The buffering effects of spirituality at work: an investigation of job stress, health and work-life practices amongst academics.

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ABSTRACT

This study investigated the moderating effects of spirituality at work on job stress and health (well-being and ill-being) amongst Australian academics based on a spiritual appraisal model of stress and well-being. It also explored whether spirituality at work moderated the relationship between job stress and work-life balance and work-life conflict amongst Australian academics. A sample of 139 academic staff members employed in Australian universities (higher education and TAFE) anonymously completed a self-report questionnaire containing quantitative measures of spirituality at work (individual, work-unit and organisation-wide spirituality), health (well-being and ill-being), work-life balance, work-life conflict and job stress (job threat stress and job pressure stress). At the bivariate level, spirituality at work (individual, work-unit and organisation-wide levels), well-being, ill-being, job threat stress and job pressure stress correlated with each other. At the multivariate level however, each of the three levels of spirituality at work did not moderate the influence of job threat and pressure stress on both well-being or ill-being. Job threat stress significantly predicted decreased well-being and increased ill-being, but job pressure stress was not predictive of health. Age also significantly contributed to increased ill-being. At the bivariate level, all three levels of spirituality at work, job threat stress, job pressure stress, work-life balance and work-life conflict correlated with each other. Yet, at the multivariate level, spirituality at work unsuccessfully moderated the influence of job threat and job pressure stress on work-life balance and work-life conflict. Job threat stress and job pressure stress both significantly predicted decreased work-life balance and increased work-life conflict. The main effect of work-unit spirituality at work on work-life balance reached significance. Theoretical implications and practical implications for Human Resource Managers were discussed in terms of universities and businesses generally. Specifically, it was suggested that universities and businesses alike consider implementing stress management components into Human Resource Management employee well-being programs and initiatives. It was also suggested that HRM programs aimed at promoting work-life balance should integrate stress management and work-unit spirituality at work.
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DECLARATION

I declare that this thesis contains no material which has been accepted for the award of any other degree or diploma and to the best of my knowledge, this thesis contains no material previously published or written by another person except where due reference is made in the text of the thesis.

Amanda Suzanne Bell

The work undertaken for this project was approved by the Swinburne University of Technology Human Research Ethics Committee on 15th November 2007 (SUHREC Project 0708/076).
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<tr>
<td>GRCS-1</td>
<td>Gender-Role Conflict-I Scale</td>
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<td>H-P</td>
<td>Hewlett-Packard</td>
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<td>HR</td>
<td>Human Resource</td>
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<td>HRM</td>
<td>Human Resource Management</td>
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<td>EAP</td>
<td>Employee Assistance Program</td>
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<td>EEO</td>
<td>Equal Employment Opportunity</td>
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<td>IB</td>
<td>Ill-Being</td>
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<td>Ind SWS</td>
<td>Individual Spirituality at Work Scale</td>
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<tr>
<td>KMO</td>
<td>Kolmogorov-Smirnov statistic</td>
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<td>MHSS-SF</td>
<td>Multidimensional Health States Scale – Short Form</td>
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<td>Org SWS</td>
<td>Organisation-Wide Spirituality at Work Scale</td>
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<td>WB</td>
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<td>WLB</td>
<td>Work-Life Balance</td>
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<td>Wrk SWS</td>
<td>Work unit Spirituality at Work Scale</td>
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<td>SHALOM</td>
<td>Spiritual Health and Life-Orientation Measure</td>
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<td>SlaM</td>
<td>Spirituality, Leadership and Management</td>
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<td>SUHREC</td>
<td>Swinburne University Human Research Ethics Committee</td>
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<tr>
<td>TAFE</td>
<td>Technical and Further Education</td>
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CHAPTER 1
INTRODUCTION

Everyone has been made for some particular work, and the desire for that work has been put in every heart - Jalal ad-Din Rumi

Do not give up working, instructs Rumi; indeed, “the treasure which you seek derives from it” - Idries Shah

1.0 Overview of Thesis

This introductory chapter will briefly outline previous research findings in the area of spirituality at work in order to demonstrate the emerging importance of spirituality in business today. To clearly describe what the concept of spirituality at work encompasses, definitions of spirituality at work and its distinction from religion will then be presented. This introductory chapter will then define the other major study variables examined in the current study. Firstly, job stress and well-being will be outlined and lastly, work-life balance and work-life conflict will be described.

Over the last fifteen years, interest in the area of spirituality in the workplace increased substantially in commercial media, academic research, mainstream newspapers and magazine articles, conferences and workshops (Biberman 2003; Harrington, Preziosi & Gooden 2002; Marques, Dhiman & King 2005; Milliman, Czplewski & Ferguson 2003). Academic research in the area of spirituality and health (mental and physical) has also increased in popularity over the last fifteen years (e.g., Kass, Friedman, Leserman, Zuttermeister & Benson 1991; Lustyk, Beam, Miller & Olson 2006; Oman, Hedberg & Thoresen 2006; Ryan & Fiorito 2003). As such, many studies discussing the conception and definition of spirituality have been published (e.g., Aupers & Houtman 2006; Benson, Scales, Sesma & Roehlkepartain 2005; Pava 2007; Webster...
However, there was not a wide level of agreement on the definition of spirituality at work, or spirituality at work models or measures (Dehler & Welsh 2003; Gall, Charbonneau, Clarke, Grant, Joseph & Shouldice 2005; Giacalone & Jurkiewicz 2003b; Kinjerski & Skrypnek 2004; Tischler, Biberman & McKeage 2002).

Increased interest in the area of spirituality at work has occurred internationally in predominantly Western countries, with many studies conducted in the United States of America (e.g., Duchon & Plowman 2005), the United Kingdom (e.g., Ackers & Preston 1997) but few in Australia (e.g., Becker 2002). The majority of this literature has attempted to describe what spirituality at work included and some studies gave examples of spiritual workplaces (see Butts 1999; Cavanagh & Bandsuch 2002; Duffy 2006; Howard 2002; Kinjerski & Skrypnek 2004). The literature demonstrated little consensus on what spirituality encompassed and proportionally, very few studies empirically investigated the influences of spirituality at work on employee outcomes (e.g., Ashmos & Duchon 2000; Becker 2002; Duchon & Plowman 2005; Kinjerski & Skrypnek 2006; Milliman et al. 2003).

Studies on spirituality at work have predominantly sampled university business students, or students from multiple academic disciplines, corporate workplaces, high school teachers, hospital staff and other occupations (see Ashmos & Duchon 2000; Becker 2002; Clark, Leedy, McDonald, Muller, Lamb, Mendez, Kim & Schonwetter 2007; Duchon & Plowman 2005). Very little research investigated spirituality among tertiary educators (see Astin & Astin 1999).

There is also debate in the literature about whether spirituality is a separate construct to religion. Some authors have proposed that spirituality consists of religious and spiritual components (see Fabricatore, Handal & Fenzel 2000; Paloutzian & Ellison 1982; Seidlitz, Abernethy, Duberstein, Evinger, Chang & Lewis 2002). Other researchers use the term spirituality and religion interchangeably (see Butts 1999; Kinjerski & Skrypnek 2004). A third group of authors view spirituality and religion as distinct constructs (see Cunha, Rego & D'Oliveira 2006; Duchon & Plowman 2005; Duffy 2006; Marques 2005; Marques et al. 2005).
Within the research that relates spirituality to religion, some authors describe spirituality as non-specific to any particular religion, but still used the terms ‘God’, ‘prayer’ or ‘higher power’ (e.g., Ellison 1983; Fabricatore et al. 2000; Fisher 1999a; Kass et al. 1991; Paloutzian & Ellison 1982; Piedmont 1999; Seidlitz et al. 2002). These definitions of spirituality were criticised by subsequent authors for using terms associated with religion (Ashmos & Duchon 2000; Giacalone & Jurkiewicz 2003b; Hatch, Burg, Naberhaus & Hellmich 1998; Milliman et al. 2003). Perhaps due to the diversity in the definition of spirituality, a wide range of measures have been developed. A methodological problem with numerous measures employed, was that individual spirituality measures were used in spirituality at work research (Sass 2000). It is therefore difficult to reach a firm consensus on research findings.

A large volume of previous research investigated individual spirituality, life stress and health. Individual spirituality has repeatedly been found to predict better health and lower levels of stress, particularly when spirituality was defined in non-religious terms (see Calicchia & Graham 2006; Lustyk et al. 2006; Perrone, Webb, Wright, Jackson & Ksiazak 2006; Powers, Cramer & Grubka 2007). Furthermore, studies have found that individual spirituality was a moderator in the relationship between stress and well-being and ill-being (e.g., Elam 2000; Hong 2008; Youngmee & Seidlitz 2002). However, to date, little research has been conducted on spirituality at work and job stress, or on spirituality at work and employee health (e.g., Becker 2002).

The overall aim of this study was to investigate empirically the influence of non-religious spirituality at work on health (well-being and ill-being), job stress, work-life balance and work-life conflict of Australian academic staff. Another research aim was to measure spirituality in a work context, using a measure that was reliable and valid. Based on past research criticisms (see Clark 2000; Stanton, Balzer, Smith, Parra & Ironson 2001), it was an aim of this study to measure general job stress (not specific to a particular occupation or stressor), and both work-life balance and work-life conflict as separate constructs. Due to the variety of single health aspects studied previously, for example, subjective well-being, affective well-being, psychological well-being, physical symptoms (see Burke, Oberklaid & Burgess 2003; Karlsen, Dybdahl & Vitterso 2006; Palliser, Firth, Feyer & Paulin 2005; Powers et al. 2007), it was a research objective to
measure health in terms of both physical and psychological states, and to measure both positive and negative health states concurrently.

Based on previous research investigating moderators of individual spirituality, life stress and health (e.g., Elam 2000; Ellison 1991; Hong 2008; Youngmee & Seidlitz 2002), and spiritual appraisal theories of stress and health (e.g., Ellison 1991; Gall et al. 2005; Hebert, Weinstein, Martire & Schulz 2006) it was an aim of this study to test whether spirituality at work (individual, work-unit and organisation-wide) would buffer the effect of job stress on well-being and ill-being. Previous research also linked work-life balance and work-life conflict with stress (e.g., Greenhaus & Beutell 1985; Kinman & Jones 2008; Tytherleigh, Webb, Cooper & Ricketts 2005; Wallace 2005; Waltman & Sullivan 2007; Wong & Lin 2007). Research also demonstrated a link between spirituality at work and work-life balance (see Laabs 1995; Mitroff & Denton 1999b; Sullivan & Mainiero 2008). As a result it was also an aim to investigate whether spirituality at work (individual, work-unit and organisation-wide) would moderate the effect of job stress on work-life balance and work-life conflict.

Academic teaching staff from a variety of faculties in both Higher Education and Technical and Further Education (TAFE) divisions across Australian institutions participated in the study. Data was collected anonymously via an online survey consisting of demographic questions, a spirituality at work scale, a work-life balance scale, a work-life conflict scale, a job stress scale and a health scale. Quantitative statistical analyses such as Pearson $R$ correlations, alpha reliabilities, factor analysis and hierarchical regressions were used to analyse the data.

Chapter One of this thesis will discuss definitions of spirituality and spirituality at work (and its distinction from religion), and other study variables (work-life balance, work-life conflict, job stress, well-being and ill-being) will also be defined. The current trends of spirituality at work will be outlined in Chapter Two, as well as how spirituality is evident in the evolution of management perspectives over time. The importance of incorporating spirituality into Human Resource Management (HRM) practices will be then be outlined. Previous literature assessing different scales available to measure spirituality and spirituality at work will be presented. Empirical research will also be
1.1 Defining Spirituality at Work

There were a number of definitions for spirituality at work in past literature. This section will outline some of these definitions and demonstrate the lack of general consensus about what authors described as ‘spirituality at work’. The following subsections will describe spirituality and spirituality at work definitions discussed in previous research. This will be followed by a description of how spirituality is viewed as a distinct concept from religion.

1.1.1 Individual Spirituality and Spirituality at Work

A variety of terms have been used to describe spirituality at work. Many terms are often used for what Kinjerski and Skrypnek (2006) describe as the same concept. For example, ‘spirit at work’ (Kinjerski & Skrypnek 2004), ‘spirituality at work’ (Ashmos & Duchon 2000; Butts 1999; Harris 2001), ‘spirituality in business’ (Konz & Francis 1999; Milliman, Ferguson, Trickett & Conde 1999; Tischler 1999), ‘spirit in the

Laabs (1995, p. 64) compared the act of defining spirituality to “capturing an angel – it’s ethereal and beautiful, but perplex.” The existence of so many definitions and labels used to describe the same concept perhaps can be attributed to the complex nature of spirituality. Terms commonly discussed in relation to spirituality and spirituality at work were the ‘soul’, ‘transcendence’ and ‘authenticity’. The soul was defined as the “deepest essence of what it is to be human” (Mitroff & Denton 1999a, p. 5). The transcendent, or process of transcendence, is described as that which is sacred (Hebert et al. 2006). Authenticity refers to behaving consistently with one’s own beliefs and values (Astin & Astin 1999). These terms were commonly used in defining aspects of individual spirituality and spirituality at work.

A variety of definitions for spirituality at work have been discussed in previous literature (Singhal 2005). The need for a consistent conceptual definition of spirituality at work has been repeatedly raised in past research (see Dehler & Welsh 2003; Gall et al. 2005; Giacalone & Jurkiewicz 2003b; Harrington et al. 2002; Kinjerski & Skrypnek 2004; Konz & Francis 1999; McCormick 1994; Milliman et al. 1999; Tischler et al. 2002). The lack of clarity in defining spirituality at work can be attributed to the subjective and divine nature of individual spirituality (Giacalone & Jurkiewicz 2003b). Spirituality means different things to different people (Cavanagh 1999; Laabs 1995; Weston 2002). Several authors have even questioned whether spirituality at work can be defined or critically evaluated (e.g., Inayatullah 2006; Laabs 1995; Mitroff & Denton 1999a; Sink 1999). Though, Milliman et al. (2003) claim to be among the first studies to investigate spirituality at work empirically and critically. Also, adding to the lack of agreement of what spirituality at work encompasses, researchers frequently generalise the definition of individual spirituality to the workplace (Sass 2000).

As spirituality at work studies often used individual spirituality models and measures extrapolated to the workplace setting, it is important to first define spirituality in a
general or individual context (Geroy 2005). Individual spirituality was described most often as an internal state involving a sense of interconnectedness and finding meaning in life. For example, Mitroff and Denton (1999b, p. 83) described individual spirituality as where individuals felt connected with their “complete self”; their community and the entire universe.

Mitroff and Denton (1999b) described individual spirituality as a concept that was beyond religious denominations, embracing everyone, universal and timeless, awe inspiring in the presence of the transcendent. Spirituality was also described as finding the sacredness in the ordinariness of everyday life, feeling interconnected with everything, having inner peace and calm, having an infinite source of faith and willpower, and the belief that spirituality was the ultimate end in itself (Mitroff & Denton 1999b). Stemming from this definition, spirituality at work, therefore, is the degree to which spirituality is expressed in the behaviours, policies, values and principles of an organisation (Dehler & Welsh 1994).

The lack of consistency in the existing conceptual definitions of spirituality at work was evident. Singhal (2005) identified three themes underpinning spirituality at work definitions in previous literature: integrity and wholeness; meaningful work; and larger than oneself. Integrity and wholeness related to organisations fostering integration of employees’ ‘whole-selves’ at work. Meaningful work referred to employees having a greater desire to find meaning and purpose in the work they do. ‘Larger than oneself” encompassed employees connecting with their community and a shared identity with their organisations.

Some authors defined spirituality at work as a personal inner experience based on interconnectedness and value alignment within themselves, within the work unit and within the organisation as a whole (e.g., Ashmos & Duchon 2000; Harrington et al. 2002; Ingersoll 2003; McCormick 1994; Mitroff & Denton 1999b; Sass 2000). For example, Giacalone and Jurkiewicz (2003b) defined spirituality at work as an organisational culture that created complete and happy employees by fostering employees’ experience of the transcendence and a sense connectedness to others. Kinjerski and Skrypnek (2004, 2006) expanded on this perspective by describing
spirituality at work as a significant feeling of well-being, belief that work makes a
difference or contributes to common purpose, sense of interconnectedness to others and
something larger than oneself, and sense of perfection and transcendence.

Other authors contended that spirituality was an inner source of energy and that
spirituality at work was an outward expression of that force in the workplace (Dehler &
Welsh 2003; Pawar 2009). Geroy (2005) defined spirituality at work as an employee’s
internal essence of their being, that has evolved over time by experience and is shown
externally through work behaviour. Spirituality at work also involved compassion,
selfless service and meditative work (McCormick 1994). Ingersoll (2003) claimed that
spirituality at work involved mystery, being in the present, spiritual freedom,
forgiveness, hope, knowledge, learning, experience and ritual.

Spirituality at work was described by Ashmos and Duchon (2000) as an internal state of
being that is fostered by meaningful work and sense of community at work. Spirituality
at work is about experiencing a sense of purpose and finding personal meaning in work
beyond the type of meaning described in job design literature, which focuses on finding
meaning in the performance of work tasks (Ashmos & Duchon 2000; Hackman &
employees want and need to be part of a community in which they can make
meaningful contributions.

More recently, The Spirituality, Leadership and Management (SlaM) network (2007)
claimed that spirituality provided a sense of meaning, the possibility of personal
transformation and celebration of life. The network argued that spirituality expresses
unity; every person and every thing in our universe is ultimately connected. The SlaM
network contended that there are many paths to spiritual awareness and enlightenment.
Furthermore, harnessing and promoting spirituality in the workplace could bring about
positive changes for employees, the organisation and society.

An all encompassing model of spirituality at work was developed by Ashmos and
Duchon (2000), which described spirituality at work as involving three levels,
individual, work unit and organisation-wide. The individual level describes how much
an employee understands their own “divine” power and how it can help them to obtain a satisfying internal and external life by finding individual meaning and purpose through their work (Ashmos & Duchon 2000, pp. 135-136), and the extent to which an employee enjoys and is energised by work (Milliman et al. 2003). The work unit dimension entails how much employees have a sense of connection and community with their colleagues and the extent to which those colleagues are caring and encouraging (Ashmos & Duchon 2000) and are linked by a common purpose (Milliman et al. 2003).

Organisation-wide spirituality at work is the extent to which an employee perceives a good relationship with their organisation, and perceives that their own values and goals align with their organisation’s (Ashmos & Duchon 2000). Having personal and organisational values in alignment leads employees to be more effective and fulfilled (Dehler & Welsh 2003; Laabs 1995). Spirituality at work is also characterised by employees identifying with their organisation’s mission, and belonging to an organisation which cares about its employees (Milliman et al. 2003).

Ashmos and Duchon (2000) created the ‘Finding Meaning and Purpose at Work survey’ which measures all three dimensions of spirituality at work (individual, work-unit and organisation-wide spirituality) quantitatively. Later, Milliman et al. (2003) adopted Ashmos and Duchon’s (2000) three component model of spirituality at work because previous authors saw these components as important (e.g., Hawley 1993; Milliman et al. 1999; Mitroff & Denton 1999b). Subsequently, Milliman et al. (2003) altered Ashmos and Duchon’s (2000) measure by removing the transcendent aspect of spirituality at work (divineness and inner life) from their version, because it was proposed that this would have greater impact on personal life rather than work life. Milliman et al. (2003) conducted a confirmatory factor analysis on their revised scale which revealed satisfactory reliability and validity. Further problems defining spirituality related to the concept of religion, will be discussed in the following section.
1.1.2 Differentiation of Spirituality from Religion

There was a divide in perspectives about whether spirituality was the same concept as religion. Some authors argued that the two were related (see Fabricatore et al. 2000; Paloutzian & Ellison 1982; Seidlitz et al. 2002) and others claimed spirituality and religion were ultimately not the same (see Cunha et al. 2006; Dent, Higgins & Wharff 2005; Duchon & Plowman 2005; Duffy 2006; Marques 2005; Marques et al. 2005; McCormick 1994).

It was often the practice for researchers to use the terms ‘spirituality’ and ‘religion’ interchangeably (see Butts 1999; Fabricatore et al. 2000; Kinjerski & Skrypnek 2004; Seidlitz et al. 2002). Although popular literature and media link these two terms, there is an increasing awareness that they are not necessarily interchangeable concepts (Cascio 1999; Rothman 2009). For example, evidence suggests that individuals can be spiritual without being religious (see Hatch et al. 1998; Marler & Hadaway 2002; Peterman, Fitchett, Brady, Hernandez & Cella 2002; Zinnbauer, Pargament, Cole, Rye, Butler, Belavich, Hipp, Scott & Kadar 1997).

As opposed to religion, spirituality was considered by Mitroff and Denton (1999a) as nondenominational and non-prejudiced: it was embodied by all faiths, races, genders, sexual orientations and abilities or disabilities. Laabs (1995) considered that spirituality was not about converting people, or making them join a particular belief system; instead it was about knowing that every person had his or her own divine power, personal truths and integrity within to make his or her own judgements. Harrington et al. (2002, p. 155) claimed that spirituality at work was not about religious beliefs, but alternatively about people who perceived themselves as “spirited beings”, whose spirits needed energising at work.

Conversely, religion was described as a structured doctrine based on a particular faith, which is formal, organised and highly structured, rigid and uncompromising (Hocking 2006; Mitroff & Denton 1999a). Even though spirituality is based in religious imagery historically (e.g., personal transformation, rediscovering self and personal journey),
many authors postulate that spirituality is ultimately not about religion (Laabs 1995; Mitroff & Denton 1999a). Specifically, Seaward (2000, p. 244) reiterates that although spirituality and religion share grounding of the “mystical divine”, spirituality embraces different people and views, while religion excludes them.

Authors frequently contend that incorporating religion into the workplace is inappropriate (see Ashmos & Duchon 2000; Cavanagh 1999; Giacalone & Jurkiewicz 2003b; Laabs 1995; Mitroff & Denton 1999b), except where accommodating religious diversity (see Cash & Gray 2000), and where it does not interfere with normal organisational function (Laabs 1995). Cavanagh (1999) suggests that utilising religion in organisations has the potential to segregate and create suspicion between employees of different faiths. This is attributed to the decline of religious involvement in society and people generally becoming sceptical of religion (Weston 2002). Cavanagh (1999) also claims that organisations which incorporate a common religion into organisational culture exclude employees who follow a minority faith, or are not religious. McCormick (1994) acknowledges that although distinct from religion, it is difficult to incorporate spirituality into the workplace without endangering an employee’s entitlement to religious freedom.

Despite this, spirituality is viewed as being a relevant issue to be incorporated into organisations (see Kinjerski & Skrypnek 2004; Milliman et al. 2003; Mitroff & Denton 1999b). For example, The Institute for Management Excellence (2008) website states:

We recognize that each person has their own beliefs. We respect each individual's belief and their right to hold their beliefs sacred and private. Spirituality - as we define it - has no religious component or preference; it is a way of expressing more humanity.

Gall et al. (2005) assert that theoretical models describing the process behind spirituality, stress, coping and well-being, frequently focus on Christianity rather than the broader concept of spirituality. It is important to distinguish between religion and spirituality, as the outcome and implications of studies investigating the influence of spirituality and/or religion will vary depending on what definition of spirituality is used (Elam 2000; Hebert et al. 2006; Sink 1999; Wills 2009). Giacalone and Jurkiewicz (2003b, p. 6) argue that combining workplace spirituality with religion is “ill-defined”
and “un-testable”, and does not, therefore, contribute to the scientific body of knowledge. In addition to spirituality at work, other organisational variables will be investigated in this study. The following sections will define these other major concepts investigated in the present study; firstly job stress and well-being.

1.2 Defining Job Stress and Well-Being

An organisational issue that may be affected by spirituality at work is job stress. Stress is defined as an event or situation that is perceived as threatening, demanding or challenging (Hardie, Kashima & Pridmore 2005). Lazarus and Folkman (1984) defined stress as a relationship between a person and their environment which is appraised as taxing and endangers his or her well-being. Generally, theories of stress state that high stress leads to poor health consequences, especially where an individual lacked the coping resources or used ineffective strategies to cope with stress (Hardie et al. 2005; Lazarus & Folkman 1984; Lazarus & Launier 1978). These health consequences could occur in the psychological or physiological realms (Stanton et al. 2001).

In linking stress to well-being, Lazarus and Folkman (1984) postulated three phases of cognitive appraisal that occur during stressful situations, which have an impact on well-being, namely primary appraisal, secondary appraisal and reappraisal. Primary appraisal referred to the cognitive perceptual process whereby an individual perceives something as stressful, neutral or positive. Secondary appraisal involves evaluating what might be done about a stressful situation and the individual deciding whether they have the coping resources to deal with the stressor. Reappraisal involves an altered perception about how stressful the situation is based on new information from the environment. An important aspect of Lazarus and Folkman’s model is that perception of whether the stressor is negative, positive or neutral, rests largely on the skills, needs and values of the particular individual. Schuler (1982) argues what is perceived as stressful to one individual, may not be perceived as stressful to another. The stress process has two elements: the actual interchange between the person and the environment; and the person’s responses over time to the stress experienced. Long-term stressors cause more severe health problems than short-term stressors.
Stanton et al. (2001) developed a self-report measure, the Stress in General scale, which measured job stress based on Lazarus and Folkman’s (1984) definition and model of stress as applied to a work context. The scale was designed to measure job stress generally (as distinct from job satisfaction and particular stressors or strains) in a wide range of workplaces (Stanton et al. 2001). The Stress in General scale comprised two domains: threat (e.g., irritating, nerve-wracking, uncomfortable, overwhelming) and pressure (e.g., pressured, hectic, demanding, pushed).

With reference to well-being, Hardie et al. (2005) describe health as a multidimensional concept which includes social, emotional and physical states of ill-being and well-being. Stress can manifest in a person either positively or negatively, and is therefore a good indicator of health (Hardie et al. 2005). Hardie et al.’s (2005) Multidimensional Health States Scale – Short Form (MHSS-SF) consisted of a measure of well-being (with emotional, somatic, cognitive, social and sexual sub-factors), and a measure of ill-being (with physical symptoms, depression and anxiety sub-factors). Both positive and negative aspects of psychological and physical states of health can be measured concurrently (Hardie et al. 2005). The following section will define the other major variables examined in the present study: work-life balance and work-life conflict.

1.3 Work-Life Balance and Work-Life Conflict

Two concepts related to spirituality at work are work-life balance and work-life conflict (Briggins 1996; Burack 1999; Laabs 1995; Marques 2005). The terms work-life balance and work-family balance are often used interchangeably in past literature, but generally are applied to the same concept (e.g., Hill, Hawkins, Ferris & Weitzman 2001; Quick, Henley & Quick 2004; Reiter 2007). ‘Work-life balance’ is a better label for the concept as it encompasses work, personal and family responsibilities (Parkes & Langford 2008; Quick et al. 2004; Sullivan & Mainiero 2008). Also, commonly interchanged terms are work-life balance and work-life conflict (Clark 2000).

Often work-life balance is defined as the absence of conflict between work and family and personal roles (Frone 2003; Quick et al. 2004). Limiting work-life research to just
one domain is too simplistic (Balmforth & Gardner 2006; Clark 2000; Hanson, Hammer & Colton 2006). Balance (or facilitation) and conflict are separate constructs coexisting at the same time, whereby an individual can experience high levels of both concurrently (Balmforth & Gardner 2006; Edwards & Rothbard 2000; Hanson et al. 2006; Wayne, Musisca & Fleeson 2004). Measuring work-life conflict as a substitute for work-life balance, assumes that work and personal life are incompatible (Clark 2000). Clark (2000) reasoned that work-life balance is not a simplistic construct and should thus be measured with more than one measure, not just by the absence of conflict.

Work-life balance is the degree to which an individual was able to simultaneously balance the emotional, behavioural and time demands of both paid work and family and personal duties (Hill et al. 2001). Alternatively, work-life conflict occurs when involvement in one domain, for example work or personal life, interferes with involvement in the other domain (Hanson et al. 2006).

Work-life spillover theory suggests that a person’s attitudes, emotions, skills and behaviours produced in one domain (either work or personal life) flow into the other (Balmforth & Gardner 2006; Edwards & Rothbard 2000; Frone 2003; Zedeck 1992). Positive spillover (or facilitation) is where participation in work, home and personal life contribute beneficially to each other (Balmforth & Gardner 2006; Hanson et al. 2006). Alternatively, negative spillover (or conflict) is where participation in work, home and personal life contribute detrimentally to each other (Balmforth & Gardner 2006). Therefore spillover could have positive or negative effects, and could occur in both directions, for example work-to-personal life spillover and personal life-to-work spillover (Hill et al. 2001). In other words, work could intrude on, or improve personal life, and personal life can interrupt, or enhance work (Hill et al. 2001).

Hill et al. (2001) developed a simple five-item work-family balance scale which assessed how well employees felt that they balanced the demands of their work and family and personal lives. Hill et al. (2001) used a “mesosystem” paradigm (Bronfenbrenner 1986, p. 723) and spillover theory (Zedeck 1992) to investigate work-life balance. The mesosystem paradigm described how external environmental systems could affect the family system. In this paradigm, external systems (such as work) do
not operate independently of the internal family system, but interact with it through a permeable barrier (Bronfenbrenner 1986; Hill et al. 2001). For example, events in the workplace can influence processes within the family system and vice versa.

In order to measure work-life conflict, O'Neil, Helms and Gable (1986) developed the Gender-Role Conflict-I Scale (GRCS-1) which was designed to measure personal gender-role attitudes, behaviours, and conflicts. The six-item work-life conflict subscale of the GRCS-1 specifically assessed the degree to which individuals felt that their personal life conflicted with their work lives.

To summarise this chapter, individual spirituality and spirituality at work are distinct concepts from religion. Likewise, spirituality at work is also a different concept from individual spirituality, and should be treated as such in research. Therefore in this study, it is an aim to use a non-religious measure of spirituality at work. Other major concepts discussed in this introductory chapter were work-life balance and work-life conflict, job stress, well-being and ill-being. The current study will discuss the implications that spirituality at work has for these particular HRM issues, and will also discuss the applicability of a spiritual appraisal theory which links spirituality, stress and well-being.

The following chapter will describe in more detail the increased trend of spirituality in business and HRM practices, and how spirituality is evident in existing management theory. The importance of incorporating spirituality into HRM practices will be then be outlined. Different measures of spirituality at work will also be examined in order to reliably measure the concept and test the existing theory linking spirituality, stress and well-being. A more detailed review of research literature linking spirituality at work with work-life balance, work-life conflict, job stress, well-being and ill-being will also be presented, including a contemporary theory linking stress, well-being and spirituality.
CHAPTER 2

LITERATURE REVIEW

2.0 Overview of Literature Review

This literature review chapter will begin by outlining trends involving spirituality in business and reasons for the increased interest in spirituality at work. Evidence of spirituality in existing management theory and examples of how management theory has evolved over time will be discussed. The importance of spirituality at work to HRM will also be outlined. Different measures and models of spirituality and spirituality at work will be overviewed and critically examined, followed by a detailed review of research investigating the relationships of spirituality at work with work-life balance, work-life conflict, job stress, well-being and ill-being. The literature review will then summarise research conducted on a variety of occupations and will present an outline of research conducted specifically on academic teaching staff. The chapter will also discuss the benefits of spirituality at work for the individual, work-unit, and organisation. Based on the literature review, this chapter will conclude with a concept map outlining the variables to be studied in this study and the hypothesised relationships between these variables.

2.1 The Trend Towards Spiritual Business Practices

Marques et al. (2005) stated that a new spiritual awareness had been stirring in workers’ souls for at least the last decade, driving them toward a more humanistic work environment, more meaning at work and a connection to something higher than just functional work. This new spiritual awareness and interest in spirituality at work is evident in the increasing number of books (see Biberman & Whitty 2007; Giacalone & Jurkiewicz 2003a), magazines (e.g., Briggs 1996; Shellenberger 2000) and popular press (see Cornell 2007; Rochfort 2007; Slattery 2007), websites (e.g., Centre for Spirituality at Work 2008; The Christian Science Publishing Society 2008; The Institute for Management Excellence 2008; The SLaM Network 2007) and journal articles (see
Ashmos & Duchon 2000; Milliman et al. 2003; Mitroff & Denton 1999b) dedicated to the notion of incorporating spirituality into the workplace.

Duchon and Plowman (2005) observed that in the United States of America in approximately the last ten years, popular business publications such as *The Wall Street Journal, Business Week* and *Fortune* reported an increased desire among employees for creating meaning and purpose at work. In Australian popular press there was much discussion about spirituality at work and ‘Generation Y’ employees. For example, Patterson (2007) claims that Generation Y are more interested in spirituality, but less likely to be involved in mainstream religions than are the ‘Baby-Boomer’ generation. It was even suggested that Generation Y are “the most unchurched generation in history” (Patterson 2007, p. 87). Generation Y are also argued to be the most educated generation in history and are more optimistic about life and work than their predecessors, Generation X (Patterson 2007).

To clarify, Cleveland and Lynem (2005) define ‘Baby-Boomers’ as people born between 1945 and 1964, Generation X as individuals born between 1965 and 1980, and Generation Y persons as born between 1980 and 2000. Cleveland and Lynem (2005) contend that Generation X and Y are more likely to embrace diversity, technology informality and seek work-life balance, than the ‘Baby-Boomer’ generation. Furthermore, Beaudoin (1998) reason that there is a spiritual revival occurring in Generation X, with many individuals in their twenties and thirties seeking spirituality and meaning in life (not constrained by religion).

A study by Monash University, the Australian Catholic University and the Christian Research Association found that forty-eight percent of Generation Y participants believed in a God, twenty percent did not believe in a God and thirty-two percent were unsure whether a God existed (Patterson 2007). Two thirds of Generation Y participants who did not believe in a God believed in some kind of higher being or life force (Patterson 2007). Furthermore, Adonis (2007) claimed that Generation Y employees preferred working for socially responsible organisations. Adonis (2007) also maintained that organisations which were environmentally friendly, supported charities and communities and embraced diversity, would have competitive advantage.
As a result of the growing number of Generation Y in the workforce, managers are increasingly focussing on emotional and spiritual needs of their employees in order to survive in the quickly changing competitive workforce (Slattery 2007). Slattery (2007, p.33) asserts that traditionally managers focused on achieving business needs through the technical and strategic skills of employees rather than the “softer” emotional and spiritual needs of employees.

Business leaders were also described in Australian newspapers to be increasingly utilising spiritual business practices. For example, John McFarlane, Chief Executive Officer of ANZ for ten years, was described by Cornell (2007, p. 30) as the “standout banker of his generation”, as he was instrumental in the transformation change of ANZ. McFarlane’s strategies were described as radical, especially his emphasis on personal growth which resulted in profitable dividends. His personality was described as being transcendental after, being quoted: “I believe that everything in the universe is connected… what its called I’m not sure… but I am absolutely sure there is a universal force that is spiritual” (Cornell 2007, p. 30). Cornell suggested that McFarlane’s purpose was intensely and primarily spiritual and was the basis of his management practice and success.

Corporate businesses were also reported to be profiting from encouraging the practice of spirituality. For example, it was reported by Rochfort (2007) that Rupert Murdoch’s Fox Entertainment Group acquired the spiritual website Beliefnet.com in December 2007. After being acquired, Beliefnet.com described itself as independent and not affiliated with any spiritual organisation or movement (Beliefnet Inc. 2007). Beliefnet Inc.’s (2007) agenda was to help people meet spiritual needs by helping people find and journey on a spiritual path that produces comfort, clarity, strength, hope and happiness. Beliefnet Inc.’s (2007) website offers free information for individuals on the topic of spirituality, but makes a significant proportion of revenue from advertising (Beliefnet Inc. 2007).

Another online resource, the SLaM network (2007), described itself as being focused on grounded and realistic ways of improving leadership and management practices of
business, society and the environment. The SLaM network (2007) website specialises in helping organisations foster spirituality into the workplace by offering public education through consulting, community, corporate-based learning groups, conferences, research on spirituality, leadership and management, publication of newsletters and an academically reviewed journal. The SlaM network (2007) stated that:

We believe that an awareness of the spiritual nature of human beings is essential to good leadership and management. This consideration of both tangible and intangible aspects of being is increasingly important as we navigate through the resource boundaries of our natural world. SLaM is not a religion or a belief system, our network is open to people from all beliefs and from all spiritual paths.

The Centre for Spirituality at Work website (2008) also provided advice about how businesses could develop spirituality in the workplace. The Centre for spirituality at work (2008) seeks to help employees wanting to deepen the spiritual connection between themselves, their work and their organisational community.

Subsequently, not only have popular press and corporate businesses observed the potential benefits of spiritual workplaces, but management groups have as well. For example, the number of conferences run by management groups about spirituality in business increased from none to approximately twelve per year in the United States of America, and several throughout the rest of the world in 1998 (Tischler 1999). For example, in 1999 the International Center for Spirit at Work (2007) held its second annual conference on spirituality in organisations. More recently, the fourth International Business and Leadership Symposium (2009) is being held in Europe in November 2009 on the topic of ethics in business, corporate culture and spirituality. It is an annual event that brings together leaders from business, politics, academia, society and faith-based organisations to discuss business practices that are sustainable and profitable for organisations.

Biberman (2003) reported a wealth of academic conferences held on the topic of spirituality after 1995 and an abundance of non-academic conferences on the topic after 1999. The topic of spirituality was formally introduced to the Academy of Management in a symposium in 1997 and a spirituality interest group (named ‘Management,
Spirituality and Religion”) was approved by the Academy Board in 1999, which registered two hundred academy members in 2001 (Biberman 2003).

Australia also seems to be following this trend, however few conferences have focussed on spirituality in business specifically. For example, in 2007 The Institute for Sustainable Futures, University of Technology, Sydney, collaborated with the Ethos Foundation to run a conference about leadership, spirituality and sustainability for businesses (The SLaM Network 2007). Additionally, The SlaM Network (2007) is running its seventh annual spirituality conference in 2010 (Sydney). The conference will discuss how managers and leaders from commercial corporations, small to medium enterprises, public sector bodies or not-for-profit organisations, can incorporate spirituality into the workplace.

More conferences in Australia have focussed on spirituality and health, rather than business. For example, the eighth International Conference on Children's Spirituality was held in Ballarat in January 2008 (Multicultural Mental Health Australia 2008). The conference consisted of experts, scholars and practitioners to explore issues, successful practices and innovative approaches that promoted spirituality and well-being in children and adolescents. Also, the third Spirituality and Health Conference: Integrating Spirituality in the Practice of Health Care was held in Adelaide in 2009 to discuss the role research has in demonstrating robust links between spirituality and health (Spirituality and Health 2009).

Researchers reasoned that the sudden influx of ‘spirituality’ at work literature in conferences, academic and popular media is not a trend, but a movement (Hicks 2003). According to Ashmos and Duchon (2000, p. 134) this “spirituality movement”, or “new management paradigm” (Dehler & Welsh 1994, p. 17) is occurring in many organisations and academic disciplines. Spirituality at work is assumed to be beneficial to all stakeholders in organisations, therefore managers are increasingly introducing human resource and organisational development programs to increase spirituality at work (Kinjerski & Skrypnek 2006). In spite of this, research involving spirituality at work only recently started to develop from conceptual discussion to the much needed theory building and empirical testing (Corner 2009; Dehler & Welsh 2003; Duchon &
Hicks (2003) contended that no single cause could explain the spirituality movement in organisations. The movement was attributed to three broad causes: social and business changes; major global changes in values, and the growing interest in Eastern philosophies (Giacalone & Jurkiewicz 2003b). Firstly, social and business changes have led to an increased number of disheartened employees searching for greater meaning and purpose at work (Cash & Gray 2000). The increased frequency of organisational downsizing, restructuring, re-engineering and layoffs caused decreasing employee morale and loyalty (Kinjerski & Skrypnek 2006; Singhal 2005), worker safety, health and well-being (Quinlan 2007). Other examples of business and social changes are the decline of community groups, aging ‘Baby-Boomers’, increasing technology making jobs redundant, and pressure of global competition which have all increased the interest of spirituality at work (Ashmos & Duchon 2000; Cash & Gray 2000).

Due to these social and business changes, organisations face greater challenges in redefining the employment relationship (Singhal 2005). For example, the elimination of the psychological contract (contract which established commitment of an employee to an employer outside the written contract, e.g., loyalty), longer working hours and the growing use of teamwork (Dessler, Griffiths & Lloyd-Walker 2007; Harrington et al. 2002) are further examples of social and business changes leading to an increased need for spirituality at work. Thus, lack of loyalty and longer working hours increase employees need for spirituality at work, and increased teamwork can foster the development of spirituality in the workplace.

Secondly, the increased interest in spirituality has been attributed to businesses developing a sense of corporate social responsibility, and individuals seeking self-actualisation (as opposed to financial security) from their work places (Hicks 2003). This global change in values according to Hicks (2003) was a result of improved living standards in developed countries. Singhal (2005) argues that employees are looking for a meaningful work-life based on a more altruistic, expressive set of principles. This global focus of working to obtain personal growth and improve society (rather than for
monetary gain only) can be explained by Maslow’s (1943, 1954, 1968) hierarchy of needs theory (Tischler 1999). By applying Maslow’s theory to the societal level, rather than the individual level of human behaviour, employees can use their employment to work towards obtaining meaning, personal, professional and spiritual growth, or what Maslow (1943, 1954, 1968) described as self-actualisation (Tischler 1999).

In accordance with Maslow’s (1943, 1954, 1968) hierarchy of needs theory, employees who could only afford to buy the bare essentials to survive, would work mainly for monetary rewards, and thus would have little desire for any other intrinsic benefits, HR development programs or personal growth (Tischler 1999). In contrast, while those employees who were in a secure financial position and were able to afford luxury items, would be more concerned with personal growth, self-actualisation, HR development and intrinsic organisational benefits (Tischler 1999). Evidence shows that spiritual well-being is positively related to self-actualisation and job satisfaction (Clark et al. 2007). Moreover, studies frequently illustrate that beyond a certain threshold, monetary rewards stop motivating employees and intrinsic rewards primarily begin to motivate them (Mitroff & Denton 1999b).

Thirdly, the increased interest in spirituality has also been accredited to the growing curiosity inside and outside the workplace about Eastern and New Age philosophies, and also the increasing acceptance of cultural diversity (Cash & Gray 2000; Giacalone & Jurkiewicz 2003b). Examples of these philosophies are acupuncture, Feng Shui, Buddhism, Taoism, Tarot, self-healing, self-discovery, integration and harmony, Jungian and transpersonal psychology, meditation, astrology and earth-based rituals (Giacalone & Jurkiewicz 2003b; Hicks 2003). For example, new age methods such as meditation and yoga are popular in organisational teambuilding exercises (Levere 1995). The following section will outline how spirituality is not only making its way into the workplace, but also into management theory.
2.2 Relevance of Spirituality in Management Theory

Ashmos and Duchon (2000) argued that there has been a shift away from classical organisation and management theory (e.g., Taylor 1985; Weber 1947) in which managers obtain material ends through controlling their subordinates. The industrial revolution was inspired by ‘morality and duty’, where scientific management was grounded in efficiency and bureaucratic management theories emphasised rationality, administration, profit and legality (Ashmos & Duchon 2000; Cunha et al. 2006). In contrast, contemporary theories (such as human relations) evidenced elements of spirituality, for example, needing to belong, self-recognition and finding meaning in work (Ashmos & Duchon 2000; Cunha et al. 2006). This is similar to spirituality at work, as spiritual organisations treat employees as people, not as aspects of production (Pfeffer 2003). Management perspectives have clearly evolved over a period of time toward incorporating spirituality into the workplace at the individual, work-unit and organisation-wide levels. This section will summarise major changes and contributions evident in management theory that have paved the way for spirituality at work.

A major contributor to the HR movement at the individual level was Henry Maslow. Maslow’s (1943, 1954, 1968) hierarchy of needs, in particular self-actualisation, was also likened to spirituality at work (Neck & Milliman 1994; Pfeffer 2003; Sass 2000). Maslow reasoned that people try to reach their full potential as a person (commonly referred to as striving for self-actualisation) (Neck & Milliman 1994). The need for self-actualisation was preceded by four other types of needs, which together formed a needs hierarchy. The needs formed a hierarchy starting from the lowest most basic needs to the highest needs. These were physiological, safety, belongingness, love, esteem needs, and finally the need for self-actualisation, which motivate people to reach their ultimate potential above and beyond lower-order needs. Higher-order needs can not be met until lower-order needs are satisfied.

Characteristics of a self-actualised person include a superior perception of reality, increased acceptance of self, others and of nature, increased spontaneity, simple and natural behaviour, as opposed to artificial or strained (Maslow 1954, 1968). Self-
actualised people are claimed to be centred on problems outside of themselves, appreciate privacy, are autonomous of their environment and culture and have a continuing ability to appreciate life. They also experience frequent peak experiences (mystical sensations filled with profound joy, wonder and awe), identify and sympathise deeply with others, have deeper interpersonal relations and a democratic or non-judgemental attitude (Maslow 1954). They develop clear opinions of what is right and wrong, are philosophical and have a kind sense of humour. Maslow argues that those self-actualised people tended to be creative and detach themselves from specific cultural norms.

Cunha et al. (2006) suggest that an employee’s spiritual needs, such as sense of purpose and belonging and self-actualisation, should be addressed by organisations in order to achieve business and employee goals and competitive advantage. The human relations perspective contends that employees seek to achieve their full potential as people, (or self-actualisation) through work, for example, choosing work that has some social meaning or value (Pfeffer 2003).

After Maslow, Herzberg (1966) developed the two-factor theory, which also evidenced spirituality. In Herzberg’s (1966) two-factor theory, motivators such as achievement, recognition, the work itself, responsibility and advancement were viewed as contributors to employee satisfaction. Job enrichment was then used to create meaningful work for employees, motivate and satisfy them (and ultimately increase organisational productivity) by nurturing an employee’s professional growth. Later, Hackman and Oldham (1975) developed the job characteristics model as a method for enriching jobs. Hackman and Oldham viewed meaningful work as one of the key features of a productive work environment. Part of the job characteristics model, ‘experienced meaningfulness’ involved employee perception that their work was worthwhile (Duchon & Plowman 2005). Though, it should be pointed out that the meaningful work aspect of spirituality at work goes beyond the type of meaning and purpose described by human relations and job design (Duchon & Plowman 2005).

Another view incorporating the individual aspect of spirituality is Neck and Milliman’s (1994) concept of ‘thought self-leadership’, which is similar to spiritual appraisal, and
self-actualisation (Maslow 1943; Sass 2000). Thought self-leadership involves consciously changing self-talk, mental imagery, beliefs and assumptions to create more constructive thought patterns, therefore enabling employees to achieve spirituality at work (Neck & Milliman 1994). Neck and Milliman (1994) maintained that spirituality could be learned or improved through thought self-leadership, and ultimately this would lead to improved employee and organisational performance.

More contemporary perspectives paved the way for spiritual work practices by introducing the work-unit or team aspect of spirituality. These perspectives do this by focussing on creating collectively responsible and co-operative cultures to create quality products, holistic concern, having meaningful and shared values and co-operation, as well as a vibrant mission to inspire employees (Cunha et al. 2006). For example, collective reward structures are claimed to decrease competition between individual employees which, therefore, helps to increase knowledge sharing and helping others, as well as developing a sense of community (Pfeffer 2003). The self-managed team is another management concept which helps to build employee spirituality at work by providing group-based autonomous decision making and empowerment (Sexton 1994). Self-managed teams do this by fostering a sense of community and connection to others, creating joint values, positive self-images and feelings of self-worth (Pfeffer 2003).

More recent management perspectives have taken a holistic view of incorporating spirituality into organisations, by introducing the organisation-wide aspect of spirituality. For example, organisational transformation is a radical change that requires a revision of the organisation’s belief system, values and purpose (Dehler & Welsh 1994). Spirituality is evident through organisational transformation concepts such as shared vision, inspiring leadership, intrinsic motivation and group belongingness (Dehler & Welsh 1994; Dehler & Welsh 2003; Neal, Bergman-Lichtenstein & Banner 1999). Dehler and Welsh (1994) contended that implementing organisational transformation successfully requires attending to the emotional (or spiritual) side of the business, by aligning employee and organisational purpose, practice and value.

Similarly, transformational (inspirational or charismatic) leadership is another
frequently mentioned perspective linked to spirituality at work (see Dehler & Welsh 1994; Dent et al. 2005; Duchon & Plowman 2005; Hartsfield 2003; Krishnan 2008; Neck & Milliman 1994). Transformational leadership contrasts with the more traditional and rational transactional leadership approach, which is characterised as leadership with no enduring purpose after the exchange between employee and employer (leader) is complete (Dehler & Welsh 1994; DuBrin, Dalglish & Miller 2006). Dehler and Welsh (1994) claim that shared vision, emotional arousal and employee inspiration are achieved through transformational leadership.

Research has shown that transformational leadership is related to increased spirituality and organisational identification (see Hartsfield 2003; Krishnan 2008). Transformational leadership emphasises the emotional arousal of employees through inspiration rather than just through intellectual stimulation (Dehler & Welsh 1994; Tourish & Pinnington 2002). Employees are said to be inspired to attain meaning and purpose in work rather than be motivated by rewards and security (Dehler & Welsh 1994). Transformational leadership also involves appealing to employees’ higher sense of purpose and aligning the leader’s vision with employee values (DuBrin et al. 2006).

Despite the fact that recent management perspectives are clearly evolving closer towards incorporating spirituality into work practices, evidence suggests that employees are still feeling as though their organisations treat them as dispensable objects in the process of making profits (Cash & Gray 2000). Researchers often noted the lack of theoretical understanding and development of how spirituality should be applied to work (Butts 1999; Cunha et al. 2006; Giacalone & Jurkiewicz 2003b).

To remedy this, a few theories have emerged which incorporate spirituality into leadership and management specifically. For example, Fry (2003) suggests a causal theory of spiritual leadership which was developed within an intrinsic motivation model. The theory of spiritual leadership incorporates vision, hope or faith, and altruistic love, theories of workplace spirituality, and spiritual survival. The purpose of spiritual leadership is to create vision and value congruence across the organisation, work-unit, and individual levels, which ultimately, will lead to high levels of organisational commitment and productivity. Furthermore, Steingard’s (2005) theory of
spiritually-informed management integrates traditional and spiritual approaches to leadership and management. The model has three dimensions: awareness (unconsciousness and consciousness); change (translation and transformation); and manifestation (temporal and perennial).

Evidence has suggested that organisations are more profitable, popular and sustainable when they create a culture and strategy which emphasises fair treatment of employees, social and environmental responsibility and understanding that employee needs are to a large extent, intrinsically motivated (Bartol, Tein, Matthews & Sharma 2008; Tischler 1999). Similarly, Konz and Ryan (1999) contended that in contemporary times, employees are more motivated to integrate their work, personal and spiritual lives, in order to work co-operatively in a community and be joined in vision and purpose beyond making profits. Ashmos and Duchon (2000) agree, claiming that the search for meaning at work and corporate spirituality are likely to characterise organisations and theoretical perspectives of the future. The benefits of incorporating spirituality into the workplace will be discussed in the following section.

2.3 Importance of Spirituality for HR Managers

Previous research discusses at length beneficial outcomes of incorporating spirituality into the workplace. As the trend towards more humanistic HRM practices increases, so does the importance of incorporating spirituality into the workplace (Marques 2005). It is claimed that in order to develop complete and profound engagement with employees (who are the most important organisational resource), managers need to incorporate spirituality into work life (see Mitroff & Denton 1999a; Stone 2008). Stone (2008) maintained that successful organisations of the future will provide meaning and purpose to their employees and encourage individuals in self-development. This section will outline the importance of spirituality to HRM and its implications for business.

According to the three level model of spirituality at work proposed by Ashmos and Duchon (2000), spirituality is expressed by individual, group and organisational goals, aspirations, values and relationships. Weston (2002) argues that all organisations
Inayatullah (2006) reasoned that incorporating spirituality into the workplace and into scientific inquiry (without degrading spirituality) does not represent a step backward into medieval times, but a step forward. Organisations often incorporate good business ethics and social responsibility into HRM systems and decision making in order to increase success of their triple bottom line (Stone 2008; Weston 2002). For example, companies such as Telstra, Westpac and ANZ in Australia have triple bottom lines: community, environment and profit or performance (ANZ Inc. 2008; Telstra
Corporation Ltd. 2008; Westpac Banking Corporation 2009). Furthermore, Inayatullah (2006) adds that in the future, successful organisations will shift towards having a quadruple bottom line, which will include spirituality.

Contemporary approaches to HRM contend that (as well as dealing with organisational policies, procedures and strategic management) competitive advantage in business is gained by developing employee knowledge, commitment, job satisfaction, coping with change and motivation (Stone 2008). These outcomes are typically promoted as being beneficial factors for organisations in common management literature (Bartol et al. 2008; Stone 2008). Harrington et al. (2002) argue that organisations can gain these benefits by incorporating spirituality into the workplace.

This view was supported by Neck and Milliman (1994) who believe that spirituality at work could enhance employee and organisational performance. This improvement occurs through increasing employee intuition, innovation and joint organisational vision, personal growth, energy, teamwork and employee commitment (Neck & Milliman 1994). Also, Cavanagh and Bandsuch (2002) suggest that incorporating spirituality into HRM policies and programs could help employees develop good ethics, motivation, creativity, job satisfaction and co-operation. Furthermore, it has been argued that incorporating spirituality into the workplace helps to sustain organisational goals and energises employees towards greater productivity (Harrington et al. 2002; Pandey, Gupta & Arora 2008).

Pandey et al. (2008) assert that incorporating spirituality into the workplace can promote customer perception of employee service positively. Spirituality at work also contributes to improved trust levels amongst employees, deeper satisfaction and wiser decision-making in organisations, as well as enhanced belongingness, decreased employee alienation, clearer communication, decreased turnover and improved organisational commitment (Singhal 2005).

Research by Laabs (1995) supported the view that fostering spirituality in the workplace could help promote the use of creativity, intuition and employees’ ownership of the organisation. In addition, empirical evidence exists to support the idea that spirituality
at work had beneficial influences on employee organisational commitment, intention to quit, job involvement and organisation-based self-esteem (Milliman et al. 2003).

Despite the evident advantages of incorporating spirituality in the workplace, there remains confusion about how to implement it in HRM procedures (Laabs 1995). To remedy this, Marques (2005) suggested incorporating spiritual practices and values into job recruitment and selection, job enrichment, motivating beyond pay, equity, individualisations, rewards and accommodating special needs, training and development programs. It was also recommended by Giacalone and Jurkiewicz (2003b) that HR managers should respect legal issues (such as abuse or harassment) surrounding the incorporation of spirituality into the workplace. For example, harassment refers to prejudice on the basis of an employee’s religious or spiritual belief system (Giacalone & Jurkiewicz 2003b; Hitchens 2000).

Ackers and Preston (1997) criticised spiritual HR programs for often being involuntary and short-term fixes for organisational problems. For example, as HRM programs largely rely on involuntary and temporary conformity of employees, the researchers cautioned that the values of an organisation could be forced on employees because they feared demotion or dismissal if they did not comply with the organisation. Consensus with this view was evidenced, referring to some management spirituality programs as ‘fads’ that were implemented purely to improve organisation profits (Dehler & Welsh 2003; Marques 2005). In addition, Cavanagh and Bandsuch (2002) cautioned that spirituality could be misused by management consultants who sell the implementation of new HR programs purely to make money, not because they are effective. Selling short-term HR programs (such as spirituality) leads to consultants collecting payment and the organisation abandoning the program when short-term results are not produced (Cavanagh & Bandsuch 2002).

Moreover, Milliman et al. (2003) cautioned against misusing spirituality in the workplace in order to solely enhance employee productivity. Milliman et al. (2003) maintain that spirituality should be practised authentically in the workplace in order to have a positive impact on employees and have long-term organisational benefits. Organisations that want to be truly spiritual, should not do so only to increase the
organisation’s bottom line, but because the organisation wants to be authentic to itself and to its employees (Dehler & Welsh 2003; Mitroff & Denton 1999a). To avoid the misuse of spirituality in the workplace, development of theories about spirituality at work is required. In order to do this, spirituality at work needs to be researched further. The difficulties in measuring spirituality at work will be discussed in the following section.

2.4 Measuring Spirituality

Due to the increased interest in researching spirituality at work, new measures have been developed. As there is no widely accepted definition or theoretical model of spirituality at work in academic research, measuring the concept of spirituality at work is problematic (Giacalone & Jurkiewicz 2003b; MacDonald & Friedman 2002). Ultimately, this may have largely contributed to the devaluation of existing spirituality at work research and the lack of understanding of how spirituality should be applied to work (Giacalone & Jurkiewicz 2003b). More recent studies noted the gaps in spirituality research, such as lack of empirical research, little replication of studies and few validated measures (Giacalone & Jurkiewicz 2003b; MacDonald & Friedman 2002; Milliman et al. 2003).

Specifically, Gall et al. (2005) commented that the sparse empirical work which does exist concentrates on describing what spirituality is rather than identifying models explaining the process behind spirituality’s influence on other variables, such as stress and well-being. Some authors tried to close these gaps by developing measures and validating instruments that measure spirituality quantitatively, empirically and critically (see Ashmos & Duchon 2000; Milliman et al. 2003). Compared to measures of individual spirituality (e.g., Hatch et al. 1998) and religious-related spirituality (e.g., Fabricatore et al. 2000; Kass et al. 1991; Paloutzian & Ellison 1982; Seidlitz et al. 2002), few measures of spirituality at work have been developed (e.g., Ashmos & Duchon 2000; Mitroff & Denton 1999b).

Due to the subjective nature of spirituality, authors have questioned whether spirituality
at work can be defined or critically and empirically studied (e.g., Inayatullah 2006; Laabs 1995; Mitroff & Denton 1999a; Sink 1999). MacDonald and Friedman (2002) acknowledged this limitation but argued that quantitative methods and psychometric testing provide important information about spirituality and that qualitative methods have their own shortcomings. Organisations frequently focus on material outcomes of spirituality, such as profit or the economic bottom line, rather than ‘soft’ outcomes, such as well-being, stress and satisfaction (Inayatullah 2006; Laabs 1995). To overcome this issue of ‘measuring the immeasurable’, Inayatullah (2006) suggests taking the layered approach, which involves measuring the outer layers (community and ethical dimensions). Inayatullah argues that this will ultimately give clues as to the deeper layers (mythical and soul level) of spirituality which are difficult to measure directly.

Based on measuring these outer layers, there are many different theoretical models and measures of spirituality and spirituality at work. For example, Piedmont (1999) based the Spiritual Transcendence Scale on Costa and McCrae’s (1992) five factor model of personality. In an evaluation of individual spirituality (not work-specific) instruments, MacDonald and Friedman (2002) concluded that many of the scales include subscales (made up of more than one component) and many used religious-based spirituality items, or used the term spirituality interchangeably with religion. Herbert et al. (2006) and Pandey et al. (2008) contended that spirituality was a multidimensional construct that should be measured accordingly (with more than a few items and components).

Religious-based measures of spirituality often define spirituality in terms of religious beliefs and view the two concepts as one and the same. For example, some of these religious measures contain questions relating to a specific belief system (see Allport & Ross 1967’s Religious Orientation scale) and others are non-specific to a particular faith (see Kass et al. 1991’s Index of Core Spiritual Experiences). These non-specific or global measures could be misunderstood (Hebert et al. 2006). For example, the term ‘God’ might not be relevant to all religions or those who were agnostic or atheist. The Index of Core Spiritual Experiences (Kass et al. 1991, p. 210) is a seven-item scale asking participants to use their own definition of the terms “God” or “higher power” when answering questions regarding the occurrence of spiritual experiences. These include experiences assuring a person of the existence of God and experiences that
induce feelings of closeness with God.

Other measures have both spirituality and religious-based components (see Fabricatore et al. 2000 Spiritual Involvement Scale; Paloutzian & Ellison 1982 Spiritual Well-being scale; Seidlitz et al. 2002 Spiritual Transcendence Index). The most frequently used instrument in spirituality literature was the Spiritual Well-being Scale (Ellison 1983; Paloutzian & Ellison 1982). It is a 20-item scale intended to measure the spiritual quality of life based on two separate but related components: existential well-being (reflecting a person’s sense of purpose and satisfaction in life, independent of religion) and religious well-being (persons well-being in relation to God).

The Spiritual Involvement Scale (Fabricatore et al. 2000) consists of two subscales: spiritual life integration and social justice commitment. Spiritual life integration items refer to direct relationships with God and personal faith, while the social justice commitment items are characterised by more active, altruistic-orientated statements (Powers et al. 2007, p. 238). The scale was designed to measure individual spirituality in people’s lives.

A subsequent religion and spirituality combination, the Spiritual Transcendence Index (Seidlitz et al. 2002) was developed to measure personal experiences of divineness which affected self-perceptions, feelings, goals, and ability to move beyond difficulties. The scale was constructed also to accommodate different views of spirituality and faith while still emphasizing their central similarities. The first subscale referred specifically to the term ‘God’, and the second subscale referred to the term ‘spirituality’.

These instruments do not totally differentiate spirituality at work from religion (specific or non-specific to a particular faith system). In an attempt to completely discriminate individual spirituality from religion, the Spiritual Involvement and Beliefs Scale (Hatch et al. 1998) was designed. The scale was intended to assess spiritual involvement and activity, not just beliefs. The instrument divides spirituality into four components (internal/ritual, external/ritual, existential/meditative, and humility/personal application) and its items do not refer to the terms ‘religion’ or ‘God’ specifically, but ‘ritual’ aspects may be likened to religion. Even though the Spiritual Involvement and Beliefs
scale tried to distinguish religion from spirituality, it still did not specifically measure spirituality in a workplace context. In comparison to individual spirituality and religious-based spirituality, the number of available instruments designed specifically to measure spirituality in a work context, were few.

Mitroff and Denton (1999b) aimed to investigate spirituality in the workplace empirically with ‘The Questionnaire of Meaning and Purpose in the Workplace’, which involved both quantitative and qualitative components. The questionnaire contained items concerning meaning and purpose in the workplace and employee perceptions of their organisation. The questionnaire also aimed to investigate employee perceptions about spirituality and religion, perceptions about self expression in the workplace, the role spirituality and personal values play in the workplace and what processes employees recommend to initiate discussions about spirituality in the workplace. Although enlightening on the topic of spirituality in a workplace context, Mitroff and Denton did not define any subscales or provide any reliability or validity values for the questionnaire.

Where Mitroff and Denton (1999b) studied both spirituality and religion by using quantitative and qualitative methods, Ashmos and Duchon (2000) researched spirituality at work empirically, but focussed specifically on spirituality at work (not religion) using a quantitative approach. Ashmos and Duchon developed the ‘Finding Meaning and Purpose at Work Survey’, which measured spirituality at work dimensions (conditions for community, meaning at work and inner life) on the individual, work unit and organisational levels. Their measure had the advantage over other previous measures in that it was multi-dimensional and assessed the degree to which employees experienced particular aspects of spirituality at work. The authors also conducted reliability analyses for their scale.

The measure produced good internal consistency, but factor analyses revealed some problems with validity. Factor analyses demonstrated that questionnaire items addressing the individual (conditions for community, meaning at work and inner life) produced the most valid factor structure, whereas some of the items addressing the work unit and several of the items addressing the organisation, loaded on more than one
factor (Ashmos & Duchon 2000). Specifically, an exploratory factor analysis was conducted, extracting seven different factors on the individual level of spirituality at work: conditions for community, meaning at work, inner life, blocks to spirituality, personal responsibility, positive connections with other individuals and contemplation (Ashmos & Duchon 2000). The work unit level yielded two factors: ‘work unit community’ and ‘positive work unit values’, while the organisational level yielded two factors: ‘organisational values’ and ‘individual and the organisation’ (Ashmos & Duchon 2000). As Ashmos and Duchon (2000) expected three factors, they concluded that the preliminary research provided empirical evidence for their spirituality at work model, but more research was required to improve validity of the scale.

Ashmos and Duchon (2000) were cited repeatedly in spirituality and spirituality at work literature (see Dent et al. 2005; Harrington et al. 2002; Kinjerski & Skrypnek 2006; Milliman et al. 2003) and their spirituality at work measure was used frequently (see Duchon & Plowman 2005; Harrington et al. 2002; Milliman et al. 2003). Milliman et al. (2003) further improved Ashmos and Duchon’s (2000) measure by renaming the factors, using only some of the original items and including some of their own items.

Milliman et al. (2003) measured only three dimensions of spirituality at work: meaningful work, sense of community and alignment with organisational values. They utilised Ashmos and Duchon’s (2000) meaningful work and alignment with organisational values items, but wanted to assess the sense of community experienced by workers, rather than the facilitating conditions or outcomes of community. The results of Milliman et al.’s (2003) study provided empirical support for Ashmos and Duchon’s (2000) spirituality at work survey, but yielded better validity with their version. This measure had advantages over other scales discussed previously because it focused on non-religious spirituality in a work context specifically, was multi-dimensional and demonstrated reliability and validity. Previous spirituality at work studies utilising these various measures will be outlined in the following section.
2.5 Spirituality at Work Studies

Spirituality at work, individual spirituality and spiritual intelligence are concepts often used interchangeably, but are very different (Ashmos & Duchon 2000; Emmons 2000a; Fabricatore et al. 2000; Tischler 1999). Academic papers repeatedly discussed what spirituality encompassed, for example, whether or not it was an intelligence or whether it was the same concept as religion (see Emmons 2000a, 2000b; Engebretson 2003; Gardner 2000). A large number of these papers began exploring the growing area of spirituality at work. Studies habitually discussed and defined the concept of spirituality at work (with little agreement on a single definition) or described organisations’ or individual’s experiences of spirituality at work (see Duchon & Plowman 2005; Freshman 1999; Harrington et al. 2002; Kinjerski & Skrypnek 2004; Konz & Francis 1999; Marques 2006), but few investigated spirituality at work’s effect on individual work attitudes and behaviours or employee wellness (Milliman et al. 2003; Sass 2000). In addition, research identifying organisational characteristics that directly fostered an individual’s experience of spirituality at work was lacking (Kinjerski & Skrypnek 2006). The following subsections will briefly outline qualitative spirituality at work studies, followed by a more detailed view of quantitative studies, and lastly research that has been conducted specifically in Australia.

2.5.1 Qualitative Spirituality at Work Studies

In terms of empirical qualitative studies investigating spirituality at work, most involved discussion of what spirituality encompassed. For example, research based journal articles commonly explored, discussed and developed definitions of spirituality at work (see Aupers & Houtman 2006; Boyle & Healy 2003; Burack 1999; Butts 1999; Cunha et al. 2006; Freshman 1999; Howard 2002; Kinjerski & Skrypnek 2004; Tischler 1999) and explored its differences or similarities with religion in an organisational context (see Ackers & Preston 1997; Cash & Gray 2000; Cavanagh 1999; Cavanagh & Bandsuch 2002; Duffy 2006; McCormick 1994). Some studies focused on spirituality at work and its link with leadership (see Dehler & Welsh 1994; Dent et al. 2005; Duchon & Plowman 2005; Neck & Milliman 1994). Other studies tried to identify
organisational factors that fostered spirituality at work (e.g., Kinjerski & Skrypnek 2006) and perceptions of spirituality in the workplace (e.g., Marques 2006). Some studies proposed or discussed models of spirituality at work (see Ashmos & Duchon 2000; Cunha et al. 2006; Duffy 2006; Milliman et al. 1999; Mitroff & Denton 1999b) and discussed applications of spirituality to human resource programs in businesses (e.g., Marques 2005).

Some case studies existed which examined the properties of spiritual workplaces. For example, Burack (1999) described Hewlett-Packard (H-P) and the H-P way as being grounded in spirituality. Some of the elements of the H-P way involved fostering “nourishment of the individual’s spirit”, balanced and flexible work-life policies, trust and mutual respect between colleagues, and between colleagues and managers, avoiding command and control organisation management style (Burack 1999, p. 287). Tom's of Maine is another example of a workplace utilising spiritual practices which Burack (1999) discussed. Tom's of Maine was described as a family business creating, manufacturing, marketing and distributing unique range of personal care household products. The Tom's of Maine business uses a Buddhist framework in which a unique type of balance was fostered (Burack 1999). Tom's of Maine fostered the combination of reflection and action, being strong, integrity, honesty and commitment to society and commitment to the products it sells, whilst still maintaining a profit (Burack 1999).

In addition to providing a case study on organisational spirituality, Milliman et al. (1999) proposed a model of how spiritual values could be integrated into organisations. Milliman et al. then assessed how this model predicted organisational behaviour in the company Southwest Airlines, who also utilised spiritual practices. The model argued that organisational spiritual values (such as trust and empowerment) could be incorporated into both business and employee plans and goals, as well as HRM practice to reinforce plans or values. This in turn was argued to lead to organizational performance and employee attitudes and employee spirituality outcomes.

Milliman et al. firstly established that organisational spiritual values, which utilised both the intellectual and emotional aspects of employees, were more positively related to employee work and spiritual attitudes and organisational performance, than
organisational values, which only used the cognitive aspects of employees. Secondly, Milliman et al. reported that organisations, which highly empowered their employees, experienced stronger positive relationships between the organisation’s spiritual values, employee work, employee spiritual attitudes, and organisational performance. Thirdly, the researchers reported that organisations, which strongly aligned HRM practices with the organisation’s core values, experienced stronger positive relationships of the organisation’s spiritual values, employee work and spiritual attitudes, and organisational performance.

The growing body of literature on spirituality at work provided a number of insights, but were criticised for lacking rigorous analysis or critical thinking (Gibbons 2000). Yet, there were some studies which empirically researched spirituality at work. For example, the relationship of spirituality at work with work unit performance (e.g., Duchon & Plowman 2005), spirituality at work and employee attitudes (e.g., Milliman et al. 2003), organisational factors that contributed to spirituality at work (e.g., Kinjerski & Skrypnek 2006) have been studied empirically. In addition, spirituality at work model-creation and validation (e.g., Ashmos & Duchon 2000) have also been investigated with empirical methods. Due to their relevance to the current study, examples of quantitative spirituality at work studies will now be outlined in more detail.

2.5.2 Quantitative Spirituality at Work Studies

A study by Mitroff and Denton (1999b) on spirituality in the workplace reported on qualitative and quantitative interviews with senior executives from companies known for their positive explicit stance on spirituality in the workplace, as well as traditional (non-spiritual) organisational executives. The researchers argued that few organisations acknowledge the concepts of spirituality and the soul, which is at odds with what employees are increasingly seeking. The researchers inquired as to what the top three elements were that gave participants the most meaning and purpose in their jobs, about the basic values that guided participants in making important decisions and how often participants were forced to compromise those values in making important decisions at work.
Mitroff and Denton (1999b) found that participants differentiated between religion and spirituality, defining spirituality as feeling connected to one’s complete self, others and the whole universe. Those organisations that were perceived by participants as ‘more spiritual’, were seen as more profitable and as places where employees could bring their complete selves to work. These organisations were also perceived as able to gain more work from its employees. Factors that gave participants the most meaning in their work were the ability to realise their full potential as a person and being associated with a good or ethical organisation. On the contrary, Mitroff and Denton ascertained that in ‘less spiritual’ organisations, employees experienced difficulties in expressing their complete selves at work. Participants in the study indicated that they were more able to demonstrate their intelligence than their emotions at work, which contrasted strongly with what they indicated gave them the most meaning in their jobs. Most participants wanted to be able to express and develop their whole-self and spirituality at work but were afraid to for fear of offending their peers. Mitroff and Denton were concerned by these findings because they argued that the workplace was one of the most important settings in which people could realise their full potential.

Later, Milliman et al. (2003) explored the relationship between workplace spirituality and employee work attitudes (organisation commitment, intention to quit, intrinsic work satisfaction, job involvement and organisational based self-esteem) in a sample of part-time evening Master of Business Administration students attending a business school. The researchers aimed to address this by testing formal hypotheses with exploratory methods, examining construct validity on survey based methods created by Ashmos and Duchon (2000). Milliman et al. found that high levels of spirituality at work (meaningful work, sense of community and alignment with organisational values) predicted significantly greater organisational commitment of the employees. Lower levels of intention to quit were significantly predicted by two aspects of spirituality at work (sense of community and alignment of values). Greater intrinsic work satisfaction, job involvement and organisation based self-esteem were significantly predicted by sense of community and meaningful work. Milliman and colleagues concluded that although alignment with organisational values did not predict all of the job attitude variables over and above the meaningful work and sense of community
variables, it was still an important dimension of workplace spirituality (it did correlate significantly with all five of the work attitude variables). Areas the researchers identified for further research were confirmatory factor analysis of spirituality measures in different work samples, as well as the negative impact of spirituality in the workplace.

Subsequently, Duchon and Plowman (2005) investigated spirituality at work in six hospital work units. Duchon and Plowman used the three individual and two work-unit level measures for spirituality at work created by Ashmos and Duchon (2000). Duchon and Plowman’s (2005) study intended to investigate the relationship between work unit spirituality and work performance in order to make inferences about the role of leadership in spirituality at work. Among work units within the same hospital system, work unit spirituality was greater in some units than in others. Leaders in units with higher levels of organisational performance had higher spirituality scores than units with lower levels of organisational performance. The authors concluded that work unit spirituality was associated with the leader’s ability to foster workers’ inner life, sense of meaningful work, and community. They suggested an association between the spiritual energy of leaders and the spiritual culture of the work unit. Duchon and Plowman (2005) proposed that work units were spiritual because leaders encouraged a sense of community and fostered the development of meaningful work.

An investigative study into organisational factors that contributed to the experience of spirit at work for a group of individuals high in self-reported spirit at work, was conducted by Kinjerski and Skrypneck (2006). Full-time employed participants from a variety of occupations were interviewed (dentist, educator, hair stylist, landscape designer, medical doctor, organisational consultant, parking attendant, physiotherapist, police constable, professor, real estate agent, receptionist and secretary). Results showed that organisational conditions that fostered spirit at work were inspiring leadership and mentorship; strong organisational foundation; organisational integrity; positive workplace culture and space; sense of community among members; opportunities for personal fulfilment, continuous learning and development; and appreciation and regard for employees and their contribution. The studies discussed in this section were conducted in countries outside of Australia. The following section
will outline spirituality at work studies conducted in Australia.

2.5.3 Australian Spirituality at Work Studies

Most spirituality at work studies were conducted in the United States of America and the United Kingdom; few were conducted in Australia. For example, Harris (2001) analysed 100 stories containing references to the terms ‘spiritual’, ‘spirituality’ or ‘spiritualism’ in conjunction with ‘work’ from the Australian national daily newspaper The Australian (published in 1999). Questions asked were: was spirituality seen as a relationship? What was the source of the spirituality? Was spirituality linked to behaviour? To what purpose was spirituality put? What techniques for the development of spirituality were mentioned? Was ‘spirit’ seen as distinct from mind and body? The most frequent purposes identified for spirituality were firstly to define an individual, race or nation, and secondly to sustain action (Harris 2001). Christianity, nature, land or the world, Buddhism, astrology, psychics, mysticism, new age and crystals were the most often reported sources of spirituality, followed by celebrities, gurus, music, beauty, indigenous or folk lore, youth, and drugs respectively (Harris 2001).

Techniques used to develop spirituality were meditation, retreat or silence, discipline or yoga, music, art, sense of community, crystals, psychics, incense, worship, drugs or action were commonly mentioned. There was little evidence that spirituality was seen as a relationship with a higher power, but more evidence that spirituality was linked with behaviour. Spirituality was seen most often as distinct from mind, body and spirit (Harris 2001).

Another Australian study on spirituality in the workplace by Becker (2002), studied conceptualisations, psychological correlates and perceived relevance of spirituality at work in a sample of employed adults. Participants from a variety of occupations and companies participated in the study. Variables studied included job satisfaction, personality, attitudes towards the organisation and well-being. The researcher used a slightly modified version of Mitroff and Denton’s (1999b) Spirituality at Work
Questionnaire resulting in spirituality at work, religiosity, attitude to organisation, and self-expression subscales. Becker also used Fisher’s (1999a) Spiritual Health and Life-Orientation Measure (SHALOM) (self, community, environment and transcendent subscales) and Piedmont’s (1999) Spiritual Transcendence Scale (prayerfulness, universality and connectedness subscales). Well-being was measured with a version of the Scales of Psychological Well-being which contained six subscales: self-acceptance, positive relations with other people, autonomy, environmental mastery, purpose in life and personal growth (Ryff 1989).

Becker (2002) verified significant positive relationships between the different measures of spirituality (some included religion). Workplace spirituality was confirmed to positively correlate with four of Costa and McCrae’s (1992) ‘Big Five’ personality factors (extraversion, openness, agreeableness and conscientiousness) and negatively correlated with neuroticism. Workplace spirituality and individual spirituality positively correlated with well-being. Conversely, religiosity was not significantly correlated with well-being. Both workplace and individual spirituality were strong predictors of well-being, over and above personality. Becker reported that participants in values based organisations were more spiritual, more satisfied with their jobs, experienced higher well-being. Participants also had a more positive attitude to their organisation, religion, spirituality and values, and were able to express themselves at work better than participants in profit-based organisations.

Most spirituality research discussed in Sections 2.5.1 and 2.5.2, and to be discussed in Section 2.6, was conducted in the United States of America and the United Kingdom. The samples used in spirituality and spirituality at work studies consisted of business students, corporate workplaces, hospital staff, high school teachers and a small variety of occupations. It is therefore important for researchers to study spirituality at work across different countries and a range of occupations to see whether experiences and influences of spirituality at work are cross-cultural and universal.

It is evident that when compared to studies investigating individual spirituality, research in the area of spirituality at work has received little attention (Kinjerski & Skrypnek 2004). Important areas of research lacking examination are: how employees can
develop spirituality at work; identifying factors that influence spirituality at work; and identifying the influences of spirituality at work on other organisational factors. Previous studies investigating individual spirituality’s influence on well-being and job stress will be outlined in the following section.

2.6 Spirituality, Stress, Well-Being and Ill-Being Research

There has been much research conducted in the area of individual spirituality and its relationship with stress and health. The following section will give a brief background on the relationship between stress, well-being and ill-being, followed by a model linking spirituality, stress and health. Then, an outline of how stress and health have been typically measured in past research will be given, as well as the findings of quantitative studies investigating direct influences of spirituality (and religion) on stress and health. Lastly, research investigating moderation effects of spirituality (and religion) on stress and well-being and ill-being will be described.

2.6.1 Spirituality, Stress, Well-Being and Ill-Being Background

The negative influence of stress on health has been widely acknowledged (e.g., Elfering, Grebner, Semmer, Kaiser-Freiburghaus, Ponte & Witschi 2005; Jamal 2005; Karlsen et al. 2006; Love, Irani, Standing & Themistocleous 2007; Noblet, Teo, McWilliams & Rodwell 2005; Shields 2006), as has the influence of job stress on well-being or ill-being. This has been evidenced across a variety of occupations. For example, occupational stress amongst dentists was found to be linked to physical and mental ill-being (see Palliser et al. 2005), burnout amongst nurses (see Siying, Wei, Zhiming, Mianzhen & Yajia 2007) lower well-being of counselling agency employees (see Elfering et al. 2005) and to depression in the employed general population (see Shields 2006).

Job stress has been widely linked with adverse effects on employee personal and physical well-being, such as high blood pressure, migraine, recurrent virus infections
and stomach ulcers (see Kinman & Jones 2003), as well as being related to burnout, job satisfaction, lack of organisational commitment, lower productivity and increased turnover (see Blix, Cruise, Mitchell & Blix 1994; Elfering et al. 2005; Goddard, O'Brien & Goddard 2006; Jamal 2005; Noblet et al. 2005). Employee well-being has been associated with reduced health care-related costs and worker absenteeism, as well as increased productivity (Hillier, Fewell, Cann & Shephard 2005). Schuler (1982) argues that because job stress can be so costly to organisations, researchers should investigate ways to deal with stress, such as how to affect potential stressors in organisations and develop strategies by which employees can reduce their stress.

Not only is the direct link between stress and well-being well documented, but so is the direct relationship between spirituality (and religion) and well-being (Wills 2009) and spirituality (and religion) and stress (Graham, Furr, Flowers & Burke 2001). However, when religious-based measures of spirituality have been utilised, relationships between religion and well-being (Ryan & Fiorito 2003) and stress (Edmondson, Lawler, Jobe, Younger, Piferi & Jones 2005) are often inconsistent. Therefore, many studies have also investigated moderating effects of spirituality (or religion) on the influence of stress on well-being and ill-being (Elam 2000; Ellison 1991; Fabricatore et al. 2000; Hong 2008; Powers et al. 2007; Youngmee & Seidlitz 2002).

Religious measures of spirituality have been shown to result in positive, negative or no significant influences on aspects of well-being and ill-being (see Cohen 2002; Hebert et al. 2006; Ryan & Fiorito 2003). Possibly contributing to the lack of consistency of religion and well-being findings is that different measures of well-being or ill-being have often been used. Past studies often utilised measures of subjective well-being (positive affect, negative affect and life-satisfaction), physical health, psychological health, physical and emotional adjustment, health behaviours, and self-efficacy (e.g., Diener & Lucas 1999; Harrison, Koenig, Hays, Eme-Akwari & Pargament 2001; Youngmee & Seidlitz 2002).

In linking stress, health and spirituality, Gall et al. (2005) proposed a conceptual framework of the role spirituality played in relation to coping and health, based on Lazarus and Folkman’s original (1984) transactional model of stress and coping. Gall
et al. (2005) contend that spirituality can be used at the personal level (e.g., beliefs), primary and secondary appraisal level (e.g., spiritual appraisal), coping behaviour level (e.g., self-reflection), connection level (e.g., interconnectedness), and meaning-making (e.g., spiritual reappraisal). Spiritual appraisal involved initial attempts at making sense of the stressor based on one’s spiritual beliefs. Such attempts at making meaning of the stressor may help the individual to reduce initial levels of distress, which ultimately influences well-being. A summary of Gall et al.’s (2005) spiritual appraisal model is shown in Figure 2.6.1 below.
Figure 2.6.1  Spiritual appraisal model
(Source: adapted from Gall et al. 2005, p. 89)
A similar concept proposed by Ellison (1991) was positive reappraisal, where personal religious or spiritual involvement helps prevent the harmful impact of stress through positive reappraisal of stressful situations, rendering them less stressful. Similarly, Zellars and Perrewe' (2003) maintain that a strong sense of spirituality may be the resource which an individual could use to cope specifically with job related stressors. For example, if an employee developed a strong sense of purpose in life through the work they did, small or petty stressors (such as inter-group politics) would not result in as much stress at work (Zellars & Perrewe' 2003). Alternatively, Herbert et al. (2006) suggest personal religious or spiritual involvement helps prevent the negative influence of stress on well-being by helping an individual believe they have the capabilities to cope successfully.

To this researcher’s knowledge, it is yet to be tested whether Gall et al.’s (2005) spiritual appraisal model can be applied to a work context specifically. It is credible that the spiritual appraisal model can be applied to the individual, work-unit and organisation-wide levels of spirituality at work, in order to buffer the effects of job stress on both well-being and ill-being. For example, the meaningful work (individual) aspect of spirituality at work can be likened to the ‘meaning making’ function of the spiritual appraisal model. Sense of community (work-unit) is comparable to the ‘connection’ role, and alignment with organisational values (organisation-wide) is similar to both the ‘connection’ and ‘person factors’ roles of the spiritual appraisal model.

This three-dimensional spirituality theory may be demonstrated by moderation models involving spirituality at work, job stress and well-being and ill-being. According to Baron and Kenny (1986) moderators are variables which affect the strength or direction of the relationship between an independent variable and a dependent variable. Questions involving moderators address under what circumstances a variable most strongly predicts an outcome variable. A moderator is therefore a variable that alters the direction or strength of the relationship between a predictor and an outcome (Baron & Kenny 1986; Frazier, Tix & Barron 2004). Frazier et al. (2004) argue that moderators can be examined when there are unexpectedly weak relationships between a predictor and an outcome variable. This may indicate it is more influential under
particular circumstances (Frazier et al. 2004). The following section will outline quantitative measures of stress and health used in previous research.

2.6.2 Quantitative Measures of Stress and Well-Being

In terms of measuring stress, a multitude of scales were developed. These were often self-report measures which related to specific stressors such as: anxiety, coping resources, life stress, illness effects, social resources, burnout, parenting stress, hardiness, resiliency, perceived social support, student life stress and women’s stress (see Zalaquett & Wood 1997, 1998). Job-specific stress scales frequently included measures of job satisfaction (see Blix et al. 1994; Winefield, Gillespie, Stough, Dua, Hapuarachchi & Boyd 2003). Studies investigating job stress amongst academics or teachers also used a variety of measures. Some studies used qualitative questions (see Gillespie, Walsh, Winefield, Dua & Stough 2001; Kinman & Jones 2003), others included simple measures of specific teacher-related stressors with no reliability coefficients given (see Winefield & Jarrett 2001). Further studies used long (over 30 items) or complex, multi-domain measures with adequate reliability coefficients and used specific stressors (see Abouserie 1996; Barnes, Agago & Coombs 1998; Gmelch, Wilke & Lovrich 1986; Goddard et al. 2006; Tytherleigh 2007).

In contrast, Stanton et al.’s (2001) Stress in General Scale was designed to measure job stress generally, as distinct from job satisfaction and particular work-related stressors or strains (Holt 1993). Based on Lazarus and Folkman’s (1984) definition and model of stress, the Stress in General Scale demonstrated good reliability, was of medium length (fifteen items) and consisted of two job stress domains.

Of similar trend were previous measures of well-being or ill-being. These scales generally measured single aspects of well-being or ill-being such as subjective well-being (see Ardelt 2003; Diener & Lucas 1999; Edmondson et al. 2005; Ellison 1991; Fabricatore et al. 2000; Karlsen et al. 2006; Myers & Diener 1995; Warr, Cook & Wall 1979), affective well-being (see Powers et al. 2007), psychological well-being (see Burke et al. 2003; Hong 2008; MacLachlan, McAuliffe, Page, Altschul & Tabony 1999;
Ryan & Fiorito 2003; Wang 2006), physical health (see Calicchia & Graham 2006; Palliser et al. 2005), situation specific well-being (see Elfering et al. 2005) or even happiness (see Cohen 2002).

Improving on these one-dimensional measures, Hardie et al.’s (2005) Multidimensional Health States Scale was designed to investigate both well-being and ill-being in their physiological and psychological forms concurrently. However, Hardie et al.’s scale consisted of a measure of well-being (emotional, somatic, cognitive, social and sexual dimensions), and a measure of ill-being (physical symptoms, depression and anxiety dimensions). The following sections will outline previous research utilising some of the above measures used to investigate the direct influence of spirituality (and religion) on stress and well-being.

2.6.3 Direct Effects of Spirituality and Religion on Well-Being and Stress

Previous studies evidence a very clear direct influence of individual spirituality on health. For example, Wilding, Muir-Cochrane and May (2006) conducted a phenomenological study asking participants with mental illnesses ‘What does spirituality mean for people with a mental illness?’ Wilding et al. found that spirituality was experienced uniquely and became extremely important when participants became mentally ill. Participants wanted to discuss their spirituality with others but were reluctant to for fear that their mental health care professionals would not be accepting. Spirituality was seen as highly individual, as it could be experienced as a journey and was life-nourishing. Furthermore, Ryan and Fiorito (2003) ascertained that spirituality (spiritual goals, means and ends) generally was significantly related to increased aspects of well-being (positive effect, satisfaction with life, global self-esteem, identity integration and self-actualisation) and decreased aspects of ill-being (negative affect, hostility and anxiety).

In terms of positive influences of religion and spirituality on well-being and stress, Edmondson et al. (2005) studied the roles of spirituality and religiosity in self-reported physical health and stress. Edmondson et al. determined that religious well-being was positively related to perceived stress. However, perceived stress was more strongly
related to existential well-being (non-religious spirituality) than it was to religious well-being. Regression analyses illustrated that stress predicted negative aspects of health, and that existential well-being predicted ill-health independently of stress. Those participants with higher existential and religious well-being conveyed fewer instances of stress and ill-health than those with lower existential and religious well-being.

In terms of religion having no influence on well-being or stress, MacLachlan et al. (1999) investigated the effect of participation in a Tibetan Buddhist retreat on perceptions of physiological and psychological well-being. MacLachlan et al. reported no significant differences, positive or negative in stress, psychological and physiological health in participants across time. Furthermore, MacFie, Amatekpor and Kapalka (2005) found that religious-based spirituality did not significantly predict stress in psychology graduate students when spirituality was measured with the Spiritual Involvement and Beliefs Scale (Hatch et al. 1998) and stress with the Daily Stress Inventory (Brantley, Earl, Catz & Bourdeaux 1997). The Spiritual Involvement and Beliefs Scale (Hatch et al. 1998) measured spirituality as a different construct to religion but measured factors of ‘internal/ritual’, ‘external/ritual’, ‘existential/mediative’ and ‘humility/personal application’.

The negative influence of religion on well-being and stress was evidenced by Ardelt (2003) who showed that religious activities were actually linked to increased fear of death and death avoidance, but intrinsic religious orientation (more likened to spirituality or self-transcendence than religion) was positively related to acceptance of approaching death. In addition, Ardelt’s study evidenced the positive influence of spirituality on well-being and stress. Purpose in life (rather than religion) was linked to elderly participants’ increased subjective well-being and was related to decreased fear of death and death avoidance.

These results suggest that religion or religion-based spirituality measures are unlikely to influence well-being or stress in a positive or consistent manner. Research demonstrates that well-being and stress have stronger and more consistently positive relationships with spirituality than religion. For example, Lustyk et al. (2006) investigated the relationships among perceived stress, premenstrual symptomatology
and spiritual well-being in female university students. Lustyk et al. used Ellison’s (1983) Spiritual Well-Being Scale (updated version of Paloutzian & Ellison 1982’s measure) to measure spirituality, which contained a religious and existential (non-religious spirituality) component. Stress was measured with the Perceived Stress Scale (Cohen, Kamarck & Mermelstein 1983). It was demonstrated that existential well-being was more strongly related to perceived stress than was spiritual well-being (religious and non-religious components combined) or religious well-being. Participants with higher levels of existential well-being tended to have lower levels of perceived stress.

Calicchia and Graham (2006) examined the relationship between life stress, spirituality and social resources in a sample of graduate students. Participants who reported higher levels of existential well-being experienced less stress from their spouse or partner and extended family. Participants who reported higher levels of religious well-being actually tended to report greater health problems. Calicchia and Graham concluded that in terms of studying stress and spirituality, religious well-being was a distinct concept from existential well-being.

Hierarchical regressions in Powers et al.’s (2007) study demonstrated that when social justice commitment (like spirituality) and spiritual life integration (like religion) were entered into the model, only social justice commitment predicted positive affect when life stress was controlled for. Powers et al. concluded that positive affect seemed to be influenced by proactive spiritual behaviours (e.g., trying to change things in the world that are unjust) over and above ritualistic religious beliefs (e.g., feeling one’s God loves them). In addition, the researchers confirmed that social justice commitment was the only spirituality aspect to remain a significant predictor of negative affect when life stress was controlled for. However, life stress remained a stronger predictor of negative affect than social justice commitment. The following section will outline studies investigating the moderating effects of spirituality (and religion) on stress and well-being.
2.6.4 Investigating the Moderating Effects of Spirituality and Religion on Stress and Well-Being

Many previous studies investigating spirituality (or religion), stress and well-being used moderation analyses. Most authors argued for spirituality (or religious) moderation models based on the notion of spiritual appraisal and coping. For example, Calicchia and Graham (2006) reasoned that moderation analyses were appropriate based on the preceding research which demonstrated that the influence of stress on well-being was effected by internal person factors (such as intelligence, previous experience and coping strategies) and external factors (such as social support and occupation). Calicchia and Graham also cited Gall et al.’s (2005) spiritual appraisal model as reason to investigate moderation models.

Moreover, Youngmee and Seidlitz (2002) also suggested that spirituality and religion could buffer the effects of stress on health through its influence on four domains: cognition, emotion, behaviour, and transcendence. Furthermore, Powers et al. (2007) based their moderation models on a religious ‘Meaning Making Coping Model’ proposed by Park (2005), in which people coped with stressful life events through finding meaning and purpose in them. The findings of various moderation studies will be outlined in the following sections, firstly by outlining the moderating effects of religious-based spirituality on the influence of stress on well-being, followed by the moderating effects of spirituality (non-religious-based) on job stress and well-being.

2.6.4.1 Religious-Based Spirituality Moderating Effects

Ellison (1991) investigated the role of religiosity in buffering the harmful effects of traumatic stress on subjective well-being. This was based on a stress-buffering model of well-being, in which personal religious or spiritual involvement was proposed to help prevent the harmful impact of stress on well-being. The negative influence would be buffered by positive reappraisal of potentially stressful situations, making the stressor appear less stressful (Ellison 1991; Gall et al. 2005; Hebert et al. 2006). Alternatively,
buffering would occur by helping an individual believe he or she had the capabilities to cope successfully (Ellison 1991; Gall et al. 2005; Hebert et al. 2006). Ellison ascertained that spiritual belief systems were directly related to subjective well-being, while church attendance and organised religious factors led to subjective well-being indirectly by strengthening religious beliefs. It was shown that religious faith (but not divine interaction) buffered the negative effects of trauma on well-being.

Fabricatore et al. (2000) studied religious-based spirituality as a moderator of the relationship between stressors and subjective well-being. They developed the Spiritual Involvement Scale to measure spirituality. The Satisfaction with Life Scale (Diener, Emmons, Larsen & Griffin 1985) and the Depression-Happiness Scale (McGreal & Joseph 1993) were used to measure subjective well-being. Spirituality (life integration of God and social justice) positively influenced satisfaction with life and was unrelated to affective well-being. Results indicated that stress, individual spirituality and the interaction between the two, contributed significantly to satisfaction with life, but only the contribution of stress alone significantly predicted affective well-being. Fabricatore et al. also reported a significant negative relationship between stress and satisfaction with life for people low in individual spirituality, but not for people with high individual spirituality. The authors concluded that spirituality did not moderate the relationship between stress and subjective well-being, but in line with previous research, they pointed out that stress did have a negative impact on subjective well-being.

Ellison, Boardman, Williams and Jackson (2001) investigated moderating links between multiple dimensions of religious involvement and psychological distress and well-being. The data was obtained from the General Social Survey (a national cross-sectional sample replicated annually). The respondents consisted of adults over 18 years of age from a culturally diverse city known for being the centre of a manufacturing industry. The researchers reported no stress-buffering effects involving frequency of prayer or frequency of church attendance. However, a strong belief in eternal life buffered the harmful effects of chronic health problems and financial problems on psychological well-being, but not on distress. A strong belief in eternal life also reduced the negative impact of work-related problems on psychological distress, but not on well-being. There was no evidence to suggest that religious
involvement buffered the effects of multiple stressors on distress or well-being.

As with the direct relationships between religious-based spirituality and well-being, it seems that moderation effects of religious-based spirituality are also inconsistent. The fact that religious-based spirituality does not consistently moderate the influence between stress and well-being could be attributed to the tenuous relationship between religion and stress (Ryan & Fiorito 2003). Studies have also investigated moderation models with individual spirituality rather than religion. The moderating effects of individual spirituality (non-religious-based) on stress and well-being will now be outlined.

2.6.4.2 Individual Spirituality Moderating Effects

Youngmee and Seidlitz (2002) investigated whether spirituality moderated the effect of stress on well-being and ill-being (positive and negative affect and physical adjustment) amongst college students. Youngmee and Seidlitz used their own Spiritual Transcendence Index, which contained items referring specifically to a God, but not a specific religion. The authors demonstrated that spirituality was not directly related to stress, ill-being or well-being, but instead was a moderator variable. They confirmed spirituality was related to ill-being and well-being as it interacted with stress. Therefore, the researchers concluded that spirituality buffered the adverse influence of stress on well-being and ill-being.

Other research has reported that the moderation effects of individual spirituality on stress only influence some aspects of health. For example, Elam (2000) studied the relationship between individual spirituality, life stress and emotional well-being among undergraduate college psychology students. Spirituality was also measured with Hatch et al.’s (1998) Spiritual Involvement and Beliefs scale which measured non-religious individual spirituality. Spirituality was a predictor of increased positive affect, satisfaction with life and decreased depression and anxiety. Yet, spirituality did not moderate either the relationship between daily stress and anxiety, or the relationship
between daily stress and negative affect. However, spirituality did moderate the relationship between daily stress and other aspects of well-being and ill-being (depression, positive affect and life satisfaction). Furthermore, Elam also established that the variables studied were better predicted by spirituality than religion.

Hong (2008) examined the moderating effects of self-transcendence meaning on psychological well-being of college students under academic stress. Self-transcendence meaning of life was verified to moderate the relationship between psychological well-being (mental-health problems, depression and self-esteem effects) and academic stress. Though, some aspects of well-being (sense of adequacy and anxiety) were not moderated.

To sum up the research on stress, health, individual spirituality and religion, findings have indicated that not only was the direct link between stress and well-being considerably documented, but so was spirituality’s beneficial effects on stress and well-being. Mixed findings were evidenced between aspects of religion and well-being. Individual spirituality generally moderated the relationship between stress and well-being and ill-being. Though in most studies, not all aspects of well-being or ill-being were moderated. The particular aspects moderated were not consistent across the studies. Research indicated that well-being and stress have stronger (and more consistent and beneficial) relationships with individual spirituality than religion or religious-based spirituality. The following section will review literature surrounding spirituality, stress and work-life issues.
2.7 Spirituality, Stress, Work-Life Balance and Work-Life Conflict Research

Over the past two decades, the changing face of the workforce has further increased the need for work-life policies (Clark 2001). For example, more women and minorities in the workforce, increasing family responsibilities of employees, the aging population and the casualisation of the workforce, are reasons for increased diversity of the current workforce (Abbott & Di Cieri 2008; De Cieri, Holmes, Abbott & Pettit 2005; Kramar 1998; Parkes & Langford 2008; Saltzstein, Ting & Saltzstein 2001). In addition to worldwide demographic changes in the employment pool and fierce competition have encouraged organisations to create policies that assist employees to balance their work and personal lives (Harrington et al. 2002; Parkes & Langford 2008; Saltzstein et al. 2001). The following sections will describe the need for work-life balance initiatives in organisations. The existing research on work-life balance and work-life conflict will be outlined, followed by a description of literature evidencing relationships between work-life balance and spirituality.

2.7.1 The Need for Work-Life Initiatives

Work-life balance has been historically considered a woman’s issue but recent studies showed that women and men both experience problems balancing work and personal life (Burke et al. 2003; Frone 2003; Hill et al. 2001). More recent studies reported no significant difference in levels of work-life balance and work-life conflict for men and women (see Balmforth & Gardner 2006; Brough, O'Driscoll & Kalliath 2005; Tytherleigh 2007), while earlier studies report that women experience higher levels of work-life conflict than men (see Higgins, Duxbury & Lee 1994; Rothbard 2001).

Progressive organisations seeking competitive advantage have begun introducing work-life balance programs which help both male and female employees better integrate their work-family responsibilities (Abbott & Di Cieri 2008; Parkes & Langford 2008; Stone 2008). In order for organisations to attract and retain skilled and adaptable employees,
work-life balance programs should be designed for a diverse workforce (Abbott & Di Cieri 2008; De Cieri et al. 2005). Work-life initiatives are important as they make employees feel valued, increase productivity, reduce absenteeism, give organisations a reputation of being an employer of choice and help organisations retain good employees (Byrne 2005).

Examples of HR initiatives aimed at promoting work-life balance include assisting with child care and elder care, telecommuting, flexible working hours, compressed working hours and job sharing (Byrne 2005; Clark 2000). The Brisbane City Council Public Sector received an Australian HR award for implementing leading flexible working arrangements which aimed at helping employees balance their work and family commitments (Hutchinson 2005). Telecommunication giant Telstra, has also won awards for implementing work-life balance strategies aimed at raising awareness about work-life balance issues, in addition to creating innovative work-life balance management approaches (Anderson 2002). Telstra (2008) provided flexibility programs (such as flexible working options, maternity and parental leave, breastfeeding or expressing at work, prayer rooms and carer’s leave) as well as supportive diversity policies (for disability, age, gender and sexual orientation or gender identity). The following section outlines findings of work-life balance and work-life conflict research.

2.7.2 Research on Work-Life Issues

As a result of the increased need for employee work-life balance initiatives, work-life balance and work-life conflict have been increasingly studied in the last fifteen years (see Caproni 2004; Hayman 2005; Kramar 1998). The National Study of the Changing Workforce conducted by the Families and Work Institute surveyed employees from a range of jobs about work-life issues. The majority of participants felt frustrated and stressed, had too little time with their children, had too little time with their partners, and just over half felt they had too little time for themselves (Prescott, Shaw & Allikas 2008). Participants worked between an average of 43.5 to 49 hours per week, most said they would like to work fewer hours, and just under half felt stretched to their limits between their work and personal lives (Prescott et al. 2008).
Work-life balance and work-life conflict are important issues for organisations, at the organisational and employee levels. For example, Moore (2007) argues that organisations that provide long-term work-life balance cultures, create employee-company loyalty and positive employee attitudes to work. In addition, the combination of longer working hours and increased work pressure is interfering with employees’ personal lives (Pocock 2005). The increase in job stress is linked to work-life balance and conflict. For example, Wong and Lin (2007) established that job stress had a direct detrimental influence on work-life conflict. Furthermore, Greenhaus and Beutell (1985) demonstrated that work-family conflict existed when stress from participation in one role made it difficult to fulfil requirements of another. For example, where job stress influences the fulfilling of personal-life duties. Wallace (2005) found that job stress had direct harmful influences on work-life conflict.

Parkes and Langford (2008) suggested work-life balance benefits organisations indirectly, through increased well-being, decreased job stress and decreased burnout of its employees. Good work-life balance and low work-life conflict are also linked to job satisfaction, organisational commitment, organisational citizenship behaviour, increased diversity and equity, productivity, improved bottom line, and lower turnover intention (see Allen, Herst, Bruck & Sutton 2000; Balmforth & Gardner 2006; Waltman & Sullivan 2007).

Satisfactory work-life balance and low work-life conflict were also linked to non-work outcomes, such as life, family, marital and leisure satisfaction and family performance (see Allen et al. 2000). High work-life conflict and low work-life balance are linked to reducing job satisfaction, lower organisational commitment, lower productivity and performance, lower career satisfaction and success, and higher absenteeism and intention to quit, as well as employee burnout, job stress, poorer physiological and psychological health, substance abuse, and diminished family functioning (see Allen et al. 2000; Hobson, Delunas & Kesic 2001; Lingard, Brown, Bradley, Bailey & Townsend 2007; Prescott et al. 2008; Tytherleigh et al. 2005; Waltman & Sullivan 2007; Wang 2006). Sufficient work-life balance and little work-life conflict is related to increased employee self-efficacy, motivation, and positive interpersonal interactions, better
performance, feelings of personal accomplishment, better mood and higher well-being (e.g., Allis & O'Driscoll 2008).

Specifically, much of this research on work-life balance and work-life conflict centred on flexible working arrangements and employee assistance programs (see De Cieri et al. 2005; Frone 2003; Hill et al. 2001; Kramar 1998; Saltzstein et al. 2001; Waltman & Sullivan 2007). Burke et al. (2003) showed that more supportive organisational values of work-life balance were linked to greater family satisfaction, lower job stress, greater job satisfaction, less intention to quit, lower ill-being and greater well-being.

A number of work-life balance and work-life conflict studies used case analyses, qualitative methods or interviews and often sampled HR managers implementing the work-life balance programs, instead of the employees who benefited from the programs (see Caproni 2004; De Cieri et al. 2005; Hill, Miller, Weiner & Colihan 1998; Lingard et al. 2007; Moore 2007; Pocock 2005; Saltzstein et al. 2001). The few existing self-report measures of work-life balance and conflict often focussed specifically on family instead of personal life (see Clark 2001; Hanson et al. 2006), were single-item (not reliable) scales (Wang 2006), or consisted of several measures of satisfaction, instead of work-life balance (see Perrone et al. 2006). Work-life conflict measures are frequently complicated, have four different aspects (e.g., work-to-family conflict, family-to-work conflict, work-to-family facilitation and family-to-work facilitation), are family-specific, or have low reliability (see Balmforth & Gardner 2006; Brough et al. 2005; Hill 2005; Netemeyer, Boles & McMurrion 1996). These issues have made work-life balance and work-life conflict difficult to study consistently.

There are also many different work-life models discussed in previous literature that proposed particular relationships between both work-life balance and work-life conflict and other variables, such as role overload, positive work-life interactions, job satisfaction, career satisfaction and success, job performance, job behaviours, individual effects, working-parents, family satisfaction and success (Korabik, Lero & Whitehead 2008). Korabik et al. (2008) dedicated a whole book to the discussion of theoretical models involving antecedents, outcomes and moderators of work-life issues, as well as practices and policies involving work-life balance and work-life conflict. Despite the
extensive previous literature about work-life research and theories, there are very few models or theories that involve spirituality and its relationship with work-life issues. Spillover theory (Zedeck 1992) has not been previously investigated in relation to spirituality at work. Little empirical research has been conducted in the area of spirituality, work-life balance and work-life conflict. The following section will outline the links between spirituality and work-life issues, as well as outlining the sparse existing research in this area of study.

2.7.3 Spirituality and Work-Life Issues

In terms of linking work-life issues in HRM to spirituality, Laabs (1995) reasoned that the compartmentalisation of employee work life from personal life (whole-self), leads to decreased productivity. Spirituality is important for work-life practices as it can lessen the compartmentalisation of employees’ lives (Marques 2005; Singhal 2005). Integration of employee’s authentic selves with their work lives is achieved when there is alignment between their personal values and that of their workplaces (Dehler & Welsh 2003). Dehler and Welsh (1994; 2003) contended that in order to bring employees’ whole-selves into the workplace, organisations need to address employees’ physical, mental, emotional and spiritual needs. Pfeffer (2003) asserted that forcing employees to separate their work and authentic identities is not only difficult and stressful for employees, but sends the message that employees need to behave differently to their individual nature and not be their authentic selves. This, Pfeffer (2003, p.32) argued “destroys the human spirit” in that organisations deny the value of individual employees and force them to be something they are not. In other words, incorporating spirituality at work enables employees to bring more of their whole-selves to work.

A way of increasing work-life balance in organisations is to create a spiritual organisational culture which promotes giving back to employees control to develop their own individualised meaning and personal growth in both work and personal life (Cash & Gray 2000; Marques 2005). According to Cash and Gray (2000) employees are currently seeking more meaning in life and stronger integration of their spiritual and
work lives.

There is evidence of growing employee and organisational demand for meaningful work and nurturing work environments which promote work-life balance (Kinjerski & Skrypnek 2004). However, little research has been conducted on spirituality at work and work-life balance or work-life conflict. In spite of this, HRM work-life balance programs appear to be linked to the concept of spirituality at work. Authors Briggs (1996), Burack (1999), Laabs (1995) and Marques (2005) typically asserted that incorporating spirituality into the workplace involves giving employees flexibility to balance work-life issues and to tailor work around their own individual needs. Byrne (2005) claims that in addition to work, family and friends, health and spirituality are also aspects of work-life balance. Byrne explains how important work-life balance is by arguing that one can choose to stay or leave a bad work situation, but with personal relationships or with health, one might not have that luxury.

Modern work-life balance programs, such as increased use of technology, working from home and onsite gyms, have made it easier to “never” leave work, rather than creating work-life balance and minimising work-life conflict (Hill et al. 1998; Pfeffer 2003, p. 39). A different approach to fostering work-life balance may then be required. As Mitroff and Denton (1999b) demonstrated, employees have an increasing desire to express and develop their whole-selves at work. Yet, few organisations allow that to happen (Mitroff & Denton 1999b). Laabs (1995) maintained that forcing employees to closet their personal identity (which includes spirituality) from their work identity, ultimately decreases organisational productivity.

Business leaders are also aware of the link between work-life issues and spirituality. For example, James Autry, the former president of the Meredith Corp. Magazine Group, suggested “spreading a little profit, love and understanding – though not in that order” in an American Management Association membership briefing called ‘Life and work: a manager’s search for meaning’ (Briggs, 1996, p. 8). Honesty, trust and individual treatment of employees were his methods of achieving community at work. Autry contended that managers would not develop into leaders without dealing with the issue of work-life balance. Autry argued that to be successful, managers needed to be
compassionate, supportive and understanding, as well as making sure tasks are completed.

Theoretical models also outline the link between spirituality at work and work-life balance. For example, the Kaleidoscope Career Model, proposed by Sullivan and Mainiero (2008) suggests that women shifted the patterns of their careers by rotating different areas of their life in order to suit their work and personal life needs. The model was designed as a way of understanding female employees’ needs and how organisations could fulfil these needs (with human resource development programs) in order to gain strategic competitive advantage. Sullivan and Mainiero asserted that the three areas of women workers’ lives in the model were authenticity (being true to oneself and finding meaning through work), balance (work and non-work decisions form a healthy whole) and challenge (activities fostering autonomy while learning and growing). The authors argue that traditional career stage models, which form the basis of many modern human resource development practices, were created by studying men’s careers and do not fit the complexities of the current workforce. This new model of career paths was created to better match the unique career patterns of women, but could be applicable to other groups of employees, due to the diverse workforce today.

Sullivan and Mainiero (2008) contend that the model has three parameters, which combine in different ways throughout an individual’s life, reflecting the unique patterns of his/her career. The model suggests that each of these parameters is active throughout an individual’s career but certain issues predominate at different points in the life span. Usually one parameter remains the focus of an individual’s attention, with the remaining parameters taking on a secondary role at that time. In this respect, authenticity refers to an individual’s focus on spirituality at work. This model clearly demonstrates the link between work-life balance, work-life conflict and spirituality at work.

To summarise this section, both work-life balance and work-life conflict are important issues for employees, HR managers and organisations. Based on the few studies available on spirituality at work and work-life issues, spirituality at work had similarities with work-life balance programs and links with work-life conflict.
Employees have an increasing desire to express and develop their whole-selves at work, but few organisations are fostering this. Forcing employees to separate their personal identity and spirituality from their work-lives, can lead to inner conflict and stress. Work-life balance and work-life conflict have links with job stress, which generally indicate that increased stress has negative influences on work-life balance and work-life conflict. This link is likely to occur through negative spillover (Balmforth & Gardner 2006; Hill et al. 2001). Stress and work-life conflict ultimately decrease organisational productivity. It is clear that spirituality at work has potential benefits for work-life issues at both the individual and organisational levels. The studies discussed in this chapter so far, investigated participants from many different occupations. Therefore, research specifically involving academic samples will be discussed in the following section.

2.8 Job Stress, Work-Life Practices, Well-Being, Ill-Being and Spirituality in Universities

Much research on job stress and well-being was conducted on professions such as teaching and management (e.g., Goddard et al. 2006; Gulielmi & Tatrow 1998; Hayes 2007; Kokkinos 2007; Lazuras 2006; Mohr 2007; Schwarzer & Hallum 2008; Wong 2007), but little has been conducted on higher education academic staff. The evidence suggests that work-related stress and demands on academics has significantly increased in recent years worldwide, and many believe that it will continue to intensify in the future (see Houston, Meyer & Paewai 2006; Kinman & Jones 2003, 2008; Mostert, Rothmann, Mostert & Nell 2008; Winefield et al. 2003). These increasing demands have also been linked to work-life issues among academics, such as juggling many different tasks and role conflicts (O'Laughlin & Bischoff 2005). Having a sense of community appears to be important for academics in coping with demands and conflicts (Schuler 1982), but universities are not currently fostering spirituality in the workplace (Astin & Astin 1999). The following sections will discuss the increasing stress of academic life, work-life issues in academia and the apparent need of spirituality in universities.
2.8.1 The Increasing Stress of Academia Life

The increasing demands in universities over the last twenty years have been attributed to major reductions in government funding of public universities, international competition and technological developments (Briggs 2009; Churchman 2006; Houston et al. 2006; Jacobs & Winslow 2004; Tytherleigh et al. 2005; Winefield et al. 2003). Churchman (2006) argues that even universities immersed in academic tradition, are being forced in the current profit-focussed economic climate, to enter the education market. In other words, universities are being pushed to contemplate making profits like corporations and business in the global economy, rather than to concentrate on education.

Also blamed for the increasing stress on academics is the intensifying accountability of educators, rising pressure to publish research, mounting workloads, frequent restructuring, use of short-term contracts and added external scrutiny (Houston et al. 2006; Jacobs & Winslow 2004; Tytherleigh et al. 2005; Winefield et al. 2003). Academics are now expected to fulfil multiple role demands within the work setting, for example, teaching, research and consultation (O'Laughlin & Bischoff 2005). Academics are also confronting the pressures of competing demands, balancing teaching with research and attempting to balance traditional workloads with the presence of new pressures, such as teaching internationally and via online methods (Briggs 2009). New university directions require academic staff to develop a range of unrelated skills to undertake a diverse range of roles, such as community service and research (Briggs 2009; Churchman 2006). Churchman (2006) reasons that as issues such as accountability and viability are increasing in academia, this in turn can cause theory development and the teaching of knowledge to be compromised.

Mostert et al. (2008) add that the increased levels of stress among academics can also be attributed to organisational change. Organisational change in universities includes increased domestic and international competition, restructuring, cuts in government funding, downsizing and changes in management style and structure. Increased competition, Mostert et al. claim, has also been characterised by lay-offs, mergers,
rapidly changing technology and ever-increasing demands for higher quality products and services in higher education.

Studies show that on average, academics experience higher levels of stress than general university staff (e.g., Gillespie et al. 2001; Winefield et al. 2003). Sixty-six percent of academics were reported to experience job stress at least fifty percent of work time (Blix et al. 1994). Abouserie (1996) found that workload was the largest contributor of stress amongst university academics, followed by family, time, money, relationships and health. The main causes of job stress were research, time, relationships with colleagues, teaching, bureaucracy, students, lack of funding, resources and support services, work overload, poor management practice, insufficient recognition and reward, and job insecurity (Abouserie 1996; Gillespie et al. 2001).

Stress among academics is an important issue as higher levels of stress can lead to low productivity, increased absenteeism and turnover, as well as individual employee problems, such as alcohol and drug abuse, and health problems (Mostert et al. 2008). Astin and Astin (1999) also reported time pressures, competition between work and family life, research and publication, administration responsibilities, students and teaching, tenure and the peer review process, colleagues and institutional climate as sources of academics’ stress. Some of the effects of stress reported were ill-health, divorce, over consumption of caffeine and sleep deprivation (Astin & Astin 1999). The following section will discuss work-life issues in academic life.

2.8.2 Work-Life Issues in Academia

Work-life balance has been linked to job stress specifically among academics. O’Laughlin and Bischoff (2005) claim that work-life balance and job stress issues are particularly relevant for academics. The researchers argue that juggling several different tasks, whether from the same or different roles (e.g., work and personal life), creates conflict. Particularly among academics, work-life conflict occurs when expected behaviours from one role to another are incompatible, or performance in one
role is affected by stress in another role, or when time pressures from one role make it impossible to fulfil expectations in another role. O'Laughlin and Bischoff investigated the influence and tenure in academics’ experiences of balancing parenthood and career. The researchers showed that work-life conflict among academics was primarily predicted by job stress (over and above average work hours, household responsibility, young children, satisfaction with day care and support of partner).

Other studies have demonstrated that academics experience problems balancing their work and personal lives. Jacobs and Winslow (2004) reported that on average, full-time academics (regardless of rank or discipline type) worked in excess of fifty hours per week. O'Laughlin and Bischoff (2005) estimated that the average academic worked approximately fifty-five hours per week. Houston et al. (2006) found that a large proportion of academics were working more than ten hours of overtime in addition to their normal full-time hours. Kinman and Jones (2003) ascertained that academics felt they had little choice in working long hours, and over half of the sample reported that their personal lives suffer as a result of their work. In addition, outside factors are equally important in contributing to work-life balance or conflict, such as personal health or health of family members (Byrne 2005).

Work-life balance is an important issue for both male and female academics. Tytherleigh (2007) reported no significant gender differences amongst academic levels of work-life balance, yet O'Laughlin and Bischoff (2005) showed that women academics reported greater academic stress and perceptions of less institutional support for work-life balance when compared to men. Miller and Hollenshead (2005) claimed that even though work-life balance issues were not limited to females, female academics experienced work-life balance differently to males. For example, female academics were more likely to delay having a family when compared to male academics (Miller & Hollenshead 2005).

Work-life balance is also linked to stress and well-being among academics. Tytherleigh et al. (2005) report that academics were significantly stressed about work-life balance issues and that work-life balance was significantly related to academics’ physical and psychological health (ill-being and well-being). Academics who reported more work-
life conflict tended to be less healthy, less satisfied with their jobs, and more likely to have seriously considered leaving academia (Kinman & Jones 2008). Conversely, academics who perceived more control over their work, better flexibility and support from their workplaces, tended to report better work-life balance (Kinman & Jones 2008). Waltman and Sullivan (2007) claim that flexible work-life environments are related to decreased employee stress and improved an academic unit’s ability to achieve diversity and equity, and increased the productivity of academic staff. Work-life balance and conflict are important issues for academics as higher levels of work-life conflict and imbalance could not only contribute to lower quality job performance, but also result in denial of promotion, which impacts both an academic’s work and personal lives (Helfat 2002; O’Laughlin & Bischoff 2005). The need for spirituality in academic life will be discussed in the following section.

2.8.3 The Need for Spirituality in Academic Life

Acceptance of the need for spirituality at work to aid work-life issues appears to be a challenge among academics. Academics are trying to find ways to make their lives and workplaces complete (Astin & Astin 1999). Houston et al. (2006) showed that academics were more satisfied with intrinsic rewards (such as flexibility, responsibility and variety) than extrinsic rewards (such as salary and chances for advancement). Astin and Astin (1999) interviewed academic staff from four universities and colleges in the United States of America about their expressions of spirituality and finding meaning in their work. Many participants saw their research and teaching as a means of expressing their spirituality or finding meaning in life (Astin & Astin 1999).

When Australian academics (chosen for being exemplary teachers) were interviewed about what they thought effective teaching encompassed, they reported very spiritually grounded ideas, such as love for one’s discipline, valuing students and their perspectives, and making learning possible (Ballantyne, Bain & Packer 1999). These can be likened to the spirituality model used in the present study (meaningful work, sense of community and alignment with organisational values). Love for one’s discipline includes enthusiasm, creating and maintaining student interest, which
corresponds to the meaningful work (individual) aspect of spirituality. Valuing students and their perspectives consisted of caring for students, pitching at the students’ level, and relating teaching to students’ everyday experience, which corresponds to fostering a sense of community (or work-unit spirituality at work aspect). Making learning possible comprised tailoring teaching to the learning that is desired and doing what is possible to ensure that such learning occurs. This can be related to the alignment with organisation (or organisation-wide) aspect of spirituality at work. These exemplary teachers used their own personal experiences of learning and chose to improve on traditional teaching methods.

Spirituality at work (sense of community) seems to be important for academics in coping with work stress. For example, Schuler (1982) argued that employees who have socially supportive relationships are more psychologically capable of dealing with stress. This is due to the feelings of acceptance social support fosters, and the awareness that there are colleagues available to help if needed. Some academics recommend maintaining a sense of purpose and staying away from conflict and prioritising work and personal life goals as means of coping with stress (Astin & Astin 1999). Yet, in a more recent study of academics, work-life balance was poor and most participants wished for more separation between their work and home lives (Kinman & Jones 2008). This contradicted Mitroff and Denton’s (1999b) findings that participants wished to integrate their whole-selves at work.

Academia traditionally discourages integration of personal life (let alone spirituality) into work-life, and encourages this unauthentic (or inconsistent with one’s own beliefs and values) view of work in their students (Astin & Astin 1999). The very nature of academia was argued to create many different definitions of academics’ selves (Churchman 2006), and thus forced the compartmentalisation of academics’ whole-selves at work (Laabs 1995). The most common perceived obstacle to spiritual development in academics seem to be time pressures (Astin & Astin 1999). Churchman (2006) argues that academics are consistently compromising their work in order to meet multiple roles (e.g., making a difference, social interaction and corporatism).

Ballantyne et al. (1999) confirmed that among academics there was often a conflict
between what was rewarded and what was considered good in academic teaching. The push for research and administrative duties, takes precedence over good teaching, and is often rewarded with promotion (Astin & Astin 1999; Ballantyne et al. 1999). Cut-backs on university funding constrains quality teaching and striving for incorporation of spirituality at work (Winefield et al. 2003). What universities typically request from academics tends to conflict with what gives academics purpose in life and intrinsically motivated activities often go unnoticed by the universities (Churchman 2006).

Higher education institutions were rarely reported as facilitating or enhancing spiritual development (Astin & Astin 1999). Conflicts between personal and organisational values (e.g., quality of teaching and administration work demands) were reported frequently as causing stress and hindering spiritual development (Astin & Astin 1999). Most academics reported a considerable amount of stress in life overall, especially in terms of value conflicts, maintaining authenticity, finding meaning and expressing spirituality (Astin & Astin 1999). Churchman (2006) verified that academics typically believed that universities should be places of higher ideals, in which behaviours would be ethical and not self-serving. These academics became disappointed with their daily work routines, as universities were increasingly focusing on profit making and competition. Therefore, based on the research available investigating work-life balance and spirituality amongst academics, it seems that the same desire for spirituality at work, that is occurring in business, is also occurring in academic samples. However, academics may be slower in accepting this new trend. The following section will summarise the main findings of this chapter and outline their relevance to the current study.
2.9 Summary of Chapter and Purpose of Present Study

To sum up this chapter, a new interest in spirituality at work is evident in the increasing number of books, magazines, popular press, websites and journal articles dedicated to the discussion spirituality in the workplace. Spirituality is also evidenced in evolving management perspectives and in the contemporary spirituality-specific management theories that are currently emerging. Spirituality at work currently has important benefits for HRM practices, and it is likely that spirituality will become more important for all organisations in the future. Spiritual HR interventions have been critiqued for being implemented as short-term fads, used purely by organisations to make profits for the consultants. Thus, it seems that spirituality at work is best implemented in the workplace as long-term interventions aimed at positively impacting employees and the organisation in an authentic way. This is relevant to the current study as the main aim is to investigate spirituality at work’s relationships with HRM issues.

There were many existing spirituality scales available, but few which were dedicated to measuring spirituality in a work-context specifically. Milliman’s (2003) measure had advantages over other measures because it focused on non-religious spirituality in a work context specifically, was multi-dimensional and demonstrated reliability and validity. Much research indicated beneficial links between individual spirituality, stress and well-being, supporting Gall et al.’s (2005) spiritual appraisal model. Few studies were conducted on spirituality at work, well-being and job stress specifically, but those that did also indicated beneficial influences of spirituality at work on health and stress. A small number of spirituality studies were conducted in Australia. Not much research investigated the relationship between spirituality and work-life issues, and very little empirical research was conducted on work-life issues. In addition, few researchers studied spirituality amongst academic teaching staff specifically. The current study aims to add to spirituality at work literature by addressing these areas of deficit.

For the purpose of this research, spirituality at work was defined as the interconnectedness between employees in a non-religious way, employees becoming their ‘complete selves’ at work without reprimand, being socially responsible in work
and the social community. It also involved finding meaning and fulfilling one’s ultimate purpose in life through work, appreciating life and individual differences among the organisational and social communities, embracing a sense of trust that things inside and outside of the organisation will work out for the better, and having personal values aligned with that of the organisation.

Stress was defined as an event or situation that is appraised as threatening, demanding or challenging. Stress can manifest in a person either positively or negatively, and is therefore a good indicator of health (Hardie et al. 2005). Hardie et al. (2005) described health as a multidimensional concept which includes social, emotional and physical states of ill-being and well-being. Work-life balance was the degree to which an individual was able to balance simultaneously the emotional, behavioural and time demands of both paid work and family or personal duties (Hill et al. 2001). Work-life conflict was where participation in work, home and personal life contributed detrimentally to each other (Balmforth & Gardner 2006). The following concept map illustrates the variables and respective relationships that will be investigated by the present study.
Figure 2.9  Moderation model of spirituality at work

Note:                  
                     
Moderator influence  
                     
Direct influence
Figure 2.9 above shows the variables and the relationships that will be researched. It will be tested whether individual, work-unit and organisation wide spirituality at work moderate (buffer) the influence of job stress (job threat and pressure stress) on well-being and ill-being. It is reasonable to assume that the harmful effect of job stress on well-being will be diminished by spirituality at work (via spiritual appraisal, beliefs, self-reflection or interconnectedness), and that the detrimental influence of job stress on ill-being will be minimised by spirituality at work. According to Gall et al.’s (2005) model of spirituality appraisal one could argue that a person experiencing high levels of spirituality at work may perceive lower levels of job stress than those who experience low levels of spirituality at work. Low levels of job stress in turn may lead to lower levels of ill-being and higher levels of well-being.

For example, if employees perceive stressful work events as creating meaning, or having some purpose, they may not perceive the stressor as being very harmful. Having a connection to work colleagues might provide employees with the view that they have the support or shared resources (Ballantyne et al. 1999) to cope with stressors, therefore rendering the stressor as less threatening. Having a connection with the wider organisation which, as a whole, has similar values and beliefs to the employees, may also help employees perceive work stressors as less stressful. The model postulates that where stress is perceived as low, the resulting well-being will be high and ill-being will be low.

It will also be investigated whether the three types of spirituality at work moderate, or buffer, the influence of job stress on work-life balance and work-life conflict. Previous research has linked spirituality at work and work-life balance (see Astin & Astin 1999; Laabs 1995; Mitroff & Denton 1999b), and spirituality has been evidenced to reduce stress (see Calicchia & Graham 2006; Edmondson et al. 2005; Lustyk et al. 2006). Stress has also been linked to work-life balance and work-life conflict (see Burke et al. 2003; Tytherleigh et al. 2005; Wallace 2005; Waltman & Sullivan 2007; Wong & Lin 2007). This detrimental influence of job stress on work-life issues is likely to occur through negative spillover (Balmforth & Gardner 2006; Hill et al. 2001). It is therefore logical to assume that the harmful effect of job stress on work-life balance will be decreased by spirituality at work, and that the detrimental influence of job stress on work-life conflict will be reduced by spirituality at work. This positive influence of
spirituality at work on work-life issues (via job stress interaction) is hypothesised to occur through positive spillover. One could question whether a person experiencing high levels of spirituality at work may perceive lower levels of job stress than those who experience low levels of spirituality at work. Low levels of job stress in turn may lead to lower levels of work-life conflict and higher levels of work-life balance, than those experiencing high levels of job stress. The implications of these findings, in terms of HRM will be discussed in this research. The next chapter will outline the aims, objectives and hypotheses of the current study.
3.1 Aims and Hypotheses

The purpose of this study was to address the rareness of research in the area of non-religious spirituality at work amongst Australian university academics. As evidenced from the literature review, there is a trend in management to incorporate spirituality into the workplace. Many studies indicated beneficial links between individual spirituality, stress and well-being, supporting Gall et al.’s (2005) spiritual appraisal model. Yet, not much research has previously investigated empirically spirituality at work and its links with HRM issues, particularly work-life issues. Of this research, little utilised work-context spirituality measures specifically. Previous literature argued that HRM programs fostering beneficial employee outcomes were applicable to universities as well as other businesses. Despite this, spirituality in universities was a neglected area of study. Therefore, the purpose of this study was to investigate empirically spirituality at work in an Australian academic sample.

The overall purpose of the current study was to investigate empirically individual, work-unit and organisation-wide spirituality at work’s relationship with work-life balance, work-life conflict, job threat stress, job pressures stress, well-being and ill-being among Australian academic teaching staff. Specifically, this research aimed to test moderation models based on Gall et al.’s (2005) spiritual appraisal model. These separate moderation models involved individual, work-unit and organisation-wide spirituality at work, job threat stress, job pressure stress, ill-being and well-being. The present study also aimed to test moderation models involving work-life balance and work-life conflict. Hypotheses and research questions were formulated based on previous research (outlined in Chapter 2) in order to meet the study’s aims and objectives. The following section will outline the current study’s aims and hypotheses in more detail.
3.2 Hypotheses

Previous studies have found that generally, individual spirituality moderated the relationship between stress and well-being or ill-being (e.g., Elam 2000; Hong 2008; Youngmee & Seidlitz 2002). Based on spiritual appraisal theories of stress and health (Ellison 1991; Gall et al. 2005; Hebert et al. 2006) and those previous moderation analyses investigating individual spirituality and life stress, it was expected that;

1a) Individual, work-unit and organisation-wide spirituality at work moderates the effect of job stress on well-being such that:
   i) individual spirituality at work buffers (reduces) the effect of job threat and pressure stress on well-being
   ii) work unit spirituality at work buffers the effect of job threat and pressure stress on well-being
   iii) organisation-wide spirituality at work buffers the effect of job threat and pressure stress on well-being

b) Individual, work-unit and organisation-wide spirituality at work moderates the impact of job stress on ill-being such that:
   i) individual spirituality at work buffers the effect of job threat and pressure stress on ill-being
   ii) work unit spirituality at work buffers the effect of job threat and pressure stress on ill-being
   iii) organisation-wide spirituality at work buffers the effect of job threat and pressure stress on ill-being

Little empirical research has been conducted on the area of spirituality at work and work-life balance. Laabs (1995), Sullivan and Mainiero (2008) and Mitroff and Denton (1999b) suggested that spirituality in the workplace involved allowing employees to incorporate their spirituality or personal lives into the workplace, and finding the balance between carrying out work duties and being true to oneself. It is therefore reasonable to argue that work-life balance and spirituality at work are related constructs. Previous research has shown relationships between both work-life balance and work-life
conflict and job stress (see Greenhaus & Beutell 1985; Kinman & Jones 2008; Tytherleigh et al. 2005; Wallace 2005; Waltman & Sullivan 2007; Wong & Lin 2007), as well as spirituality and stress (see Ardelt 2003; Lustyk et al. 2006). It is therefore reasonable to hypothesise that:

2a) Individual, work-unit and organisation-wide spirituality at work moderates the effect of job stress on work-life balance such that:
   i) individual spirituality at work buffers the effect of job threat and pressure stress on work-life balance
   ii) work unit spirituality at work buffers the effect of job threat and pressure stress on work-life balance
   iii) organisation-wide spirituality at work buffers the effect of job threat and pressure stress on work-life balance

b) Individual, work-unit and organisation-wide spirituality at work moderates the influence of job stress on work-life conflict such that:
   i) individual spirituality at work buffers the effect of job threat and pressure stress on work-life conflict
   ii) work unit spirituality at work buffers the effect of job threat and pressure stress on work-life conflict
   iii) organisation-wide spirituality at work buffers the effect of job threat and pressure stress on work-life conflict.

These relationships are thought to occur by means of positive spillover (Balmforth & Gardner 2006; Hanson et al. 2006). The methods used to investigate these hypotheses will be described in the following chapter.
CHAPTER 4

METHOD

4.0 Overview of Method

Academics employed in universities Australia wide (from higher education and TAFE divisions) voluntarily completed a self-report questionnaire. The questionnaire consisted of a demographic section and questions inquiring about participants’ spirituality at work, well-being, ill-being, job stress, work-life balance and work-life conflict. A quantitative and empirical research design was used in this study to overcome limitations of previous studies of spirituality that utilised a qualitative design and smaller sample size. Instead of generalising a definition of individual spirituality to the workplace (Sass 2000), a spirituality at work-specific measure was used, based on a previously tested model of spirituality at work (see Ashmos & Duchon 2000; Milliman et al. 2003). Additionally, rather than discussing what spirituality at work is, spirituality at work’s influence on other organisational factors was investigated empirically.

As spirituality is a highly personal topic (Laabs 1995; Weston 2002), self-report measures seemed most appropriate. For the purpose of consistency and reliability, all measures were self-report, previously tested quantitative scales. Academic teaching staff were sampled because earlier spirituality at work research had not investigated this particular occupation (e.g., Duchon & Plowman 2005; Milliman et al. 2003). Little research has been conducted on academic teaching staff, compared to university students and school teachers (e.g., Goddard et al. 2006; Kokkinos 2007; Schwarzer & Hallum 2008). The successive sections outline in more detail the participants, measures and procedure used in this research.

4.1 Participants

One hundred and thirty-nine academic staff members employed in universities Australia wide (from higher education and TAFE divisions) voluntarily completed a self-report questionnaire. No incentive was provided to complete the questionnaire. Most of the
139 participants were employed in urban (82.0%) and non-private universities (87.8%) while 18.0 percent were employed at non-urban universities and 10.1 percent were employed by private universities. Eighty participants were female, 58 were male and 1 participant did not specify gender.

The bulk of participants’ highest academic teaching was at the lecturer level (42.4%), while 22.3 percent were employed at the tutor level, 16.5 percent at the senior lecturer level, 3.6 percent associate professor level, 2.9 percent professor level, 0.7 percent academic head level and 7.2 percent indicated ‘other’ level. Academic duties most often carried out by participants were teaching and research (55.4%), while 23 percent taught only, 15.1 percent were engaged in research only, 2.9 percent conducted administrative duties, and 3.6 percent indicated ‘other’ duties.

The majority of participants came from the Social Sciences discipline (21.6%), while 16.5 percent were from Business, 7.2 percent were from Engineering and Industrial Sciences, 6.5 percent from Education, 5.8 percent Information and Communication Technologies. Five percent were from the Health discipline, 4.3 percent Science, 3.6 percent Design, 2.9 percent Language and Academic Skills, 2.2 percent Writing, 1.4 percent Information Technology Services Management, 1.4 percent Law, 1.4 percent Christian Studies, 1.4 percent Social Work and 1.4 percent Arts, Hospitality and Sciences oriented faculties. Less than 1 percent of participants came from Arts, Child and Family Studies, Information Resources, Institute for Research, International Centre, Language, National Institute of Circus Arts, Regional Development and Sustainability oriented faculties. The following section will outline the measures completed by respondents.

4.2 Measures

The self-report questionnaire contained: a demographic section, a three level spirituality at work scale, a work-life balance scale, a work-life conflict scale, a job in general stress scale and a health scale (please refer to Appendix A). Table 4.2 below summarises the variables studied in the current study.
Table 4.2  
*Study Variable Names and Classifications*

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Type of Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spirituality at Work</td>
<td>Moderator Variables</td>
</tr>
<tr>
<td>Individual spirituality at work</td>
<td></td>
</tr>
<tr>
<td>Work-unit spirituality at work</td>
<td></td>
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<tr>
<td>Organisation-wide spirituality at work</td>
<td></td>
</tr>
<tr>
<td>Job Stress</td>
<td>Independent Variables</td>
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<tr>
<td>Job threat stress</td>
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<tr>
<td>Job pressure stress</td>
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<tr>
<td>Well-Being</td>
<td>Dependent Variable</td>
</tr>
<tr>
<td>Ill-Being</td>
<td>Dependent Variable</td>
</tr>
<tr>
<td>Work-Life Balance</td>
<td>Dependent Variable</td>
</tr>
<tr>
<td>Work-Life Conflict</td>
<td>Dependent Variable</td>
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</tbody>
</table>

As can be seen from Table 4.2 above there were three separate moderator variables, two independent variables and four dependant variables. In order to quantitatively and statistically analyse moderator models, quantitative scales were chosen. The scales used to measure the study variables will be described in detail in the following sections.
4.2.1 Spirituality at Work (Moderator Variable)

From their ‘Finding Meaning and Purpose at Work survey’, six of Ashmos and Duchon’s (2000) meaningful work items were used to measure spirituality at work at the individual level. Milliman et al.’s (2003) selection of Ashmos and Duchon’s (2000) meaningful work items were used to measure the individual level of spirituality at work of Australian university academics. Participants indicated on a six item rating scale ranging from one (strongly disagree) to seven (strongly disagree) the extent to which they agreed with certain statements, for example “I experience joy in work” (Ashmos & Duchon 2000, p. 143). Total mean individual level spirituality at work scores were calculated, creating a possible range of total scores ranging from one to seven. Participants obtaining a high score on this measure could be described as having a deep sense of meaning and purpose in their work, while those participants obtaining a low score would be described as having little sense of meaning and purpose in their work. Milliman et al. (2003) confirmed that when the six meaningful work items were used to assess workplace spirituality and employee work attitudes, they demonstrated good internal consistency (Cronbach alpha = .88).

Milliman et al.’s (2003) own sense of community items were used to measure the work unit level of spirituality at work of Australian university academics. Participants indicated on a seven item rating scale ranging from one (strongly disagree) to seven (strongly disagree) the extent to which they agreed with certain statements, for example “Working cooperatively with others is valued” (Milliman et al. 2003, p. 437). Total mean work unit level spirituality at work scores were calculated, creating a theoretical range of total scores ranging between one and seven. Participants obtaining a high score on this variable could be described as having a deep connection to, or relationship with co-workers, while those participants obtaining a low score would be described as gaining less of a connection to, or relationship with co-workers. Milliman et al. (2003) established that when the work unit subscale was used to assess workplace spirituality and employee work attitudes, the items demonstrated good internal consistency (Cronbach alpha = .91).
Eight of Ashmos and Duchon’s (2000) alignment with organisational values items were used to measure spirituality at work at the organisation-wide level. Milliman et al.’s (2003) selection of Ashmos and Duchon’s (2000) alignment with organisational values items were used to measure the organisation-wide level of spirituality at work of Australian university academics. Participants indicated on an eight item rating scale ranging from one (strongly disagree) to seven (strongly disagree) the extent to which they agreed with certain statements, for example, “I feel positive about the values of the organisation” (Ashmos & Duchon 2000, p. 144). Total mean organisation-wide level spirituality at work scores were calculated, creating a possible range of total scores ranging from one to seven.

Participants obtaining a high score on this measure could be described as experiencing a strong sense of alignment between their personal values and their organisation’s mission and purpose. Those obtaining a low score would be described as experiencing a low sense of alignment between their personal values and their organisation’s mission and purpose. Milliman et al. (2003) verified that when the organisation-wide spirituality at work subscale was used to assess workplace spirituality and employee work attitudes, the items demonstrated good internal consistency (Cronbach alpha = 0.94). A confirmatory factor analysis on each of the subscales displayed a good model fit (Milliman et al. 2003). The following section will outline the job stress measure used in this study.

4.2.2 Job Stress (Independent Variable)

Stanton et al.’s (2001) fifteen item Stress in General Scale was used to measure the degree to which a job was perceived as taxing, exceeding resources and/or endangering well-being (Stanton et al. 2001). Participants indicated on a three-point rating scale (0 = No, 1.5 = Not sure, 3 = Yes) whether certain words and phrases, for example “demanding”, described their job (Stanton et al. 2001, p. 873). The measure consists of two subscales, threat and pressure. The threat subscale consisted of eight items, three of which were reversed scored (irritating, under control, nerve-wracking, hassled, comfortable, more stressful than I’d like, smooth running and overwhelming). The pressure subscale consisted of seven items, two of which were reversed scored
(demanding, pressured, hectic, calm, relaxed, many things stressful and pushed). Possible mean total scores could range from zero to three on both job pressure stress and job threat stress subscale scales.

A high pressure score represented high levels of pressure-related stress perceived by the participant, and low pressure score represented a low level of pressure-related stress was perceived. A high threat score represented a high level of threat-related stress perceived by the participant, and a low pressure score represented a low level of pressure-related stress was perceived. In a scale development and validation study, Stanton et al. (2001) confirmed that both subscales demonstrated good internal consistency (job threat stress Cronbach’s alpha = 0.82, job pressure stress Cronbach’s Alpha .88). Stanton et al. (2001) conducted exploratory and confirmatory factor analyses, supporting a two-factor solution for job stress. The following section will outline the well-being and ill-being measures implemented in this study.

### 4.2.3 Well-Being and Ill-Being (Dependent Variables)

Hardie et al.’s (2005) Multidimensional Health States Scale – Short Form (MHSS-SF) assessed the extent to which an individual has experienced a range of physical and mental states related to well-being (WB) and ill-being (IB) in the past month. The 35-item scale was originally rated on a five-point scale ranging from zero (not experienced) to four (strongly experienced). The scale included five WB subscales: social WB (friendly, sociable, cheerful, enthusiastic), somatic WB (physically fit, active, strong, agile), emotional WB (calm, relaxed, content, satisfied), cognitive WB (competent, confident, capable, alert, efficient) and sexual WB (sensual, attractive, affectionate). The scale also included three IB subscales: depression (miserable, gloomy, sad, depressed, trouble sleeping), anxiety (tense, nervous, worried, uptight, indecisive) and somatic symptoms (backache, muscle pain, headache, indigestion, abdominal pain). The MHSS-SF showed good construct validity (Hardie et al. 2005) and factor structure (Morris 2008).

In the current study a six-point rating scale ranging from zero (not experienced) to five (strongly experienced) for the MHSS-SF (Hardie et al. 2005) was used. Some
researchers argue that forced-choice rating scales (those with an even number of points) give better validity than formats which offer a middle ‘neutral’ response (Kaplan & Saccuzzo 2005). DeVellis (2003) recommended using forced-choice formats when participants may be inclined to give a neutral response in order to avoid making a choice. As the researchers wanted to use a forced-choice format for this measure to indicate definite well-being or ill-being states, and, because Murphy and Davidshofer (2001) recommend using between five and nine points on a rating scale, a six-point format was used for the MHSS-SF (Hardie et al. 2005) in this study.

Total mean scores were calculated for each subscale: emotional WB, social WB, physical WB, cognitive WB, sexual WB, depression, anxiety and physical IB. Total mean scores were also calculated for overall WB and overall IB. Possible total mean scores for total IB and total WB (and their subscale total scores) ranged from zero to five, with high scores reflecting higher frequencies of WB or IB experienced in the past month. Hardie et al. (2005) demonstrated that when the WB and IB measures were used to investigate the influence of relational, individual and collective self-aspects on stress, uplifts and health, the total WB and IB measures reported good internal consistency (Cronbach alpha for WB = 0.92 and IB = .90). The following section will outline the work-life balance measure utilised in this study.

4.2.4 Work-Life Balance (Dependent Variable)

Hill et al.’s (2001) five item Work-Family Balance scale was used to measure the degree to which an individual was able to balance simultaneously the emotional, behavioural and time demands of both paid work and family or personal duties. The original rating scale varied, sometimes using a scale ranging from one (strongly agree) to five (strongly disagree), from one (very easy) to five (very difficult), from one (never) to five (almost always), and from one (extremely successful) to five (extremely unsuccessful). For the purpose of the current study, the term ‘work-life balance’ was used to encompass personal as well as family responsibilities (Parkes & Langford 2008; Sullivan & Mainiero 2008).
In line with Murphy and Davidshofer’s (2001) recommendation to use between five and nine points on a rating scale, Kaplan and Saccuzzo (2005) argued that the optimal number of responses for a rating scale was seven. Therefore, a seven-point rating format was used for Hill et al.’s (2001) work-family balance measure in this study. Participants were asked to indicate on a five item rating scale ranging from one (strongly disagree) to seven (strongly agree) the extent to which they agreed with certain statements, for example “It is easy for me to balance the demands of my work and my personal life” (Hill et al. 2001, p. 52). One item was reverse scored.

Minor changes in wording were made to suit the new scaling system, and also to suit the aims of the study, for example, ‘personal life’ was used instead of ‘family life’ to encompass all aspects of personal life outside work. A total average work-life balance score was calculated, creating a possible total score ranging from one to seven. High scores represented a good ability to balance work and personal life demands, while low scores represented a poor ability to balance work and personal life demands. Hill et al. (2001) established that when the scale was used to assess the influence of job flexibility on work and family life balance, the items demonstrated good internal consistency (Cronbach alpha = .83). The following section will describe the work-life conflict measure used in this study.

4.2.5 Work-Life Conflict (Dependent Variable)

A slight variation of O’Neil et al.’s (1986) six item work-life conflict subscale (taken from the full GRCS-1) was used to measure participants’ work-life conflict. Participants were asked to indicate the extent to which they agreed with certain statements on a rating scale ranging from one (totally disagree) to seven (totally agree), for example “I feel torn between my hectic work schedule and caring for my family and friends” (O'Neil et al. 1986, p. 344). Possible total average scores ranged from one to seven where a high score represented high levels of work-life conflict. A low score represented low levels of work-life conflict.

O’Neil et al. (1986) reported that when the scale was used to assess gender role conflict with a six-point rating scale ranging from one (strongly disagree) to six (strongly agree)
it demonstrated good internal consistency (Cronbach alpha = .75). Factor analyses also supported the factor structure of the measure (O'Neil et al. 1986). In an Australian study by Riddle (2001), a four-point rating scale version (different wording of the response categories) of O’Neil’s measure (one = totally disagree and four = totally agree) was used yielding higher reliability (Cronbach alpha = .89). Therefore, a seven-point rating scale (optimum number recommended by Kaplan & Saccuzzo 2005) ranging from one (totally disagree) to seven (totally agree) was used in this study.

4.3 Procedure

Before the data collection phase commenced, an Ethics application was submitted to the Swinburne University Human Research Ethics Committee (SUHREC) seeking permission to conduct the research. Ethics approval was sought and obtained to use this line of recruitment (see Appendix B). A university approved email broadcast was sent out to all teaching staff at both higher education and TAFE sectors of an Australian university requesting voluntary and anonymous participation for the current study. Participation involved completing a questionnaire either online or in hard copy format, with no reward offered. A web address link was provided in the email, which directed participants to an online version of the questionnaire. A paper and pen version of the questionnaire was offered to participants on request if they preferred to complete a hard copy version instead.

Participants were also requested to forward the web address and research details to teaching staff in other universities Australia-wide. A short advertisement (to participate in this study) was also placed in an Australian University academics magazine (Campus Review). Either hard copy or online versions of the questionnaire took approximately 20 to 30 minutes for participants to complete. Over a period of approximately four months the online survey was opened 222 times, but only 145 answered some, or all of the questionnaire. Preliminary quantitative data analyses were performed to screen the data and to test if the main study variables were viable to include in the main moderation analyses. Hierarchical regressions were then performed in order to investigate whether spirituality at work buffered the influence of job stress on well-being and ill-being; and work-life balance and work-life conflict. In order to analyse
the quantitative study variables, data screening, preliminary analyses, reliability analyses and moderation models were required. The successive chapter outlines these analyses in more detail and presents results of this study.
CHAPTER 5

RESULTS

5.0 Overview of Analyses

The relationships between individual, work-unit and organisation-wide spirituality at work and employee outcomes were investigated among Australian university academics. Employee outcome variables studied were work-life balance, work-life conflict, job threat stress, job pressure stress, ill-being and well-being. Statistical analyses were performed in accordance with the study aims and hypotheses. Preliminary data analyses were conducted to screen the data and to test the assumptions underlying multiple regression.

The Spirituality at Work Scale (Ashmos & Duchon 2000; Milliman et al. 2003), Work-Life Conflict Scale (O’Neil et al. 1986), Multidimensional Health States Scale (Hardie et al. 2005) and the Stress in General Scale (Stanton et al. 2001) showed previous validity and reliability in psychometric testing studies. However, the work-life balance measure had not previously undergone psychometric testing. Therefore, an exploratory factor analysis was conducted for the work-life balance measure to test its factor structure. Reliability analyses were performed on all scales. Bivariate correlations and hierarchical multiple regressions were conducted to investigate the various relationships between the study variables and to test moderation models.

5.1 Preliminary Data Screening and Assumption Testing

The data were analysed using SPSS version 16. The data were screened to ensure there were no out-of-range values for each variable and that missing values were appropriately coded. Consequently, two outliers (cases) were deleted as they lay outside the intended range of values on one or more variables. Four cases were deleted as they contained non-random missing responses (Tabachnick & Fidell 2007), where, for example, participants had failed to respond to all or most of the items belonging to at
least one scale. Therefore, 139 of the total sample of 145 cases were retained for further analysis. The remaining missing values (missing at random) were imputed for the metric variables using an Expectation Maximisation (EM) SPSS missing values analysis (Little's MCAR test $\chi^2(2089) = 1624.71, p = 1.00$).

Univariate and multivariate outliers were investigated by examining scatterplots, histograms, boxplots, standardised residual values (within +/-3.29) and Mahalanobis distance scores (Tabachnick & Fidell 2007). Two extreme cases were detected and deleted. Boxplots indicated non-extreme outliers on the total ill-being and total individual spirituality at work variables. However, the five percent trimmed mean statistic did not differ substantially from the mean for any of the variables, indicating no problematic outlier influences. Hence, these cases remained in the data set. None of the remaining cases had a Mahalanobis distance (distributed as $\chi^2$ with $df$ equal to the number of predictors) that exceeded the critical value $\chi^2(5) = 20.51$ at the $p < 0.001$ significance level. This suggested no remaining extreme outliers (Tabachnick & Fidell 2007). Standardised residual scatterplots also showed residuals within the +/- 3.29 value range (Tabachnick & Fidell 2007).

The sample size ($N = 139$) was adequate to find significant ($p < 0.05$) medium sized relationships between the variables. Tabachnick and Fidell (2007) recommended a sample size of 104 + $m$, (where $m$ is the number of independent variables) to test the contribution of individual predictors in multiple regression. According to this rule, the number of predictors included in the multiple regression analyses in the current research was sufficient to preserve the statistical integrity of the results. There was no evidence of singularity and little evidence of multicollinearity (highly correlated independent variables). Tolerance values almost reached zero, but the highest correlation among the independent variables was $r = -0.40$ (see Table 5.3 below). Variables used in the multiple regression analyses were centered in order to minimise multicollinearity problems (Tabachnick & Fidell 2007). Table 5.1 below provides the descriptive statistics for the main study variables prior to centering.
Table 5.1

Summary of Descriptive Statistics and Preliminary Data Screening.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>SD</th>
<th>Min</th>
<th>Max</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>KMO</th>
<th>Skewness Z value</th>
<th>Kurtosis Z value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ind SWS</td>
<td>5.44</td>
<td>1.18</td>
<td>1.50</td>
<td>7.00</td>
<td>-1.09</td>
<td>1.41</td>
<td>.12</td>
<td>-5.29</td>
<td>3.46</td>
</tr>
<tr>
<td>Wrk SWS</td>
<td>4.70</td>
<td>1.25</td>
<td>1.43</td>
<td>7.00</td>
<td>-4.2</td>
<td>-2.4</td>
<td>.09</td>
<td>-2.04</td>
<td>-.59</td>
</tr>
<tr>
<td>Org SWS</td>
<td>3.54</td>
<td>1.36</td>
<td>1.00</td>
<td>6.50</td>
<td>-.17</td>
<td>-.79</td>
<td>.08</td>
<td>-.83</td>
<td>-1.94</td>
</tr>
<tr>
<td>WB</td>
<td>3.25</td>
<td>.88</td>
<td>.70</td>
<td>5.00</td>
<td>-.12</td>
<td>-.38</td>
<td>.05</td>
<td>-.58</td>
<td>-.93</td>
</tr>
<tr>
<td>IB</td>
<td>1.99</td>
<td>1.13</td>
<td>.00</td>
<td>5.00</td>
<td>.32</td>
<td>-.46</td>
<td>.06</td>
<td>1.55</td>
<td>-1.13</td>
</tr>
<tr>
<td>Threat</td>
<td>1.17</td>
<td>.83</td>
<td>.00</td>
<td>3.00</td>
<td>.34</td>
<td>-.97</td>
<td>.10</td>
<td>1.65</td>
<td>-2.38</td>
</tr>
<tr>
<td>Pressure</td>
<td>2.07</td>
<td>.90</td>
<td>.00</td>
<td>3.00</td>
<td>-.77</td>
<td>-.62</td>
<td>.15</td>
<td>-3.74</td>
<td>-1.52</td>
</tr>
<tr>
<td>WLB</td>
<td>4.34</td>
<td>1.45</td>
<td>1.20</td>
<td>7.00</td>
<td>-.08</td>
<td>-.98</td>
<td>.09</td>
<td>-.39</td>
<td>-2.40</td>
</tr>
<tr>
<td>WLC</td>
<td>3.98</td>
<td>1.69</td>
<td>1.00</td>
<td>7.00</td>
<td>-.02</td>
<td>-1.06</td>
<td>.08</td>
<td>-.10</td>
<td>-2.60</td>
</tr>
</tbody>
</table>

N = 139. Note: Ind SWS = Individual level spirituality at work, Wrk SWS = work unit level spirituality at work, Org SWS = Organisation-level spirituality at work, WB = Well-being, IB = Ill-being, Threat = Job Threat Stress, Pressure = Job Pressure Stress, WLB = Work-life Balance, WLC = Work-life Conflict, KMO = Kolmogorov-Smirnov statistic, Skewness standard error = .206, Kurtosis standard error = .408.

The well-being and ill-being variables demonstrated a Kolmogorov-Smirnov (KMO) significance level greater than 0.05 (p = .200), indicating normal distribution (Coakes 2005). The KMO statistic for the remaining study variables was not significant, suggesting that the normality assumption was violated. Tabachnick and Fidell (2007) suggested calculating the skewness and kurtosis significance statistic to test for violations of normality. The skewness z value was calculated by dividing the skewness statistic by its standard error. The kurtosis z value was computed by dividing the kurtosis statistic by its standard error.

Hair, Black, Babin, Anderson and Tatham (2005) suggested that skewness and kurtosis z values within the +/- 2.58 range, represent reasonably normal distributions. As can be seen from Table 5.1 above, most skewness and kurtosis z values were within the +/- 2.58 (p < 0.01) range of zero. The job pressure stress, work-life conflict and individual spirituality at work variables skewness and/or kurtosis z values exceeded the +/- 2.58 (p < 0.01) critical z value. Histograms and boxplots revealed reasonably normal distributions for the other variables and reflected the skewness and kurtosis of the job pressure stress, work-life conflict and individual spirituality at work variables.
In spite of this, the normal probability plots displayed points that lay in a reasonably straight diagonal line from bottom left to top right for all the variables, suggesting no major deviations from normality. Residual scatterplots revealed roughly rectangular dispersions centred around zero with a lower and upper band of around +/-3.00 and no systematic pattern to the residuals, indicating normal distribution (Pallant 2001). This suggests that the statistical assumption of normality was adequately met. All variables demonstrated a varied range of response scores.

The slight violations of normality observed for some variables were not enough to warrant statistically transforming the data. Transformation is only recommended when skewness and kurtosis are extreme (Coakes 2005). Furthermore, populations are quite often skewed because of the nature of the construct being measured (Pallant 2001). Moreover, Tabachnick and Fidell (2007) argue that transformation can make interpretation of previously used scales difficult. Therefore, the original metric of each scale was maintained by not statistically transforming the data.

The residual scatterplots and bivariate scatterplots also displayed random rectangular dispersion, suggesting the linearity assumption of multiple regression was met (Tabachnick & Fidell 2007). The band enclosing the residuals was relatively equal in width at each value of the predicted score, suggesting that the homoscedasticity assumption was met (Tabachnick & Fidell 2007). These preliminary findings indicated that the statistical assumptions relevant to multiple regression were met, therefore the data was deemed appropriate for further investigation.

As can be seen from Table 5.1 in comparison to the range of possible scores for each scale, on average, academics experienced relatively moderate levels of job threat stress and high levels of job pressure stress. On average, academics experienced relatively high levels of individual spirituality at work, medium to high levels of work-unit spirituality at work, and medium levels of organisation-wide spirituality at work. On average, academics experienced medium to high levels of work-life balance and medium levels of work-life conflict.
5.2 Work-life Balance Factor Analysis

An exploratory factor analysis was conducted on the Work-life balance measure to examine its factor structure with a sample of Australian academics. Due to the existing model of work-life balance, a maximum likelihood extraction method was used. The correlation matrix table confirmed all five item-intercorrelations at .30 or above. Kaiser-Meyer-Olkin Measure of Sampling Adequacy was adequate at .81, which was above the suggested level of 0.6 (Kaiser 1970, 1974). Bartlett’s (1954) test of sphericity was significant ($p < 0.001$), which supported factorability of the correlation matrix. It was therefore decided that the items were suitable for factor analysis.

The factor analysis established the presence of one factor with eigenvalues exceeding 1. The one-factor solution explained 62.8 percent of the total variance. An inspection of the scree plot revealed a clear break after the first component. The goodness of fit index ($\chi^2 (5) = 11.86, p < 0.05$) indicated that there was a significant difference between the model and the data. Though, the goodness of fit statistic is sensitive to sample size and the $\chi^2$/df statistic is offered as a less sensitive alternative, where 1 to 2 is ideal (Francis 2002). In this case $\chi^2$/df = 2.4, suggesting a reasonable fit. The structure matrix is shown in Table 5.2 below.
Table 5.2

*Exploratory Factor Analysis Loadings for Work-life Balance Items*

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item 4</td>
<td>I feel successful in balancing work/personal life</td>
</tr>
<tr>
<td>Item 1</td>
<td>Easy to balance demands of work/personal life</td>
</tr>
<tr>
<td>Item 2</td>
<td>Sufficient time away from work to maintain balance</td>
</tr>
<tr>
<td>Item 3</td>
<td>When taking a holiday, I can separate myself from work</td>
</tr>
<tr>
<td>Item 5</td>
<td>I feel drained when I go home from work</td>
</tr>
</tbody>
</table>

% variance explained 62.8%

*N = 139. Note: Extraction Method: Maximum Likelihood. Only loadings above 0.3 are shown.

These results were consistent with the Hill et al. (2001) model of work-life balance and gave support to the factor structure of the measure in an Australian sample of academics.

### 5.3 Reliability and Bivariate Correlation Analyses

Cronbach’s alpha reliabilities were calculated for each of the scales to determine the reliability of the measures. Bivariate correlations were conducted to determine whether the three spirituality at work subscales (individual, work-unit and organisation-wide levels) were significantly related to work-life balance, work-life conflict, job threat stress, job pressure stress, well-being and ill-being. Only independent variables that correlated with dependent variables were included in subsequent multiple regression analyses. There was no evidence of multicollinearity, the scales demonstrated good reliability (> .70), and all of the correlations were statistically significant. Table 5.3 below shows the reliability coefficient for each scale and the Pearson R correlation coefficients between the measures.
<table>
<thead>
<tr>
<th></th>
<th>Ind SWS</th>
<th>Wrk SWS</th>
<th>Org SWS</th>
<th>WB</th>
<th>IB</th>
<th>Threat</th>
<th>Pressure</th>
<th>WLB</th>
<th>WLC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ind SWS</strong></td>
<td>[.90]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wrk SWS</td>
<td>.39***</td>
<td>[.90]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Org SWS</td>
<td>.33***</td>
<td>.46***</td>
<td>[.94]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WB</td>
<td>.33***</td>
<td>.37***</td>
<td>.36***</td>
<td>[.93]</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IB</td>
<td>-.20*</td>
<td>-.21*</td>
<td>-.21*</td>
<td>-.44***</td>
<td>[.93]</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Threat</td>
<td>-.37***</td>
<td>-.36***</td>
<td>-.40***</td>
<td>-.57***</td>
<td>.49***</td>
<td>[.85]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pressure</td>
<td>-.32***</td>
<td>-.33***</td>
<td>-.28**</td>
<td>-.45***</td>
<td>.37***</td>
<td>.65***</td>
<td>[.88]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>WLB</td>
<td>.30***</td>
<td>.38***</td>
<td>.27**</td>
<td>.64***</td>
<td>-.43***</td>
<td>-.70***</td>
<td>-.64***</td>
<td>[.84]</td>
<td></td>
</tr>
<tr>
<td>WLC</td>
<td>-.32***</td>
<td>-.37***</td>
<td>-.26**</td>
<td>-.61***</td>
<td>.55***</td>
<td>.74***</td>
<td>.66***</td>
<td>-.85***</td>
<td>[.93]</td>
</tr>
</tbody>
</table>

N = 139. Note: Cronbach’s alpha reliabilities are shown on the diagonal in bold. Ind SWS = Individual level spirituality at work, Wrk SWS = work unit level spirituality at work, Org SWS = Organisation-wide level spirituality at work, WB = Well-being, IB = Ill-being, Threat = Job Threat Stress, Pressure = Job Pressure Stress, WLB = Work-life Balance, WLC = Work-life Conflict.

*** p<0.001, **p<0.01, *p<0.05.
As shown in Table 5.3, the spirituality at work subscales (individual, work unit and organisation-wide) were moderately and positively correlated with each other. All three spirituality at work subscales were positively and weak-to-moderately correlated with well-being and work-life balance, and negatively and weak-to-moderately correlated with ill-being, work-life conflict, job threat stress and job pressure stress. In terms of employee outcomes, individual and organisation-wide spirituality at work were most strongly correlated with job threat stress, while work-unit spirituality at work was most strongly related to work-life balance. Job threat stress and job pressure stress were negatively and moderate-to-strongly correlated with well-being, and positively and moderately related to ill-being. The strongest correlations in Table 5.3 involved job threat stress, job pressure stress, work-life balance and work-life conflict. Job threat stress and job pressure stress were strongly and negatively related to work-life balance. Job threat stress and job pressure stress were also strongly and positively related to work-life conflict.

The relationships between well-being and both work-life balance and work-life conflict are noteworthy. It is apparent from Table 5.3 that work-life balance was moderate-to-strongly and positively correlated with well-being, while work-life conflict was moderate-to-strongly (but negatively) related to well-being. Ill-being was moderately, negatively correlated with work-life balance and moderately, positively correlated with work-life conflict. All of these variables were retained for subsequent regression analyses as they significantly correlated with each other.

The demographic variables collected were age, gender, marital status, number of children, country of birth, highest academic teaching level, academic duties, number of years employed in an academic position, discipline or faculty, number of work contact hours per week and type of university employed at (urban vs non-urban and private vs non-private). The age of the participants ranged from 25 to 66 years ($M = 43.66$, $SD = 11.06$). The number of years participants were employed in an academic position ranged from 0.25 to 40 years ($M = 7.88$, $SD = 7.41$). The number of participants’ work contact hours per week ranged up to 70 hours ($M = 25.10$, $SD = 16.54$), with the most frequently recurring response (Mode) being 40 hours per week. Marital status of participants varied with 49.6 percent married, 20.9 percent de facto, 20.1 percent single, 0.7 percent widowed and 8.6 percent separated. The number of participants with
children also varied, with 41.7 percent having no children, 17.3 percent having one child, 24.5 percent having two children and 15.8 percent having three or more children. Most participants were Australian born (70.5%) while 4.3 percent were born in the United Kingdom, 3.6 percent in The Netherlands, 2.9 percent were born in New Zealand, 2.2 percent were born in United States of America, 2.2 percent were born in Norway and 2.2 percent were born in Germany. Various other countries of birth represented with small percentages in the sample included Canada, Fiji, India, Italy, Malaysia, Republic of Korea, Scotland, Wales, Spain, Sri Lanka, Tibet and the Republic of Uzbekistan.

Participants were mostly lecturers (42.4%), followed by tutors (22.3%), then senior lecturers (16.5%), with much fewer associate professors (3.6%), professors (2.9%) and academic heads (0.7%). Quite a few participants reported reaching an “other” highest academic position (7.2%). More participants engaged in teaching and research (55.4%) than teaching only (23%) or research only (15.1%) and administrative duties (2.9%). A few participants reported performing “other” academic duties (3.6%).

The bivariate relationships of the continuous demographic variables (age, number of years employed in an academic position and number of contact hours per week), and the dependent variables were examined to determine whether to control for demographics in subsequent analyses or not. The only significant correlation was between age and ill-being ($r = -.21$, $p < 0.05$).

The sample size of this study meant that statistical power was not sufficient to test group differences for all categorical demographic variables (Cohen 1988). For example, there were only 25 responses from non-urban universities and 114 from urban universities, therefore statistical integrity of these results would be questionable (see Appendix C for detailed participant information). Therefore, only one t-test was conducted, which examined the relationship between the categorical demographic variable of gender and the dependent variables. There were no differences in the study variables for gender. Consequently, multiple regression analyses were performed on the sample as a whole.
5.4 Main Analyses: Moderator Models

Frazier et al. (2004) argue that a moderator effect is an interaction whereby the effect of one variable depends on the level of another. Baron and Kenny (1986) argue that moderation results when the relationship between two variables changes as a function of the moderation variable. The moderator hypothesis is supported if the interaction between the independent variable and moderator significantly influences the dependent variable (Baron & Kenny 1986). Buffering moderation occurs when the moderator variable weakens the effect of the independent variable on the dependent variable (Frazier et al. 2004).

![Moderator Model](Source: Frazier et al. 2004, p. 116)

To test for moderator effects, Frazier et al. (2004) firstly recommend centering the independent and moderator variables (e.g., subtracting the sample mean from each individual score). Secondly, product terms are calculated which represent the interaction between the independent variable and the moderator variable (Frazier et al. 2004). Thus, product terms are computed by multiplying the newly centered independent and moderator variables together. Moderation models are tested using hierarchical regression analysis: the centered variables are entered in block one, and product terms in block two (Frazier et al. 2004).

Hierarchical regression analyses were performed to test moderation models involving interactions between the three spirituality at work variables and the two job stress variables in the prediction of (a) well-being and ill-being (research question 1) and (b) work-life balance and work-life conflict (research question 2). Four separate hierarchical regression analyses were conducted in order to examine moderator effects.
for the four dependent variables separately, that is, well-being and ill-being, work-life balance and work-life conflict.

Although the general structure of the regression equation was the same for all four dependent variables, the independent variables entered at the first step varied. For the dependent variable of ill-being, age was controlled for by entering it in the first step before spirituality at work.

5.4.1 Moderator Models for Well-being and Ill-being

The first model to be tested was whether individual, work-unit, organisation-wide spirituality at work moderated the effect of job threat and job pressure stress on well-being. This model tested the following hypotheses:

1a) Individual, work-unit and organisation-wide spirituality at work moderates the effect of job stress on well-being such that:
   i) individual spirituality at work buffers (reduces) the effect of job threat and pressure stress on well-being
   ii) work unit spirituality at work buffers the effect of job threat and pressure stress on well-being
   iii) organisation-wide spirituality at work buffers the effect of job threat and pressure stress on well-being

Centred individual, work-unit and organisation wide spirituality at work variables and centred job threat and pressure stress variables were entered in block one, and the six product terms (centred spirituality at work x centred job stress) were entered in block two, with well-being entered as the dependent variable. The results of the hierarchical regression analysis are shown below in Table 5.4.1.1.

\[ R \] was significantly different from zero at the end of each step. After step two, with all the independent variables in the regression equation, \( R = .64, F (11, 127) = 7.82, p < 0.001. \)
Table 5.4.1.1

*Summary of Hierarchical Regression Analysis for Job Stress, Spirituality at Work and Well-being*

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>(R^2)</th>
<th>Adjusted (R^2)</th>
<th>(R^2) Change</th>
<th>(F)</th>
<th>df1, df2</th>
<th>(p)</th>
</tr>
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<tr>
<td>1</td>
<td>Individual spirituality at work</td>
<td>.38</td>
<td>.35</td>
<td>.38</td>
<td>15.97</td>
<td>5, 133</td>
<td>&lt;.001</td>
</tr>
<tr>
<td></td>
<td>Work-unit spirituality at work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Organisation-wide spirituality at work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job threat stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job pressure stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Individuality spirituality at work</td>
<td>.40</td>
<td>.35</td>
<td>.03</td>
<td>1.02</td>
<td>6, 127</td>
<td>.416</td>
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<td></td>
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</tr>
<tr>
<td></td>
<td>(\times) job threat stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(\times) job pressure stress</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Work-unit spirituality at work</td>
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\(N = 139\).

Hypothesis 1a) was unsupported. As shown in Table 5.4.1.1, adding the set of six product terms failed to produce a significant increment in \(R^2\). In addition, no product term reached significance at the .05 level, suggesting that there was no interaction between spirituality at work and job stress in the prediction of well-being. Therefore, spirituality at work did not moderate the influence of job stress on well-being. Though, in block two, the main effect of job threat stress significantly predicted well-being (\(sr_{1}^2 = .07, B = -.40, \beta = -.38, p < .001\)) over and above the other variables. The 95% confidence interval for \(B\) was from -.61 to -.19 for job threat stress.
The second model to be tested was whether individual, work-unit and organisation-wide spirituality at work moderated the effect of job threat and pressure stress on ill-being. This model tested the following hypotheses:

1b) Individual, work-unit and organisation-wide spirituality at work moderates the impact of job stress on ill-being such that:
   i) individual spirituality at work buffers the effect of job threat and pressure stress on ill-being
   ii) work unit spirituality at work buffers the effect of job threat and pressure stress on ill-being
   iii) organisation-wide spirituality at work buffers the effect of job threat and pressure stress on ill-being

At the bivariate level, age correlated significantly with ill-being, therefore its influence on ill-being was controlled in the hierarchical analysis. Age was entered in block one; centred individual, work-unit and organisation wide spirituality at work variables and centred job threat and pressure stress variables were entered in block two; and the six product terms (centred spirituality at work x centred job stress) were entered in block three, with ill-being as the dependent variable. The results of the hierarchical regression analysis are shown below in Table 5.4.1.2.

\[ R \text{ was significantly different from zero at the end of each step. } \]
\[ R = .57, \ F (12, 126) = 5.11, p < .001. \]
Table 5.4.1.2

Summary of Hierarchical Regression Analysis for Job Stress, Spirituality at Work and Ill-being when Controlling for Age

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>$R^2$ Change</th>
<th>$F$</th>
<th>df1, df2</th>
<th>p</th>
</tr>
</thead>
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<td>1</td>
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<td>.04</td>
<td>.05</td>
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<td>1, 137</td>
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<td>.28</td>
<td>.27</td>
<td>9.98</td>
<td>5, 132</td>
<td>&lt;.001</td>
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<td>3</td>
<td>Individuality spirituality at work</td>
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<td>.64</td>
<td>6, 126</td>
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</table>

$N = 139.$

Hypothesis 1b) was unsupported. As shown in Table 5.4.1.2, the set of six product terms failed to produce a significant increment in $R^2$. In addition, no product term reached significance at the 0.05 level, suggesting that there was no interaction between spirituality at work and job stress in the prediction of ill-being. Therefore, spirituality at work did not moderate the influence of job stress on ill-being. However, in block three, the main effects of job threat stress ($sr_i^2 = .09, B = .61, \beta = .45, p < .001$) and age ($sr_i^2 = .06, B = -.03, \beta = -.26, p = .001$) significantly predicted ill-being over and above that of the other variables. Of the significant predictors, job threat stress explained more variance in ill-being than did age. The 95% confidence interval for $B$ was -.04 to -.01 for age, and from .32 to .89 for job threat stress.
5.4.2 Moderator Models for Work-life Balance and Work-life Conflict

The third model to be tested was whether individual, work-unit and organisation-wide spirituality at work moderated the effect of job threat and pressure stress on work-life balance. This model tested the following hypotheses:

2a) Individual, work-unit and organisation-wide spirituality at work moderates the effect of job stress on work-life balance such that:
   i) individual spirituality at work buffers the effect of job threat and pressure stress on work-life balance
   ii) work unit spirituality at work buffers the effect of job threat and pressure stress on work-life balance
   iii) organisation-wide spirituality at work buffers the effect of job threat and pressure stress on work-life balance

The centred individual, work-unit and organisation wide spirituality at work variables and the centred job threat and pressure stress variables, were entered in block one and the six product terms (centred spirituality at work x centred job stress) were entered in block two, with work-life balance as the dependent variable. The results of the hierarchical regression analysis are shown below in Table 5.4.2.1.

$R$ was significantly different from zero at the end of each step. After step two, with all the independent variables in the regression equation, $R = .76$, $F (11, 127) = 15.75$, $p < 0.001$. 


Table 5.4.2.1

Summary of Hierarchical Regression Analysis for Job Stress, Spirituality at Work and Work-life Balance

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>$R^2$</th>
<th>Adjusted $R^2$</th>
<th>$R^2$ Change</th>
<th>$F$</th>
<th>df1,</th>
<th>df2</th>
<th>$p$</th>
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<td>1</td>
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<td>.55</td>
<td>.56</td>
<td>34.47</td>
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<td>133</td>
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<td>Work-unit spirituality at work</td>
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<td>2</td>
<td>Individuality spirituality at work</td>
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<td>127</td>
<td>.71</td>
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$N = 139.$

Hypothesis 2a) was unsupported. As shown in Table 5.4.2.1, the set of six product terms failed to produce a significant increment in $R^2$. In addition, no product term reached significance at the 0.05 level, suggesting that there was no interaction between spirituality at work and job stress in the prediction of work-life balance. Therefore, spirituality at work did not moderate the influence of job stress on work-life balance. Yet, in block two, the main effects of job threat stress ($sr_i^2 = .11, B = -.86, \beta = -.49, p < 0.001$) and job pressure stress ($sr_i^2 = .03, B = -.44, \beta = -.28, p < 0.01$) significantly predicted work-life balance over and above that of other variables. The main effect of work-unit spirituality at work on work-life balance reached significance ($sr_i^2 = .01, B = .17, \beta = .14, p = 0.05$). Of the significant predictors, job threat stress explained more variance in work-life balance than did job pressure stress and work-unit spirituality at
work. The 95% confidence interval for $B$ was -.71 to -.17 for job pressure stress, -1.15 to -.57 for job threat stress and from .00 to .33 for work-unit spirituality at work.

The fourth model to be tested was whether individual, work-unit and organisation-wide spirituality at work moderated the effect of job threat and pressure stress on work-life conflict. This model tested the following hypotheses:

2b) Individual, work-unit and organisation-wide spirituality at work moderates the influence of job stress on work-life conflict such that:
   i) individual spirituality at work buffers the effect of job threat and pressure stress on work-life conflict
   ii) work unit spirituality at work buffers the effect of job threat and pressure stress on work-life conflict
   iii) organisation-wide spirituality at work buffers the effect of job threat and pressure stress on work-life conflict

The centred individual, work-unit and organisation wide spirituality at work variables and the centred job threat and pressure stress variables, were entered in block one, and the six product terms (centred spirituality at work $\times$ centred job stress) were entered in block two, with work-life balance as the dependent variable. The results of the hierarchical regression analysis are shown below in Table 5.4.2.2.

$R$ was significantly different from zero at the end of each step. After step two, with all the independent variables in the regression equation, $R = .79, F (11, 127) = 19.17, p < 0.001$. 

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Table 5.4.2.2

Summary of Hierarchical Regression Analysis for Job Stress, Spirituality at Work and Work-life Conflict

<table>
<thead>
<tr>
<th>Step</th>
<th>Predictor</th>
<th>R²</th>
<th>Adjusted R²</th>
<th>R² Change</th>
<th>F</th>
<th>df1,</th>
<th>df2</th>
<th>p</th>
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<tr>
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<td>.60</td>
<td>.62</td>
<td>43.10</td>
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<td>133</td>
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<td>.01</td>
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N = 139.

Hypothesis 2b) was unsupported. As shown in Table 5.4.2.2, the set of six product terms failed to produce a significant increment in $R^2$. In addition, no product term reached significance at the 0.05 level, suggesting that there was no interaction between spirituality at work and job stress in the prediction of work-life conflict. However, in block two, the direct effects of job threat stress ($sr_i^2 = .13, B = 1.07, \beta = .53, p < 0.001$) and job pressure stress ($sr_i^2 = .04, B = .55, \beta = .29, p < 0.001$) significantly predicted work-life conflict. Of the significant predictors, job threat stress explained more variance in work-life conflict than did job pressure stress. The 95% confidence interval for $B$ was .25 to .85 for job pressure stress, and from .75 to 1.39 for job threat stress.
For significant moderation effects, Frazier et al. (2004) suggested computing predicted values of the dependent variable for high and low scores (one standard deviation above the mean and one standard deviation below the mean) on the independent and moderator variables. The predicted values are then plotted on a graph summarizing the form of the moderator effect (Frazier et al. 2004). Since no interaction terms produced significant changes in the dependent variables, graphs were not plotted. The results of this study will now be discussed in more detail, in terms of support for hypotheses, other findings, past research, implications, limitations and suggestions for further research.
CHAPTER 6
DISCUSSION AND CONCLUSION

6.0 Overview of Discussion and Conclusion

Due to the increasing popularity of research on spirituality at work, this research aimed to investigate positive and negative outcomes of spirituality at work amongst Australian academics. Specifically, it was hypothesised that spirituality at work would have a buffering effect on the detrimental influences of job stress on both well-being and ill-being. It was also investigated whether spirituality at work moderated the influence of job stress on work-life balance and work-life conflict. The discussion will firstly address whether these hypotheses were supported by the results of this study. The findings will be related to earlier research investigating direct effects of spirituality on stress and well-being (e.g., Calicchia & Graham 2006; Lustyk et al. 2006; Powers et al. 2007) as well as studies investigating moderating influences of individual spirituality on stress and health (e.g., Elam 2000; Hong 2008; Youngmee & Seidlitz 2002). In particular it will be discussed whether the results of this study were consistent with earlier research findings and theories. Theoretical implications of the findings and implications for academic staff and HR managers will then be discussed, followed by the limitations of the study. Based on these deliberations, suggestions for future research will be provided and these will be followed by a conclusion.

6.1 Hypothesis (1): Moderator Models for Well-being and Ill-being

The results of the present study supported Laabs (1995, p. 64) argument that defining spirituality was like “capturing an angel – it’s ethereal and beautiful, but perplex.” On average, academics experienced relatively high levels of individual spirituality at work, medium to high levels of work-unit spirituality at work and medium levels of organisation-wide spirituality at work. However, contrary to expectations hypothesis (1) was inconsistent with previous research findings. Results of the initial correlation analyses suggested that academics with high levels of spirituality at work (individual,
work unit and organisation-wide) tended to experience fewer instances of ill-being, more instances of well-being, less job threat stress and less job pressure stress. At a bivariate level, spirituality at work was related to better well-being and lower ill-being and lower job stress amongst academics. Academics with high levels of job threat stress and less job pressure stress tended to experience more instances of ill-being and fewer instances of well-being. At a bivariate level, older age was significantly related to more frequent experiences of ill-being.

At a multivariate level, however, job threat stress significantly predicted decreased well-being over and above job pressure stress, spirituality at work and the interaction variables (see Table 5.4.1.1). Job threat stress and age significantly predicted increased ill-being over and above job pressure stress, spirituality at work or the interaction variables (see Table 5.4.1.2). Symptoms of ill-health tended to increase with age among academics. However, job threat stress was more important in predicting ill-being than was age, which implies that ill-being was more influenced in this sample by job threat stress than age.

The fact that spirituality at work was related to both job stress and health at the bivariate level, but not the multivariate level, could be attributed to the strong influence of job stress on health. As reported earlier in Table 5.3, job stress variables in this study were more strongly related to well-being and ill-being, than were the spirituality at work variables. It seems that job threat stress and job pressure stress overrode any positive influences that spirituality at work could have had on well-being or ill-being.

Job threat stress referred to anxiety or overwhelming feelings of job stress, while pressure represented time and demand aspects of job stress (Stanton et al. 2001). Feelings of anxiety and feeling internally threatened by work, seemed to be a stronger influence on academics’ health than were time and pressure demands. It seems that when academic teaching staff felt irritated, lacked control, nerve-wracked, hassled, uncomfortable, or overwhelmed (due to their work), they were less likely to experience states of social, somatic, emotional, cognitive and sexual well-being, and more likely to experience symptoms of depression, anxiety and somatic ill-being. Achieving meaningful work, a sense of community among colleagues and experiencing alignment
between their own values and the values of their organisation, did not foster academics’ well-being or reduce their ill-being.

In this particular sample of academics, job pressure stress was not predictive of well-being or ill-being. These results may substantiate earlier views arguing that in circumstances where stress is only temporary, or known to be short-term, well-being and ill-being are less affected than in cases of ongoing or uncertain stressors (Schuler 1982). Furthermore, short-term stressors were argued to lead to negative emotional reactions (e.g., anxiety) and minor physical symptoms (e.g., headaches or stomach upsets), but long-term stressors were argued to lead to more severe negative emotional problems (e.g., chronic anxiety) and serious physical health problems (e.g., cardiovascular disease and even premature death) (Schuler 1982; Spector 2002).

In this sample, on average, academics experienced higher levels of job pressure stress than job threat stress (see Table 5.1). These levels of stress could be attributed to the sample used in this particular study that consisted predominantly of academics belonging to a single university that was undergoing restructuring and significant change at the time of data collection. Therefore, with reference to earlier views on stress and health (e.g., Schuler 1982; Spector 2002) it is plausible that temporary but intense job pressure stressors in this sample (e.g., being forced to complete extra tasks during restructures, or while team members were absent, undertaking short-term projects or exam or assignment marking) were very common amongst academics during the time when the data was collected for this study. It could be argued that job pressure stress did not influence well-being or ill-being due to the presence of temporary job pressure stressors (that were expected to be short-term) in this sample. In addition, it is likely that job threat stressors (e.g., large amounts of work, juggling multiple tasks, conflict with colleagues, teaching, research or professional development) were ongoing rather than temporary, when the academics participated in the study. It could therefore be argued that job threat stress influenced well-being or ill-being directly because of the presence of ongoing job threat stressors in this sample.

The results of the moderation analyses could also be attributed to the sample used in the current study. If job threat stress was ongoing, it is possible that academics felt that spiritual appraisal of work stressors was ineffective in reducing job stress at the
individual level. Therefore, without utilising spiritual appraisal, academics’ ongoing job threat stress would have directly reduced well-being and increased ill-being (Schuler 1982; Spector 2002). In addition, where academics felt extremely demanded, pressured, hectic, agitated, tense and pushed by work (as measured by the Stress in General Scale), spiritual appraisal at the individual level would likely have had little effect on reducing stress levels. These findings substantiate the earlier view that the effectiveness of spirituality in coping with stress depends on the level of stress experienced (Youngmee & Seidlitz 2002).

The results of this current study may also help to substantiate Spector’s (2002) view that different types of stressors can influence different types of well-being or ill-being. For example, high-level stressors (e.g., heavy work loads) have been found to be linked to physical symptoms of ill-being (Spector 2002). To preserve reliability of the measures, total well-being and ill-being scores were used in the present study, rather than individual subscale scores of social, somatic, emotional, cognitive and sexual well-being, and depression, anxiety and somatic ill-being.

The following sections will discuss the results of the current study in relation to previous research and theory. Specifically, Section 6.1.1 will discuss direct influences of job stress and spirituality at work on health, and Section 6.1.2 will outline moderation influence of spirituality on job stress and health.

6.1.1 Relevance to Direct Relationships between Spirituality, Stress and Well-being Evidenced in Previous Studies and Theory

The results were consistent with the plethora of literature evidencing the link between both life stress and health (e.g., Elfering et al. 2005; Jamal 2005; Karlsen et al. 2006; Lazuras 2006; Love et al. 2007; Noblet et al. 2005; Shields 2006), and job stress and health (e.g., Palliser et al. 2005; Siying et al. 2007). For example, Edmondson et al. (2005) reported that stress was linked to decreased health. Stress was measured with cardiovascular responses to stressors and health was measured by physical symptoms. Edmondson and colleagues’ regression analyses illustrated that stress predicted negative aspects of health. It seems that due to the statistically significant findings, the link
between job stress and health can be expanded to the general population of Australian academics.

In terms of direct effects of spirituality and stress on well-being and ill-being, the results were consistent with MacLachlan et al. (1999) who found no significant differences, positive or negative in stress, psychological and physiological health in participants who attended a Tibetan retreat for four years. The researchers assessed the effect of participation in the retreat at different intervals over the four-year period using a health measure and a stress measure. Residence at the retreat did not show any harmful or beneficial effects on the participants’ levels of stress and general well-being. MacLachlan et al.’s study used participants ranging from 23 to 67 years. MacLachlan and colleagues’ results were consistent with that of the current study because spirituality did not have a statistically significant influence on stress or well-being of participants.

It is possible that MacLachlan et al.’s (1999) results are consistent with the current study’s results because both studies recruited a similar age range of participants and MacLachlan et al. used a religious-based spirituality intervention. It could be argued that in the current study spirituality at work failed to directly influence job stress because academics may have interpreted ‘spirituality’ as ‘religion’. From MacLachlan et al.’s study it appears that religious-based spirituality does not directly influence stress in mature-aged samples (compared to that of student samples). Furthermore, MacFie et al (2005) reported that religious-based spirituality did not significantly predict stress in psychology graduate students when religious-based spirituality was measured. Moreover, the negative influence of religion on well-being and stress was evidenced by Ardelt (2003) who found that religious activities were actually linked to increased fear of death and death avoidance. In addition, Calicchia and Graham (2006) ascertained that participants who reported higher levels of existential well-being experienced less stress from their spouse or partner and extended family. Participants who reported higher levels of religious well-being actually tended to report greater health problems. These consistencies with the current study support the view that due to the tenuous relationship between religion and stress (Ryan & Fiorito 2003) spirituality did not influence job stress directly in the current study, because academics who participated in this study may have misinterpreted spirituality for religion. This misinterpretation may have occurred despite the researcher’s best efforts to clearly distinguish between the two
concepts. Alternatively, this may indicate that spirituality does not influence job stress directly.

The results of the present study are consistent with the findings of Powers et al. (2007) who claimed that life stress more strongly predicted ill-being than did spirituality. Contradictory to the current study’s results, Powers et al. confirmed that spirituality remained a significant predictor of decreased ill-being when life stress was controlled. Also differing from the current study, Powers and colleagues indicated that in predicting well-being, spirituality was the only remaining significant influence when life stress was controlled. Powers et al. recruited different participants, namely Liberal Arts students who averaged an age of 18 years. The inconsistency with these findings could well be attributed to the age of the respondents, the artistic and liberal bias of the sample and other demographic variables. It is reasonable to assume that spirituality is better able to influence health and stress in younger samples.

Powers et al. (2007) measured life stress, rather than work-related stress, and individual spirituality, as opposed to work-place spirituality, which also could have affected the results. A different measure of subjective well-being (negative affect, positive affect and depression) was used, as opposed to the multi-dimensional health states scale used in the current study. Powers and colleagues’ measure of well-being consisted of only emotional aspects of well-being, rather than both physical and emotional aspects. The average life stress score for Powers et al.’s study was quite low, indicating the level of stress experienced by participants, was different to that of the current study. It could be argued that under normal circumstances, spirituality can directly influence health, but in unusual circumstances, spirituality may not be effective in directly influencing health. This consistency with the current findings substantiates the view that the effectiveness of spirituality in coping with stress depends on the level of stress experienced (Youngmee & Seidlitz 2002).

The results of the current research were inconsistent with earlier studies that indicated spirituality had direct effects on well-being and ill-being. This could be due to the characteristics of the respondents, such as their age, religious-orientations or life experience. For example, Lustyk et al. (2006) found that participants with higher levels of existential well-being tended to experience fewer symptoms of premenstrual
symptomatology. The researchers also showed that spirituality partially mediated the relationship between life stress and premenstrual symptomatology. The inconsistency with the current study’s findings could be attributed to the fact that Lustyk et al.’s study consisted of female students, aging between eighteen and twenty-one years, and more than half belonged to Catholic religious denominations. The present study’s sample was quite different in terms of gender, and the scales used to measure well-being, stress and spirituality. Lustyk and colleagues’ measure of well-being was purely physical and gender specific, and spirituality and stress were not work-specific.

The results of the current study were also different to that of Edmondson et al. (2005) who verified through regression analyses that spirituality was linked directly to better health. The researchers used female college students averaging twenty-one years of age. An individual measure of spirituality was administered as well as a physical health measure of well-being. The inconsistencies with the current study’s findings could also be attributed to the different participants sampled and measures utilised.

The results were not consistent with that of Wilding et al. (2006) who demonstrated that spirituality was viewed as extremely important by health nurses for mentally ill patients and was seen as life-nourishing. In addition to the differing sample, spirituality was investigated qualitatively not quantitatively. Ardelt (2003) posited a direct positive influence of spirituality on well-being and stress amongst older adults from several social groups. Purpose in life (rather than religion) was also linked to increased elderly participants’ subjective well-being and was related to decreased fear of death and death avoidance. In addition, Calicchia and Graham (2006) established that graduate students who reported higher levels of spirituality experienced less stress from their spouse or partner and extended family. These discrepancies could be attributed to the different sample used in terms of age and occupation. The following section will compare the results of the current study to that of previous research, which investigated the moderation influences of spirituality on job stress and health.
6.1.2 Relevance to Moderation Influences between Spirituality, Stress and Well-being Evidenced in Previous Studies and Theory

After reviewing previous studies and the findings of the current study, it is conceivable that only individual spirituality, and not spirituality at work, has direct effects on well-being or ill-being. This could be because the measure used in this study eliminated the personal or transcendent aspects of spirituality, in order to make the measure more work specific (Milliman et al. 2003). It could be argued that spiritual appraisal of stressors are best measured with these highly personal aspects of spirituality, rather than through finding meaning and purpose at work. This suggests that well-being and ill-being of academics were predominantly influenced by job stress. As the assumptions of the statistical analyses were met and the measures used demonstrated previous reliability, the moderation analyses provided very little evidence to suggest that any of the three types of spirituality at work buffered the relationship between job stress (job threat and pressure stress) and well-being or ill-being.

The results were consistent with previous studies that reported no moderation effects of religious-based spirituality on stress and well-being. For example, Ellison (1991, p. 88) ascertained that “divine interaction” did not buffer the negative effects of trauma on well-being amongst the general population. Fabricatore et al. (2000) concluded that religious-based spirituality did not moderate the relationship between stress and subjective well-being amongst undergraduate students. Ellison et al. (2001) demonstrated no stress-buffering effects involving frequency of prayer or frequency of church attendance amongst adults. The researchers argued that there was no evidence to suggest that religious involvement buffered the effects of multiple stressors on distress or well-being. These consistencies with the current study also support the view that spirituality did not influence job stress directly, because academics may have misinterpreted spirituality for religion. Alternatively, the consistency of results may indicate that spirituality at work does not buffer multiple stressors or health (as defined in this study).

The results of the present research were inconsistent with earlier studies that reported moderation effects of spirituality on the relationship between stress and health. In their
findings, Youngmee and Seidlitz (2002) argued that spirituality was not directly related to stress, ill-being or well-being, but instead moderated the relationship between stress and health. The authors sampled college students ranging between 19 and 33 years. Youngmee and Seidlitz used an individual spirituality measure and a life stress scale. Well-being and ill-being were measured by physical symptoms, negative affect and positive affect. Youngmee and Seidlitz’s results could have varied from that of the current study because, on average, students in their study reported very low levels of stress. Again, it seems that spirituality is more likely to moderate the influence of life stress on health among younger individuals experiencing low or moderate amounts of stress. These discrepancies could also be attributed to the different measures used.

The results of the study were inconsistent with studies that demonstrated moderation effects of individual spirituality on the influence of stress on a few aspects of well-being or ill-being, such as depression, positive affect, life satisfaction and self-esteem. For example, Elam (2000) established that spirituality moderated the relationship between stress and depression, positive affect and life satisfaction, but not stress and anxiety or negative affect. Elam used individual spirituality, life stress and subjective well-being measures, and sampled undergraduate students. Elam’s findings could have varied from the results of the current study because Elam used a younger sample and administered different scales. It is interesting to note that Elam did not specify the average age or stress levels of participants. Hence, whether there was a difference in the samples’ average stress levels and age cannot be verified.

Hong (2008) reported that spirituality moderated the relationship between well-being and stress among undergraduate students (average age or stress level was not specified). A measure of self-transcendence meaning of life, psychological well-being (mental-health problems, depression and self-esteem effects) and academic stress were used. It is plausible that Hong’s results varied from the current study because of the different measures administered and the younger participants sampled. It is important to note, however, that in Hong’s study sense of adequacy and anxiety were not moderated.

These inconsistencies could also be attributed to the nature of the work or job characteristics (Hackman & Oldham 1975) and previous experience of individuals (Calicchia & Graham 2006). The link between job characteristics and job stress has
long been established (Landsbergis 1988; Shaw & Riskind 1983). Different types of job characteristics (and therefore stressors) are likely to be present when comparing academic student life to academic teaching life. Shaw and Riskind (1983) claim that a strong relationship exists between the behavioural characteristics of different jobs and the levels of various stresses experienced by groups of employees in those jobs. Landsbergis (1988) argue that jobs which combine high workload demands with low decision latitude lead to higher job strain (job dissatisfaction, depression, psychosomatic symptoms) and burnout.

Hackman and Oldham (1975) claimed that the amount of skill variety, task identity, task significance, autonomy and feedback present in a job will determine employee job satisfaction, absenteeism and turnover. It could be argued that academics may have worked without supportive feedback on their performance. In contrast, students in consistent learning environments are likely to be able to practise a wide range of acquired skills, identify that their efforts lead to an end product (such as obtaining a grade or degree), have task significance, responsibility for their own learning and positive feedback from their teachers. In addition, inconsistencies in results could be due to differing job characteristics and individual differences between samples used in earlier studies and that of the current study.

Calicchia and Graham (2006) established that the influence of stress on well-being was affected by internal person factors (such as previous experience) and external factors (such as occupation). It could be argued that having previous experience may enable academics to cope with stress, without utilising spiritual appraisal as academics have likely refined coping strategies over time to deal with day-to-day stressors. In addition, the degree to which a particular occupation is stressful will likely determine whether spiritual appraisal is effective. For example, highly stressful occupations such as teaching (Briggs 2009; Houston et al. 2006; Tytherleigh et al. 2005) may not enable spirituality to be effective in buffering the influence of stress on health (Youngmee & Seidlitz 2002).

The results lend support to Maslow’s (1943, 1954, 1968) theory in that when lower-order needs, such as physiological and safety needs, were under threat (due to high work demands), academics’ desire for belongingness and self-actualisation subsided, so that
lower-order needs could be achieved. It could be argued that academics focus on lower-order needs, such as keeping up with work demands, rather than having time to seek higher-order needs, such as seeking socially responsible, meaningful and purposeful projects.

This direct influence of job threat stress on well-being and ill-being provided further support for Lazarus and Folkman’s original (1984) transactional model of stress and coping, which contends that cognitive appraisal during stressful situations has an impact on health. The model also suggests that the effects of stress influences health differently over time. Academics would have engaged in primary appraisal in order to perceive job threat stressors as stressful, then in secondary appraisal they would have evaluated what might be done about a stressful situation and whether they had the coping resources to deal with the stressor. An important aspect of Lazarus and Folkman’s model is that perception of whether the stressor is negative, positive or neutral rests largely on the skills, needs and values of the particular individual. The current study supports this model as the average level of job pressure stress of academics was quite high, yet job pressure stress did not lead to increased ill-being and/or decreased well-being. This suggests that job pressure stress did not influence the health of academics because job pressures may have been short-term in nature, perceived as not very threatening and therefore, seen as within the academic’s ability to cope. Yet job threat stress led to increased ill-being and decreased well-being, which suggests that academic’s health was influenced by job threat stress because job threat stressors may have been ongoing, viewed as quite threatening and therefore, outside the academic’s ability to cope.

The results of the study did not provide support for Gall et al.’s (2005) theory of spiritual appraisal as employees who perceived higher levels of spirituality at work did not appraise job stressors as less threatening than employees who perceived lower levels of spirituality at work. It is possible that spirituality at work buffers the influence of job stress on well-being and ill-being, but not amongst academic teaching staff. This finding substantiates Narayanswamy’s (2008) critical view that tertiary education (specifically the management discipline) is extremely intellect-driven and does not create well-rounded leaders who are able to deal with diverse groups of people. In contrast, some disciplines such as social work are realising the importance of
incorporating spirituality into professional university courses. Rothman (2009) concurred however, that in the area of social work, students see spirituality as a necessary component in their education before professional practice. Rothman also claims that professionals working in the area of social work view spirituality as a personal, individual and internal experience, while the general population see spirituality as being linked with organised religion.

It could be reasoned that the particular disciplines sampled in the current study also contributed to the lack of support for the research hypotheses. For example, only a small percentage of the sample in the current study reported that they came from the Social Work discipline. If disciplines, such as Social Work, value spirituality, and these were underrepresented, it is possible that the results were distorted by other disciplines, which do not value spirituality as much. In the current study the largest grouping of participants sampled came from Social Sciences (almost one quarter), followed by Business, Engineering and Industrial Sciences, Education, and Information and Communication Technologies respectively. Only a very small percentage came from the Social Work, Health, Christian Studies, or Arts, Child and Family Studies. Hodge (2003) claims that organised religion in the social work profession are actually underrepresented. It is probable that the current generation of academics (from all disciplines) do not feel the need for spiritual appraisal or are not spiritually inclined.

It could be possible that academics in the current study did not feel the need to utilise spiritual appraisal because the average academic generally belongs to a highly conservative, religiously educated, ‘Baby-Booming’ generation (Patterson 2007). As these older academics’ professional role is to teach, it is likely that they do not utilise concepts or tools that they find difficult to teach. For example, it may be a dilemma to some academics to teach or talk about spirituality with their students (Rothman 2009). Furthermore, Ballantyne et al. (1999) claim that Australian academics tend to teach their students how they themselves were taught in university, staying loyal to traditional methods and strategies without reflecting on their appropriateness or effectiveness. Ballantyne and colleagues believe that the very nature of academia (logical and scientific) conflicts with the contemporary academic life of making sense of contradictions and dilemmas, grasping new ideas and methods, interacting with students and colleagues, and juggling the increasing demands of teaching and research. It seems
that the well-educated, logical and rational mindset of academics could sometimes conflict with the ‘soft’, subjective, diverse and complex notion of spirituality (Zajonc 2003).

Similarly, Schuler (1982) suggests that individual characteristics, such as physical condition, social support, life experience and self-esteem, can determine whether stress will influence an individual’s health. These findings substantiate earlier views which maintain that academics typically view spirituality, faith, moral code and values as opposed science, reason and fact (Zajonc 2003). Therefore, Rothman (2009) argues that spirituality is an especially challenging concept for academics. Rothman questions whether something as complex and difficult to communicate can be discussed meaningfully in an academic context. In addition, academic teaching staff are a unique sample and appear to experience higher levels of stress than other occupations (Houston et al. 2006). Furthermore, Winefield et al. (2003) argue that the working conditions of academics is becoming more demanding and stressful, which maybe hindering their spiritual development (Astin & Astin 1999).

In addition, research on spirituality which used moderation models were conducted on non-Australian samples (e.g., Fabricatore et al. 2000; Hong 2008; Powers et al. 2007; Ryan & Fiorito 2003; Youngmee & Seidlitz 2002), therefore it is possible that cultural differences contributed to the lack of support for the research hypotheses. Giacalone and Jurkiewicz (2003b) argued that one of the reasons for the increased interest in spirituality is that developed countries, like Australia and the United States of America, are becoming more culturally diverse and more accepting of diverse business practices. It was expected that Ashmos and Duchon’s (2000) model of spirituality at work (empirically tested in the United States of America) would be generalisable to Australian samples, as both cultures are similar in terms of individualistic cultures and similar management practices (Hofstede 1980; Westwood & Posner 1997). Therefore, it could be said that spirituality at work may be more important in Australian corporate businesses (e.g., SLaM Network), which are often American subsidiaries (Wood 2000). It is therefore possible that spirituality in academic environments may gain more momentum in the future. The hypotheses regarding results of work-life balance and work-life conflict analyses will be discussed in the following section.

Results of the initial correlation analyses (see Table 5.3) suggested that academics with high levels of spirituality at work (individual, work unit and organisation-wide) tended to experience fewer instances of work-life conflict and fewer instances of job stress (threat and pressure) and more instances of work-life balance. As academics’ job threat and pressure stress increased, their perceptions of work-life conflict also tended to increase and their perception of work-life balance tended to decrease.

At a multivariate level, however, both job threat and pressure stress significantly predicted decreased work-life balance over and above individual and organisation-wide spirituality at work and the interaction variables (see Table 5.4.2.1). Work-unit spirituality at work significantly predicted increased work-life balance over and above individual and organisation-wide spirituality at work and the interaction variables. Yet, job threat stress was more important in predicting work-life balance than was job pressure stress and work-unit spirituality at work, respectively. Both job threat and pressure stress significantly predicted increased work-life conflict over and above spirituality at work and the interaction variables (see Table 5.4.2.2). Though, job threat stress was more important in predicting work-life conflict than was job pressure stress.

In this present study, when academic teaching staff felt irritated, lacked control, nerve-wracked, hassled, uncomfortable and overwhelmed (due to their work), they experienced less balance between their work and personal life, and more conflict between their personal and work lives. In addition, when academics felt demanded, pressured, hectic, agitated, tense and pushed (by work pressures), they experienced less work-life balance, and more work-life conflict. Furthermore, it seems that feelings of anxiety and being internally threatened by work, more strongly influenced academics’ work-life balance and work-life conflict than did time and pressure demands.

The fact that individual and organisation-wide spirituality at work were related to work-life balance and work-life conflict at the bivariate level but not at the multivariate level, could be attributed to the direct relationships between job stress and work-life issues. As presented in Table 5.3 the strongest bivariate correlations in the study were between
the job stress, and work-life variables. Except for the case of work-unit spirituality and work-life balance, it could be reasoned that in this sample job threat stress and job pressure stress were so strongly linked with work-life issues, that any positive influence spirituality at work had on work-life balance or conflict, was overridden by job pressure and job threat stress.

In contrast to the well-being and ill-being analyses, both job threat stress and pressure stress directly predicted work-life balance and work-life conflict. It was argued previously that job pressure stress did not influence health, but job threat stress did because academics in this sample were exhibiting temporary but high levels of job pressure stress, and ongoing job threat stress (Schuler 1982; Spector 2002). The results suggest that short-term high job pressure stress may lead to academics’ increased work-life conflict and decreased work-life balance, but not to academics’ health. In addition, long-term job threat stress may lead to academics’ decreased health, low work-life balance and high work-life conflict.

It is likely that temporary but intense job pressure stressors or particular job characteristics resulted in academics taking unfinished work home to complete. In the short-term, this could lead to work and personal life conflicting, and having less time to balance work and personal responsibilities. The presence of ongoing job threat stressors (e.g., large amounts of work, juggling multiple tasks, conflict with colleagues, teaching or research, teaching and research or professional development) may also have resulted in work-related anxiety, which in turn may have affected the academics personal life. In the long-term, this could also have led to work and personal life conflicting, role conflict at work and having less time to balance personal and work responsibilities. Furthermore, Byrne (2005) contends that changes in work conditions can significantly affect the work-life interface. Therefore, restructures, changes in reporting relationships, role overloads and other significant challenges and changes in the work environment causing high pressure and anxiety, could create imbalance or conflict between the work-life domains.

It was claimed that the detrimental effect of job stress on work-life balance and work-life conflict could be buffered by spirituality at work. As the assumptions of the statistical analyses were met, and the work-life balance scale factor analysis
demonstrated good factor structure, the moderation analyses provided no evidence to suggest that any of the three types of spirituality at work buffered the relationship between job stress (job threat and pressure stress) and work-life balance or work-life conflict. Due to the lack of previous research on the specific buffering effects of spirituality, these initial results signify that spirituality at work does not buffer the influence of job stress on work-life balance or work-life conflict.

It could also be plausible that work-unit spirituality (sense of community) did not moderate the relationship between job stress and work-life balance because in environments such as in this study, where job threat stress is ongoing, spiritual appraisal may be seen to be ineffective at the work-unit level in buffering stress’s influence on work-life balance. If many academics felt irritated, lacking in control, nerve-wracked, hassled, uncomfortable and overwhelmed due to work-related issues over a prolonged period of time, work-unit spiritual appraisal may be seen as less effective in reducing these job threat stressors than other means, such as delegating the overflow of tasks. Therefore, sense of community may not buffer the influences of job threat stress on work-life balance.

It is probable that many academics in this sample were experiencing high levels of job pressure stress (see Table 5.1), therefore the ability of work-unit spirituality in buffering its influence on work-life balance was totally overridden by job pressure stress. Therefore, job pressure stress would influence work-life issues directly. It could be reasoned that academics felt their jobs were extremely demanding, pressured, hectic, agitated, tense and felt pushed by work, therefore work-unit spiritual appraisal in this study was not able to buffer the influence of job pressure stress on work-life balance. The following section will discuss the current study’s results in terms of previous theories.

6.2.1 Consistency with Previous Theoretical Models

These results lend some support to Zedeck’s (1992) spillover theory, which suggested that a person’s attitudes, emotions, skills and behaviours produced in one domain (either work or personal life) flow into the other. This spillover can be positive (facilitation) or
negative (conflict) and could occur in both directions, for example, from work-to-personal life, or personal life-to-work. The results give support to negative spillover in the work-to-personal life direction (only work-to-personal life spillover investigated), as job stress directly influenced academic’s ability to balance their personal and work lives, and directly led to increased conflict between academic’s work and personal lives.

The fact that work-unit spirituality, and not individual or organisation-wide spirituality at work, influenced work-life balance could be attributed to the nature of the sample. As shown in Table 5.3 on average, academics reported high levels of individual spirituality at work, medium-to-high levels of work-unit spirituality at work, and medium levels of organisation-wide spirituality at work. On average, academics experienced medium-to-high levels of work-life balance and medium levels of work-life conflict. If the respondents of this study were experiencing significant changes in the work environment, leading to work-related anxiety or taking extra work home, having a sense of community might well be seen as relevant in dealing with work-life balance. Sense of community has the potential to aid work-life balance via social support, shared resources and collective values (Ballantyne et al. 1999). For example, colleagues could support one another by listening to each of their concerns, banding together as a team, offering advice on how to deal with work-life issues, and sharing workloads.

Meaningful work and alignment with organisational values were not shown by the moderation analyses to help academics achieve work-life balance, probably because work-related anxiety issues took precedence over the use of more spiritual tools. Schuler (1982) argues that one method of dealing with stress is information seeking or problem solving, which permits employees to reduce uncertainty regarding resolution of the stressful condition. Due to the intellectual nature of academics, information seeking would likely appeal to most academics, more so than spiritual appraisal. Furthermore, belonging to an organisation that has similar values to one’s own, and having to perform meaningful work, more than likely is not enough to foster work-life balance when there are significant challenges in the work environment.

These results lend support to the management theory of transformational leadership, in which employees are argued to be inspired to attain meaning and purpose in work, shared vision and emotional arousal, rather than be motivated by rewards and security.
(Dehler & Welsh 1994). It could be stated that sense of community was achieved via work-unit leaders appealing to academics’ higher sense of purpose and aligning the leader’s vision with employee values (DuBrin et al. 2006). Thus, having a higher sense of purpose and having sense of community among work-units enabled academics to foster work-life balance. The following section will discuss the results of the current study in relation to that of previous studies.

6.2.2 Consistency with Previous Studies

These findings were consistent with studies conducted by Astin and Astin (1999), Burke et al. (2003), Greenhaus and Beutell (1985), Hobsor et al. (2001), Lingard et al. (2007), Tytherleigh et al. (2005), Wallace (2005), Waltman and Sullivan (2007) and Wong and Lin (2007) which indicated (utilising many different measures) that high levels of job stress tended to decrease work-life balance and increase work-life conflict among a variety of occupations, including academics. To highlight the consistency of results and use of different measures, Burke et al. (2003) measured work-life balance with a scale assessing the extent to which psychologists’ organisational values supported work-life balance and found that more supportive organisational values of work-life balance were linked to lower job stress. Greenhaus and Beutell (1985) assessed work-life conflict in terms of work-family role pressure incompatibility amongst a variety of samples. Greenhaus and Beutell found that work-family conflict existed when stress from participation in one role makes it difficult to fulfil requirements of another, for example, where job stress influences the fulfilling of personal-life duties.

Wong and Lin (2007) measured work-life conflict with work-to-leisure conflict scale which measured the frequency participants perceive conflict between work interference with leisure life amongst full-time employees in the tourist industry. Wong and Lin demonstrated that job stress had a direct detrimental influence on work-life conflict. Wallace (2005) assessed the extent to which work demands interfered with home and family life, the extent to which family activities had to be changed to accommodate work, and the extent to which it was difficult to fulfil family responsibilities because of work demands. Wallace also investigated the extent to which strain from work made it difficult to fulfil family duties, and the extent to which demands of the job made it
difficult to do things participants want to do at home. Wallace reported that job stress had direct harmful influences on work-life conflict amongst lawyers.

Specifically, these results of the current study were consistent with O'Laughlin and Bischoff's (2005) study, which demonstrated that work-life conflict among academics was primarily predicted by job stress (over and above average work hours, household responsibility, young children, satisfaction with day care and support of partner). It appears that academics experience the influence of job stress on work-issues in the same way as that of other occupations.

The results of the study were partially consistent with previous empirical studies conducted by Mitroff and Denton’s (1999b) and Astin and Astin’s (1999) which evidenced a link between spirituality at work and both work-life balance and work-life conflict. The results were only partially consistent because Mitroff and Denton’s (1999b) and Astin and Astin’s (1999) studies did not use the same methods or measures of spirituality at work or measure work-life balance specifically, such as the current study did. Therefore, the results cannot be entirely compared. For example, Mitroff and Denton used qualitative methods, such as asking participants what gave them the most meaning and purpose in their jobs. Participants responded that having good colleagues as well as serving human kind was the fifth most important factor. This suggests that by fostering work-unit spirituality in the workplace, organisations in turn could also be helping employees balance their personal and work needs. As discussed in Section 1.3 (p.14), positive spillover (or facilitation) is where participation in work, home and personal life contribute beneficially to each other (Balmforth & Gardner 2006; Hanson et al. 2006). Therefore, it could be argued that having a sense of community and joint purpose within employee work-units helps to foster balance between the personal and work-life of employees (Ashmos & Duchon 2000; Balmforth & Gardner 2006; Milliman et al. 2003). The results of the current study differ from Mitroff and Denton’s as in the present study, not all aspects (e.g., individual and organisation-wide) of spirituality at work influenced work-life balance. This was attributed to the strong relationship between job stress and work-life balance and work-life conflict.
In addition the moderation results were also partially consistent with Astin and Astin (1999) who interviewed academic staff about their expressions of spirituality and finding meaning in their work and work-life issues. Their results varied from the current study in that academics saw their research and teaching as a means of expressing their spirituality or finding meaning in life. Astin and Astin found that academics were trying to find ways to make their lives and workplaces more complete. Astin and Astin’s findings are consistent with the current study in that sense of community, or work-unit level spirituality at work, influenced work-life balance. In contrast to the current study though, meaning and purpose (individual level of spirituality at work) did not influence work-life balance. The differences in the findings could be attributed to the fact that Astin and Astin did not measure work-life balance or spirituality at work quantitatively as the current study did.

The results of the moderation analyses were partially consistent with non-empirical studies conducted by Briggs (1996), Burack (1999), Laabs (1995) and Marques (2005). These studies demonstrated through concept discussion and case studies that incorporating spirituality into the workplace involved giving employees flexibility to balance work-life issues and tailor work around their own individual needs, as well as encouraging employees to become their complete selves at work. The results were consistent with Sullivan and Mainiero (2008) who argued that authenticity (spirituality) was important in determining employees’ work-life balance.

To the current researcher’s knowledge, no previous research has investigated whether spirituality at work moderates the influence of job stress on work-life balance and work-life conflict. Therefore, the results of the work-life balance and work-life conflict moderation analyses in the current study are difficult to compare with past literature involving moderation models.

The results from this study indicate that work-life balance practices are equally important for male and female Australian academics, which adds to the growing evidence suggesting work-life balance is applicable to both men and women. The findings were consistent with more recent studies which reported no significant gender differences among academics’ work-life balance (e.g., Tytherleigh 2007). These results
were, however, inconsistent with previous studies reporting higher levels of work-life conflict in women than men among a variety of samples (Hill 2005; Rothbard 2001).

There are currently more women entering the workforce and higher education than in the past, and therefore they are delaying starting a family longer than previous generations (Miller & Hollenshead 2005). However, Miller and Hollenshead (2005) claim that family concerns in academia are no longer limited to women. For both male and female academics, conflict occurs between work demands and a variety of personal life demands, including child care, caring for the elderly and health issues (Miller & Hollenshead 2005).

Alternatively, it could be reasoned that female academics experienced more work-life conflict but were better at coping with it than their male colleagues. For example, Doyle and Hind (1998) demonstrated that women academics perceived the structure and content of their jobs similarly to men, experienced higher levels of job stress than men, but coped better with work demands than their male counterparts. Therefore, it is likely that identifying gender differences in work-life balance and conflict issues is dependant on how the concepts are defined and measured.

The results were consistent with previous findings that reported equal levels of work-life balance for males and females among a variety of different occupations (Balmforth & Gardner 2006; Brough et al. 2005; Hill et al. 2001; Hill et al. 1998). For example, Balmforth and Gardner (2006) sampled all employees within a human resource consultancy organisation. Brough et al. (2005) recruited different levels of employees from a variety of large organisations, and different industries. Hill et al. (2001) also surveyed employees from a large international business and Hill (1998) studied employees from marketing and service sectors of IBM. These studies reported no gender differences in work-life issues amongst several different non-academic samples.

With the exception of Burke et al.’s (2003) study, the previous work-life balance and conflict literature discussed were conducted in the United States of America. Therefore, it is possible that cultural differences contributed to the lack of evidence supporting a relationship between spirituality at work and work-life balance and conflict. However, as explained earlier, both Australian and American cultures are similar in terms of
individualistic cultures and similar management practices (Hofstede 1980; Westwood & Posner 1997). Therefore, it is unlikely that the results of the current study can be attributed solely to cultural differences. As with spirituality at work and health, it is likely that the influence of spirituality at work on work-life issues is more important in Australian corporate businesses, rather than in higher education. The following section will discuss the implications of the current research.

6.3 Implications of the Study

The current study aimed to address gaps in the existing spirituality at work literature, particularly in the lack of spirituality at work research on Australian academic teaching staff samples. The study improved on many previous studies, which extrapolated definitions and measures of individual spirituality to the workplace. Instead this research used an existing spirituality at work measure, which has been previously reported to demonstrate good reliability and validity. It also went further than conceptual discussion of spirituality at work, to empirical testing of spirituality at work’s influences on HRM issues. Instead of investigating the relationship between individual spirituality, life stress and well-being, the present study investigated spirituality at work’s influence on well-being, ill-being, work-life balance, work-life conflict and job stress (threat and pressure) specifically. Multidimensional measures of these variables were used to understand better the complex nature of spirituality at work and its potential positive and negative influences on employee and organisational outcomes.

The present study contributed to the current literature, as, to the researcher’s knowledge, spirituality at work’s influences on the employee outcomes of ill-being, well-being, work-life balance, work-life conflict and job stress had not been investigated. This research also builds on the sparse existing literature investigating spirituality amongst Australian academics; spirituality and job stress; and the effects of spirituality on work-life issues. Moderation effects of spirituality on job stress, health and work-life practices had not been investigated in a workplace-specific context. This research also adds to the existing spirituality at work literature, because it made use of empirical methods and investigated whether an existing spiritual appraisal model, linking stress
and well-being, could be applied to a work context. Most importantly, this research is among the pioneering studies to investigate moderation effects of spirituality at work on job stress, health and work-life issues in an Australian academic setting. The implications of the results will be discussed in terms of both practical use in management and theoretical application.

6.3.1 Implications for HR Managers and Academic Staff

Generally, the results implied that spirituality at work (at the individual, work-unit and organisation-wide levels) does not thus far directly predict higher well-being or lower ill-being amongst Australian academics. Spirituality at work also does not yet moderate the influence of job stress on well-being or ill-being, amongst Australian academic staff. In situations where job threat stress is ongoing, spiritual appraisal of work stressors seems to be ineffective. Also, in environments where job pressure stress is very high, the ability of spirituality to moderate the influence of job stress on health is overridden. This suggests that well-being and ill-being of academics are predominantly influenced by job stress. In other words, achieving meaningful work, a sense of community among colleagues and experiencing alignment between employees’ own values and that of their organisation, does not yet foster academics’ well-being or reduce their ill-being directly, or via buffering effects of job stress.

Job threat stress has a direct detrimental influence on academics’ well-being and ill-being, while job pressure stress does not directly influence either well-being or ill-being. Age also has a direct damaging impact on ill-being, however, job threat stress is more important in predicting ill-being than age. This implies that older academics tend to experience more symptoms of ill-being than younger academics, but levels of job threat stress should be considered as a more important risk factor than age in reducing symptoms of ill-being. Interestingly, job pressure stress does not appear to influence well-being or ill-being. This may imply that job pressure stress does not influence well-being or ill-being at all, or that job pressure stress may be only influential of well-being and ill-being in particular circumstances. Perhaps in the presence of high temporary job pressure stressors (caused by organisational restructure, or other significant change) and
ongoing job threat stressors, job threat stress will influence well-being and ill-being, but job pressure stress may not.

Thus, universities should contemplate incorporating a stress management (job threat focus) component into HRM programs promoting well-being, and interventions aimed at combating ill-being. As discussed in Section 1.2 job threat stress relates to anxiety or overwhelming feelings of job stress, while pressure represented time and demand aspects of job stress (Stanton et al. 2001). Therefore, person-centred stress management techniques could be considered in order to promote well-being and combat ill-being. Examples are employee relaxation, exercise, good eating habits and counselling (Aderman & Tecklenburg 1983; Bruning & Frew 1985; Palmer & Dryden 1994; Richardson & Rothstein 2008; Stone 2008). Age-related interventions should also be considered in combating symptoms of ill-being among older academics. For example, Dale (2004) recommends that occupational therapists should classify deskbound work as physically demanding and potentially risky for the development of musculoskeletal disorders among older academics, and occupational therapists should focus on modifying the physical environment of older employees. Also, interventions aimed at promoting moderate levels of physical activity among older adults could be recommended in order to improve mental health (Mummery, Schofield & Caperchione 2004).

It is important that universities emphasise the importance of employees utilising stress management programs because higher levels of stress can lead to low productivity, increased absenteeism and turnover, as well as individual employee problems, such as alcohol and drug abuse, and health problems (Mostert et al. 2008). Job stress has been widely linked with adverse effects on employee psychological and physical well-being, such as high blood pressure, migraine, recurrent virus infections and stomach ulcers (see Kinman & Jones 2003), as well as being related to burnout, job dissatisfaction, lack of organisational commitment, lower productivity and increased turnover (see Blix et al. 1994; Elfering et al. 2005; Goddard et al. 2006; Jamal 2005; Noblet et al. 2005).

Even though many universities already have Employee Assistance Programs (EAPs) in place (e.g., Monash University 2009; Swinburne University of Technology 2009), HR managers may also need to be educated on the benefits of these interventions so that
they can implement and encourage more employees to make use of them. Even if these interventions are available and recommended, academics may still not be making use of them. EAPs provide counselling to employees and their immediate families free of cost, but are often voluntary and require the employee to seek help. Some universities offer a supervisor assist program as part of EAPs, in which staff can seek assistance in helping or referring another employee (Monash University 2009). The programs offer assistance in areas such as career issues, depression, grief, gambling problems, family and other relationship problems, emotional stress, drug problems, interpersonal conflict and financial problems (Monash University 2009; Swinburne University of Technology 2009). However, supervisor assist programs also require an employee to take action and ask for help, as an employee can decline counselling if a supervisor or manager refers them.

Blake and Lloyd (2008) suggest that effective implementation of well-being interventions requires an organisational culture which promotes good health. Blake and Lloyd argue that this can be achieved through a combination of education, behaviour change interventions, and services and strategies for developing healthy work environments. They also recommend high-level managerial support for well-being programs, and allowing employees time to adopt and maintain healthy behaviours.

In addition to well-being interventions, the results have implications for work-life issues. Work-life balance and work-life conflict were found to be experienced equally by academic men and women. This highlights the importance of HRM programs for both male and female academics, particularly work-life balance and work-life conflict issues, which were seen previously as mainly women’s issues (Hill et al. 2001).

In contrast to the well-being and ill-being analyses, the results imply that both job threat stress and job pressure stress directly predict work-life balance and work-life conflict amongst academic staff. The results could imply that job pressure stress influences academics’ work-life conflict and work-life balance, but not their health. In addition, it seems that feelings of anxiety and being internally threatened by work (job threat stress), more strongly influenced academics’ work-life balance and work-life conflict than did time and pressure demands (job pressure stress). Therefore, restructures and other significant changes in the work environment causing high pressure and anxiety
could create imbalance or conflict between the work-life domains. It appears that academics experience the influence of job stress on work-issues in the same way as that of other occupations, such as full-time employees in the tourism industry (see Wallace 2005) lawyers (see Wong & Lin 2007), psychologists (Burke et al. 2003) and variety of samples (see Greenhaus & Beutell 1985).

As both job threat and pressure stress predicted work-life balance and work-life conflict, job-centred stress management interventions could be considered in addition to person-centred stress management interventions. Examples of job-centred stress management interventions include planning and time management skills, modifying the experience of stressors, stress audits and changing employees work environment (Bond & Bunce 2000; Bruning & Frew 1985; Gallos 2006; Palmer & Dryden 1994; Richardson & Rothstein 2008; Stone 2008). Job threat stress interventions can be combated with person-centred interventions discussed earlier in this section.

Another important implication of the current study is that spirituality at work at the work-unit level is able to predict higher work-life balance of Australian academics, but to a lesser extent than does job stress. Except for the influence of work-unit spirituality on work-life balance, it appears that job threat stress and job pressure stress are so strongly linked with work-life issues, that any positive influence spirituality at work may have on work-life balance or conflict, is overridden by job pressure and job threat stress. In work environments experiencing significant changes which lead to work-related anxiety or taking extra work home, having a sense of community might well be seen as relevant in dealing with work-life balance.

But, spirituality at work also does not seem to moderate the influence of job stress on either work-life balance or work-life conflict. In work environments where job threat stress is ongoing, spiritual appraisal (even at the work-unit level) may be seen as ineffective in buffering the influence of stress on work-life balance. In work environments where job pressure stress is very high, spiritual appraisal probably becomes irrelevant in buffering stress’s influence on work-life balance and work-life conflict. This is most likely because work-related anxiety and demand issues take precedence over the use of more spiritual needs. Due to the rational nature of
academics, cognitive appraisal would likely appeal to academics, more so than spiritual appraisal.

In addition to well-being interventions, universities could consider incorporating both stress management and work-unit spirituality components into HRM work-life conflict interventions and work-life balance workshops. Although academics are generally provided with flexible work schedules or other work-life balance initiatives, one outcome of these interventions is that work is often completed at home or out of work hours time (O'Laughlin & Bischoff 2005). Modern work-life balance programs, such as increased use of technology, working from home and onsite gyms, have been argued to make it easier for employees not to leave work, rather than creating work-life balance and minimising work-life conflict (Hill et al. 1998; Pfeffer 2003). Stress management programs perhaps need to be aimed at separating work and personal life, as well as incorporating more community engagement into the workplace.

Examples of organisational perspectives used to develop a sense of community and shared vision among work-units are organisational citizenship behaviour (Guillermo 2008), shared leadership, changing corporate culture (Gallos 2006), perceived organisational support (Fallon & Richardson 2003) and team building (Mealiea & Baltazar 2005). Spirituality can also be incorporated into the workplace by implementing mentoring and career development programs. Sullivan and Mainiero (2008) suggested providing paid leave to pursue community service activities, implementing wellness programs which focus on the whole person and offering workshops on spirituality and finding a higher purpose at work.

The Institute for Management Excellence (2008) suggested implementing spirituality in the workplace by fostering seven principles: creativity, communication, respect, vision, partnership, energy and flexibility. Collective reward structures also may be useful to develop sense of community at work. Pfeffer (2003) argues that collective reward structures decrease competition between individual employees as well as increasing knowledge sharing and promoting helping others. Self-managed teams also help to build employee spirituality at work by providing group-based autonomous decision making and empowerment (Sexton 1994). Self-managed teams do this by fostering a
sense of community and connection to others, creating joint values, positive self-images, feelings of self-worth and a sense of belongingness (Pfeffer 2003).

These results imply, and support previous perspectives, that universities may be in need of spiritual HRM practices, but are slow in accepting them. Churchman (2006) found that academics often felt isolated at work, which contrasted with their expectations and desires of a community life. Ballantyne et al. (1999) suggests that many academics would like support from colleagues, but in reality there is little teamwork or sense of collegiality. Ballantyne and colleagues attributed this to increasing organisational performance pressures, such as research and accountability, which were often rewarded rather than teamwork or high quality teaching (which gave academics the most meaning and purpose in their jobs).

On average, high levels of individual spirituality at work were found among academics in this sample, yet individual spirituality at work did not influence well-being, job stress or work-life conflict. Spirituality may not yet have the potential to positively influence academics and universities over and above job stress management (in terms of well-being, ill-being, work-life conflict and work-life balance), even if spirituality amongst academics is high. It does not appear that universities currently utilise non-religious spiritual practices for competitive advantage like corporate businesses have started. For example, most universities have a resident chaplain on campus to provide religious-based spiritual counselling (e.g., Deakin University 2009) to staff and students, but universities do not currently promote spirituality at the individual, work-unit and organisation-wide level as part HR interventions or organisational culture.

This may change in time as universities enter the profit-making market (Churchman 2006), and like other businesses across the globe, move into the new spirituality paradigm (Ashmos & Duchon 2000). Spiritual HRM practices currently may be more important in Australian corporate businesses. Corner (2009) claims that spirituality at work is seen as a critical resource for business in the 21st century by academics and practitioners in terms of business ethics and sense of community and interconnectedness. In spite of this, universities are not yet currently associated with spirituality (Astin & Astin 1999). In order to add value to well-being and work-life
balance HR interventions, universities should consider including spirituality at work as part of their organisational culture and interventions.

One role of the HR manager is to promote employee well-being and work-life balance, therefore the results of this study may also be important for businesses other than universities. However, HRM programs or interventions aimed at improving work-life balance and well-being should not be implemented purely to effect the bottom line, or as a short-term fad (Dehler & Welsh 2003; Marques 2005). Organisations should develop spiritual, healthy and flexible cultures in order to become socially responsible, meaningful, community orientated, authentic and employee focussed (Milliman et al. 2003; Mitroff & Denton 1999b). Harrington et al. (2002) predicted that incorporating spirituality into HRM practices would become an important part of every type of organisation in the future, big and small. However, Mitroff and Denton (1999a) suggested that a very important challenge for management in the next millennium would be incorporating employees’ spiritual needs into the workplace and HRM practices.

6.3.2 Theoretical Implications

The results imply that Gall et al.’s (2005) spiritual appraisal model may need to be applied to the academic work environment differently to that of non-work or non-academic work environments. The ever-increasing pressures and anxieties of academic life seem to override the outcome of spiritual appraisal of work stressors, even though previous literature argues a need for spirituality in the workplace. Nevertheless, incorporating spirituality at work models, such as Ashmos and Duchon’s (2000), into contemporary management theories of work-life balance, could have potential value to universities and businesses of the future. Researchers often pointed out the lack of development in theoretical understanding of how spirituality can be applied to work (Butts 1999; Cunha et al. 2006; Giacalone & Jurkiewicz 2003b). Therefore, it is important that researchers continue to empirically assess and refine these models.

It is possible that the new spirituality paradigm will take more of a hold on academia when university teaching staff are predominately from Generation X (born between 1965 and 1980) and Y (born between 1980 and 2000), instead of the ‘Baby-Boomer’
generation (born between 1945 and 1964). Due to the more traditional background of older academics, there might be an issue with academic interpretations of spirituality versus religion. Previous research evidenced that spirituality moderated the effects of stress on health predominantly in young student samples. As discussed in Section 2.1 (p.17), Patterson (2007) claimed that Generation Y were more interested in spirituality, but less likely to be involved in mainstream religions than were ‘Baby-Boomers’. Cleveland and Lynem (2005) also argued that Generation X and Y are more likely to embrace diversity, technology, informality, spirituality and seek work-life balance than the ‘Baby-Boomer’ generation. The average age of Australian academic teaching staff (48 years), is closer to retirement age (65 years), when compared to the average age (39 years) of employed Australians from the general population (Australian Government 2008). In time, when the older ‘Baby-Boomer’ generation of academics retire, the academic staff community will consist of predominantly younger Generation X and Y employees. Thus, spirituality at work could have more of an impact in universities as well as corporate businesses in the future, but this is yet to be tested empirically.

Even though academics reported average scores ranging from medium to high on the three levels of Milliman et al.’s (2003) version of Ashmos and Duchon’s (2000) spirituality at work measure, the results suggest that Ashmos and Duchon’s model of spirituality at work may not yet be relevant to academic teaching staff. As spirituality at work did not directly influence job stress, health or work-life conflict amongst academics, this implies that Ashmos and Duchon’s spirituality at work model may have more importance in relation to other employee or organisational outcome variables. Alternatively, as previously discussed, the spirituality at work model may be more important to academic’s job stress, health and work-life conflict in the future.

The results of the study indicate that Maslow’s (1943, 1954, 1968) theory can be applied to the realm of academia in terms of dealing with job stress. Academics may tend to focus on lower-order needs, such as keeping up with increasing work pressures and work-related anxieties, rather than being able to seek achievement of higher-order needs, for instance, seeking socially responsible, meaningful and purposeful projects. In terms of dealing with work-life issues, academics are also likely forced to seek achievement of lower-order needs, such as working enough hours to pay for living expenses, but not so many that their personal lives suffer, rather than seeking to achieve
higher more spiritual needs. However, there was evidence to suggest that academics also seek to achieve the higher-order need of social support from colleagues, in order to aid work-life balance, but to a lesser extent than lower-order needs.

Also implied by this current study is that Lazarus and Folkman’s original (1984) transactional model of stress and coping can be utilised in university HRM practice. Academics appear to utilise cognitive (not spiritual) appraisal of stressful situations, which has various impacts on their health. Academics seemed to be able to cope with short-term job pressure stressors, probably through cognitive (not spiritual) appraisals of the stressors and of their abilities and resources. Yet academics are exhibiting difficulties in coping with long-term job threat stressors, which influence their health detrimentally.

These results also indicated that Zedeck’s (1992) spillover theory can be applied to Australian academics in terms of positive and negative work-to-personal life spillover. Academic’s experiences of job threat stress and job pressure stress seem to flow into their personal lives in a detrimental manner. Job stress directly influences academics’ ability to balance their personal and work lives, and directly leads to increased conflict between their work and personal lives. In addition, the sense of community aspect of academics’ work lives aided the balance between their personal and work lives. Based on previous discussion the following section will outline the limitations of the current study.

6.4 Limitations

There are some limitations of the study that should be noted in order to guide future researchers. The previously used term ‘spirituality’ has often been associated with religion (Astin & Astin 1999) and as such, might have limited the reliability of participants responses, particularly if academics interpreted ‘spirituality at work’ as ‘religion’. It is important to clearly distinguish between religion and spirituality, as the outcome and implications of studies investigating the influence of spirituality and/or religion will vary depending on what definition of spirituality is used and its interpretations (Elam 2000; Hebert et al. 2006; Sink 1999; Wills 2009).
As spirituality was claimed to be a subjective concept, the use of only quantitative data collection methods and analysis could have limited the depth and quality in results of the study. As job stress, well-being, ill-being, work-life conflict and work-life balance were also all measured with quantitative methods, this could also have limited the results. For example, qualitative methods have the advantage over quantitative methods of collecting more rich sources of information (MacDonald & Friedman 2002). The quantitative method was chosen to test empirically spirituality at work, which was rarely utilised in previous research (Milliman et al. 2003). Self-report measures were used for all the variables, which can create biases in the data (Dyer 2006). Participants may answer with false information on purpose in order to appear socially desirable, or to distort purposefully the data from reality (Murphy & Davidshofer 2001). Participants may also respond randomly because they are unmotivated to complete the questionnaire or uncomprehending of the survey items (Murphy & Davidshofer 2001).

The work-life balance and work-life conflict measures used in this current study were reasonably simple in nature. These previously tested work-life measures were not designed specifically to assess spillover between life domains, and the variables used did not allow testing of different directions of work-life balance and conflict. These direction-specific spillover variables and measures might have better indicated influences of spirituality at work and job stress on both work-life balance and work-life conflict. These measures were not utilised in the current study because they were deemed to be too complex or demonstrated lower reliability than did Hill et al.’s (2001) and O’Neil et al.’s (1986) measures. Considering the lack of previous research on the area of work-life issues and spirituality, it was decided that a simple measure of work-life balance and work-life conflict (with previously demonstrated good reliability) would be used to explore whether the variables showed relationships with spirituality at work initially. Perhaps altering one, or a combination, of these measures would have confirmed influences of spirituality on work-life balance or work-life conflict in a particular direction, such as life-to-work facilitation rather than work-to-life facilitation.

Another limitation of the study was the inability to test thoroughly the causal relationships between spirituality at work and both work-life balance and work-life conflict; and between spirituality at work and both well-being and ill-being, due to a
small sample size. The statistical method utilised did not allow for specific causal relationships between variables to be tested, or several sets of relationships to be tested simultaneously (as is found in the real world).

In terms of studying demographic differences, the group sample sizes also limited the results of this study. In particular, differences of highest academic teaching level and faculty were very limited by sample size. For these, no significance tests were performed due to having fewer than two cases in each category, therefore limiting the ability to generalise those particular results. Specifically, most participants were female (more than three quarters) which may have influenced these results by not providing a representative sample of the general population. Samples with equal number of males and females should also be considered, in order to more thoroughly test gender differences in work-life issues specifically.

The measure of well-being and ill-being used may have limited the study. In order to preserve reliability of the measures, total well-being and ill-being measures were used in the analyses rather than individual subscale scores (social, somatic, emotional, cognitive and sexual well-being, and depression, anxiety and somatic ill-being). If any direct effects or moderation effects involving these aspects of well-being and ill-being were present, they may not have been evident due to the use of total well-being and ill-being scores.

It should also be noted that the sample used in this study was specifically Australian academic teaching staff, therefore caution should be taken when generalising the results of this study to other occupations and countries. In addition, the sample used in this particular study consisted predominantly of academics belonging to a single university that was undergoing restructuring and significant change at the time of data collection. The generalisation of the findings may be limited as participants were surveyed at a single point in time. This could have limited the results of the study in that participants were undergoing unusual circumstances at the time of data collection.

The results were also limited by the variables investigated. For example, spirituality at work may be more important for other university academic outcomes, such as social responsibility, community engagement, job satisfaction and student satisfaction. In
addition, organisational outcomes, such as productivity, absenteeism and turnover, are other variables that may be influenced by spirituality at work. Based on these limitations, suggestions for future research will be made in the following section.

6.5 Suggestions for Future Research

The previous research evidencing a link between job stress and health, and Lazarus and Folkman’s (1984) original transactional model of stress were substantiated by the results of the current study. However, the research evidencing direct and moderation effects of spirituality at work on health, and Gall et al.’s (2005) theory of spiritual appraisal were not supported by this current study. Past literature indicating direct and moderation effects of spirituality at work on health, and work-life issues, Zedeck’s (1992) spillover theory and transformational leadership were partially supported by the results of the current study. The inconsistencies between previous research and theory and the results of the current study could be attributed to the measures and methods utilised; respondents sampled; and work-environment investigated. Based on the findings and limitations of this study, suggestions for future research will be made.

Perhaps future research should endeavour to rename ‘spirituality at work’ as something that will not be confused with religion. Terms such as personal authenticity, mission in life, or sacredness of life (Astin & Astin 1999), the transcendent, complete soul and interconnectedness (Hebert et al. 2006; Mitroff & Denton 1999b) as expressed through work, may better explain what is meant by the term spirituality at work.

A multi-method approach that combines qualitative and quantitative methods could be considered in future studies, to avoid methodological biases (Dyer 2006). Self-report methods should be maintained because spirituality is a highly personal construct and more difficult to observe (see Inayatullah 2006; Mitroff & Denton 1999a; Sink 1999). Yet, the use of behavioural observations, focus groups or interviews, in addition to self-report methods might be more useful in gaining a less biased perspective (Murphy & Davidshofer 2001). Using different methods (qualitative and quantitative) will give the
researcher comparable and complementary information about the participants’ spirituality at work (Murphy & Davidshofer 2001).

In addition to utilising appropriate variables that enable the study of spillover from both personal-to-work life and work-to-personal life directions, specific positive and negative spillover instruments could be considered for future research to investigate the positive and negative influences of job stress and spirituality at work on work-life issues in more depth. For example, the Work-family and Family-work Facilitation and Conflict Scale (Wayne et al. 2004) measures four aspects of work-life balance and conflict: work-to-family facilitation, work-to-family conflict, family-to-work facilitation and family-to-work conflict. Using this type of measure may give researchers more information about whether specific aspects of spirituality at work have influence on work-life balance or conflict in different directions. Hanson’s (2006) Multidimensional Scale of perceived Work–Family Positive Spillover could also be considered in order to measure particular types of work-family positive spillover, such as behaviour-based positive spillover, value-based positive spillover, and affective (mood or emotion based) positive spillover.

Furthermore, instead of measuring total well-being and ill-being scores, future research should consider measuring aspects of well-being and ill-being. This will help identify if any direct or moderating influences of spirituality at work on aspects of well-being and ill-being exist, rather than on total well-being or ill-being. High-level stressors (e.g., heavy work loads) have been found to be linked to physical symptoms of ill-being (Spector 2002). Therefore, measuring different types of job stress in future research might also provide different results to that of the current study.

Future studies (that have adequate sample size) could also consider utilising structural equation modelling in order to determine the causal association between spirituality at work, work-life balance, job stress and well-being (Tabachnick & Fidell 2007). Structural equation modelling could also be used better to test the theories used in the study and investigate different models and relationships simultaneously. Astin and Astin (1999) argued that the most common perceived obstacle to spiritual development in these academics was time pressures. Therefore, it would be interesting to see whether spirituality at work is more of an outcome variable, rather than a predictor variable. Structural equation modelling could also help to understand better the
influences of spirituality at work on organisational variables. With appropriate sample size, invariance testing could also be used to assess whether the influences of spirituality at work on well-being and job stress varied between different types and sized universities (Cunningham 2008). Furthermore, equal numbers of males and females should be recruited in future research in order to investigate gender differences in work-life issues specifically.

Previous studies often measured life stress, rather than work-related stress, and individual spirituality, rather than work-place spirituality, which also could have affected the results. Therefore, moderation analyses could also be conducted using individual spirituality (non-work context) to determine whether individual spirituality is more important than spirituality at work, in influencing job stress, health and work-life issues. The spirituality at work measure used in this study was chosen because it did not focus on the transcendent (personal) aspect of spirituality (Milliman et al. 2003). Examining spirituality at work’s influence on life stress instead of job stress, may also yield different results and help researchers understand the topic of spirituality in the workplace.

Spirituality at work’s influence on other academic outcomes (e.g., social responsibility, job satisfaction and student satisfaction) as well as organisational outcomes (e.g., productivity, absenteeism and turnover) should also be investigated. In the present study the lack of spirituality at work’s influence on well-being and work-life issues was not as expected. It may be that spirituality at work was not particularly important in influencing health and work-life issues, but spirituality may be vital in influencing other employee or organisational outcomes.

Future studies investigating demographic differences of academics specifically should be powerful enough to detect group differences in the population if they exist. It would be interesting to see whether demographic differences (such as highest academic teaching level, academic duties, number of years employed in an academic position), discipline, number of contact hours per week and type of university employed by, cause significant differences in academics’ spirituality, health and work-life issues.
The inconsistencies between previous findings and the results of the current study could well be attributed to the age of the respondents and other demographic variables, such as religious orientation, culture and age. It might be useful to conduct spirituality at work moderation analyses amongst student samples in order to determine whether spirituality at work is more able to influence job stress, health and work-life issues in younger academic samples. It is also important to perform these analyses amongst young non-student samples, to see if the lack of influence spirituality at work has on job stress, health and work-life issues can be attributed to higher academic institutions. As the area of study is exploratory in nature, further research needs to be conducted before potential moderation effects of spirituality at work on job stress and work-life issues and health can be discarded. Further research is necessary to determine whether the same relationships and results would occur in a wide range of academic samples (across disciplines), diverse occupations and different countries, as Wills (2009) argues that it is important to validate spirituality scales in different cultural contexts. This will also help to determine whether the spirituality at work measure used in the present study is cross-culturally generalisable.

It is most important to conduct research in universities during normal times of status quo, rather than in times of restructure and significant change, as job stress will be experienced differently. Perhaps under normal stressful circumstances, spirituality may directly influence health, but in extraordinary stressful circumstances, it may not. Further research could also investigate whether the inconsistencies between previous research and the current study findings can be attributed to the nature of the work or job characteristics (Hackman & Oldham 1975) and previous experience of individuals (Calicchia & Graham 2006).

Finally, it would be interesting to investigate whether the new spirituality paradigm will take hold of academia when university teaching staff is predominately from Generation X and Y. Research conducted in the future, when the ‘Baby-Boomer’ academics have retired, will verify whether this view is supported.
6.6 Conclusion

It is evident that globalisation influences corporate business and higher education cultures. All employees feel the implications of global change directly or indirectly. This study examined one outcome of global change, increased spirituality at work, and its influence on academic teaching staff. The results of the study indicated that work-unit spirituality had some beneficial influences on work-life balance. Yet, job stress had the strongest influence on academic teaching staff outcomes, specifically decreased well-being, increased ill-being, increased work-life conflict and decreased work-life balance. Therefore, job stress should be a large concern for human resource managers of organisations and universities alike.

Implementing spirituality at work into work-life balance interventions effectively involves a transformation in university culture, which will ultimately lead to employee benefits such as sense of community, collaboration and self-actualisation. Spirituality at work is an integral part of humans’ search for meaning and purpose in life, but needs to be recognised as such in higher education. The spirituality at work model presented provides a non-denominational framework and a new paradigm for theory, business and management practice. Incorporated into organisational culture, spirituality help can bring about an inner employee transformation. However, it is clear that spirituality at work and its influence on other employee outcomes need further investigation, as well as investigating spirituality at work in diverse samples. Despite the evident need for spirituality in universities, it seems that spirituality at work may be more important currently in corporate businesses, but may become more influential for academia in the future.

The study fulfilled its aims to address the deficiency in the existing spirituality at work literature and to test empirically the moderating effects of spirituality at work’s influence on (a) well-being and ill-being, and (b) work-life balance and work-life conflict. The results of the study were important as they added to the existing spirituality at work literature and went further than extrapolating individual spirituality to the workplace and conceptual discussion. Moderation influences of spirituality had not been previously investigated in a workplace-specific context. Therefore, the
moderation models investigated provided a stepping-stone for future research in the area of spirituality at work and employee outcomes, particularly in the area of academia. This study also investigated whether an existing spiritual appraisal model linking stress and well-being, could be applied to a work context. Even though the moderation models and spirituality appraisal model were not supported in this study, work-unit spirituality at work did show direct influences on work-life balance. This shows promise for future research investigating the positive influence of spirituality at work on other organisational outcomes.

The results suggested that universities and businesses should consider implementing stress management into well-being programs, and work-unit spirituality components into their work-life balance programs, particularly in terms of tackling ongoing job stress. However, in addition to providing wellness programs, it is recommended that in order for interventions to be effective, organisations require a change in culture that promotes health, flexibility and spirituality. It was cautioned that organisations should implement these HRM programs with a long-term employee focussed strategy rather than a short-term strategy focussed on improving the bottom line.
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CONSSENT INFORMATION STATEMENT

Project title: Spirituality in Australian universities: relationship with work-life balance, job stress and well-being amongst academic staff.

Investigator: Amanda S. Bell, Swinburne University of Technology, Faculty of Higher Education, Lilydale.

You are invited to participate in this research project. Please see below for a description of the study and how you may be a part of it.

What is the project about?
Spirituality at work is not about religion. It involves the individual search for ultimate purpose in life, building a strong connection with work colleagues and to have congruity between one’s core beliefs and the values of the organisation in which one works (Mitroff & Denton, 1999). Ashmos and Duchon (2000) suggest that spirituality exists on three levels of work, the individual, work unit and organisational levels. These are defined as having a meaningful job, a sense of community at work and having values that are aligned with the organisation in which the individual works. The internal expression of being, sense of place, interconnectedness and meaning seeking (Geroy, 2005) is encouraged in individual employees.

Why is the study being conducted and why are academic staff being approached?
This project is valuable because little research has been conducted in the area of Spirituality at work in Australia. Much research has been conducted overseas on university business students, corporate workplaces or hospital staff, not among academic staff. The findings of the current research will add to the existing Spirituality at work literature, especially in the area of the academic workplace. Positive and negative implications of Spirituality at work are worth identifying for the benefit of Human Resource Management programs, not only in universities, but perhaps other organisations.

Aims of the study
This project aims to explore Spirituality at work and its relationship with Well-being, Job stress and Work-life balance amongst Australian university academics. The study also aims to study academic level (ie tutor, lecturer, academic head) and academic duties (ie teaching, research) and their relationships with Spirituality at work, Job stress, Well-being and Work-life balance. The research findings will also explore the implications for Human Resource Managers in organisations and universities. Academics from all disciplines and universities will be invited to participate in the study.

Project interests
This research is being conducted by a student to fulfil the requirements of Master of Business (by research) degree under the supervision of Dr. Diana Rajendran and Dr. Steven Theiler from Swinburne University of Technology, Faculty of Higher Education, Lilydale.

What will participation involve?
The survey includes a series of questions about Spirituality at work, Work-life balance, Wellbeing, Job stress and demographic details. The survey is estimated to take 20 to 30 minutes to complete.

Free Consent and Withdrawal from Participation
If you decide to participate, please be aware that you can stop completing the survey anytime if you wish. If any stress is experienced during completion of the survey, Swinburne staff can contact the university counsellor (ph: 9215 7101) and staff from other universities can contact Life Line (ph: 13 11 14) for free counselling.

Privacy & Confidentiality
All data collected from the anonymous survey will be confidentially maintained and securely stored by the supervisor at the Faculty of Higher Education, Lilydale. Data collected for the purposes of the study will only be accessible to researchers involved and will be destroyed after a period of 5 years. Completing the survey and returning it (either online or in hard copy) implies that you have freely consented to participate.

Research output
In addition to presentation in a thesis, group data collected from the current research may be submitted as an article in a refereed journal / conference paper for publication. Group data may also be used for further research purposes. Participants may contact the investigator for a summary of results when the research is complete. You are reminded that participation is voluntary and anonymous.

For further information
Please do not hesitate to contact Amanda S. Bell

Contact Address:
Swinburne University of Technology
Faculty of Higher Education
Mail L100
Locked bag 218
Lilydale
Victoria, 3140

Tel No: 03 9215 7144
Email: ambell@swin.edu.au

Concerns or complaints
This project has been approved by or on behalf of Swinburne's Human Research Ethics Committee (SUHREC) in line with the National Statement on Ethical Conduct in Research Involving Humans. If you have any concerns or complaints about the conduct of this project, you can contact:

Research Ethics Officer, Office of Research & Graduate Studies (H68),
Swinburne University of Technology, P O Box 218, HAWTHORN VIC 3122.
Tel (03) 9214 5218 or +61 3 9214 5218 or resethics@swin.edu.au
Demographics
Please fill in the blanks and check boxes where appropriate.

1. Age __________ years

2. Gender □ Male □ Female

3. Marital status (Check one) □ Married
   □ De facto
   □ Single
   □ Widowed
   □ Separated

4. How many Children do you have? (Check one)
   0
   1
   2
   3 or more

5. Country of birth _____________________________

6. Highest academic teaching level (Check one)
   □ Tutor
   □ Lecturer
   □ Senior Lecturer
   □ Reader
   □ Associate Professor
   □ Professor
   □ Academic Head
   □ Other (Please specify) ____________________

7. Academic duties (Check one)
   □ Teaching only
   □ Research only
   □ Teaching and research
   □ Administrative
   □ Other (Please specify) _________________

8. Number of years employed in an academic position _____________________________

9. Discipline/ School/ Faculty __________________________________________________

10. Number of work contact hours per week _________________ (approximately)

11. Currently employed at an
    (Check one) □ Urban university
              □ Non-urban university

12. Currently employed at a
    (Check one) □ Private university
              □ Non-private university
Spirituality at work Scales

Please read each statement below and circle a number from 1 to 7 to indicate the extent to which you disagree or agree with the statement.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I experience joy in work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>2. My spirit is energised by work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>3. The work I do is connected to what I think is important in life</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>4. I look forward to coming to work</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>5. I see a connection between work and social good</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>6. I understand what gives my work personal meaning</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

The next set of questions asks you to reflect on the department or faculty of which you are part of. Please read each statement below and circle a number from 1 to 7 to indicate the extent to which you disagree or agree with the statement.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
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</thead>
<tbody>
<tr>
<td>7. Working cooperatively with others is valued</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>8. I feel part of a community</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>9. I believe people support each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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<tr>
<td>10. I feel free to express my opinions</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
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<tr>
<td>11. I think employees are linked with a common purpose</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
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</tr>
<tr>
<td>12. I believe employees genuinely care about each other</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<tr>
<td>13. I feel there is a sense of being a part of a family</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
</tbody>
</table>
The next set of questions asks you to reflect on the university campus of which your department or faculty is part of. Please read each statement below and circle a number from 1 to 7 to indicate the extent to which you disagree or agree with the statement.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
<th>2</th>
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<tbody>
<tr>
<td>14. I feel positive about the values of the organisation</td>
<td></td>
<td></td>
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<tr>
<td>15. This organisation is concerned about the poor</td>
<td></td>
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<tr>
<td>16. This organisation cares about all its employees</td>
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<td>17. This organisation has a conscience</td>
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<tr>
<td>18. I feel connected with the organisation’s goals</td>
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<tr>
<td>19. This organisation is concerned about the health of employees</td>
<td></td>
<td></td>
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<tr>
<td>20. I feel connected with the mission of the organisation</td>
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<tr>
<td>21. This organisation cares about whether my spirit is energised</td>
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**Work-life balance scale**

The following statements describe your ability to simultaneously juggle the demands of your personal and work lives. Please use the following scale to indicate your opinion next to each statement by circling the corresponding number.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1</th>
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<th>4</th>
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</thead>
<tbody>
<tr>
<td>1. It is easy for me to balance the demands of my work and my personal life</td>
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<tr>
<td>2. I have sufficient time away from my job to maintain adequate work and personal life balance</td>
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<tr>
<td>3. When I take a holiday I am able to separate myself from work and enjoy myself</td>
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</table>
4. All in all, I feel extremely successful in balancing my work and personal life

5. Often I feel drained when I go home from work because of work pressures and problems

**Conflict between work and family**

The following statements describe your ability to balance the demands of your personal and work lives. Please read each statement below and circle a number from 1 to 7 to indicate the extent to which you agree or disagree with the statement.

<table>
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</thead>
<tbody>
<tr>
<td>1. I feel torn between my hectic work schedule and caring for my family and friends</td>
<td></td>
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<tr>
<td>2. My career, or job affects the quality of my personal life</td>
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<td></td>
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<tr>
<td>3. Finding time to relax is difficult for me</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>4. My need to work keeps me from my family and friends more than I would like</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>5. My work often disrupts other parts of my life</td>
<td></td>
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<tr>
<td>6. Overwork, and stress, caused by a need to achieve on the job affects/hurts my life</td>
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</table>
Multidimensional Health States Scale
Listed below are various physical and mental states which people sometimes experience. Think about your own recent experiences and circle the number which indicates the extent of your experience of each health state in the past month.

<p>| 0 Not experienced | 1 | 2 | 3 | 4 | 5 Strongly experienced |
|-------------------|---|---|---|---|---|------------------------|
| 1. Friendly       | 0 | 1 | 2 | 3 | 4 | 5                      |
| 2. Sociable       | 0 | 1 | 2 | 3 | 4 | 5                      |
| 3. Cheerful       | 0 | 1 | 2 | 3 | 4 | 5                      |
| 4. Enthusiastic   | 0 | 1 | 2 | 3 | 4 | 5                      |
| 5. Agile          | 0 | 1 | 2 | 3 | 4 | 5                      |
| 6. Physically fit | 0 | 1 | 2 | 3 | 4 | 5                      |
| 7. Active         | 0 | 1 | 2 | 3 | 4 | 5                      |
| 8. Strong         | 0 | 1 | 2 | 3 | 4 | 5                      |
| 9. Calm           | 0 | 1 | 2 | 3 | 4 | 5                      |
| 10. Relaxed       | 0 | 1 | 2 | 3 | 4 | 5                      |
| 11. Content       | 0 | 1 | 2 | 3 | 4 | 5                      |
| 12. Satisfied     | 0 | 1 | 2 | 3 | 4 | 5                      |
| 13. Efficient     | 0 | 1 | 2 | 3 | 4 | 5                      |
| 14. Alert         | 0 | 1 | 2 | 3 | 4 | 5                      |
| 15. Competent     | 0 | 1 | 2 | 3 | 4 | 5                      |
| 16. Confident     | 0 | 1 | 2 | 3 | 4 | 5                      |
| 17. Capable       | 0 | 1 | 2 | 3 | 4 | 5                      |
| 18. Sensual       | 0 | 1 | 2 | 3 | 4 | 5                      |
| 19. Affectionate  | 0 | 1 | 2 | 3 | 4 | 5                      |
| 20. Attractive    | 0 | 1 | 2 | 3 | 4 | 5                      |
| 21. Miserable     | 0 | 1 | 2 | 3 | 4 | 5                      |
| 22. Gloomy        | 0 | 1 | 2 | 3 | 4 | 5                      |</p>
<table>
<thead>
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<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>23. Sad</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. Depressed</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>25. Trouble sleeping</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>26. Tense</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>27. Nervous</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>28. Worried</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>29. Uptight</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>30. Indecisive</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>31. Backache</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>32. Muscle pain</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>33. Headache</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>34. Indigestion</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>35. Abdominal pain</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tr>
</tbody>
</table>
The Stress in general scale

Do you find your job stressful? For each of the following words and/or phrases, please circle 3 for ‘yes’ if it describes your job, 0 for ‘no’ if it does not describe your job, or 1.5 for ‘Not sure’ if you cannot decide.

<table>
<thead>
<tr>
<th>No</th>
<th>Not sure</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1.5</td>
<td>3</td>
</tr>
</tbody>
</table>

1. Demanding 0 1.5 3
2. Pressured 0 1.5 3
3. Hectic 0 1.5 3
4. Calm 0 1.5 3
5. Relaxed 0 1.5 3
6. Many things stressful 0 1.5 3
7. Pushed 0 1.5 3
8. Irritating 0 1.5 3
9. Under control 0 1.5 3
10. Nerve-wracking 0 1.5 3
11. Hassled 0 1.5 3
12. Comfortable 0 1.5 3
13. More stressful than I’d like 0 1.5 3
14. Smooth running 0 1.5 3
15. Overwhelming 0 1.5 3

Thank-you for your time!
Appendix B - Ethics Approval

From: Keith Wilkins
To: Amanda Bell; Diana Rajendran
CC: Anne Cain; Barbara Kompe
Date: Thursday - November 15, 2007 12:27 PM
Subject: SUHREC Project 0708/076 Ethics Clearance

To: Dr Diana Rajendran/Ms Amanda Bell, FHEL

Dear Diana and Amanda,

SUHREC Project 0708/076 Spirituality in Australian universities: relationship with work balance, job stress and well-being amongst academic staff
Dr Diane Rajendran FHEL Ms Amanda Suzanne Bell
Approved Duration: 9/11/2007 To 30/03/2009

I refer to the ethical review of the above project carried out on behalf of Swinburne's Human Research Ethics Committee (SUHREC) by a SUHREC Subcommittee (SHESC3). Your responses to the review as emailed on 16 October and 1 November 2007 (with some modification to the project protocols) were considered by the Subcommittee. I also note your acceptance today of a separate suggestion on consent info statement text on privacy and anonymity/confidentiality.

I am pleased to advise that ethics clearance has been given for the project to proceed in line with standard on-going ethics clearance conditions here outline.

- All human research activity undertaken under Swinburne auspices must conform to Swinburne and external regulatory standards, including the current National Statement on Ethical Conduct in Research Involving Humans and with respect to secure data use, retention and disposal.

- The named Swinburne Chief Investigator/Supervisor remains responsible for any personnel appointed to or associated with the project being made aware of ethics clearance conditions, including research and consent procedures or instruments approved. Any change in chief investigator/supervisor requires timely notification and SUHREC endorsement.

- The above project has been approved as submitted for ethical review by or on behalf of SUHREC. Amendments to approved procedures or instruments ordinarily require prior ethical appraisal/clearance. SUHREC must be notified immediately or as soon as possible thereafter of (a) any serious or unexpected adverse effects on participants
and any redress measures; (b) proposed changes in protocols; and (c) unforeseen events which might affect continued ethical acceptability of the project.

- At a minimum, an annual report on the progress of the project is required as well as at the conclusion (or abandonment) of the project.

- A duly authorised external or internal audit of the project may be undertaken at any time.

Please contact me if you have any concerns or queries about on-going ethics clearance. The SUHREC project number should be cited in communication.

Best wishes for the project.

Yours sincerely

Keith Wilkins for
Secretary, SHESC3

******************************************************************************

Keith Wilkins
Research Ethics Officer
Swinburne Research (H68)
Swinburne University of Technology
P O Box 218
HAWTHORN VIC 3122
Tel: 9214 5218
### Appendix C - Detailed Participant Information

#### Gender

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