.

## **Chapter One: Teacher Stress and Well-Being**

Stress within the teaching profession has been defined as “a negative emotional experience being triggered by the teacher’s perception that their work situation constituted a threat to their self-esteem or well-being” (Kyriacou, 2001, p. 28). Despite survey data indicating the high prevalence of teachers finding their profession stressful, many successfully negotiate the strains and find effective ways of moderating the impact of daily pressures.

Although international statistics reporting the prevalence of teacher distress and/or teacher attrition vary, they are consistently of significant concern. In the New Zealand context, research has found that less than 50 percent of educators believed their workload to be manageable (Wylie, 2007) and employees in the education sector were amongst those who reported that they often to always felt stressed (Statistics New Zealand, 2008). In 2008, the education sector recorded the highest proportion of employees who reported being either dissatisfied or very dissatisfied with their work-life balance (Statistics New Zealand, 2008). Wylie’s 2007 study reported that only 32 percent of teachers were satisfied with their work-life balance. These findings are supported internationally with suggestions that more than 40 percent of teachers have experienced serious stress-related symptoms (Austin, Shah, & Muncer, 2005). Research conducted in the UK with a sample of 17,000 individuals indicated similar results; when compared to all other occupational groups, teaching was found to consist of the largest number of highly stressed employees (Smith, Brice, Collins, McNamara, & Matthews, 2000). It has been estimated that between five and twenty percent of all teachers suffer from burnout (Schaufeli, Daamen, & Van Mierlo, 1994), while survey data from the United Kingdom, Australia, New Zealand and America report

that approximately a third of all teachers found their work to be 'stressful' or 'extremely stressful' (Pithers & Soden, 1998). Evidence of such high prevalence rates are suggestive of potential difficulties recruiting and retaining staff in the profession.

## **1.2 Contributing Factors to Teacher Well-Being**

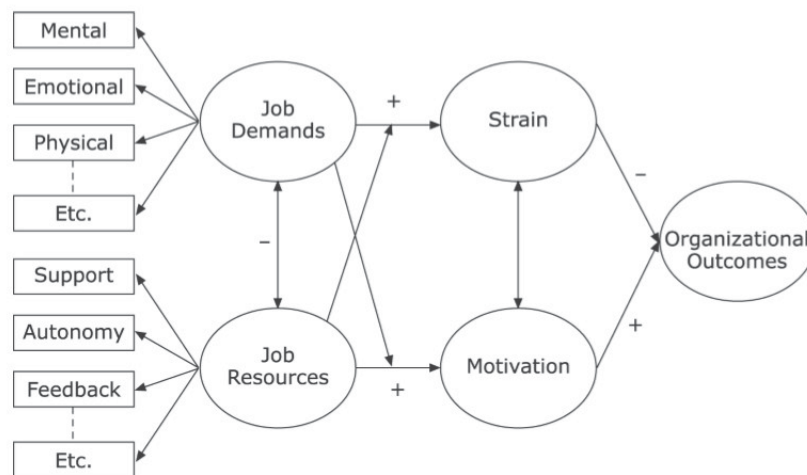
Occupational well-being is defined as a positive evaluation of aspects of one's work. As a multi-dimensional phenomenon, occupational well-being is reflected in one's work-related affect, cognitions, motivations and behaviours, and in self-reported physical health (Van Horn, Taris, Schaufeli, & Schreurs, 2004). Well-being is not only the absence of stress or the presence of job satisfaction, but also incorporates positive cognitions, motivations and health (Van Horn et al., 2004). Occupational well-being may indicate the extent to which teachers are satisfied in their role, and the degree to which they are emotionally and cognitively committed to their position (Saks, 2006). Teacher engagement is characterised by workplace participation, positive attitudes and emotions towards work, low absenteeism and positive future career ambitions (Parker & Martin, 2009; Schaufeli, Taris, & Van Rhenen, 2008). High levels of satisfaction are seen to increase a teacher's motivation which may in turn raise intrinsic motivation in students (Day, 2000; Klusmann, Kunter, Trautwein, Lüdtke, & Baumert, 2008).

Teacher engagement and well-being can be influenced by an expansive range of individual situational and environmental factors, many of which have been the focus for an array of research studies. However, the Job-Demands-Resources model provides a framework which provides a wider lens for exploring and understanding processes which may underpin well-being.

### 1.3 Job-Demands-Resources Model

The Job-Demands-Resources (JD-R) model (Demerouti et al., 2001; Schaufeli & Bakker, 2004) recognises that each occupation has its own set of specific risk factors but, irrespective of the specific strains, it attributes employee well-being to two general characteristics of the work environment; demands and resources.

Job resources refer to the physical, psychological, social or organisational aspects of work which may facilitate achieving work goals and reduce job demands and their associated physiological and psychological costs, and aspects of the work which may stimulate personal growth and development (Demerouti et al., 2001). Job demands are the physical, social or organisational aspects of the work which necessitate sustained physical or mental efforts and, unless balanced by appropriate resources, can be related to negative physiological and psychological outcomes.



**Figure 1. The JD-R Model** (Source: Bakker & Demerouti (2007, p. 313))

According to the JD-R model, job demands are the main predictors of job strain (Bakker, Demerouti, & Verbeke, 2004), reduced psychological well-being (Sonnentag, Binnewies, & Mojza, 2010), and poor health outcomes (Bakker & Demerouti, 2007; Hockey, 1993). Chronic job demands exhaust an individual's mental and physical resources, leading to the erosion of energy, leaving an employee feeling drained and fatigued, and resulting in health problems. Examples of job demands include work overload, role ambiguity, emotional demands and aspects of the physical environment, such as loud noise levels. Teachers can be challenged by a vast array of demands which result from their daily work, such as student motivation and negative behaviours, or low levels of autonomy.

Student motivation and behaviour have been indicated as sources of poor well-being (Betoret, 2006; Evers, Tomic, & Brouwers, 2004; Howard & Johnson, 2004; Kyriacou, 2001; McCormick & Barnett, 2011). Other factors include: bureaucracy and administrative red tape (Burke & Greenglass, 1996); time pressures, workload and excessive paperwork (Carlson & Thompson, 1995; Chan, 1998; McCarthy, 2009; Pithers & Soden, 1998; Travers & Cooper, 1996); lack of professional recognition (Pithers, 1995); coping with change (Benmansour, 1998); lack of resources (Carlson & Thompson, 1995) and government level policy implementation (Moriarty, Edmonds, Blatchford, & Martin, 2001). Inequalities in working relationships have been found to affect emotional exhaustion (van Dierendonck, Schaufeli, & Buunk, 2001). Decision-making and autonomy have been acknowledged as key aspects of teacher professionalism (Ingersoll & Alsalam, 1997; Pearson & Moomaw, 2005) with perceptions of low levels of control over work contributing to higher levels of burnout among teachers (Santavirta, 2007).



Research has found evidence for the interaction of job resources on the relationship between job demands and well-being; for employees where the levels of resources were high, the effect of job demands on levels of burnout was significantly reduced (Xanthopoulou et al., 2007). Similarly, Bakker et al. (2005) found that high demands when combined with low resources significantly predicted burnout when they conducted a study with teaching staff in a higher education institute. The JD-R model proposes that many different types of job demands and resources may interact in predicting workplace stress (Bakker et al., 2004).

Job resources have been associated with levels of work engagement (Bakker, Hakanen, Demerouti, & Xanthopoulou, 2007; Hakanen et al., 2006; Mauno, Kinnunen, & Ruokolainen, 2007) and organisational commitment (Salanova, Agut, & Peiró, 2005). They were found to be the most important predictors of work engagement amongst a group of teachers (Hakanen et al., 2006).

A range of intrinsic and extrinsic factors influence teacher stress and well-being. Intrinsic factors such as the desire to make a contribution to children's emotional and academic development as well as making a difference to society (Pearson & Moomaw, 2005) are powerful motivators and these are often the reasons teachers quote as to why they regard their stressful profession as also highly rewarding. In addition, quality of life outside of work that allows opportunities to relax and detach from work pressures can be a protective resource for teachers (Michie, 2002).

With differential effects of stress repeatedly reported for educators, using the theoretical underpinnings of the JD-R model as a basis from which to view teacher well-being and stress allows the study to investigate the role of individual differences in

outcomes for teachers. Based on the JD-R framework, the present study will examine how psychological capital may act as a resource that helps reduce the stress arising from work demands for teachers.

## Chapter Two: Psychological Capital

Psychological capital is a multi-dimensional construct which is characterised by the combination of four critical factors; *self-efficacy*, *hope*, *resiliency*, and *optimism* (Luthans, Avolio, Avey, & Norman, 2007b). It is described as a psychological resource that may promote growth and performance (Luthans, Avolio, Walumbwa, & Li, 2005).

Self-efficacy has been defined as “an individual’s conviction (or confidence) about his or her abilities to mobilise the motivation, cognitive resources, and course of action needed to successfully execute a specific task within a given context” (Stajkovic & Luthans, 1998, p. 66). It is a perception (rather than the actual availability of resources or abilities per se) that one possesses the necessary abilities to be able to engage with a task and achieve success.

Teacher self-efficacy has been found to be negatively related to burnout (Chwalisz, Altmaier, & Russell, 1992; Evers, Brouwers, & Tomic, 2002; Skaalvik & Skaalvik, 2010) and lower levels of self-efficacy related to higher levels of work-related stress (Betoret, 2006; Schwarzer & Hallum, 2008), and lower levels of job satisfaction (Klassen et al., 2009; Klassen & Chiu, 2010). In contrast, self-efficacy has been reported to be positively related to job commitment (Caprara, Barbaranelli, Borgogni, & Steca, 2003). Student factors such as achievement and motivation have been associated with teacher self-efficacy (Caprara, Barbaranelli, Steca, & Malone, 2006; Skaalvik & Skaalvik, 2010).

Snyder (2000) defines *hope* as the belief that you can identify what your goals are, a confidence that you can find a way to make them happen and the certainty that you can exert the effort required to achieve success at accomplishing them. It relates to an individual’s perception of their ability to create pathways to succeed in their goals (Cheung,

Tang, & Tang, 2011). Agency can be seen as having the will, motivation and determination to accomplish the desired goals (Snyder, 2000, 2002). People who are driven to accomplish their goals are seen to have this sense of agency (Luthans & Youssef, 2004) and in addition, they hold an expectation that they will succeed; they have the confidence that any obstacles along the way can be overcome by the use of alternative courses of action (Luthans et al., 2007b). The reciprocal relationship between agency and pathways is important as it is this duality that differentiates hope from other similar constructs such as optimism (Snyder et al., 1991). For example, Seligman (1991) differentiates optimism from hope on the conceptual basis that forces outside of the self contribute to optimism expectancies, whereas Snyder (2000) explains hope as being initiated and determined through one's self, i.e. the ownership of agency and the will to find pathways to optimal resolution.

Research has yet to explore with any depth the role of hope in organisational settings, or the potential relationship between hope, the work environment and well-being. Initial investigations into the contributions of hope focussed on academic and athletic success (Curry, Snyder, Cook, Ruby, & Rehm, 1997; Snyder, 2000; Snyder, Rand, & Sigmon, 2002) finding evidence that hope can have a positive impact on performance in these areas. Preliminary empirical research has found relationships between hope and job satisfaction and organisational commitment (Luthans & Jensen, 2002; Peterson & Luthans, 2003) and between hope and work performance (Adams et al., 2002). Larson and Luthans (2006) found that levels of hope in factory workers were related to job satisfaction and organisational commitment. Similar findings were reported by Youssef and Luthans (2007) who used both self-rated scales of performance and organisational performance appraisals, and found relationships between hope, job satisfaction, performance, organisational commitment and work happiness.

Although the terms *hope* and *optimism* are often used interchangeably, Seligman (1991) has defined optimism in relation to attribution theory; those who are optimistic regard positive events from the perspective of internal, stable and global attributions, i.e. they credit the event to result from being driven by themselves and they perceive that, overall, they have the ability to achieve positive results. Conversely, they attribute negative events to external, unstable and/or specific reasons; for example, somebody who fails to be employed following an interview may explain it to themselves as being the result of the organisation or the interviewers, there was no opportunity for the person to display their best qualities, or, a sense that at the next interview, things will be better. This allows individuals to distance themselves from unfavourable events and subsequently protects them from the harmful consequences that arise from such attributions (Jian & Hanling, 2009). In contrast to optimists, pessimistic people make internal attributions to difficult situations or bad events (i.e. 'it's all my own fault'), the attributions are stable, lasting a long time, and global (i.e. see it as affecting everything they do). As such, optimism may play a role for teachers when dealing with difficult workplace situations.

The final component of psychological capital, *resilience*, is characterised by the capability of individuals to handle adversity or significant risk through adaptation and positive coping (Masten, 2001). It is described by Luthans (2002) as the ability to 'bounce back' from negative challenges such as uncertainty, conflict or failure, and also when related to positive change; for example, a workplace promotion can be viewed as a positive event but it may bring with it increased responsibility. Individuals who are resilient can grow and increase in resilience through their experiences of change, adversity or risk (Luthans & Youssef, 2004; Richardson, 2002). In the workplace, resilient individuals are seen to be open to new experiences, are flexible to changing demands and display more emotional stability

when faced with adversity (Tugade & Fredrickson, 2004). Individuals who have high levels of resiliency are regarded as having the ability to adapt and succeed in the face of challenging working conditions (Avey, Wernsing, & Luthans, 2008).

## **2.2 Developing Psychological Capital**

In order for psychological capital to be valuable to organisations it is important that it is made up of state-like, malleable components. Organisations can therefore design and implement interventions designed to address and increase levels of each of the four components of the construct. Characteristics which are considered to be traits are regarded as being generally fixed and stable over time, with minimal influence from the external environment at that moment. Establishing that self-efficacy, resilience, optimism and hope are state-like, i.e. are responses to the moment and/or situation rather than fixed dispositions, is a central factor that differentiates psychological capital from other similar constructs (Luthans et al., 2007b). Luthans et al. (2007b) argue for the malleability of each of the four components and have demonstrated the success of preliminary intervention programmes, presenting them as support for the argument that psychological capital components are open to change and development. This is important if organisations are going to profit from the benefits of psychological capital as an economical lever and a supportive resource which may promote well-being.

Levels of psychological capital have been demonstrated to increase following support/training programmes through interventions delivered in group sessions (Luthans, Avey, Avolio, Norman, & Combs, 2006; Milan & Luthans, 2006) and via delivery through the internet (Luthans, Avey, & Patera, 2008). A randomised control trial of a psychological

capital intervention found that participants in the treatment group reported higher levels of psychological capital post intervention and increases in psychological capital were also significantly related to improvements in performance, as measured by both self-rated reports and manager ratings of performance (Luthans, Avey, Avolio, & Peterson, 2010). A pre-test/post-test control group experiment demonstrated significant increases in levels of psychological capital with interventions delivered by a web-based training intervention (Luthans et al., 2008)

### **2.3 Psychological Capital and the Current Study**

Effectively managing stress is a critical objective for effective human resource management, particularly in the education sector with its reported high levels of workplace stress. By recognising the role of psychological capital, human resource managers are likely to be in a stronger position to promote employee well-being, therefore protecting the organisation from the negative effects of stress in terms of reduced performance and organisational commitment, increased absenteeism and voluntary turnover.

In a group of 264 full-time Chinese school teachers researchers demonstrated that higher levels of psychological capital are negatively related to burnout and positively related to job satisfaction (Cheung et al., 2011). Employees' psychological capital has been found to be positively related to psychological well-being (PWB) and in addition, when measured over time, psychological capital also explained additional variance in levels of PWB (Avey et al., 2010). It has also been found that psychological capital predicted positive mood and daily life satisfaction (Culbertson, Fullagar, & Mills, 2010).

Milan and Luthans (2006) reported a significant relationship between psychological capital and job satisfaction and psychological capital and organisational commitment. Not

only was the relationship positive, but the variance explained was above and beyond that of human and social capital, indicating the significance of the role of psychological capital for human resource management.

If self-efficacy is seen as possessing the belief in oneself to exercise some influence over what we are able to do, and these beliefs determine how environmental opportunities and challenges are perceived (Bandura, 2006), then teachers' self-efficacy may act as a major source of motivation and commitment (Tschannen-Moran, Hoy, & Hoy, 1998). Self-efficacy for teachers may be conceptualised as their belief in their ability to organise, plan and demonstrate teaching practices that are needed to achieve the educational goals of their students (Skaalvik & Skaalvik, 2010). Self-efficacy may be seen to influence the choice of activities teachers engage in, the amount of effort exercised to achieve goals, and the degree of perseverance to overcome difficulties (Pajares, 1997).

Modest effects of experience on self-efficacy have been demonstrated (Wolters & Daugherty, 2007) with results showing effects of experience on self-efficacy for instructional strategies and for classroom management, although no effect of experience on self-efficacy for student engagement was found. However longitudinal research demonstrated that teacher self-efficacy may not be linear and data showed an initial rise in self-efficacy was followed by a decrease at later data collection points (Hoy & Spero, 2005). These findings were supported by research undertaken by Klassen et al. (2010) who found that self-efficacy varies with years of teachers' experience; teacher self-efficacy increased with experience for teachers in early and mid-career stages and declined for teachers in late career stages.



Resilience involves successful adaption, despite facing obstacles, and maintaining personal well-being (Howard & Johnson, 2004). It is seen as a dynamic process that is the result of interactions between a person and his or her environment (Day, 2008; Tait, 2008) which may act as a protective factor to sustain teachers in their profession and allow them to persevere and thrive. Over the course of their professional lives, the sustainability of resilience in teachers is neither a static nor innate state, but is influenced by the quality of leadership support and individual capacities to manage anticipated and unanticipated events (Day, 2008). Levels of resiliency have been seen to be strongly influenced by support from colleagues and leadership (Day & Gu, 2010). Factors which contribute to teacher resiliency also include strong intrinsic motivation (Flores & Day, 2006; Kitching, Morgan, & O'Leary, 2009), optimism (Chong & Low, 2009) and perseverance and persistence (Fleet, Kitson, Cassidy, & Hughes, 2007; Sinclair, 2008). Resiliency has been associated with high levels of occupational well-being in teachers and positive student outcomes (Klusmann et al., 2008).

## **2.4 Conceptual Framework**

As a personal resource, psychological capital may play a dual role; 1) as a protective factor against burnout, organisational withdrawal and perceived stress, and 2) be directly related to positive outcomes, i.e. life satisfaction and positive affect. In addition it is proposed that psychological capital will interact with forms of appraisal and coping to promote well-being. The use of different types of coping when faced with workplace demands is related to perceived stress and well-being, and can be understood through the theoretical underpinnings of the transactional model of stress. The current study aims to outline underlying processes and factors which contribute to well-being and stress, and to

review how appraisals and types of coping relate to psychological health and life satisfaction.

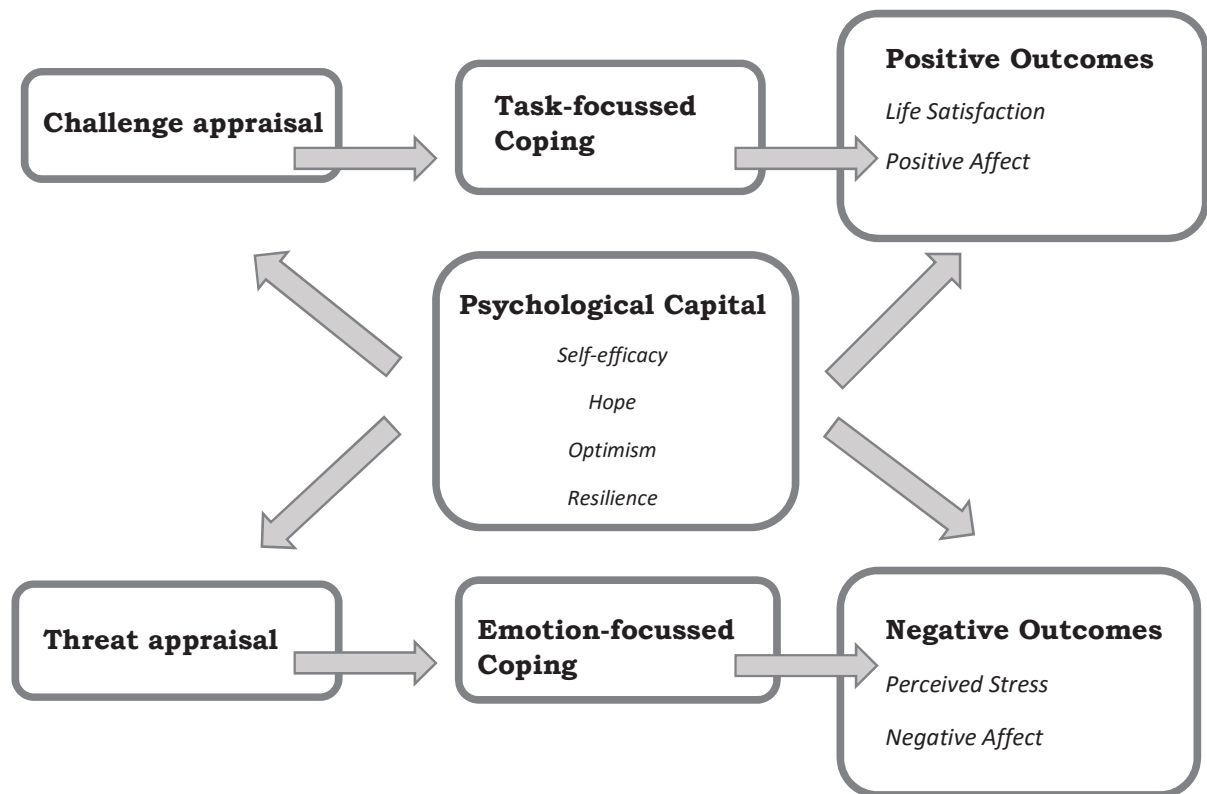


Figure 2. Conceptual framework of the current study

### **Chapter Three: The Transactional Model of Stress and Coping**

The cognitive-transactional model of Lazarus and Folkman (1984) places individual difference and relational meaning between person and context as the key to understanding why some demanding conditions, in some circumstances, or for some people, do not result in stress on a universal level. As a process-oriented framework, the model identifies the critical role of the appraisal process, focussing on the phenomenological nature of the interaction between person, environment, resources and demands (Folkman & Moskowitz, 2004). Stress is regarded as an individual and subjective phenomenon (Lazarus, 1991) which would suggest a need to explore the role of individual resources and demands in addition to work-specific resources and demands for teachers. Examining the role of the two key concepts in the transactional model, i.e. appraisal and coping, may provide further understanding of the processes involved in promoting teacher well-being.

The impact of a situation is constructed through a person's appraisal of available resources to manage demands and eliminate or minimise threats of harm or loss to goals, beliefs or expectations (Folkman & Moskowitz, 2000). Assessing the degree of risk presented by a situation is identified as primary appraisal (Lazarus & Folkman, 1984). At this initial stage of the process, individuals subjectively evaluate the situation in terms of potential risk (Perrewé & Zellars, 1999), the nature of perceived risks being specific to the individual.

#### **3.2 Appraisals**

Appraisals can take two forms; a challenge appraisal or a threat appraisal. Challenge appraisals are an evaluation of a particular situation in which a demand can be successfully negotiated. In contrast, threat appraisals are an assessment whereby an individual believes

that the demand may generate harm, there may be a potential risk of damage to one's well-being, or a perceived inability to overcome the demands of a situation (Webster, Beehr, & Christiansen, 2010). Challenge appraisals facilitate goal achievement whereas hindrance appraisals pose a threat to goal achievement (Cavanaugh, Boswell, Roehling, & Boudreau, 2000; Webster, Beehr, & Love, 2011) and discourage motivation (LePine, Podsakoff, & Lepine, 2005). Challenge appraisals may be more evident in situations where there are potential opportunities for mastery, gain or growth (Folkman & Moskowitz, 2000) and are more likely to take place under circumstances where a sense of control is perceived and the anticipation of personal reward, learning material gains, and/or social rewards may lead to a sense of enjoyment or satisfaction (Skinner & Brewer, 2002).

In work environments, research has associated challenge appraisal with positive emotions and lower levels of stress (Blascovich & Mendes, 2000; Crawford, LePine, & Rich, 2010; Lin, Wu, Chen, & Chen, 2014; Skinner & Brewer, 2002; Tomaka, Blascovich, Kelsey, & Leitten, 1993; Tomaka, Blascovich, Kibler, & Ernst, 1997), while threat appraisals are associated with negative emotional reactions (Fischer, Shaver, & Carnochan, 1990; Folkman & Lazarus, 1985). Cognitive appraisals partially mediated the relationship between occupational stress and burnout in a study of university teachers in Portugal (Simões, Gomes, Faria, & Gonçalves, 2014). Furthermore, challenge and hindrance appraisals have explained unique variance in affective states after controlling for the effects of demands (Searle & Auton, 2014).

Challenge appraisals have also been found to be positively related to job satisfaction and negatively related to job search in a study of self-reported work stress amongst a sample of 1,886 managerial employees (Cavanaugh et al., 2000). While challenge appraisals

are linked to higher levels of work engagement (Crawford et al., 2010), threat appraisals positively relate to absenteeism, intentions to quit and predict voluntary turnover (Fugate, Prussia, & Kinicki, 2012).

The importance of the role of appraisal and work performance has been established through a range of studies (O'Connor, Arnold, & Maurizio, 2010; Pearsall, Ellis, & Stein, 2009; Skinner & Brewer, 2002). When associated with coping expectancies, appraisal processes impacted on exam performance; positive perceptions accounted for the greatest variance in performance and resulted in greater levels of exam success (Skinner & Brewer, 2002). Moore, Vine, Wilson and Freeman (2012) examined the effects of appraisals on motor task performance by manipulating task instructions and the results of their study identified that the challenge group outperformed the threat group. Workplace demands have been found to relate to outcomes both directly and indirectly through appraisal (Webster et al., 2011).

### **3.3 Coping**

Coping involves a process of continuous appraisal in response to person-environment changes. Secondary appraisal is a reflection of the perceived resources or abilities the person believes they possess in order to cope (Lazarus & Folkman, 1984) and it involves evaluations as to the possibility of altering, avoiding or preventing the situation (Park & Folkman, 1997). Assessments are made of potential paths of action to regulate the distress and manage demands as best as possible. Strategies that may be effective at the onset of a difficult situation may be ineffective and in need of adaptation as the situation evolves. These appraisals and reappraisals highlight the dynamic nature of a process that is

embedded in the relationship between person and environment (Folkman & Moskowitz, 2004).

The function of the coping process is the regulation of distress and the management of problems (Folkman & Moskowitz, 2000), and it has been defined as the cognitions and behaviours that are used in order for individuals to manage internal and external demands that are appraised as taxing or exceeding the resources of the person (Lazarus, 1993). If demands are considered excessive or resources lacking then stress, poor health and negative organisational outcomes may be the consequence (Cox et al., 2000).

Lazarus and Folkman (1984) identify different types of coping which may be drawn upon by an individual in response to demands. Problem-focussed coping, or task-focussed coping (TFC) refers to directing efforts at managing demands and taking action, as opposed to changing the relational meaning imposed upon them (Lazarus, 1993). Strategies can be practical and task-oriented and may involve gathering information, decision making, planning, and acquiring resources (Folkman & Moskowitz, 2000).

Emotion-focussed forms of coping (EFC) are processes targeted at reducing emotional distress and are often used in times when there has been a perception that very little can be done to modify the situation or environment and the demand is therefore less amenable to change (Lazarus & Folkman, 1984). It may include employing tactics such as avoidance, minimisation, self-soothing (e.g. relaxation), rumination, denial, wishful thinking and distancing. Individuals employing emotion-focused approaches may moderate the perceived threat through a reappraisal process and make changes to the relational meaning between themselves and a given situation. Although in the long term these practices tend to be less effective at bringing about satisfactory resolution of a problem (Lazarus, 1993) or

may be viewed as avoiding reality or denial, Lazarus and Folkman (1984) maintain that EFC can sustain hope and optimism. This highlights the role of context and change, and avoids dichotomising coping processes into good or bad, helpful or unhelpful, effective or ineffective.

Research has identified that EFC is often associated with threat appraisals (Lowe & Bennett, 2003), suggesting higher levels of distress, negative affect, and burnout may arise if relied on in the long-term (Covington, 2000; Thompson, 2004). Other consequences of over-reliance on EFC include lower satisfaction, lower resilience and reduced participation, and poor aspirations (Martin, 2002; Martin & Marsh, 2008; Parker & Martin, 2009; Parker, Martin, Colmar, & Liem, 2012). Emotion-focussed coping strategies, particularly avoidance, are not effective in protecting individuals from repeated exposure to persistent threats to self-worth (Covington, 2000), and avoidance and denial may have a paradoxical effect; the result may be an increase in intrusive thoughts regarding the stressor, and subsequently an increase in anxiety (Najmi & Wegner, 2008).

Despite the differentiation between the two coping processes, one is not exclusive of the other (Lazarus & Folkman, 1984). For example, effective task-focused coping may reduce the perception of a threat, and subsequently it diminishes the distress generated by the threat, however, emotion-focused coping may diminish the initial distress, making it possible to consider the problem more calmly and thus facilitating effective task-focused coping (Carver & Connor-Smith, 2010). The degree of effectiveness of a coping strategy depends how well it meets the internal and/or external demands of the situation (Lazarus & Folkman, 1984).

### 3.4 The Transactional Model and the Current Study

Lazarus (1991) suggests that stress management plans fail because they treat everyone alike, not taking into account individual differences whereby some people, i.e. some teachers, may utilise different personal resources (such as psychological capital) than others. The transactional model offers a lens through which research can move away from models that concentrate largely on environmental stressors and instead highlight the focus on individual differences; in order to make sense of demands we need to take into account individual perceptions (Harris, Daniels, & Briner, 2004). Researching individual differences and personal resources may help to clarify their effects in predicting stress and well-being, and develop and implement person, as well as environment, focussed interventions (Parkes, 1994). The role of primary appraisal is important as it highlights the importance of individual differences; it is not necessarily a demand in itself that is the issue, it is the appraisal of that demand that influences how it is dealt with. Subsequent coping styles are employed based on appraisal and informed by past coping experience and personal resources (Mark & Smith, 2008).

As a personal resource, the current study proposes that psychological capital may be an individual difference which relates to appraisals and coping and it is therefore hypothesised that:

- H1: Psychological capital will be positively related to challenge appraisal.
- H2: Psychological capital will be negatively related to threat appraisal.
- H3: Psychological capital will be positively related to TFC.
- H4: Psychological capital will be negatively related to EFC.



As the role of primary appraisal may relate to subsequent choice of coping strategies, it is hypothesised that:

- H5: Challenge appraisal will act as a mediator between psychological capital and task-focussed coping.
- H6: Task-focussed coping will act as a mediator between challenge appraisal and positive affect.
- H7: Task-focussed coping will act as a mediator between challenge appraisal and life satisfaction

#### **Chapter Four: Subjective Well-Being**

In order to address the demands of the profession, it is evident that there is a need to integrate the stress literature within the educational context. Stress and well-being may act as potential mechanisms through which workplace experiences are translated into teacher behaviours (Erdogan, Bauer, Truxillo, & Mansfield, 2012). Well-being may be described as a positive evaluation of one's situation which includes both affective and cognitive dimensions (Diener & Suh, 1997).

Defining and measuring well-being has led researchers to develop theories which include Maslow's (1968) conception of self-actualisation, Rogers' (1961) perspective of the fully functioning person, and Allport's (1961) conception of maturity. Alternatively, Ryff (1989) proposes a conceptualisation of psychological well-being which was generated based on points of convergence of early theories and suggests well-being encompasses six main factors; positive relations with others, self-acceptance, autonomy, environmental mastery, purpose in life, and personal growth. For the purposes of the present study however, it is proposed that subjective well-being (Diener, 1994) will provide a comprehensive measure of well-being which will encompass both affective and cognitive domains. Predictors of global well-being and assessments of specific life domains explain 40-60% of the variance in measures of well-being (Andrews & Robinson, 1991). Some measures of happiness have been shown to reflect relatively large amounts of affect but relatively little cognition. In contrast, measures of satisfaction reflect relatively more cognition (Andrews and Robinson, 1991). Diener's (1994) subjective well-being construct provides the theoretical rationale for measuring both affect and cognitions.

Evaluations of life satisfaction reflect unique, individual perceptions of one's own life appraised as a whole. It comprises of three related but independent factors: positive affect, negative affect and life satisfaction (Diener, Suh, Lucas, & Smith, 1999). People are seen to use two components to evaluate their lives; their emotions and their thoughts (Linley, Maltby, Wood, Osborne, & Hurling, 2009; Veenhoven, 1984). While these judgments are general and not domain specific, they may involve explicit goals, individuals' values, and standards of comparison (Diener, 1994).

Positive affect (PA) reflects the extent to which individuals experience such emotions as enthusiasm, excitement, determination or mental alertness (Watson, 1988). In contrast, negative affect (NA) refers to moods such as feeling angry, afraid or guilty. Low positive affect may be characterised by sadness and lethargy and low negative affect may be experienced as a state of calmness and serenity (Watson, Clark, & Tellegen, 1988). When assessed with factor analysis, it has been suggested that positive and negative affect have been found to form independent dimensions (Watson, 1988; Watson & Tellegen, 1985; Zevon & Tellegen, 1982). However these assumptions have been challenged by Diener and Iran-Nejad (1986) who suggest that the relationship between positive and negative affect is not homoscedastic; individuals can experience both positive and negative emotions when they are at relatively low levels but at times when affect is strong and one of them is dominant then both emotions cannot be experienced simultaneously. Watson and Tellegen (1985) suggest that positive and negative affect account for approximately one half to three quarters of the common variance in SWB ratings.

Well-being is seen as more than just the absence of negative emotions; it comprises of frequent positive affect and infrequent negative affect (Diener, 1984, 1994; Diener,

Sandvik, & Pavot, 2009); individuals with high levels of SWB report mild to moderate levels of positive emotions for the majority of the time versus spikes of intense emotion (Diener, 2000).

Levels of subjective well-being are considered to be fairly constant over time (Costa & McCrae, 1988; Diener, Oishi, & Lucas, 2003). Although research suggests that life satisfaction is stable, two large scale studies from the UK and Germany were used to assess changes in life satisfaction over the lifespan (Baird, Lucas, & Donnellan, 2010). The analysis of the data identified a decline in life satisfaction after the age of 70 and the UK data showed an increase in life satisfaction for people in their forties through to their early seventies. Following major life events, such as physical impairment due to an accident, research has shown that, although there may be an initial decline in life satisfaction judgements, over time, SWB may stabilise and return to a level similar to pre-event levels (Headey & Wearing, 1989). Certain factors however have been identified that may impact on life satisfaction ratings in the long term; research has repeatedly identified that unemployment can have a long-term detrimental effect (Ervasti & Venetoklis, 2010; Lucas, Clark, Georgellis, & Diener, 2004; Pittau, Zelli, & Gelman, 2010), as can traumatic experiences such as being widowed (Lucas, Clark, Georgellis, & Diener, 2003).

The stability of SWB suggests a reflection of characteristics that are stable throughout an individual's life, such as personality. Subjective well-being is often strongly correlated with personality traits (Diener et al., 2003; Eid & Diener, 2004) and these traits are seen as the most consistent predictors of SWB (Diener, 1998).

With the role played by affect in judgements of life satisfaction researchers have suggested that extroversion influences positive affect and neuroticism influences negative

affect (Costa & McCrae, 1980; Lucas & Fujita, 2000) which in turn will influence assessments of SWB. Extroversion and neuroticism have been found to be consistently associated with levels of well-being (Diener, 1984; Diener & Lucas, 1999; Rusting & Larsen, 1997). DeNeve and Cooper's meta-analysis (1998) provided further support for links between personality characteristics and SWB with extroversion and agreeableness moderately predicting positive affect.

Steel, Schmidt and Schultz (2008) questioned the extent to which previous results had reported personality-SWB relationships and reported results that indicated a much stronger role of personality traits than had been previously thought. Multivariate analyses found that the combined relationship between the 5 personality variables (i.e. openness to experience, conscientiousness, extroversion, agreeableness and neuroticism) and quality of life measures to be as high as 39%. Specifically, extroversion accounted for 19% of the variance for positive affect, versus previous finding of 4% (DeNeve & Cooper, 1998) and neuroticism accounted for 29% of variance in negative affect, versus 5% previously reported (DeNeve & Cooper, 1998).

Social comparison has been reported as the strongest predictor of satisfaction in many domains (Emmons, Larsen, Levine, & Diener, 1983). Social comparison information may have a significant effect if it influences choice or perceptions of attainability of goals (Diener et al., 1999). Individuals who rate themselves as happy appear to be less sensitive to information gleaned from social comparison processes (Lyubomirsky, 2001). Happy individuals appear to only reference others' perceived achievements sparingly and selectively as being relevant to their own well-being and self-esteem.

## 4.2 Subjective well-being and the context of work

In the context of the work environment it has been identified that subjective well-being can be related to a range of both positive and negative influences.

Studies have suggested that life satisfaction may be stronger in its influence on performance than that of job satisfaction (Jones, 2006). This has been demonstrated to be significant for a group of teachers in a study by Duckworth, Quinn and Seligman (2009) where teachers with higher life satisfaction showed higher levels of performance than their peers.

Moè, Pazzaglia and Ronconi (2010) explored the relationships between job satisfaction, self-efficacy and positive affect, proposing that the more highly teachers perceived themselves capable and the more positive affect they experience then the higher their levels of work satisfaction will be. The results from their study suggested that teaching practice alone was not sufficient to have a direct effect on job satisfaction and that positive affect and self-efficacy were also required. Other research has found positive relationships between teaching practice and positive affect (Hargreaves, 1998), and job satisfaction and positive affect (Judge & Ilies, 2004).

Lower turnover intentions have been related to life satisfaction (Rode, Rehg, Near, & Underhill, 2007) and has been reported to have negative correlations with absenteeism (Murphy, Duxbury, & Higgins, 2007; Shaw & Gupta, 2001). Additionally, life satisfaction was negatively related to intentions to undertake early retirement (von Bonsdorff, Huuhtanen, Tuomi, & Seitsamo, 2009). A longitudinal study conducted over 7 years found that work engagement had a positive effect on life satisfaction while in contrast, burnout predicted life

dissatisfaction and linked work-related well-being to predicting general well-being in the long term (Hakanen & Schaufeli, 2012).

Job satisfaction and life satisfaction were positively related in a meta-analysis conducted by Tait, Padgett, and Baldwin (1989), with similar results found in a later meta-analysis by Bowling, Eschleman and Wang (2010). Further research supported these findings when Judge and Watanabe (1993) proposed a causal model which considered both cross-sectional and longitudinal effects between life satisfaction and job satisfaction. Cross sectional results yielded strong relationships between job and life satisfaction but weaker relationships were found across a 5-year period from the longitudinal data. Relationships between the two constructs were found to be reciprocal.

Career satisfaction has been found to be significantly related to life satisfaction (Burke, Divinagracia, & Mamo, 1999; Todd, Harris, Harris, & Wheeler, 2009) and a meta-analysis by Erdogan, Bauer, Truxillo and Mansfield (2012) found that correlations between career satisfaction and life satisfaction were larger than job satisfaction-life satisfaction.

#### **4.3 Subjective Well-Being and the Current Study**

It is proposed that psychological capital may play a role in the well-being of teachers. Previously, researchers have suggested that our goal aspirations and the way we approach them influence SWB (Scheier & Carver, 1993); having goals and making progress towards goal achievement are associated with emotional and cognitive well-being (Emmons, 1986). Carver and Scheier (1998) suggest that discrepancies between goals and actual conditions can influence levels of negative and positive affect. Perceptions of a low probability of goal

attainment are associated with negative affect (Emmons, 1986) whilst past achievement of goals is related to positive affect and optimism. If psychological capital plays a significant role in goal success then it can be supposed that it will be related to life satisfaction judgments and affect. It is therefore hypothesised that:

- H8            Psychological capital will be positively related to life satisfaction.
- H9            Psychological capital will be positively related to positive affect.
- H10          Psychological capital will be negatively related to perceived stress.
- H11          Psychological capital will be negatively related to negative affect.



### **The Present Study**

Given that teaching is reported to be highly stressful, and the effects of such transcend across psychological, physiological, emotional and social facets of life, it signifies a need to identify potential protective resources. The current study will consider the role of underlying psychological processes and variables which may promote stable patterns of appraisal, and thus explain individuals' preferences for particular coping strategies. Although there may be a wide range of available resources for teachers, this study will focus specifically on the role of psychological capital and how it may influence teachers' perceptions of stress and types of coping employed, providing a better understanding of the differential effects found in studies of occupational stress.

Underpinned by the theoretical foundations of the Job Demands-Resources model and the Transactional Model of stress and well-being and with a focus on individual differences, the present study aims to explore the role of psychological capital in appraisals, coping and subjective well-being. If teachers possess high levels of self-efficacy, hope, optimism and resilience, it may be supposed that they will be more likely to be in a position to apply such resources to overcome, or buffer against, the injurious effects of demands inherent in the profession.

## Chapter Five: Method

### 5.1 Participants

There were 1,502 responses to the online questionnaire (Appendix 1). The majority of respondents were female (Female:  $n = 921$ , 89%; male  $n=114$ , 11%). The number of years of teaching experience ranged from 1 to 50 with a mean of 15.46 ( $SD = 10.7$ ). The number of hours worked (per week) ranged between 1 and 90 ( $M = 52$ ,  $SD = 12.45$ ). Information regarding occupational role was also collected. Demographic analysis is displayed in Table 1.

**Table 1. Demographic information of participants**

	Frequency	%
<b>Position</b>		
Principal	51	5%
Deputy/Assistant Principal	110	11%
Team/Syndicate Leader	137	13%
Head of Department	78	8%
Scale A Teacher	546	53%
RTLB	13	1%
Other	102	10%
<b>Number of years' experience</b>		
0 - 10	359	38.6%
11 - 20	336	32.6%
21 – 30	194	18.9%
31 – 40	91	8.8%
41 – 50	11	1.1%
<b>Number of hours worked per week</b>		
0 – 10	14	1.4%
11 – 20	32	3.1%
21 – 30	38	3.7%
31 – 40	73	7.1%
41 – 50	360	35%
51 – 60	404	39.3%
61 – 70	89	8.6%
70+	18	1.8%
<b>Gender</b>		
Male	114	11%
Female	921	89%

## 5.2 Measures

Data was collected using a self-report questionnaire. The questionnaire was created using a selection of measurement tools designed to address each of the constructs being examined, i.e. psychological capital, coping strategies, subjective well-being, positive and negative affect, perceived stress and cognitive appraisal styles.

### *Psychological Capital*

Teachers' perceived levels of self-efficacy, resilience, optimism and hope were measured using the Psychological Capital Questionnaire (PSQ) (Luthans, Avolio, & Avey, 2007a). The PSQ contains 24 items and asks respondents to indicate levels of agreement on a 6-point Likert scale ranging from 'strongly disagree' to 'strongly agree'. Questions on the PSQ asks statements such as "*I feel confident in helping to set targets/goals in my work area*" and "*I feel I can handle many things at a time in this job*". Reliability for the PSQ was  $\alpha = .91$ . For psychological capital, principal component analysis identified a single factor accounting for 57.75% of the variance. All items correlated at least .3, suggesting reasonable factorability. The Kaiser-Meyer-Olkin measure of sampling adequacy was .95, above the recommended value of .60, and Bartlett's test of sphericity was significant ( $\chi^2(276) = 13232.80, p = <.005$ ). All items loaded at least .38 on the common factor. A single scale comprising all items was therefore computed for psychological capital.

### *Coping Strategies*

The 28 item Brief COPE (Carver, 1997) was used to examine the coping strategies that teachers used to manage workplace problems. Respondents answered 28 questions such

as *"I blame myself for things that happened"* and indicated answers on a 4-point scale anchored with statements *'I don't do this at all; I do this sometimes; I do this frequently'* and *'I do this a lot.'* For coping, principal component analysis identified two factors accounting for 57.75% of the variance. All items correlated at least .3, suggesting reasonable factorability. The Kaiser-Meyer-Olkin measure of sampling adequacy was .79, above the recommended value of .60 and Bartlett's test of sphericity was significant ( $\chi^2$  (378) = 11355.20,  $p = <.005$ ). Six items were eliminated as they did not load on either of the two factors. Two scales were computed: task-focussed coping (10 items, e.g. *"I try hard to think about what steps to take"*,  $\alpha = .82$ ), and emotion-focussed coping (12 items, e.g. *"I blame myself for the things that happened"*,  $\alpha = .79$ ).

### *Well-Being*

Well-being is considered to comprise two dimensions: life satisfaction and affect. The Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985) provided a cognitive assessment of life satisfaction and the Job-Affective Related Well-Being Scale (Van Katwyk, Fox, Spector, & Kelloway, 2000) was used to measure work-specific affect.

The Satisfaction With Life Scale (Diener et al., 1985) focuses on individuals' judgments of their own lives, based on a standard which each individual sets for themselves. This allows respondents to weight various domains (e.g. health, material wealth) and emotional states for themselves. The scale comprises five questions. Responses are indicated on a 7-point scale which ranges from 'strongly disagree' to 'strongly agree' for items such as *"In most ways my life is close to my ideal"*. Reliability for the scale was  $\alpha = .90$ .

### *Positive and Negative Affect*

Positive and negative affect were measured by asking respondents to rate how often they experienced emotions related to their job over the previous month, using the Job Affective Related Well-Being Scale (JAWS) (Van Katwyk et al., 2000). Responses were on a 5-point scale, ranging from 'never' to 'always'. The JAWS is considered to be a pure measure of affect rather than attitudes such as job satisfaction (Van Katwyk et al., 2000), and reflects the affective component of job-related well-being. The JAWS includes 15 positive and 15 negative items; e.g. *"My job made me feel excited"*; *"My job made me feel annoyed"*. Reliability for the positive items on the scale was  $\alpha = .95$ , and for the negative items  $\alpha = .93$ .

### *Stress*

The Perceived Stress Scale (PSS) (Sheldon, Kamarck, & Mermelstein, 1983) is designed to measure the degree to which participants feel that their lives are unpredictable, uncontrollable and overloaded. It recognises that responses to stress are not based solely on the intensity of events but also on personal and contextual factors, so that the focus of the measure is on cognitively mediated responses to stressful situations rather than the stressors themselves. Respondents were asked to answer 14 questions such as *"In the last month, how often have you felt unable to control the important things in your life?"* and *"In the last month, how often have you felt you were on top of things?"* Responses were on a five-point scale ranging from 'never' to 'very often'. Reliability for the scale was calculated as  $\alpha = .90$ .

### *Cognitive Appraisal*

The Cognitive Appraisal Scale (CAS) (Skinner & Brewer, 2002) was used to examine the frequency of challenge and threat appraisals, of workplace stressors. The CAS relates closely to the transactional theory of stress and well-being (Lazarus & Folkman, 1984). Principal component analysis with varimax rotation identified 2 factors explaining 57.81% of the variance; 1) Challenge Appraisal,  $\alpha = .75$ , 8 items, and 2) Threat Appraisal,  $\alpha = .94$ , 9 items.

### *Demographics*

Information regarding gender, teaching position, number of years' experience teaching and average number of hours worked per week was collected through the survey. (Table 1). The number of hours worked was given by many participants as a range (e.g. 40 – 50 hours, or 40+ hours); ranges were re-specified as 'Adjusted hours worked', in which each range was given as the highest value in that range (i.e. 40 – 50 hours was recorded as 50). Responses such as 40+ were recoded as a single numerical figure, in this case 40, as no information on the upper end of the range was provided.

## **5.3 Procedure**

Information about the study and an invitation to participate (Appendices 2 and 3) were sent to Principals of every primary, intermediate and secondary school in New Zealand (total 2,700). Invitations were sent via email and outlined the aims of the study. Principals were asked to forward details of the study to teaching staff. The questionnaire was

available online and a link was included in the email invitation. The invitation also included an offer for the researcher to visit schools and discuss the study with teachers.

Social media was also used to advertise the survey, targeting online teaching groups, teacher well-being community groups, Principals' Associations pages and the New Zealand Educational Institute social media pages. Due to the temporary nature of social media pages, the survey link and research outline were advertised on five different occasions.

In addition, the researcher met with a group of Principals and discussed the importance of the research, the study aims and objectives, and how to access the questionnaire electronically.

Ethical approval was gained from the Massey University Human Ethics Committee (Northern); Approval number MUHECN 15/011 (Appendix 4).

## **5.4 Data Analysis**

Survey data were entered into SPSS (IBM Statistics Version 22) for analysis.

Preliminary examination of data was performed to ensure there were no violations of the assumptions of normality, linearity and homoscedasticity. Levene's test of equality of error variances yielded significance values greater than 0.5, indicating that all assumptions of equality of variance had been met. Outliers were checked for the 5% trimmed mean and were found to be satisfactory. Where data percentages/numbers do not equate this is reflective of missing data and/or incomplete surveys. Missing data was excluded from data analyses.



Exploratory factor analysis using Principal Component Analysis with varimax rotation was conducted for three of the scales used in the study, i.e. Psychological Capital, the Cognitive Appraisal Scale, and the Brief COPE. Scree plots were examined to determine the number of factors to retain when there was more than one factor. The Psychological Capital Questionnaire retained one overall scale, whereas the Cognitive Appraisal Scale and the Brief COPE both generated two scales. Positive and negative affect were easily identified on the JAWS to generate two separate scales for analysis and the PSS was used a single scale in order for the study to analyse overall levels of perceived stress.

Bivariate relationships were analysed using Pearson's  $r$ , with the exception of the ordinal variables gender and teaching position which were analysed using Spearman's Rho.

Group differences were explored using independent samples t-test and ANOVA.

For the regression analyses, dummy variables were created for gender and teaching position. For gender, males was coded as 0 and females was coded as 1. For teaching position, a Leadership group (Principals, Deputy and Associate Principals, Team Leaders, Syndicate Leaders and Heads of Department) was coded as 1 and Scale A teachers were coded as 0. Responses to the RTLB and 'Other' categories was very low so these were excluded from the dummy variables. For the "Other" category, it was not possible to establish the exact roles of this group of participants.

Hypotheses were tested using hierarchical regression. The first step in each analysis entered number of years' experience, number of hours worked per week, gender and position. Appraisal or task-focussed coping were entered as the second step, and the hypothesised variables in the third.

Hypotheses regarding mediation were tested using three steps (Baron & Kenny, 1986)

- 1) The DV was regressed on the IV;
- 2) The mediator was regressed on the IV;
- 3) The DV was regressed on both the IV and mediator.

If the relationship between IV and DV became non-significant, or was significant but reduced, a further test for mediation was carried out using the Sobel test.

## Chapter 6: Results

### 6.1 Group Differences

Independent samples t-tests identified that there were significant gender differences for Emotion-Focussed Coping,  $t(968) = -3.04, p = .00, \eta^2 = .01$ ; Task-Focussed Coping,  $t(108) = -5.20, p = .00, \eta^2 = .03$ ; Positive Affect,  $t(997) = -3.66, p = .00, \eta^2 = .01$ ; Challenge Appraisal,  $t(1020) = -2.85, p = .00, \eta^2 = .01$ ; and Threat Appraisal  $t(1007) = -3.78, p = .00, \eta^2 = .01$ .

Gender was therefore controlled for in the regression analyses.

A one-way between-groups analysis of variance was conducted to explore the impact of teaching position on scores on each of the scales. Statistically significant differences between groups (i.e. position) were found on Perceived Stress:  $F(6, 1003) = 4.91, p = .00, \eta^2 = .29$ ; Positive Affect:  $F(6, 994) = 3.65, p = .00, \eta^2 = .02$ ; Task-focussed Coping:  $F(6, 1005) = 8.26, p = .00, \eta^2 = .05$ ; Emotion-focussed Coping:  $F(6, 963) = 4.03, p = .00, \eta^2 = .02$ ; Challenge Appraisals:  $F(6, 1010) = 3.01, p = .00, \eta^2 = .02$ ; Threat Appraisals:  $F(6, 1004) = 4.25, p = .00, \eta^2 = .02$ ; Psychological Capital:  $F(6, 994) = 4.91, p = .00, \eta^2 = .09$ . No statistically significant difference in mean scores between position and Life Satisfaction or position and Negative Affect were identified.

Post-hoc comparisons using the Tukey HSD test were analysed to identify where significant differences in means between groups could be found. Principals were significantly higher than Scale A teachers on Perceived Stress (Mean difference -4.78,  $p = .01$ ), Positive Affect (Mean difference 4.96,  $p = .02$ ), on Task-Focussed Coping (Mean difference 1.89,  $p = .00$ ), on Emotion-Focussed Coping (Mean difference -3.19,  $p = .00$ ), Challenge Appraisal (Mean difference 1.50,  $p = .00$ ), on Threat Appraisal (Mean difference -5.90,  $p = .00$ ), and on Psychological Capital (Mean difference 16.13,  $p = .00$ ). Principals were

also significantly higher than Head of Departments on Positive Affect (Mean difference 6.02,  $p = .02$ ), Task-Focussed Coping (Mean difference 2.30,  $p = .04$ ) and on Psychological Capital (Mean difference 13.01,  $p = .00$ ). Principals were significantly higher than Team Leaders on Task-Focussed Coping (Mean difference 2.06,  $p = .04$ ), and Psychological Capital (Mean difference 9.28,  $p = .00$ ). Deputy Principals were significantly higher than Scale A teachers on Perceived Stress, (Mean difference -3.49,  $p = .00$ ), Task-Focussed Coping (Mean difference 1.89,  $p = .00$ ), and Psychological Capital (Mean difference 10.74,  $p = .00$ ). Deputy Principals were significantly higher than Head of Departments on Psychological Capital (Mean difference 7.62,  $p = .01$ ). Team Leaders were significantly higher than Scale A teachers on Psychological Capital (Mean difference 6.84,  $p = .00$ ). Position was subsequently dummy coded and entered into regressions as a control variable.

Hours worked per week was positively correlated with psychological capital, ( $r = .07$ ) and emotion-focussed coping ( $r = .06$ ), and negative affect ( $r = .14$ ), and negatively correlated with positive affect ( $r = -.09$ ), life satisfaction ( $r = -.13$ ), and perceived stress ( $r = .19$ ). Therefore, number of hours worked per week were controlled for in the regression analyses by entering them into the first block in each analysis carried out.

Number of years' experience was positively correlated with psychological capital, challenge appraisal and life satisfaction and negatively related to threat appraisals, emotion-focussed coping, negative affect and perceived stress, and so included in the controls in regression analyses.

## 6.2 Bivariate Correlations

Supporting hypotheses 8 and 9, psychological capital was positively related to life satisfaction and positive affect. Hypotheses 10 and 11 were also supported with psychological capital being negatively related to perceived stress and negative affect respectively. Psychological capital was positively related to challenge appraisal, supporting hypothesis 1, and negatively related to threat appraisal, supporting hypothesis 2. Hypotheses 3 and 4 were also supported with analysis indicating a positive relationship between task-focussed coping and Psychological capital and a negative relationship between emotion-focussed coping and Psychological capital (Table 2).

In addition to the hypothesised relationships, Psychological capital was also positively related to the number of years' experience and teaching position. It was negatively related to perceived stress, number of years' experience and number of hours worked per week. (Table 2).

In addition, both challenge appraisal and task-focussed coping were positively related to life satisfaction and positive affect. They were also negatively related to negative affect and perceived stress. Conversely, threat appraisal and emotion-focussed coping were both negatively related to life satisfaction and positive affect, and positively related to negative affect and perceived stress.



### 6.3 Hypothesis Testing

Hypothesis 8 was supported. After controlling for gender, position, years' experience, and hours worked per week, psychological capital was positively related to life satisfaction and also acts as a significant, unique contributor (Table 3) in life satisfaction. In addition to the hypothesised relationship, the results indicate that challenge appraisal is also a significant contributor to the model ( $\beta = .41, p < .001$ ).

**Table 3.**  
*Multiple Regression: DV = Life Satisfaction*

	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
Gender	-1.11	.56	-.06*	.01	.48	.00	-.09	.47	-.01
Position	-.41	.93	-.01	.01	.78	.00	.09	.77	.00
Hours' worked	-.07	.01	-.16***	-.05	.01	-.12***	-.05	.01	-.11***
Years' Experience	.05	.02	.10**	.01	.02	.03	-.01	.02	-.01
Challenge Appraisal				.99	.06	.50***	.82	.07	.41***
Task Focussed Coping				.10	.04	.08*	.01	.05	.01
Psychological Capital							.07	.01	.21***
R			.19			.57			.59
$\Delta R^2$			.03			.32			.34
F			8.43***			71.81***			67.99***

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Psychological capital was positively related to positive affect (Table 4), uniquely accounting for 11% of the variance in positive affect and providing support for hypothesis 9.

Psychological capital and the control variables, explain a total of 47.2% of the variance in positive affect. Gender, hours worked per week, number of years' experience, psychological capital, challenge appraisal and task focussed coping were each significant in the analysis.

Psychological capital was the largest individual contributor to the model ( $\beta = .46, p < .001$ ).

**Table 4.***Multiple Regression: DV = Positive Affect*

	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
Gender	-4.43	1.09	-.14***	-1.24	.90	-.04	-1.67	.81	-.05*
Position	.11	1.82	.00	1.55	1.47	.03	1.75	1.34	.03
Hours' worked	-.08	.03	-.09**	-.05	.02	-.06*	-.04	.02	-.05*
Years' Experience	.06	.03	.03	-.02	.03	-.02	-.10	.03	-.10***
Challenge Appraisal				1.38	.12	.36***	.67	.12	.18***
Task Focussed Coping				.80	.80	.32***	.40	.08	.16***
Psychological Capital							.31	.02	.46***
R			.17			.61			.69
$\Delta R^2$			.024			.362			.472
F			6.59***			86.06***			115.95***

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$ 

Psychological capital was found to be negatively related to perceived stress and multiple regression further supported hypothesis 10 (Table 5). Psychological capital ( $\beta = -.50, p < .001$ ), threat appraisal ( $\beta = .16, p < .001$ ), emotion-focussed coping ( $\beta = .17, p < .001$ ), and hours worked per week ( $\beta = .16, p < .001$ ) were all significant contributors to unique variance in perceived stress. Psychological capital was the largest individual contributor to the model and accounted for 26.7% of variance in perceived stress.



**Table 5.**  
*Multiple Regression: DV = Perceived Stress*

	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
Gender	.31	.93	.01	1.96	.79	.07*	.15	.68	.01
Position	.11	1.56	.00	-.50	1.32	-.01	-1.13	1.12	-.02
Hours' worked	.15	.02	.21***	.13	.02	.18***	.12	.02	.16***
Years' Experience	-.18	.03	-.21***	-.08	.03	-.09**	-.02	.02	-.02
Threat Appraisal				.27	.03	.30***	.14	.03	.16***
Emotion Focussed Coping				.54	.06	.31***	.30	.05	.17***
Psychological Capital							-.29	.02	-.50***
R			.29			.59			.73
$\Delta R^2$			.079			.346			.528
F			19.64***			77.55***			139.87***

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Support for hypothesis 11 was established, identifying that Psychological capital was negatively related to negative affect (Table 6). The model as a whole accounted for 50% of the variance in negative affect, with psychological capital acting as the largest contributor ( $\beta = -.46, p < .001$ ). In addition, emotion focussed coping ( $\beta = .35, p < .001$ ) and the number of hours worked per week ( $\beta = .09, p < .001$ ) were also significant contributors.

**Table 6.**  
*Multiple Regression: DV = Negative Affect*

	Step 1			Step 2			Step 3		
	B	SE B	$\beta$	B	SE B	$\beta$	B	SE B	$\beta$
Gender	1.08	1.05	.04	2.96	.87	.10**	1.05	.77	.03
Position	.64	1.76	.01	-.01	1.45	.00	-.66	1.27	-.01
Hours' worked	.11	.03	.14***	.08	.02	.09**	.07	.02	.09***
Years' Experience	-.15	.03	-.15***	-.02	.03	-.02	.04	.02	.04
Threat Appraisal				.15	.03	.15***	.02	.03	.02
Emotion Focussed Coping				.93	.06	.48***	.68	.06	.35***
Psychological Capital							-.29	.02	-.46***
R			.21			.60			.71
$\Delta R^2$			.038			.349			.500
F			9.46***			77.84***			123.91***

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

#### 6.4 Mediation Analysis

Challenge appraisal was not found to mediate the relationship between psychological capital and task-focussed coping, therefore finding no support for hypothesis 5. The mediation analysis identified that a reduction in Beta at step 3 ( $\beta = .31, p < .001$ ) remained significant but was lower than at step 2 ( $\beta = .61, p < .001$ ), suggesting partial mediation, however this was negated by an insignificant Sobel test result (Table 7).

**Table 7.**

Mediation analysis: Challenge appraisal as a mediator between psychological capital and task-focussed coping

	DV	IV	B	SE B	$\beta$	$\Delta R^2$	Sobel
1	Task-focussed coping	Challenge Appraisal	.12	.01	.54***	.294	
2	Challenge Appraisal	Psychological capital	.11	.01	.61***	.369	
3	Task-focussed coping	Challenge Appraisal	.47	.05	.31***	.355	
		Psychological capital	.10	.01	.35***		0.23ns

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$

Hypothesis 6, i.e. task-focussed coping will act as a mediator between challenge appraisal and life satisfaction, was partially supported. At step 3 in the mediation analysis the relationship between the IV and the DV was reduced but remained significant when controlling for task-focussed coping (Table 8). The Sobel value yielded a p-value of less than .05, thus demonstrating that mediation has been identified between challenge appraisal and life satisfaction when task-focussed coping was included as a mediating variable.

**Table 8.**

Mediation analysis: task-focussed coping as a mediator between challenge appraisal and life satisfaction

	DV	IV	B	SE B	$\beta$	$\Delta R^2$	Sobel
1	Life Satisfaction	Challenge appraisal	1.07	.05	.55***	.30	
2	Task focussed coping	Challenge appraisal	.79	.04	.53***	.28	
		Challenge appraisal	1.00	.06	.51***		
3	Life Satisfaction	Task focussed coping	.09	.04	.02*	.30	
							2.24*

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$  (two tailed)

Hypothesis 7 was partially supported (Table 9) as the relationship between challenge appraisal and positive affect was reduced but still significant when task-focussed coping was controlled for at step 3 ( $\beta = .39, p < .001$ ). The Sobel value was also significant (8.56,  $p = < .001$ ) and indicates that task-focussed coping partially mediates the relationship between the DV and the IV.

**Table 9.**

Mediation analysis: Task-focussed coping as a mediator between challenge appraisal and positive affect

	DV	IV	B	SE B	$\beta$	$\Delta R^2$	Sobel
1	Positive Affect	Challenge appraisal	2.08	.10	.55***	.30	
2	Task focussed coping	Challenge appraisal	.79	.04	.53***	.28	
3	Positive Affect	Challenge appraisal	1.47	.11	.39***	.36	
		Task focussed coping	.76	.08	.30***		8.56***

\*  $p < .05$  \*\*  $p < .01$  \*\*\*  $p < .001$  Two tailed

## **Chapter Seven: Discussion**

This study set out to examine the extent to which psychological capital acts as a protective factor for teachers with respect to outcomes of well-being. This model hypothesised that psychological capital would be associated with reduced stress and increased well-being both directly and indirectly. Consistent with theoretical expectations, analyses of the data identified significant relationships between psychological capital and outcomes of well-being.

Supporting the hypotheses, psychological capital was positively related to life satisfaction and positive affect and negatively related to perceived stress and negative affect. The direct relationships between psychological capital and measures of well-being and stress provide support for identifying psychological capital as a protective factor for teachers, identifying that those with higher levels of psychological capital have lower levels of perceived stress and negative affect. Within the context of the Job-Demands Resources model (Demerouti et al., 2001) these findings provide indirect support for psychological capital as a resource which can be drawn upon to help protect teachers from the detrimental effects of workplace stress. The direct relationships and outcomes support previous findings that have linked psychological capital to lower levels of stress (Avey et al., 2009), higher levels of well-being (Avey et al., 2010), positive moods and daily life satisfaction (Culbertson et al., 2010). While data analyses are unable to explain how the relationships operate, consideration of theoretical foundations and previous research findings may provide some direction for understanding how these relationships function. Psychological capital has been found to relate to positive workplace attributes and attitudes, such as job satisfaction and organisational commitment (Cheung et al., 2011;

Milan & Luthans, 2006). Similarly, these factors have been positively related to measures of subjective well-being, such as the relationship between job satisfaction and positive affect (Judge & Ilies, 2004). The relationship between psychological capital and positive outcomes identified by this study may understood as an extension of these previous findings.

Positive relationships between psychological capital and challenge appraisal, and conversely, negative relationships with threat appraisal were found. Teachers with higher levels of psychological capital tended to appraise demands as challenges rather than threats. The transactional model of stress (Lazarus & Folkman, 1984) indicates that challenge appraisals are related to perceptions of possessing sufficient resources and skills to adequately handle a situation and attain goal achievement. Taking into consideration individual differences, transactional theories highlight that the impact of a situation is created via appraisal systems and demands are defined by their significance and meaning to the individual (Cassidy, 2011). The relationships found between psychological capital and challenge/treat appraisals identifies psychological capital as an individual difference that plays a role in how demands are perceived and addressed. As job resources are seen to balance the effects of demands (Demerouti et al., 2001) then psychological capital may protect against the negative physiological and psychological outcomes that are evident as a result of the sustained physical and mental efforts that job demands can require.

The coping process has been defined as the cognitions (i.e. appraisals) and behaviours that individuals use to manage internal and external demands (Lazarus, 1993); the current study aimed to examine if the cognitions (challenge appraisal) would explain some of the relationship between psychological capital and the behaviours (task-focussed coping). A non-significant Sobel test indicated that challenge appraisal did not mediate the

relationship between psychological capital and task-focussed coping. However challenge appraisal was found to be the largest contributor to the variance in life satisfaction, signifying a substantial role for challenge appraisal when examining how processes which underpin the transactional model may operate.

Teachers with higher levels of psychological capital had a greater propensity to use task-focussed coping and conversely, lower levels of psychological capital related to higher levels of emotion-focussed coping. Although research has clarified that both types of coping can act in positive ways (Lazarus, 2000) the current study relates TFC directly to positive outcomes and EFC directly to negative outcomes. When examined in conjunction with relationships with appraisal the findings overall support the hypothesised model, suggesting both direct and indirect effects of psychological capital on measures of well-being and stress. Our goal aspirations and how we approach them have been found to influence levels of subjective well-being (Scheier & Carver, 1993) and it may be supposed that as psychological capital supports goal attainment (Luthans et al., 2005) it therefore plays an indirect role given its positive relationship with task-focussed coping and TFC's relationship with life satisfaction and positive affect.

Coping is described as a process that evolves from resources and cognitions that precede and influence it, in turn, mediating stress (Lazarus & Folkman, 1984). Lazarus (1993) suggests that coping may be seen as a goal which is accomplished by the use of particular strategies (e.g. task-focussed or emotion-focussed strategies). When appraisal cognitions are included in the process this suggests that types of coping may explain some of the relationship, i.e. mediate, between appraisal and outcomes. The current study's hypotheses were supported in that task-focussed coping was found to mediate the

relationship between psychological capital and measures of well-being (i.e. life satisfaction and positive affect). This identifies that, in addition to the role played by psychological capital, coping also has both direct and indirect effects on positive outcomes, and also goes some way to identifying how parts of the transactional process may operate.

Findings relating psychological capital to appraisal and types of coping indicate the importance of examining dispositional effects on workplace stress rather than focussing exclusively on situational effects. As the transactional model suggests that stress is an individual and subjective phenomenon (Lazarus, 1991) the results from this study support the need to explore individual resources and demands in addition to work-specific resources and demands for teachers. Studying the psychological variables and processes which may promote stable patterns of appraisals and coping strategies incorporates individual differences into a transactional approach to stress and well-being (Parker et al., 2012).

## **7.2 Implications for Research**

Findings from this research provide additional information about the processes of occupational stress and how they result in differential effects of stress between individuals. In addition to identifying the role of psychological capital as a protective factor against stress the findings from this study provide additional support for previous research associating appraisals and coping with outcomes of well-being and with processes leading to well-being. Shifting attention from the negative effects of work-related stress to using a positive psychological perspective has provided opportunities for exploring the role of protective factors in the stress-mental health relationship, specifically for the teaching profession. The study integrates transactional processes within an educational context and



goes some way to developing a theoretical rationale for the inconsistent results of occupational stress. Additionally it works towards producing a process model of teacher well-being and highlights processes and individual differences which may underlie psychological and emotional health.

Underpinning aspects of this research study was the theoretical rationale of the job demands-resources model. While data analysis suggests a protective role for psychological capital it is difficult to quantify or ascertain the degree of that role as a resource for teachers without a measure of resources and demands. Future research would benefit from including these measures. Similarly, while subjective well-being was deemed appropriate for the purposes of the study, further insight may be gained into how psychological capital, appraisals and coping styles are related to other types of well-being, e.g. psychological well-being (Ryff, 1989).

As the construct of psychological capital is made up of self-efficacy, hope, optimism and resiliency it would be possible for future research to examine the contributions of each of the four facets in addition to analysing data in terms of the construct as a whole.

It has been recommended that research also needs to focus on the evolving situational demands (Carver & Connor-Smith, 2010). Coping involves a process of continuous appraisal in response to person-environment changes. Strategies that may be effective at the onset of a challenging situation may be ineffective and in need of adaptation as the situation evolves. For example, avoidance may be preferable in the early stages but in the long term it may have a detrimental effect on outcomes as it can hinder the adoption of adaptive behaviours (Shen, 2009; Suls & Fletcher, 1985). Given how little is known about

how the timing, order, combination or duration of coping may influence outcomes a recommendation for longitudinal studies may redress this imbalance.

Dollard and colleagues suggest that, although necessary, it is insufficient to research individual factors. They highlight the need to create psychologically safe environments which require a focus on initiatives at a broader, systems level. Research studies focussing on the educational sector have largely explored the role of antecedents and consequences of specific demands but has not addressed the roles played by policy, regulations, governing bodies, and Ministry of Education initiatives. A fuller understanding of the stress-well-being relationship of teachers may benefit from including studies at this level.

### **7.3 Implications for Practice**

The impact of occupational stress across work settings results in significant health care costs (Dollard, Skinner, Tuckey, & Bailey, 2007), has emotional and social costs (Darr & Johns, 2008) and direct costs for education sectors in terms of employee performance (Mearns & Cain, 2003), distress (Betoret, 2006), burnout (Chan, 1998; Kyriacou, 2000), and increased absenteeism (Chambers & Belcher, 1992). The results from this study suggest that psychological capital may be a resource that not only relates directly to positive outcomes but also promotes successful navigation of demands leading to effective ways of appraising and coping at work. An increase in hope, self-efficacy, optimism and resilience can provide increases in personal well-being in both the work and home environments (Avey, Reichard, Luthans, & Mhatre, 2011). Noting the malleability of psychological capital highlights the potential of the construct for employers. Critically, identification of protective factors can lead to the development and dissemination of intervention and professional

development programmes. A school context that promotes and develop well-being may include a focus on psychological capital. Professional development aimed at increasing psychological capital may increase levels of well-being for teachers and may also have added benefits such as subsequent increases in intrinsic motivation for employees (Luthans et al., 2007b) or a greater sense of loyalty (Larson & Luthans, 2006).

#### **7.4 Limitations**

The cross-sectional design of this study means that no inferences can be made regarding causality. Future longitudinal studies may provide further insight into the directions of cause and effect. Longitudinal studies may also be capable of identifying changes in coping associated with context and time, as responses to situations and choice of coping styles in dealing with them are dependent on context and may change as the problem itself changes (Lazarus & Folkman, 1984).

The self-report nature of data collection may also be seen as a limitation due to potential response bias (e.g. social desirability, inaccurate recall, etc.) that is inherent in all self-report surveys, although each of the surveys used in this study has been shown to hold good psychometric properties regarding reliability and validity. As this study focussed on examining how individual differences and subjective perceptions related to well-being and stress, the use of self-reports was able to provide a measure of the individuals' perceived reality. Self-report surveys can be influenced by individuals' abilities to recall accurately, for example, the intensity of a stressful situation may be either recalled as being of great significance or alternatively, as time passes the impact of the stressful situation may lessen over time, making it difficult for respondents to accurately record the effects of the

situation. Additionally, questions which address general approaches to coping may be challenging as it requesting an 'overall' response to a period of time which may be significantly influenced by specific events.

Methods of participant recruitment accrued a positive response rate, with data collection from across the education spectrum (excluding early childhood and tertiary educators) and was geographically diverse. Demographic analyses suggest that the sample is representative of the teaching population however, there is a potential limitation of interpretation of results due to gender bias. The majority of respondents (89%) were female which may play an influential role in the data analysis. Data was not collected identifying whether respondents were primary or secondary level teachers; this could be useful for further statistical analyses and identifying differences between the types of teaching. Due to the complicated, and overlapping nature of how New Zealand schools can be organised (i.e. primary/full primary/intermediate/junior high/senior high/college) future data collected would best include an item asking respondent which year level they currently teach. Additionally, with the electronic survey being publicly available through social media there can be no guarantee that questionnaires were exclusively completed by employees of the education sector. While this risk is acknowledged, it should also be noted that the potential for non-teachers to complete the survey is minimal, and the large response rate further supports a minimal level of risk.

The possibility of effects from self-selection should be acknowledged. Results from the data may only reflect those of teachers who have, at least to some degree, successfully negotiated the demands of the profession over the years. It is not possible for the analyses to reflect the cognitions and emotions of those educators who have left the profession,

possibly due to the effects of occupational stress and/or burnout. It is also possible that as teaching is a highly stressful occupation, with pressures on time often cited as specific sources of stress (Chan, 1998; Pithers & Soden, 1998) those teachers who were most stressed and/or saw time (or rather, the lack of it) as a strain may have been the least likely to take the time to participate in the study.

## **7.5 Conclusion**

This study demonstrated the role of psychological capital as a protective factor and possible resource for teachers that has both direct and indirect effects on life satisfaction, affect and perceived stress. Additionally, relationships between psychological capital, appraisals and coping were established and theoretical expectations were supported. The partially mediating mechanism of coping between psychological capital and outcomes was analysed and established. These findings suggest positive implications for effective prevention and intervention processes.

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## Appendix 1: Questionnaire

### Psychological Capital and Emotional Well-Being in New Zealand Teachers

Thank you for taking the time to complete this survey. It is part of my Master's degree in Educational Psychology at Massey University

I am looking at how hope, resilience, self-efficacy and optimism help teachers handle their well-being, coping and life satisfaction. The survey is anonymous and confidential. There are no right or wrong answers when completing this questionnaire; I am interested in collecting your considered and candid feelings. Please read each question and take a moment to consider your response, answer how you actually feel about that question rather than how you would like to or think you should feel. If there are any questions which you do not want to complete, please leave them blank. Completion and return of the questionnaire implies consent.

If you would like more information about the study, or a summary of the findings upon completion of the report, please email me at [andreasoykan@clear.net.nz](mailto:andreasoykan@clear.net.nz)

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*This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 15/011. If you have any concerns about the conduct of this research, please contact Dr Andrew Chrystall, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800 x 43317, email [humanethicsnorth@massey.ac.nz](mailto:humanethicsnorth@massey.ac.nz).*

## Section 1

Below are statements that describe how you may think or feel about yourself **right now**. Please indicate the most suitable response.

		Strongly disagree	Disagree	Somewhat disagree	Somewhat Agree	Agree	Strongly Agree
1.	I feel confident analysing a long-term problem to find a solution	1	2	3	4	5	6
2.	I feel confident in representing my work area in meetings with management	1	2	3	4	5	6
3.	I feel confident contributing to discussions about the school's strategy	1	2	3	4	5	6
4.	I feel confident in helping to set targets/goals in my work area	1	2	3	4	5	6
5.	I feel confident contacting people outside the school (e.g. parents, support workers) to discuss problems	1	2	3	4	5	6
6.	I feel confident presenting information to a group of colleagues	1	2	3	4	5	6
7.	If I should find myself in a jam at work, I could think of many ways to get out of it	1	2	3	4	5	6
8.	At the present time, I am energetically pursuing my work goals	1	2	3	4	5	6
9.	There are lots of ways around a problem	1	2	3	4	5	6
10.	Right now I see myself as being pretty successful at work	1	2	3	4	5	6
11.	I can think of many ways to reach my current work goals	1	2	3	4	5	6
12.	At this time, I am meeting the work goals I have set myself	1	2	3	4	5	6
13.	When I have a setback at work, I have trouble recovering from it, moving on	1	2	3	4	5	6
14.	I usually manage difficulties one way or another at work	1	2	3	4	5	6
15.	I can be "on my own" so to speak, at work if I have to	1	2	3	4	5	6
16.	I usually take stressful things at work in my stride	1	2	3	4	5	6
17.	I can get through difficult times at work because I've experienced difficulty before	1	2	3	4	5	6
18.	I feel I can handle many things at a time in this job	1	2	3	4	5	6
19.	When things are uncertain for me at work, I usually expect the best	1	2	3	4	5	6

20.	If something can go wrong for me work-wise, it will	1	2	3	4	5	6
21.	I always look on the bright side of things regarding my job	1	2	3	4	5	6
22.	I'm optimistic about what will happen to me in the future as it pertains to work	1	2	3	4	5	6
23.	In this job, things never work out the way I want them to	1	2	3	4	5	6
24.	I approach this job as if "every cloud has a silver lining"	1	2	3	4	5	6

## Section 2

Please answer these questions thinking about how you generally handle work related problems

		I don't do this at all	I do this sometimes	I do this frequently	I do this a lot
1.	I try to see it in a different light, to make it seem more positive	1	2	3	4
2.	I seek emotional support from others	1	2	3	4
3.	I give up trying to deal with it	1	2	3	4
4.	I blame myself for things that happened	1	2	3	4
5.	I throw myself into work or other activities to take my mind off things	1	2	3	4
6.	I say things to let my unpleasant things escape	1	2	3	4
7.	I make jokes about it	1	2	3	4
8.	I come up with a strategy about what to do	1	2	3	4
9.	I try to get advice or help from other people about what to do	1	2	3	4
10.	I try to comfort myself in religion or spiritual beliefs	1	2	3	4
11.	I criticise myself	1	2	3	4
12.	I concentrate my efforts on doing something about the situation I'm in	1	2	3	4
13.	I make fun of the situation	1	2	3	4
14.	I use food, alcohol or other drugs to make myself feel better	1	2	3	4
15.	I express my negative feelings	1	2	3	4

16.	I say to myself “this isn’t real”	1	2	3	4
17.	I try hard to think about what steps to take	1	2	3	4
18.	I seek comfort and understanding from someone	1	2	3	4
19.	I give up the attempt to cope	1	2	3	4
20.	I do something to think about it less, such as going to the movies, watching TV, exercise, etc.	1	2	3	4
21.	I pray or meditate	1	2	3	4
22.	I look for something good in what is happening	1	2	3	4
23.	I accept the reality of the fact that it has happened	1	2	3	4
24.	I take action to try and make the situation better	1	2	3	4
25.	I refuse to believe that it has happened	1	2	3	4
26.	I learn to live with it	1	2	3	4
27.	I blame myself for the things that happened	1	2	3	4
28.	I use food, alcohol or other drugs to help me get through it	1	2	3	4

### **Section 3**

Please indicate the amount to which your job overall has made you feel each emotion in the **last month**

		Never	Rarely	Quite often	Very often	Always
1.	My job made me feel at ease	1	2	3	4	5
2.	My job made me feel annoyed	1	2	3	4	5
3.	My job made me feel bored	1	2	3	4	5
4.	My job made me feel calm	1	2	3	4	5
5.	My job made me feel content	1	2	3	4	5

6.	My job made me feel disgusted	1	2	3	4	5
7.	My job made me feel elated	1	2	3	4	5
8.	My job made me feel excited	1	2	3	4	5
9.	My job made me feel enthusiastic	1	2	3	4	5
10.	My job made me feel frustrated	1	2	3	4	5
11.	My job made me feel gloomy	1	2	3	4	5
12.	My job made me feel happy	1	2	3	4	5
13.	My job made me feel inspired	1	2	3	4	5
14.	My job made me feel pleased	1	2	3	4	5
15.	My job made me feel satisfied	1	2	3	4	5
16.	My job made me feel angry	1	2	3	4	5
17.	My job made me feel anxious	1	2	3	4	5
18.	My job made me feel cheerful	1	2	3	4	5
19.	My job made me feel confused	1	2	3	4	5
20.	My job made me feel depressed	1	2	3	4	5
21.	My job made me feel discouraged	1	2	3	4	5
22.	My job made me feel energetic	1	2	3	4	5
23.	My job made me feel ecstatic	1	2	3	4	5
24.	My job made me feel frightened	1	2	3	4	5
25.	My job made me feel furious	1	2	3	4	5
26.	My job made me feel fatigued	1	2	3	4	5
27.	My job made me feel intimidated	1	2	3	4	5
28.	My job made me feel miserable	1	2	3	4	5
29.	My job made me feel proud	1	2	3	4	5
30.	My job made me feel relaxed	1	2	3	4	5



## Section 4

The following questions ask about the **last month**. Although they may seem similar, there are differences between them. The best approach is to answer them fairly quickly.

		Never	Almost Never	Sometimes	Fairly Often	Very Often
1.	In the last month, how often have you felt upset because of something that happened unexpectedly?	1	2	3	4	5
2.	In the last month, how often have you felt that you were unable to control the important things in your life?	1	2	3	4	5
3.	In the last month, how often have you felt nervous or 'stressed'?	1	2	3	4	5
4.	In the last month, how often have you felt things were going your way?	1	2	3	4	5
5.	In the last month, how often have you dealt successfully with irritating life hassles?	1	2	3	4	5
6.	In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?	1	2	3	4	5
7.	In the last month, how often have you felt confident in your ability to handle your personal problems?	1	2	3	4	5
8.	In the last month, how often have you found that you could not cope with all the things you had to do?	1	2	3	4	5
9.	In the last month, how often have you been able to control the irritations in your life?	1	2	3	4	5
10.	In the last month, how often have you felt that you were on top of things?	1	2	3	4	5
11.	In the last month, how often have you found yourself thinking about things that you have to accomplish?	1	2	3	4	5
12.	In the last month, how often have you been able to control the way you spend your time?	1	2	3	4	5
13.	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?	1	2	3	4	5
14.	In the last month, how often have you been angered because of the things that happened that were outside of your control?	1	2	3	4	5

### **Section 5**

The next set of questions ask about your life in general

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree	Strongly Agree
1. In most ways my life is close to my ideal	1	2	3	4	5	6	7
2. The conditions of my life are excellent	1	2	3	4	5	6	7
3. I am satisfied with my life	1	2	3	4	5	6	7
4. So far, I have gotten the important things I want in life	1	2	3	4	5	6	7
5. If I could live my life over, I would change almost nothing	1	2	3	4	5	6	7

### **Section 6**

1. I tend to focus on the positive aspect of any situation	1	2	3	4	5	6	7
2. I worry that I will say or do the wrong things	1	2	3	4	5	6	7
3. I often think what it would be like if I do very well	1	2	3	4	5	6	7
4. I believe that the most stressful situations contain potential for positive benefits	1	2	3	4	5	6	7
5. I am concerned that others will find fault with me	1	2	3	4	5	6	7
6. Overall, I expect that I will achieve success rather than experience failure	1	2	3	4	5	6	7
7. I worry about what kind of impression I make	1	2	3	4	5	6	7
8. In general, I look forward to the rewards and benefits of success	1	2	3	4	5	6	7
9. Sometimes I think that I am too concerned with what other people think of me	1	2	3	4	5	6	7
10. I feel that difficulties are piling up so that I cannot overcome them	1	2	3	4	5	6	7
11. I lack self confidence	1	2	3	4	5	6	7
12. A challenging situation motivates me to increase my efforts	1	2	3	4	5	6	7

- |     |   |   |   |   |   |   |   |   |
|-----|---|---|---|---|---|---|---|---|
| 13. | In general I anticipate being successful at my chosen pursuits rather than expecting to fail    | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 14. | I worry what other people will think of me even when I know that it doesn't make any difference | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 15. | I am concerned that others will not approve of me   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 16. | I look forward to opportunities to fully test the limits of my skills and abilities             | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 17. | I worry about what other people may be thinking about me  | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 18. | I feel like a failure   | 1 | 2 | 3 | 4 | 5 | 6 | 7 |

What position do you hold? \_\_\_\_\_

How many years have you been teaching? \_\_\_\_\_

How many hours per week, on average, do you spend working? \_\_\_\_\_

I am      Male / Female (please circle)

Please return to:

Andrea Soykan/Terence Edwards

Institute of Education

## Appendix 2: Letter of Information for Principals

Dear Principal,

I am a psychology student completing an Educational Psychology Master's degree at Massey University. A component of my course entails carrying out a research thesis and the focus of my topic is **well-being in teachers**.

My research will be focussed on teacher well-being, coping, and life satisfaction. In contrast to previous research which largely focussed on antecedents and consequences of stress, this study will investigate potential factors that promote and enhance individual well-being.

Identifying positive attributes that play a protective role is expected to provide insight into ways teacher well-being can be supported and developed. Clear links have been established in the research between emotional well-being and reduced levels of sick leave. States of well-being have also been found to affect the quality of teacher-student relationships and to play a significant role in staff turnover and teachers leaving the profession. Current discourse and support initiatives rightly place student well-being as a core value and consideration for schools; given the significance of the teacher student relationship, continuity of staffing, and staff/teacher retention it is also clear that teacher well-being is also indicated as a core value to enhance educational outcomes for students.

This study will explore the role of hope, self-efficacy, optimism and resilience in protecting the well-being of one of society's most valuable resource; our teachers. Relationships between well-being, engagement and performance are well documented. It is committed, supported, happy teachers who drive student success.

In order to inform the study, I am seeking responses from a range of teachers across primary and intermediate year levels. I am looking for participants to complete a survey as part of this process. I have enclosed a copy of the teacher information handout and anticipate that the survey would take 10-15 minutes to complete. I can present an overview of the project and introduce the surveys at staff/team meetings. Teachers will also be able to access the survey electronically. I would appreciate it if you and your staff would consider participating in the study and would love the opportunity to discuss the project with you and provide more background and details.

I look forward to hearing from you. Many thanks,

Andrea Soykan

413 8061

021 044 7605

andreasoykan@clear.net.nz

### Appendix 3: Invitation to participate

#### Psychological Capital and Emotional Well Being in NZ Teachers

Dear colleagues,

I would like to invite you to take part in a short research questionnaire looking at teacher well-being in New Zealand schools.

I am a registered primary school teacher and I am in the process of completing a Master of Educational Psychology for which this research is an integral component. My study aims to explore how some individual traits and qualities support teachers to moderate the effects of stressful work, promote well-being, adopt helpful coping strategies, and enhance life satisfaction.

Your participation in this study is voluntary and will ensure that the findings are based on robust chalk face perspectives. The survey will take approximately 10-15 minutes to complete. If you do not want to answer any particular question you can leave that question blank. Completing the questions in this survey may cause you to perceive the work context from a new perspective and evoke an emotional response. You may find it helpful to debrief with a colleague to explore those responses. The survey contains no information which allows identification of participants, confidentiality of responses is assured and no information that could identify schools or individuals will be reported or made available. Data collected will be stored securely and destroyed upon completion of the study,

If you would like more information about the study, or a summary of the findings, please email me on [andreasoykan@clear.net.nz](mailto:andreasoykan@clear.net.nz)

Thank you.

Researcher: **Andrea Soykan**

Institute of Education

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Albany Campus

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(09) 414 0800 ext 43526

*This project has been reviewed and approved by the Massey University Human Ethics Committee: Northern, Application 15/011. If you have any concerns about the conduct of this research, please contact Dr Andrew Chrystall, Chair, Massey University Human Ethics Committee: Northern, telephone 09 414 0800 x 43317, email [humanethicsnorth@massey.ac.nz](mailto:humanethicsnorth@massey.ac.nz).*

## Appendix 4: Ethics Approval



### MASSEY UNIVERSITY ALBANY

20 May 2015

Andrea Soykan  
3/8 Crewe Close  
Albany  
Auckland 0632

Dear Andrea

**HUMAN ETHICS APPROVAL APPLICATION – MUHECN 15/011**  
**Psychological Capital and Emotional Well-Being in NZ Teachers**

Thank you for your application. It has been fully considered, and approved by the Massey University Human Ethics Committee: Northern.

Approval is for three years. If this project has not been completed within three years from the date of this letter, a re-approval must be requested.

If the nature, content, location, procedures or personnel of your approved application change, please advise the Secretary of the Committee.

Yours sincerely

Dr Andrew Chrystall  
Acting Chair  
Human Ethics Committee: Northern

cc	Mr Terence Edwards Institute of Education Albany Campus	Dr Dianne Gardner Institute of Education Albany Campus	Professor John O'Neill Head of Institute of Education Albany Campus
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Te Kunenga  
ki Pūrehuroa

**Research Ethics Office**  
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