

**The role of locus of control in the
relationship between spiritual well-being
and satisfaction with life of those in early
middle adulthood**

Dawie Fivaz

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**THE ROLE OF LOCUS OF CONTROL IN THE
RELATIONSHIP BETWEEN SPIRITUAL WELL-BEING
AND SATISFACTION WITH LIFE OF THOSE IN
EARLY MIDDLE ADULTHOOD**

by

Dawie Fivaz

Submitted in fulfilment of the requirements for the degree

Masters of Social Science in Counselling Psychology

in the Faculty of Psychology

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University of the Free State

SUPERVISOR: Mr. Henry Taylor

CO-SUPERVISOR: Dr. Pravani Naidoo

15 APRIL 2020

Permission to submit

Reference: Mr HW Taylor
Psychology Building Room 204
University of the Free State
BLOEMFONTEIN
South Africa

Telephone: 051 401 9322

Email: taylorhw@ufs.ac.za

April 2020

PERMISSION TO SUBMIT

Student: Dawie Fivaz

Degree: Masters of Social Sciences (Counselling Psychology)

Department: Psychology

Title: The role of locus of control in the relationship between spiritual well-being and satisfaction with life of those in early middle adulthood

We hereby provide permission that this dissertation be submitted for examination – in partial fulfilment of the requirements for a Master's in Psychology, in the Department of Psychology, Faculty of the Humanities, at the University of the Free State.

We approve the submission for assessment and that the submitted work has not previously, either in part or in its entirety, been submitted to the examiners or moderators.

Kind regards,



Mr. HW Taylor
Supervisor



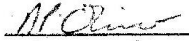
Dr P Naidoo
Co-Supervisor

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I herewith declare that I did the language editing of the script, **THE ROLE OF LOCUS OF CONTROL IN THE RELATIONSHIP BETWEEN SPIRITUAL WELL-BEING AND SATISFACTION WITH LIFE OF THOSE IN EARLY MIDDLE ADULTHOOD**, by Dawie Fivaz, in the Faculty of Psychology.



Dr. A P Olivier

PhD (Linguistics) UP

Language Practitioner, academic writing and plagiarism consultant

TELA Developers CC Registration Number: 2010/165991/23

UFS Vendor registration number TE092

E-mail: apolivier@mweb.co.za; alet.olivier@gmail.com

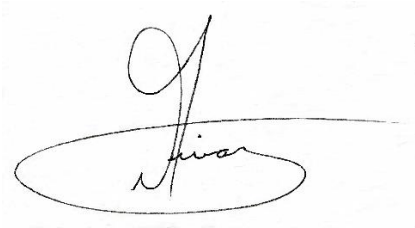
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Ethics Statement

The author, whose name appears on the title page of this thesis, has obtained, for the research described in this work, the applicable research approval. The author declares that he has observed the ethical requirements in terms of the University of the Free State's Code of ethics for researchers and the Policy guidelines for responsible research.

A handwritten signature in black ink, appearing to read 'Dawie Fivaz', is enclosed within a rectangular box. The signature is stylized with a large initial 'D' and a horizontal line extending across the middle.

Dawie Fivaz

Date: 09/04/2020

Declaration of Authenticity

I, Dawie Fivaz (student number 2012031015) declare that this thesis titled: **The role of locus of control in the relationship between spiritual well-being and satisfaction with life of those in early middle adulthood**, which I hereby submit for the degree (BC170118) Masters of Social Science in Counselling Psychology at the University of the Free State, is my own work and has not previously been submitted by me for a degree at this or any other tertiary institution.

A handwritten signature in black ink, appearing to read 'Dawie Fivaz', is written over a light blue rectangular background.

Dawie Fivaz

Signed on the 9th day of April 2020, Bloemfontein, South Africa.

Abstract

Middle adulthood is a pivotal phase in the life course of human development. Therefore, individuals in midlife need to function optimally, despite the challenges they are faced with for their own, their families', and the well-being of society at large. Spiritual well-being has been demonstrated to have positive outcomes for the satisfaction with life of individuals in midlife. Literature points to locus of control being an important contributor in the relationship between spiritual well-being and satisfaction with life during adulthood. However, this contribution has not been reported for individuals in early midlife. Therefore, the current study aims to assess the possible role of locus of control in the relationship between spiritual well-being and satisfaction with life amongst individuals in early midlife. Data were collected from 110 South African adults aged 39–42 ($M = 44.63$), mainly women (66.4%). A hierarchical regression analysis was conducted to assess whether locus of control mediates and or moderates the relationship between spiritual well-being and satisfaction with life among adults in early middle adulthood. The results revealed a moderator effect of locus of control on two spiritual well-being subscale scores (Transcendental- and Personal relationship) and satisfaction with life. Further investigation revealed that for the 25% participants with the highest external locus of control, a positive relationship at the 5% level ($r = 0.49$; $p = .013$) between personal relationship and life satisfaction was found. Therefore, an increase in personal relationships for those participants resulted in a significant increase in their satisfaction with life. Furthermore, for the 25% participants who had the highest internal locus of control, a negative relationship at the 5% ($r = -0.41$; $p = .037$) between transcendental relationship and life satisfaction was found. Thus, an increase in a transcendental relationship for those participants coincided with a significant decrease in their satisfaction with life. An interpretation of the results and their implications were discussed.

Keywords: satisfaction with life, spiritual well-being, locus of control, early middle adulthood.

Abstrak

Die middeljare is 'n baie belangrike fase in die lewensgang van menslike ontwikkeling. Gevolglik is dit nie slegs vir die individu se eie welstand noodsaaklik dat hulle optimaal funksioneer ten spyte van die uitdagings waarmee hulle gekonfronteer word nie, maar ook vir die welstand van hul families en die hele gemeenskap. Dit is bevind dat spirituele welstand positiewe uitkomst ten opsigte van lewenstevredenheid by middeljarige individue het. Literatuur in die verband toon dat lokus van beheer 'n belangrike bydraende faktor in die verhouding tussen spirituele welstand en lewenstevredenheid gedurende die middeljare is. Hierdie faktor is egter nie gerapporteer ten opsigte van individue in hul vroeë middeljare nie. Die doelstelling van hierdie studie is gevolglik om die moontlike rol van lokus van beheer in die verhouding tussen spirituele welstand en lewenstevredenheid van individue in hul vroeë middeljare te ondersoek. Data is ingesamel van 110 Suid-Afrikaanse volwassenes tussen die ouderdomme van 39–42 ($M = 44.63$), wat hoofsaaklik vroulik (66.4%) was. 'n Hiërargiese regressie-ontleding is onderneem om te ondersoek of lokus van beheer die verhouding tussen spirituele welstand en lewenstevredenheid van individue gedurende hul vroeë middeljare medieer en/of modereer. Die resultate het 'n moderator-effek blootgelê tussen lokus van beheer en twee spirituele subskaalteelings (Transendentale- and Persoonlike verhouding) en lewenstevredenheid. Nadere ondersoek het gevind dat vir 25% van die deelnemers met die hoogste eksterne lokus van beheer daar 'n positiewe verhouding teen 'n 5% vlak ($r = 0.49$; $p = .013$) tussen persoonlike verhouding en lewenstevredenheid bestaan. Gevolglik is bevind dat, die toename in 'n persoonlike verhouding van daardie deelnemers 'n betekenisvolle verhoging in lewenstevredenheid tot gevolg gehad het. Voorts is bevind dat vir die 25% deelnemers met die hoogste interne lokus van beheer daar 'n betekenisvolle negatiewe verhouding op 'n 5% vlak ($r = -0.41$; $p = .037$) tussen 'n transendentale verhouding en lewenstevredenheid bestaan. Derhalwe gaan 'n verhoging in transendentale verhouding vir daardie deelnemers gepaard met 'n betekenisvolle afname in lewenstevredenheid. Die studie bied 'n interpretasie van hierdie bevindinge en die gevolglike implikasies daarvan.

Sleutelwoorde: Lewenstevredenheid, lokus van beheer, spirituele welstand, vroeë middeljare.

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Introduction

Middle adulthood is a pivotal phase in the life course of human development for several reasons. This period of life coincides with critical crossroads of growth and declining pathways (Lachman, 2015; Lachman et al., 2015). Furthermore, the well-being of both young and old at home, in the workplace, and society at large often depends on the stability of those in their middle years (Lachman et al., 2015; Palk, 2015). This developmental stage spans over 25 years (40 to 65 years) and is associated with an “interest in establishing and guiding the next generation” (Erikson, 1959, p. 97). Consequently, individuals in midlife influence the well-being of generations to come (Blatný et al., 2019; Erikson, 1950; Malone et al., 2016). A focus on promoting the well-being of individuals in midlife can have far-reaching implications not only for the well-being of a particular individual but also for the community at large (Lachman et al., 2015).

There has been renewed interest in the study of middle-aged adults over the last decade in the field of psychology (Robinson & Lachman, 2017). However, adults in midlife are often omitted from research on adult development and aging (Lachman, 2015; Lachman & James 1997; McGinnis, 2018). One of the reasons cited is that researchers find it challenging to recruit this population group given their busy lifestyles where multiple jobs and family demands are juggled (Lachman, 2015; Lachman & James 1997; McGinnis, 2018). Lachman (2015) proposes that research on middle-aged adults will assist to further our understanding of this critical period in the life course of human development.

A universal human desire to be satisfied with one’s life and enjoy a high quality of life is commonly recognised and considered a major goal in life in almost every culture being studied. These cultures referred to include both individualistic/agentive and collectivistic/communal cultures (Abele, 2014; Diener et al., 2015; Veenhoven, 2012, 2018). Midlife is typically the phase when an amalgamation of physical and mental fitness, work and life-related knowledge, acquired skills, maturity, and experience are at their peak levels (Lachman, 2001; McGinnis, 2018). However,

middle adulthood is also associated with a plethora of obstacles such as managing chronic life issues, daily hassles, life transitions, life crises and role strains (McGinnis, 2018; Palk, 2015). Research indicates that most middle-aged adults cope capably with obstacles, even though previous negative experiences and current stressors can present significant challenges to their developmental processes (Baltes, 1987; McGinnis, 2018). Because of the centrality of this issue, much research since the end of the twentieth century has been devoted to understanding what constitutes being satisfied with one's life, and determining individual differences in well-being and happiness (Aguirre-Camacho & Moreno-Jiménez, 2018; Lachman, 2015; Palk, 2015).

Spiritual well-being is an important component in the global conceptualisation of well-being (Fisher, 2016; Gomez & Fisher, 2003). Although research on spiritual well-being has demonstrated positive outcomes for the physical and mental health of individuals in midlife (Mueller et al., 2001; Tagay et al., 2006; Zarzycka & Rydz, 2014) the psychological processes underlying these relationships are yet unclear (Jackson & Bergeman, 2011; Ryan & Francis, 2012). Spiritual well-being is often conceptualised in terms of four relationships (transcendental-, environmental-, personal- and communal relationships) which are discussed and investigated collectively by researchers (Fisher, 2016; Gomez & Fisher, 2005). However, the current study assesses the possible role of locus of control in the relationship between these four spiritual well-being relationships and satisfaction with life amongst individuals in early midlife. This study proposes the importance of assessing these individual spiritual well-being scores to explore possible pathways through which locus of control may contribute to the satisfaction with life of individuals in early midlife (40 to 50 years).

Locus of control has been found to significantly affect an individual's satisfaction with life (Anderson et al., 2018; Klonowicz, 2001; Kostka & Jachimowicz, 2010). Despite the increase in research on locus of control and physical and mental health outcomes, Robinson and Lachman (2017) advocate that in order to fully understand the processes at work and optimise control during midlife, researchers need to further explore the processes involved in well-being outcomes. An individual's locus of control is a learned, generalised belief regarding how much control an individual perceives to have over what happens to him or her in life (April et al., 2012; Krause, 2010; Rotter,

1966). Therefore, it represents the interpretation of past, present, and possible future experiences (Anderson et al., 2018; Wolinsky et al., 2009; Zhang et al., 2014). Likewise, midlife is characterised by a heightened awareness of the meaning of present and past challenges, and preparing for future uncertainty (McGinnis, 2018; Ryff & Singer, 2003). As such, midlife could create the opportunity to reappraise critical experiences in a way that is conducive to well-being (Ramsay et al., 2018; Vishkin et al., 2019).

Jackson and Bergeman (2011) conducted a longitudinal study in Australia intending to explore possible pathways that might lead to successful development across the adult lifespan. These researchers reported that the relationship between religious/spiritual coping and spiritual experiences and subjective well-being (including satisfaction with life) were partially mediated by an internal locus of control (Jackson & Bergeman, 2011). Similarly, Flori et al. (2006) found that religiosity (both objective and subjective) could improve or impede an individual's psychological health during adulthood depending on the individual's attributions or interpretations of past, present and possible future challenges. In line with this finding, Vishkin et al. (2019) and Ramsay et al. (2018) reported that religiosity, through cognitive reappraisal during adulthood, represents a constructive way to maintain greater life satisfaction, despite all the potential negative occurrences that could be encountered. According to Flori et al. (2006) and Jackson and Bergeman (2011) religiosity and/or spirituality do differentially impact life satisfaction through an individual's locus of control during adulthood. However, this effect was not found for individuals under the age of 50.

Literature points to locus of control being an important contributor in the relationship between spiritual well-being and satisfaction with life during adulthood. However, this contribution has not been reported for individuals in early midlife. Therefore, the current study aims to assess the possible role of locus of control in the relationship between spiritual well-being and satisfaction with life amongst individuals in early midlife.

The middle adulthood developmental phase

Middle adulthood generally refers to individuals between forty and sixty-five years of age (Lachman et al., 1994; Lachman, 2004; Lachman & James, 1997) which is in line with Erikson's (1959) view of the middle adulthood stage. The developmental task that is faced in midlife according to this model is generativity versus self-absorption or stagnation. Generativity is marked by a shift from a primary self-focus to an increased focus on ensuring the well-being of future generations (Erikson, 1959). Erikson's (1950, 1968) model of psychosocial development is frequently used as a foundational framework for understanding adult development across the lifespan (Palk, 2015).

Staudinger and Bluck (2001) suggested differentiating between younger midlife and late midlife for more accurate research and to harmonise alleged disparity in findings. Based on his research findings within the South African context among the middle-class, Palk (2015) suggested that when studying people in midlife, the individuals studied should be divided into two clear age categories – younger or early midlife (40-50) and older or late midlife (50-65). Jackson and Bergeman (2011) for example found that the effects of religious/spiritual coping and spiritual experiences on subjective wellbeing were partially mediated by personal control in late midlife (50-59) but not in the early midlife group (31-49). Similarly, Flori et al. (2006) found that religiosity significantly predicted internal control for older adults but not for young adults. Therefore, in line with the afore-mentioned, the focus of the current study will be on individuals in early midlife from the middle-class in South Africa. This focus will ensure more accurate research and hopefully shed light on differences in research findings related to spirituality/religiosity and well-being outcomes during adulthood (Kim-Prieto & Miller, 2018), which is the research focus of this study.

An ongoing debate exists among authors as some describing midlife as a time of "crisis" (Brim et al., 2004; Lachman, 2001; Wethington, 2000) and other's as a time of hardly any psychological change (Baird et al., 2010; Kunzmann et al., 2000; McGinnis, 2018). The common understanding of midlife, however, has now been understood to be a time of good health, peak cognitive functioning, stable

relationships, many responsibilities, and high satisfaction for most people (Finke et al., 2005; Lachman et al., 2015; Lachman, 2015). Middle adulthood is characterised by variability, plasticity, and multidirectionality in the direction and nature of change in cognitive functioning, physical health, and well-being (Lachman et al., 2015; McGinnis, 2018; Ryff & Singer, 2003). No single theory offers an all-encompassing explanation of adult development (Phillipson, 2013). Therefore, instead of using a single theory to partially explain development, Baltes et al. (2006) suggest that a lifespan developmental perspective be used as a framework for studying midlife.

The lifespan development perspective has been critiqued because of the use of generational concepts in research (Cort & Zacher, 2016; Costanza & Finkelstein, 2015). Cort and Zacher (2016) argue that across disciplines (e.g., anthropology, sociology, psychology), different valuations, conceptualisations, and definitions of generational concepts are being used. These researchers contend that the interchangeable use of the terms age, period, and cohort in lifespan developmental research poses substantial challenges on statistical models that attempt to separate these terms. They report that although the causal factors experienced by individuals among these terms might differ, there is still a remarkable confounding linear dependency among them. They propose that researchers should rather appropriately distinguish age-related factors and use alternatives for generational concepts when conducting research (Cort & Zacher, 2016). Similarly, Lachman (2004) suggested that given the high degree of divergence within the middle adulthood developmental stage in terms of health, well-being, and functioning across multiple domains, chronological age might not be the best predictor for identifying midlife. Midlife may be better considered in terms of roles (e.g., parent, partner), the occurrence of life events, and specific life experiences (Lachman, 2004; McGinnis, 2018). However, selecting age-related factors as inclusion or exclusion criteria for determining when midlife occurs and consequent recruitment of participants in terms of such factors, would be a daunting task. Therefore, the current study will make use of Baltes' (1987) lifespan development perspective to explore the possible role that of locus of control plays in the relationship between spiritual well-being and satisfaction with life of individuals in early midlife.

In his seminal work on lifespan development, Baltes (1987) proposed five principles, which constitute a set of beliefs that guide the understanding of aging. Firstly, development is a lifelong process, and every stage in the lifespan is influenced by what precedes and follows that period (Baltes, 1987). In this regard, Landes et al. (2014) found that men who experienced adversity in childhood were less likely to achieve generativity in midlife than men who did not experience childhood adversity. For those men who did achieve generativity, it was reported that generativity mediated and moderated their adjustment to aging. These results propose that psychosocial growth in adulthood can counterbalance the long-term negative effects of childhood adversity on adjustment to aging (Landes et al., 2014). Likewise, Jung (2018) reported evidence that adult religious involvement could serve as a protective factor against the long-term negative psychological effects of childhood adversity.

Secondly, Baltes (1987) suggests that development is a multidimensional and multidirectional process that is ongoing in every aspect of life at a pace unique to the individual. Making progress or attaining gains in one area could also mean regressing or losing in another area. Salthouse (2010) for example reported gains in experience and knowledge-related abilities while reporting losses in the area of acquiring new knowledge especially under fast developing conditions. Furthermore, Lachman et al. (2015) found gains in the domains of emotional regulation, experience, and knowledge while reporting losses in the domains of the speed of processing, working memory, and functional health. As midlife functions at the intersection of upward and downward cognitive trajectories, it is thus at a pivotal position in terms of integrating strengths and limitations (Hughes et al., 2018; Lachman et al., 2015).

Thirdly, Baltes (1987) proposed that development is influenced by both culture and biology. As an individual's biological capability decline with age, cultural mechanisms such as social support and guidance are strengthened and can serve as a compensatory factor (Baltes, 1987). Brown and Shillington (2017) reported that psychosocial resources such as a warm family environment could play a buffering role in protecting health despite adversity. Religion is among the most important cultural factors which give meaning and structure to people's experiences and behaviours (Park et al., 2013; Zarzycka & Rydz, 2014). Religion has also been associated with

lower levels of depression and anxiety (Hood et al., 2018), comfort (Exline et al., 2000), and better self-control (McCullough & Willoughby, 2009). Historically, spirituality and religiosity were viewed as the same construct and used interchangeably for research purposes (Falb & Pargament, 2012; Hood et al., 2018). Chirico (2016, p 13) advocated that “in recent years, the historical link between religion and spirituality has been broken”. This viewpoint, however, is still far from being unanimous (Hood et al., 2018). Thus, spiritual well-being could play an important role during early midlife as a mechanism to create meaning and also provide structure to life.

Fourthly, Baltes (1987) contends that development is flexible, which means that abilities such as memory or physical strength can be improved with practice, even at an advanced age. The Midlife in the United States Study (MIDUS) reported that regular exercise, supportive social relationships, and positive attitudes regarding control in midlife were associated with the ability to maintain cognitive skills and functional health over 10 years (Lachman & Agrigoroaei, 2010). Furthermore, Lachman and Weaver (1998) found that a sense of control moderated the effects of low socioeconomic status on health. Similarly, Liu and Lachman (2019) reported that educational attainment in adulthood mitigated the effects that low socioeconomic status experienced during childhood had on cognitive abilities during midlife.

Finally, Baltes (1987) maintains that development occurs in a specific context and historic setting. Gruner and Csikszentmihalyi (2018) studied 39 215 participants from 29 countries with a mean age of 48.19. The study reported that higher levels of trust in social institutions, coupled with high levels of political freedom, accounted for substantial variation in positive life evaluations, and contributed significantly toward life satisfaction. Likewise, an analysis of the World Database of Happiness (Veenhoven, 2017) showed that macro-social conditions (health, freedom, equality, security, institutional quality, and modernity) collectively explained about 75% of the differences in average happiness in the nations represented (Veenhoven, 2018). Therefore, the political turmoil, unfair distribution of resources and opportunities that are prevalent in a South African context (April et al., 2012; Dykes, 2016; Gruner & Csikszentmihalyi, 2018) could adversely affect participants’ perception of control over their environment and ultimately adversely impact on their satisfaction with life.

Midlife is usually the time when a combination of, among other, physical and mental fitness, experience, skill, work and life-related knowledge, maturity, as well as the motivation of individuals should be at peak level (Lachman, 2001; McGinnis, 2018; Palk, 2015). It is, therefore, not unexpected that key roles in organisations are often held by individuals in their midlife. Hence these individuals should be able, willing, and allowed to perform to the best of their ability for their own, and the organisation's continued effectiveness, productivity, and efficiency (Lachman, 2001; Palk, 2015).

A paradoxical situation exists in South Africa where there is an excess of unskilled and semi-skilled individuals, and a shortage of skilled individuals (Donisi, 2017; Critical Skills Survey Results, 2018). Furthermore, because of the educational shortfall in South Africa, the skills gap cannot be resolved by further developing these unskilled and semi-skilled individuals (Donisi, 2017; Fisher & Scott, 2011). This skills shortage is particularly pertinent in the management structures in South Africa (Critical Skills Survey Results, 2018). Palk (2015) reported that 15 percent of middle-aged individuals in South Africa experienced a true midlife crisis, while an additional 31 percent had a troublesome, but manageable experience. These findings suggest that a substantial percentage of individuals in midlife might find it difficult to function efficiently and effectively (Palk, 2015), which could contribute to the shortage of skilled individuals due to absenteeism and ineffectiveness. However, Veenhoven (2018) proposes that higher levels of subjective well-being in individuals in a country can stimulate the economy in several ways. It can foster equality and freedom, and embrace socialisation practices that promote the development of trust, mental health, and self-determination. A focus on promoting the well-being of individuals in midlife could enable skilled individuals to function optimally in the key roles they occupy in organisations.

Positive psychology championed empirical methods to research well-being and drove the development of evidence-based technologies that can enable individuals to flourish, be happy and live a fulfilled life (Compton & Hoffman, 2020; Mac Donald, 2018). Thus, positive psychology seems particularly applicable in the middle-adulthood developmental stage where individuals need to function optimally, despite

the challenges they are faced with, for their own and their families' well-being and the society at large.

Positive psychology

Positive psychology studies the correlations, causes, and consequences of the good life and constantly contributes to the understanding of wellbeing (Kesebir, 2018). Although the heightened interest in well-being may appear to be novel, in reality, it is a renewed interest in a long-standing creed (Veenhoven, 2018). Because of the centrality of the good life to the human experience, it is not surprising that the humanities, in particular, abound with inquiries into this phenomenon (Kesebir, 2018). During the 1970s social indicators research emerged. The 1980s saw the emergence of medical "quality of life research" while "happiness economics" and "positive psychology" research appeared around the year 2000 (Veenhoven, 2012). Since the emergence of positive psychology, it has by far been the fastest-growing movement within psychology in recent years. Positive psychology has permeated virtually all the areas that are investigated by different intellectual, academic, and psychological movements (Moreno-Jiménez & Aguirre-Camach, 2018). Mac Donald (2018) states that positive psychology has turned well-being into a virtual industry, not only championing the investigation of empirical methods but also driving the development of evidence-based technologies (e.g., interventions) to enable individuals to live the good life.

Positive psychology was formally introduced by Martin Seligman in 1998 during his inaugural address when he became the president of the American Psychological Association (Seligman, 1999). Consequently, Seligman and Csikszentmihalyi (2000) defined this new field in psychology as "the scientific study of positive human functioning and flourishing on multiple levels that include the biological, personal, relational, institutional, cultural, and global dimensions of life" (Falissard, 2016, p3). The aforementioned would be achieved through a commitment on the part of researchers to give prominence to the sources of psychological health and in doing so surpass earlier emphases of psychology on disease and disorder (Sheldon et al., 2001).

Positive psychology has been criticised for largely taking an individualistic stance, which assumed individualistic cultural orientation and value systems (Sandage et al., 2003). It mainly made use of quantitative research which seemingly had an inadequate engagement with cross-cultural issues, particularly a Western perspective and agenda that neglected the contextual influences of other cultural orientations (Compton & Hoffman, 2020; Sandage et al., 2003; Wong, 2019). Likewise, Coetzee and Viviers (2007) stated that positive psychology in a South African context neglected taking the impact of historical antecedents into considering when conducting their research undertakings. Furthermore, positive psychology has been criticised for oversimplifying the social-adaptive value and experience of human flourishing (Sandage et al., 2003). In this regard, the main critique against positive psychology was that it ignores the benefits and reality of negative experiences and emotions (Compton & Hoffman, 2020; Ehrenreich, 2010; Held, 2004; Lazarus & Martin, 2003; Wong, 2019).

In response to this critique, Wong (2011) recommended a more balanced and inclusive approach to positive psychology through the amalgamation of the “complex interactions between the negatives and positives to optimize positive outcomes” across situations and cultures (p. 69). Lomas and Ivizan (2016) contributed to the perspective that well-being had a dialectical nature and proposed three principles in support of this claim. The principle of appraisal proposed that positive could be negative and negative could be positive depending on the context in which it took place. Furthermore, the principle of co-valence holds that numerous experiences require a mixture of positive and negative elements while the principle of complementarity explains that wellbeing and flourishing are dependent on a complex balance and harmonisation of light and dark aspects of life. However, rather than unsettling the field, these arguments have assisted positive psychology to reach a new chapter of development and maturity. Positive psychology now encompasses the scope of positive qualities and outcomes, which are of interest to positive psychology, while also recognising the fundamental dialectical nature of wellbeing (Compton & Hoffman, 2020; Lomas & Ivizan, 2016; Wong, 2019).

The term Applied Positive Psychology, reflecting the emergence of positive psychology as praxis with the core purpose to generate “theoretically grounded and

empirically validated interventions, activities, and recommendations to enhance wellbeing” was introduced by Lomas et al. (2014, p. ix). Data collected from empirical studies in areas such as optimism, mindfulness, self-esteem, positive thinking, and happiness, contributed to establishing the theoretical basis and practical interventions to increase well-being and happiness (Shubina, 2017). Lee (2018) suggested that the implicit function of any positive psychology approach was change. Lee further posited that change could be externally manifested or through an introspective process. The desired goal of change could be characterised by emotional, cognitive, attitudinal, spiritual, and/or behavioural adjustments, or relational, group, and wider changes (Lee, 2018).

Elaborating on the dialectic nature of wellbeing in mind, Cummings and Swickert (2010) found that life transition problems were associated with individuals making positive psychological changes to their lives. Calhoun and Tedeschi (2014) argued that when positive psychological changes were set in motion by the encounter of difficult life situations at the most basic level, it constituted post-traumatic growth. Post-traumatic growth is related to numerous positive adjustments (Calhoun et al., 2014; Compton & Hoffman, 2020; Wong, 2019) including changed priorities (e.g. enhanced appreciation of life and lessor importance of material goals), enhanced relationships (closer and more appreciative), increased personal strength (e.g. more mature, creative), altered life philosophy (e.g. increased meaning-making and existential awareness), and enhanced spirituality (Calhoun et al., 2014; Lomas & Ivizan, 2016). In line with the afore-mentioned, Lomas and Ivizan (2016) posited that discomfort (such as chronic life problems, daily hassles, life transitions, life crises, and role strains) could play an important role in compelling individuals to create a better life, one that could essentially be more conducive to wellbeing.

Well-being

Well-being is a complex and universally debated issue that attracted renewed interest from researchers in various disciplines in recent years (Delle Fave et al., 2010; Kesebir, 2018; Veenhoven, 2012). The term well-being corresponds with 'quality of life' or signifies that life is good but does not identify what is good about that life

(Veenhoven, 2018). When well-being is used in philosophy it is referred to as happiness (Veenhoven, 2018), which in one of two broad senses, parallels the characteristics of eudaimonic and hedonic theories of happiness (Kesebir, 2018). The pursuit and achievement of the good life within the patronage of the positive psychology movement have been researched from these two tenets of well-being (Kesebir, 2018; Veenhoven, 2018; Seligman, 2002).

The eudaimonic conception of the good life is expressed in the writings of Aristotle (1925) who suggested that through self-realisation we could reach eudaimonia (or happiness). From this perspective, the good life results from being in congruence with your “daimon” (or your true self), striving towards self-actualisation (Waterman, 1993). Therefore, eudaimonia is a result of the realisation of our potential through living a life directed by our deeply held values, talents, and needs (Ryff, 2014; Seligman, 2002). This perspective holds that the quality of behaviour and feelings are merely markers of a life well lived rather than being ends in themselves (Huta, 2015). Whereas, hedonic conception of the good life originated in the Greek philosopher Aristippus. From this point of view an individual primarily pursues as much pleasure as possible while steering clear of any painful experiences in life (Delle Fave et al., 2011). Hedonic psychology corresponds to the avoiding of pain and the pursuit of pleasure and tends to define the good life in terms of personal happiness (Ryan & Deci, 2001; Waterman, 1993), which is articulated in the study of subjective well-being (Diener, 1984).

Subjective well-being consists of three interrelated but distinct elements: life satisfaction, the relative absence of negative affect and the presence of positive affect (Diener, 2000; Huebner et al., 2003). Hence, subjective well-being has two related dimensions, namely an affective and cognitive evaluation of life (Diener et al., 1985; Taş & İskender, 2018). The affective component of subjective well-being is defined as the emotional quality of an individual's everyday experience (intensity and frequency of experiences of sadness, affection, joy, stress, and anger), which makes one's life satisfying or unsatisfying (Diener et al., 1985; Tas & Iskender, 2018). Fredrickson (2001) reported many benefits of even brief positive affect, including broadened attention, flexible thinking, efficiency, and a desire to build.

The cognitive or “subjective” dimension of well-being refers to the individual as the final judge of his own life and is conceptualised as life satisfaction (Diener et al., 1985; Tas & Iskender, 2018). Positive evaluations of satisfaction with life are linked with happiness and the achievement of the good life, whereas negative evaluations of satisfaction with life are associated with depression and unhappiness (Pu et al., 2017).

Tov (2018) proposes that both the cognitive and affective evaluative components of subjective well-being can be investigated in terms of more distinct processes and components that are paramount to understand the consequences and causes of well-being. Because satisfaction with life transcends and incorporates mood states, influences behaviour and is considered to be a fundamental contributor to well-being, it is often studied as an outcome in itself (Diener & Diener, 1995; Huebner et al., 2003; Veenhoven, 2012).

Satisfaction with life

For the purpose of this study the construct of satisfaction with life of Diener et al. (1985) was investigated. Two main types of theories are applicable when investigating satisfaction with life (Ackerman, 2019). Bottom-up theories assume that satisfaction with life is the sum of its parts. Therefore, Diener et al. (1985) makes use of a weighted average of self-reported evaluation from different life domains to determine the individual's satisfaction with life (Lucas, 2007; Robinson & Klein, 2018). In contrast, top-down theories assume that satisfaction with different domains of life is primarily a result of overall life satisfaction, which is mainly rooted in predetermined genetic effects and personality traits (Lucas, 2007; Robinson & Klein, 2018). Therefore, conditions external to the individual are unlikely to have a great or lasting influence on a person's happiness, which is fundamentally determined by genetics (Ackerman, 2019; Diener, 1984). The setpoint perspective (Mroczek & Kolarz, 1998), holds that an individual has an inborn measure of happiness to which he/she returns despite environmental stressors. This debate regarding bottom-up versus top-down theories is ongoing; however, most researchers choose to acknowledge that overall

life satisfaction and satisfaction in the multiple domains of life are closely related (Ackerman, 2019).

A bottom-up approach was used in this study. Satisfaction with life is conceptualised as the thoughts that people have about their life when they consciously think about it (Diener et al., 1985). Definitions of satisfaction with life are generally grounded on the aspects that individuals find central in their own lives. Therefore, satisfaction with life does not include aspects that individuals do not find personally meaningful (Pavot, & Diener, 1993). Although we may, for example, call the same world 'home', individuals have a variety of perspectives, ways of life, and differ so widely on variables such as values, religion, and country that it would be daunting to subdivide life satisfaction into specific domains (Diener et al., 2013). Robinson and Klein (2018) suggest that although certain individuals might sometimes consciously think about different life domains before judging their satisfaction with life, most of them would evaluate their lives in more heuristic ways when answering questions regarding their satisfaction with life.

A U-shaped curve is frequently observed when investigating well-being at different ages. This pattern explains the characteristics of well-being that is higher in earlier and later life than during mid-life. This curve is also descriptive of life satisfaction, lack of negative emotions and presence of positive emotions (Lansford, 2018; Stone et al., 2010). The Gallup World Poll conducted in more than 160 countries proposes that the U-shaped curve of well-being is most frequent in high-income countries, with the lowest point of well-being between the ages of 45 to 54 (Lansford, 2018). However, this age-related pattern was not observed in Sub-Saharan Africa (Steptoe et al., 2015). Blanchflower (2020), however, drew systematic comparisons across 132 countries and reported only slight differences between the nadir age of well-being, developing countries (48.2) and developed countries (47.2). He concluded that the happiness curve is representative of well-being in Europe, Asia, North and South America, Australasia and Africa. This implies that individuals in early midlife in South Africa can experience a low point in well-being that can contribute toward their spiritual development (Wink & Dillon, 2002).

Spiritual well-being

Spiritual well-being is a critical component in the global conceptualisation of well-being (Gomez & Fisher, 2003). Research has indicated that spiritual well-being strongly correlates with life satisfaction in middle adulthood (Jafaria et al., 2010; Shafi et al., 2016). In this regard, Wink and Dillon (2002) report that experiences of adversity during midlife facilitate spiritual development. They also contend that spiritual development is related to the experience of negative life events in early midlife but not in late midlife. Furthermore, Kim-Prieto and Miller (2018) suggest that religion serves as a defensive wall against distress by providing various ways of coping with adversity such as negative life events.

An important aspect that becomes prevalent in midlife is the re-appraisal of one's life when most individuals turn inward and focus on a personally meaningful life (Levinson et al., 1978). Individuals search for meaning in past and present life events in search of purpose and/or unity (McAdams, 1993). Jung (1933) proposes that the passage through midlife is a religious or spiritual journey and personifies a search for a new and deeper purpose, value and meaning in life. He suggests that this journey of transformation, which he called individuation, was at the mystical heart of all religions (Jung, 1933). Likewise, Villani et al. (2019) maintain that spirituality is the human desire for interconnectedness, introspection, transcendence, and the quest for meaning in life and therefore, suggest that spiritual well-being can be a critical component in the conceptualisation of well-being for individuals during midlife.

Since the constructs of religiosity and spirituality are so complex, it is critical to stipulate how spiritual well-being is conceptualised (Hood et al., 2018; Villani, et al., 2019). Spirituality and religiosity are highly ambiguous terms that are often viewed as the same construct and used interchangeably in research (Falb & Pargament, 2012). In recent years this historic link has been broken (Chirico, 2016). Religiosity is frequently viewed as “the formal, institutional, and outward expression” (Cotton et al., 2006, p. 472) of an individual's relationship with the sacred, and it is commonly defined as beliefs and practices connected to a specific religious community and worldview (Lannello et al., 2019). Conversely, spirituality is often defined as the search for

meaning in life, for interconnectedness with humanity and a personal connection with transcendent realities. Thus, spiritual well-being is not synonymous with belief in the particular aspects of religion (Etemadifar et al., 2016; Gomez & Fisher, 2005; Shafi et al., 2016). Instead, it is “a state of being, reflecting positive feelings, behaviours, and cognitions of relationships with oneself, others, the transcendent and nature, that in turn provide the individual with a sense of identity, wholeness, satisfaction, joy, contentment, beauty, love, respect, positive attitudes, inner peace and harmony, and purpose and direction in life.” (Gomez & Fisher, 2003, p. 1976)

Prior conceptualisations of spiritual well-being investigated a narrow set of domains of spiritual well-being. For example, Paloutzian and Ellison’s (1982) spiritual well-being questionnaire assesses two scales, namely existential well-being and religious well-being. The authors defined religious well-being in terms of a relationship with God or any other transcendent dimension while existential well-being was defined as well-being in terms of a purpose in life and a sense of life satisfaction, with no reference to a higher power (Paloutzian & Ellison, 1982). However, other spiritual well-being domains were not included in their questionnaire. More recently, the conceptualisation of spiritual well-being has been elaborated to include other domains. In this regard, Gomez and Fisher (2003) posit that spiritual well-being consists of four domains, namely transcendental, environmental, personal and communal domains. This definition, which includes the four domains of spiritual well-being, has also been adopted by the National Interfaith Coalition on Aging (1975) and transcends previous conceptualisations of spiritual well-being (Fisher, 2016).

For the purposes of the current study, spiritual well-being is conceptualised by making use of Gomez and Fisher’s (2003) perspective. The personal dimension of spiritual well-being refers to how one internally relates to the self regarding values, purpose, and meaning in life (Gomez & Fisher, 2003). While the quality of the individual’s relationships with, among others, friends and family refers to the communal dimension, it includes aspects such as morality, culture, religion, hope, justice, love, and faith in humanity (Gomez & Fisher, 2003). Furthermore, the environmental component pertains to respect and care for nature and the physical world, as well as a sense of awe and wonder for the environment, and connectedness

with the environment (Gomez & Fisher, 2003). Lastly, the transcendental dimension of spiritual-well-being pertains to a relationship with a transcendental reality that can be subsumed in organised religion. Consequently, the current study aims to assess the four spiritual well-being subscale scores individually as they relate to satisfaction with life and locus of control to better understand individual differences in well-being and happiness.

Spiritual well-being has been shown to have positive consequences for mental health. Koenig (2012) did a systematic review of studies on mental health, religious affiliation and spiritual well-being between 1971 and 2012. The researcher found that spiritual well-being and psychiatric conditions such as depression, anxiety, and being suicidal have an inverse relationship (Koenig, 2012). From a positive psychology perspective, Etemadifar et al. (2016) conducted a study on 190 females with infertility in Iran and reported that infertile females with higher spiritual well-being reported greater levels of satisfaction with their lives than those with low spiritual well-being. Similarly, Lun and Bond (2013) researched adults across 57 countries and found that achieving a sense of spiritual well-being could predict decreased disability, increased health and greater levels of happiness and life satisfaction. Furthermore, Vishkin et al. (2019) and Ramsay et al. (2018) investigated adult samples and concluded that feeling in connection with others, a higher power, and with life in general, constituted effective ways to maintain greater life satisfaction, despite many conceivable negative conditions. Thus, the benefits of spiritual well-being on satisfaction with life have been well documented.

Subjective well-being is dependent on individuals' locus of control when they have to cope with adversity (Stocks et al., 2012). Pargament et al. (1988, 2013) found that religious coping was linked to people's religious commitment and classified coping styles as either positive or negative, based on their relationship to well-being outcomes. The use of positive religious coping methods is associated with an internal locus of control (turning inward, re-appraising, seeking assistance, asking forgiveness and blessing) (Pargament et al., 1988, 2013). Conversely, negative religious coping methods is related to an external locus of control (seeing the situation as punishment, disconnecting from people and God, not taking any action to gain control, waiting for

God to solve their problems) (Pargament et al., 1988, 2013). Furthermore, Amjad and Bokharey (2014) indicated that spiritual and religious activities assisted individuals to reframe stressful events in such a way as to motivate them intrinsically to deal with life stressors, whereas Hefti (2011) reported that religion and spirituality fostered an internal locus of control in stressful conditions. These results suggest that locus of control could play an important role in the relationship between spiritual well-being and the positive evaluation of one's life during early midlife.

Locus of control

The construct of locus of control is situated in the framework of Rotter's (1954) social-learning theory which stimulated research in various fields of psychology such as educational psychology, health psychology, the psychology of religion, positive psychology and clinical psychology (April et al., 2012; Holt et al., 2003). A person's "locus" (Latin for "place" or "location") was conceptualised by Rotter (1966) as internal (to have control over one's own life) or external (outside factors controlling one's life). An internal locus of control is often equated with a perceived sense of personal control, which is a learned, generalised assumption that outcomes are dependent on the individual's actions and choices (Mirowsky & Ross, 2003). Thus, locus of control represents generalised beliefs of personal control (Krause, 2010) which is a core component of the individual's understanding of how he or she actually lives and presents the individual's internal-external belief system (April et al., 2012).

In addition to the internal-external belief system, the concept of dual control exists, which assumes a combination of internality and externality within an individual (Kurt et al., 2012). How this combination of expectancies coincides is as yet not fully understood (April et al., 2012), but it is presumed that a combination of internal and external locus of control in different domains in life can result in an individual being bi-local. April et al. (2012) reported that bi-locals coped more efficiently when having a blend of internal and external control and that they even experienced greater levels of well-being. However, the dual control perspective is not pre-eminent in academic literature, with most authors favouring internality when investigating positive psychological constructs such as satisfaction with life (April et al., 2012).

For purposes of the current study, Rotter's (1966) more inclusive measures of locus of control were used. According to Rotter's conceptualisation, individuals with an internal locus believe that they are responsible for and can change their lives. Therefore, an individual with an internal locus of control, who believes that the situation is within his or her control, may find a situation stimulating, while others perceive it as daunting (Owusu-Ansah, 2008). In contrast, individuals with an external locus believe they can change only a few things through their own abilities and behaviours. Externally controlled individuals are convinced that they are controlled by events, other individuals, chance, fate, and opportunities, whereas internally controlled individuals believe that they have control over outcomes in their lives (Tas & Iskender, 2018). It is perceived that people with an internal locus of control actively influence their environments, and consequently act to take control of events and change unacceptable conditions (Kulshresta & Sen, 2006). In contrast, people with an external locus of control believe that they have no power to influence their failures or successes and, therefore, are unable to remove themselves from unsatisfactory situations (Kulshresta & Sen, 2006).

Control seems to be on a declining trajectory during middle adulthood (Lachman, 2004) when individuals often experience a lack of control to influence their circumstances (Razali, 2015). How the middle years turn out is indeed largely dependent on the individual's actions. Lachman (2004) suggests that the realisation that their actions could influence the turnout of midlife can be both liberating and frightening. Lachman et al. (2009) report that two sources of control are especially pertinent throughout adulthood, one showing an increase and the other a decrease, with midlife at the intersection of these two paths. Gains in control come from obtaining experience, expertise, competence, a peak of knowledge, and developing mastery. Simultaneously, declines are reported in productivity, performance, and functioning, and escalating restrictions of aging (Lachman et al., 2009). Losses in control are associated with limitations and obstacles, including unforeseen events such as loss of loved ones and deteriorating health associated with aging. Both these aspects of control need to be recognised and integrated during midlife for individuals to stay balanced and stable. Therefore, it is paramount that individuals find ways to counteract

or compensate for losses and declines by using skills, strengths, and assets during midlife (Lachman et al., 2009).

Locus of control has been linked to many physical and psychological health outcomes (Anderson et al., 2018; Kostka & Jachimowicz, 2010; Quevedo & Abella, 2013). Generally, studies report more positive outcomes for individuals classified as predominantly internal, suggesting that it is psychologically healthier to have control over aspects that can impact one's wellbeing (Jackman et al., 2017). Quevedo and Abella (2013) reported that an adult sample of individuals in Spain with an internal locus of control had lower levels of negative emotions, experienced more positive emotions, had greater life satisfaction, job satisfaction, and scored higher in an array of psychological well-being measures. In line with these findings, other researchers reported that locus of control could significantly affect people's degree of satisfaction with life and that locus of control consistently predicted subjective well-being (Klein & Keller, 1990; Klonowicz, 2001; Kostka & Jachimowicz, 2010). Furthermore, Anderson et al. (2018) studied a British female adult sample and found that an external locus was related to a decline in all domains of cognitive function including verbal fluency, processing speed, and memory. Conversely, they reported that having an internal locus of control in middle-adulthood was potentially related to better cognitive functioning. The benefits of an internal locus of control on the well-being of adults are well documented in different contexts.

Caution should, however, be taken against extremities of both internal and external locus of control (April et al., 2012). April et al. (2012) emphasised that contrary to research evidence that focused on external locus of control and lower levels of well-being, decreased levels of well-being experienced by adults with a high internal locus of control, they found overwhelming support of lower levels of well-being in individuals with an extreme internal locus of control. Reasons cited for a lack of well-being include stress caused by taking on too much responsibility; feelings of guilt when not having achieved their goals; being overly critical of self; the absence of scapegoats; fear of losing control; insecurity due to the mistrust of others' capabilities; and loneliness because of a lack of compassion (April et al., 2012). April et al. (2012) concluded that a balanced locus of control would lead to higher levels of well-being.

Locus of control is not static but can change through life events and interventions such as cognitive training (Anderson et al., 2018; Wolinsky, et al., 2010; Zhang et al., 2014). Therefore, it is possible to enhance an individual's ability to internalise which may impact on later health such as cognitive functioning (Anderson et al., 2018). Based on their findings, Quevedo and Abella (2013) proposed the promotion of an internal locus of control to enhance an individual's well-being.

As far as could be determined, literature did not reveal research investigating the role of locus of control on the relation between the subscales of spiritual well-being and satisfaction with life of individuals in early midlife. However, Flori et al. (2006) conducted a longitudinal study in the United States on individuals aged 25 and older and reported that internal and external locus of control mediated the relationship between religiosity and life satisfaction. These authors concluded that locus of control played an important role in the relationship between religiosity and satisfaction with life. Furthermore, they concluded that one mechanism by which religiosity (both objective and subjective) could differentially impact life satisfaction was through locus of control (Flori et al., 2006). Likewise, Jackson and Bergeman (2011) investigated 529 adults (aged 31 to 88) and found that the effects of spiritual/religious coping and spiritual experiences on subjective well-being were in part mediated by personal control. This effect was not found in the early midlife group (31–49).

Middle adulthood is a pivotal period in the life course of human development (Lachman, 2015; Lachman et al., 2015). Therefore, it is of the utmost importance for the well-being of both young and old at home, the workplace, and society at large that those individuals in early midlife are stable and functioning optimally (Lachman et al., 2015; Palk, 2015). Spiritual well-being can greatly contribute to life satisfaction in middle adulthood (Jafaria et al., 2010; Shafi et al., 2016). However, evidence in the literature suggests that locus of control can play a significant role in affecting well-being outcomes through the relationship between spiritual wellbeing and life satisfaction (Flori et al., 2006; Jackson & Bergeman, 2011). The current study investigates the role of locus of control in the relationship between the subscales of spiritual well-being and satisfaction with life. Thus, it is hypothesised that locus of control may play an important role in this relationship for individuals in early midlife.

Research Aim and Questions

Based on the discussion in the literature review, the aim of this study was to investigate the possible role that locus of control plays in the relationship between satisfaction with life and spiritual wellbeing amongst early midlife adults. In order to address the aim, the following research questions were posed:

- Is there a significant relationship between the different spiritual well-being relationship scores and satisfaction with life amongst those in early middle adulthood?
- Does locus of control mediate and or moderate the relationship between spiritual well-being and satisfaction with life amongst those in early middle adulthood?

To investigate this question a specific research design and methodology was adopted as discussed below.

Research design and methodology

In order to answer the research questions, a quantitative, non-experimental study employing a correlation design was conducted (Stangor, 2015). The advantages of using a quantitative approach are that it is an objective and systematic process in which numerical data are used. Furthermore, results can be investigated anonymously, which might make participants more willing to participate in the study. A correlation design enables the researcher to identify and describe the relationship between variables (Stangor, 2015). In this study satisfaction with life is the dependent variable and spiritual well-being the independent variable. Regarding satisfaction with life for each respondent, a single score was calculated, while four different scores (environmental, personal, transcendental, and communal relationship) were calculated regarding spiritual well-being. Locus of control is the intervening variable and for this variable a single score for each respondent was also calculated.

Participants and Sampling Procedures

Participants were recruited by means of non-probability snowball sampling (Stangor, 2015). This sampling method focuses on identified participants from the desired population to lead the researcher to other members of the population. The non-probability snowball sampling method holds time, cost and logistical advantages over other sampling methods (Gravetter, & Forzano, 2018). However, snowball sampling does not provide for the representation of a specific population (Stangor, 2015). In this study, participants were not representative of the wider South African early middle adult population. Therefore, as Kite and Whitley (2016) suggest, the findings should be interpreted with caution. The researcher approached individuals from different spheres of society such as churches, members of schools' parent representative bodies and business owners, and invited them to participate in the study. These individuals were asked to identify and refer other individuals who would meet the sample requirements to further participate in this research. Participants included male and female adults between 39 and 52 years with an average age of 44.63 years.

Participants were required to answer 43 items posed by the respective questionnaires and return the completed questionnaires to the identified individuals for collection. From 250 questionnaires that were distributed, 110 questionnaires were returned, thus a response rate of 44%. Langbein (2012) reports that the expected response rate for e-mail questionnaires is between 30% and 40%. The response rate of the current study is slightly above the expected rate of response. The context in which this study was conducted needs to be considered (Phillipson, 2013). A further breakdown of the participants' demographic characteristics is therefore represented in Table 1.

Table 1

Frequency distribution of group according to gender and home language (N = 110).

Biographical variable	N	%
Gender:		
Male	37	33.6
Female	73	66.4
Home language:		
English	12	10.9
Afrikaans	64	58.2
Sesotho	17	15.5
Tswana	7	6.4
Zulu	6	5.5
Xhosa	3	2.7
Ndbele	1	0.9

Table 1 indicates that the participants in the study were mostly female and spoke Afrikaans as a home language. The sample in this study was unrepresentative of the South African population because the majority of the population in South Africa is black (65%), while only 8.2% are white (Statistics South Africa, 2018). Furthermore, in South Africa, there are considerably more middle-aged females (61%) than males (39%) (Statistics South Africa, 2018), which is represented in this sample, as 66.4% of the participants were female and 33.6 % were male. Thus, black South Africans were underrepresented in this study. This aspect has been kept in mind when interpreting the results of the study.

Measures

The participants in the study completed a short biographical questionnaire and three self-report questionnaires (Stangor, 2015). The following questionnaires were included in the self-report booklet:

The Biographical questionnaire consisted of four items to gather demographic information such as date of birth, age, gender, and home language.

The Satisfaction with Life Scale, developed by Diener et al. (1985), measures the thoughts that people have about their life when they consciously think about it by using a 5-item self-report scale. An example of a question on this scale is: 'I am satisfied with my life'. Responses are given on a 7-point Likert scale that ranges from 1 (strongly disagree) to 7 (strongly agree). Diener et al. (1985) suggest that scoring should be kept continuous by adding the 5-item ratings together and therefore working with raw scores and not standardised scores. López-Ortega et al. (2016) reported a Cronbach's Alpha (α) of 0.74 among a sample of Mexican adults. The satisfaction with life scale also demonstrated good validity and internal consistency in the same study (López-Ortega et al., 2016).

The Spiritual Well-being Questionnaire (SWBQ) was used to measure participants' feelings of connection to specific life components using four subscales, namely transcendental, environmental, communal and personal scales (Gomez & Fisher, 2003). The questionnaire consists of 20 items. Participants had to indicate the degree to which the statements describe their experiences of the past six months, using a five-point Likert scale ranging from 'very low' (rated 1) to 'very high' (rated 5). An example of a question in this questionnaire is: "Over the last six months I developed a love for other people". A high total score indicated a high level of spiritual well-being and a low total score demonstrated a lower level of spiritual well-being. The reliability of the SWBQ was demonstrated to be 0.89 and the internal consistency was measured at 0.92 in Australian high school students (Fisher, 2010). In South Africa, Moodley, Esterhuyse and Beukes (2012) obtained reliability coefficients of 0.888 and 0.878 for Afrikaans and English adolescents respectively.

To measure locus of control, *the Locus of Control Scale*, developed by Rotter (1966), consists of 29 items. The aim is to measure whether an individual has an internal locus of control (e.g. "People's misfortune results from the mistakes that they make") or external locus of control (e.g. "Many of the unhappy things in people's lives are partly due to bad luck"). The scale consists of questions that provide an individual

with the option of choosing either (a) or (b) as an answer to certain questions (Rotter, 1966). The scores are added to get to a total raw score which is used instead of standardised scores. An individual with a score between 13-23 is considered as having an external locus of control, whereas a score between 0-12 is seen as having an internal locus of control. Test-retest reliability range from 0.55 to 0.83 in the initial research on this scale (Rotter, 1966). During a later study among entrepreneurs, the reliability was set at 0.65 and the discriminant validity at a weak value of 0.3 (Schjoedt & Shaver, 2011).

The internal consistency of the total and subscale items on the three measuring instruments was assessed using both Cronbach's α and the omega total coefficients. According to McNeish (2017), Cronbach alpha has certain limitations, such as overly rigid assumptions that are commonly violated, and poor performance, when compared with alternative measures such as omega total. The coefficients of the current study appear in Table 2.

Table 2

Reliability of measuring instruments' subscales for the entire group

Measuring instrument	α -coefficient	Omega-coefficient
Satisfaction with life:	.823	.843
Locus of control:	.698	.706
Spiritual well-being:		
Environmental relationship	.842	.851
Personal relationship	.819	.826
Transcendental relationship	.910	.914
Communal relationship*	.817	.804

Note: * Item 1 omitted

According to Lance, Butts and Michels (2006), a cut-off of 0.7 for the Cronbach coefficient within the social sciences is regarded as acceptable. From Table 2 (above)

it appears as if the total as well as the subscale scores, fall within the acceptable coefficients. This indicates that the data obtained in the present study could be considered as reliable and used for further analyses.

Ethical considerations

Permission was obtained from the Research Ethics Committee of the Faculty of the Humanities at the University of the Free State (UFS) with approval number UFS-HSD2018/0239 for this study. Informed consent was also obtained from all parties before their participation. Participants were informed regarding the purpose of the study in an information sheet that was attached to the questionnaire booklet.

Participants were informed that certain identifying features might come forth during the biographical questionnaire, but numbers were used to protect their anonymity. In keeping with the principle of autonomy, it was emphasised that they had the right to withdraw their participation at any stage of the study without any repercussions to them (Allan, 2016). However, none of the participants withdrew their participation from the study. Furthermore, participants were informed that they would not receive any form of payment or incentive for participating in the study.

The principles of non-maleficence and beneficence were upheld in an attempt to avoid harm to the participants during the research process (Allan, 2016). Support for emotionally vulnerable participants was arranged. If any of the participants were to report emotional vulnerability due to participation in the study, they would have been referred to the psychological services rendered by the students currently enrolled in the Psychology Master's Programme at the UFS, under the strict supervision of lecturers. However, none of the participants needed to be referred for psychological services.

All data obtained in the study were kept confidential. The original list of participants is held by the primary researcher. All data are kept in a locked cabinet and the computers that were used during the study are password protected. The data will

be kept for the prescribed period of at least one year (HPCSA, 2016). The researcher will retain any records used for research purposes in case of a query or dispute.

Participants were provided with detailed feedback on the findings from the study. During all phases of this study, every effort was made to adhere to the HPCSA (2016) guidelines for ethical research.

Data Analyses

In the hierarchical regression analysis that follows, the possible role that locus of control could play in the relationship between spiritual well-being and satisfaction with life was investigated. The role that is referred to describes whether the intervening variable (locus of control) mediates/moderates the relationship between spiritual well-being and satisfaction with life of those in early middle adulthood (Howell, 2013). A mediating variable is identified by the measure in which it can pronounce the relationship between the predictor (independent) and the criterium variable (dependent). Mediation refers to the condition where the relationship between the predictor variable and the criterium variable can be declared by the relationship with a third variable (the mediator). A moderator variable though, influences the direction and/or strength of the relationship between the predictor- and criterium variables (Baron & Kenny, 1986; Field, 2013).

Different steps in the hierarchical regression analysis procedure are conducted to investigate whether the intervening variable acts as a mediator or mediator in the relationship between the independent and dependent variables. The first step is to analyse single variables. One of the spiritual well-being variables (for example, personal relationship) will be added to the regression equation to determine its unique contribution. During the second step, both the independent (in this instance personal relationship) and the intervening variable (locus of control) are added to the equation. Through this process, the significant proportional contribution to the prediction of the criterium variable (satisfaction with life) of each of the predictor variables is determined. The third step investigates the product between the independent variable (in this

instance personal relationship) and locus of control, in the prediction of satisfaction with life. When working with the product between two variables, it is important to prevent multicollinearity. Multicollinearity is a state of very high intercorrelations or inter associations among the independent variables. It is, therefore, a type of disturbance in the data, and if present in the data, the statistical inferences made about the data may not be reliable (Howell, 2013). For this reason, the deviation score of the relevant variables (the independent as well as the dependent) is calculated and thereafter the product between the two sets of deviation scores is calculated. The analytical procedure will be discussed in more detail.

In adhering to this procedure the following inferences can be made:

- If the calculated Beta-coefficient of the specific spiritual well-being scale (for example personal relationship) produces a significant value in step one, but a non-significant value in step 2 (when locus of control is added), it can be inferred that locus of control is indeed a mediator variable in the specific relationship (between personal relationship and life satisfaction).
- Should the calculated Beta-coefficient of the product term (step 3, in this instance between personal relationship and locus of control) be significant, it can be inferred that there is a significant interaction, which is indicative of a moderating effect (Howel, 2013).

All analyses have been conducted with the SPSS software version 25.0 (SPSS Institute, 2017) and the 1%-, as well as the 5%-level of significance, have been used. To determine a significant *interaction effect*, a lessened *p*-value of 0.1 was applied (Aiken et al., 1991).

Results

The following Table contains more details regarding the descriptive statistics (averages, standard deviations, skewness, and kurtosis) for the variables that were used in further analyses.

Table 3

Averages, standard deviations, skewness, and kurtosis for the variables for the total group

Variable	Mean	sd	Skewness	Kurtosis
Life satisfaction	23.66	6.07	-.697	.159
Spiritual well-being:				
Environmental relationship	17.95	3.57	-.657	.860
Personal relationship	19.93	3.35	-.261	-.634
Transcendental relationship	21.11	3.53	-1.04	1.76
Communal relationship	18.88	3.41	-.393	-.058
Locus of control	10.21	3.54	-.002	-.055

In order to investigate the skewness and kurtosis values, the following guideline values were used. For skewness, a range between -1 and +1 indicated slight skewness; values between -2 and +2 indicated moderate skewness (Peat et al., 2008); and for kurtosis, normal distribution was between -3 and +3 (Brown, 1997). From Table 3, it is clear that all the values calculated fall within the acceptable range of skewness as well as kurtosis. This indicates that the data obtained in the present study can be used for further analyses.

A correlation matrix was used to investigate whether a statistically significant relationship exists between the dependent variable, spiritual wellbeing and the independent variable, satisfaction with life, as well as the intervening variable, locus of control. The results are shown in Table 4.

Table 4

Correlation between locus of control, satisfaction with life and spiritual wellbeing for the total group

Variable	2	3	4	5	6
1 Satisfaction with life	.21*	.29**	.08	.16	-.06
2 Environmental relationship	-	.49**	.37**	.40**	-.17
3 Personal relationship		-	.57**	.67**	-.29**
4 Transcendental relationship			-	.52**	-.07
5 Communal relationship				-	-.30**
6 Locus of control					-

** $p \leq 0,01$

* $p \leq 0,05$

Table 4 indicates a statistically significant positive relationship between environmental relationship and satisfaction with life ($r = 0.21$, $p \leq 0.05$) amongst early midlife individuals. Thus, an increase in environmental relationship is associated with an increase in satisfaction with life. There was also a statistically significant positive relationship between personal relationship and satisfaction with life ($r = 0.29$, $p \leq 0.01$) amongst early midlife individuals. This coefficient indicates a medium effect size which renders the results to be of practical significance. An increase in personal relationship can thus also be associated with an increase in satisfaction with life. However, although there was a positive relationship between transcendental relationship and life satisfaction ($r = 0.08$) as well as between communal relationship and life satisfaction ($r = 0.16$), these relationships were not statistically significant on at least the 5% level. Furthermore, although a negative correlation was established between satisfaction with life and locus of control ($r = -0.06$) it was not statistically significant. Finally, a significant negative relationship was established between personal relationship and locus of control ($r = -0.29$, $p \leq 0.01$) and between communal relationship ($r = .30$, $p \leq 0.01$) and locus of control. These coefficients indicate medium effect sizes which render the results to be of practical significance. It is important to keep in mind that the

higher the score on locus of control, the more the person will have an external locus of control. Thus, for the early midlife participants, a decrease in locus of control (internal locus) is associated with an increase in personal- and communal relationships. Although there was a negative relationship between transcendental relationship and locus of control ($r = -0.07$), and between environmental relationship and locus of control ($r = -0.17$), these relationships were not statistically significant on at least the 5% level.

Hierarchical multiple regression analyses were conducted to determine the mediating or moderating effect of locus of control on the relationship between spiritual well-being and life satisfaction of individuals in early midlife. In order to conduct the analysis, the data were checked to ensure that all assumptions of multiple regression analyses were met. Normality, linearity, multi-collinearity, and homoscedasticity were investigated. Outliers were investigated by calculating Mahalanobis distance. The critical value of chi-square for one dependent variable set at an alpha level of .001 was 10.828. The dependent variable (life satisfaction) did not violate the distance. All the other assumptions for regression analyses were met.

The analyses reflected in Table 5 investigated the main and interaction effects of environmental relationship and locus of control in relation to life satisfaction.

Table 5

Hierarchical regression analysis predicting life satisfaction with environmental relationship as independent variable and locus of control as intervening variable

	Step 1	Step 2	Step 3
	Standardised Regression Coefficients (Beta)		
Environmental relationship (ER)	.186	.182	.181
Locus of control (LC)		-.028	-.030
ERxLC			.022
Model R^2	.035	.036	.036
Model ΔR^2	.035	.001	.000

*** $p \leq 0.01$

** $p \leq 0.05$

* $p \leq 0.10$

Table 5 shows that when the environmental relationship was entered (step 1) it was not significant on at least the 5% level. In step 2 locus of control was added. The additional variance explained by locus of control [$\Delta R^2 = .001$, $F_{1; 100} = .080$; $p = .778$] was also not significant. The results indicate that locus of control did not mediate the relationship. In the final step, the interaction effect between environmental relationship and locus of control (ERxLC) was investigated. The result indicates no statistically significant interaction effect [$\Delta R^2 = .000$, $F_{1; 99} = .050$; $p = .824$] and it can, therefore, be concluded that locus of control did not moderate the relationship between environmental relationship and life satisfaction amongst individuals in their early middle adulthood.

The analyses reflected in Table 6 investigated the main and interaction effect of personal relationship and locus of control in relation to life satisfaction.

Table 6

Hierarchical regression analysis predicting life satisfaction with personal relationship as independent variable and locus of control as intervening variable

	Step 1	Step 2	Step 3
	Standardised Regression Coefficients (Beta)		
Personal relationship (PR)	.248**	.252**	.200
Locus of control (LC)		.013	-.002
PRxLC			.173*
Model R^2	.061	.062	.089
Model ΔR^2	.061	.000	.027

*** $p \leq 0.01$

** $p \leq 0.05$

* $p \leq 0.10$

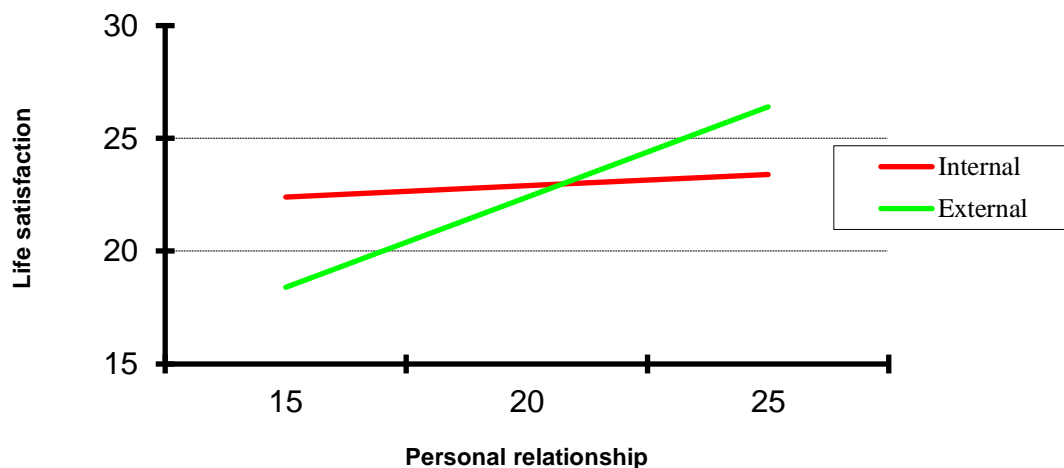
Table 6 shows that when personal relationship was entered (step 1) it was significant [$R^2 = .061$, $F_{1; 101} = 6.604$, $p = .012$] on the 5% level. In step 2, locus of control was added and the results [$\Delta R^2 = .001$, $F_{1; 100} = .080$; $p = .778$] indicate that locus of control did not mediate the relationship between personal relationship and life satisfaction of those in early middle adulthood. In the final step, the interaction effect

between personal relationship and locus of control (PRxLC) was investigated. The result indicates that a statistically significant interaction effect was found on the 10% level [$\Delta R^2 = .027$, $F_{1; 99} = 2.973$; $p = .088$]. It can be concluded that locus of control does indeed moderate the relationship between personal relationship and life satisfaction amongst individuals in their early midlife.

The nature of the moderating effect was investigated by determining the relationship between personal relationship and the criterium (life satisfaction) for those with high and low scores on the moderator variable (locus of control) respectively. It is important to keep in mind that the lower the score on locus of control, the more the person will have an internal locus of control. Two separate regression lines were calculated: one for those with high scores on locus of control (on or higher than the 75th percentile, $N = 25$; a score equal to or higher than 13), and one for those with low scores on locus of control (on or lower than the 25th percentile, $N = 25$; a score equal to or lower than 8). The regression lines are indicated in Figure 1.

Figure 1

Regression line for participants with respectively high and low levels of locus of control with personal relationship as predictor of life satisfaction



From Figure 1 it is clear that both locus of control groups shows a rise in the regression line. For the group with a high locus van control (external), the slope is 0.8 while for the group with low locus of control the slope is merely 0.1. In the aforementioned instance there is a statistically non-significant correlation ($r = 0.03$; $p =$

0.872) between personal relationship and life satisfaction for the group with an external locus of control while there is a significant positive relationship at the 5% level ($r = 0.49$; $p = .013$) between personal relationship and life satisfaction. According to Cohen (1988), the aforementioned correlation coefficient shows a high effect size and it can, therefore, be accepted that the results rendered are of practical importance. Thus, it is clear that with an increase in personal relationships, those with an external locus of control also have a significant increase in satisfaction with life, while the same is not true for those with an internal locus of control.

The analyses reflected in Table 7 investigated the main and interaction effect of transcendental relationship and locus of control in relation to life satisfaction.

Table 7

Hierarchical regression analysis predicting life satisfaction with transcendental relationship as independent variable and locus of control as intervening variable

	Step 1	Step 2	Step 3
	Standardised Regression Coefficients (Beta)		
Transcendental relationship (TR)	.060	.057	.070
Locus of control (LC)		-.056	-.089
TRxLC			.169*
Model R^2	.004	.007	.034
Model ΔR^2	.004	.003	.027

*** $p \leq 0.01$

** $p \leq 0.05$

* $p \leq 0.10$

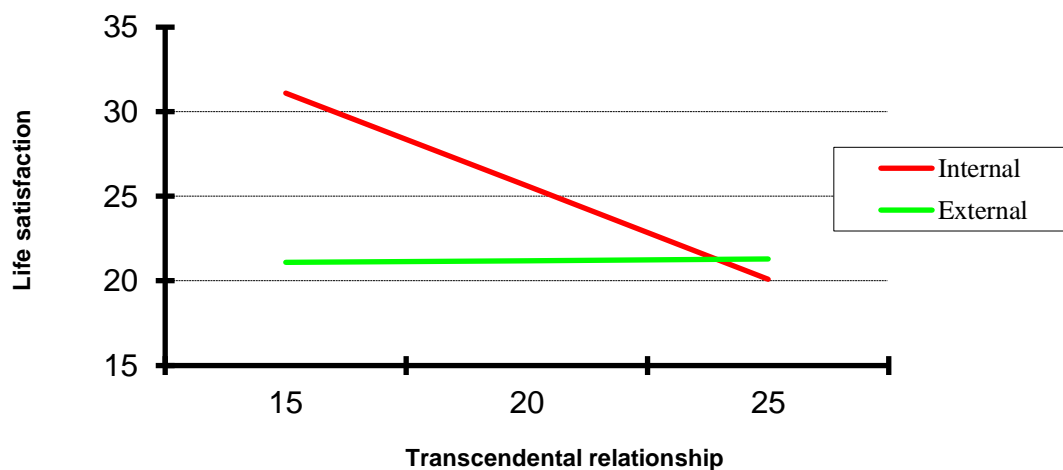
Table 7 shows that when the transcendental relationship was entered (step 1) it was not significant [$R^2 = .004$, $F_{1; 101} = 0.369$, $p = .545$] on at least the 5% level. Locus of control was then entered in step 2 and the results [$\Delta R^2 = .003$, $F_{1; 100} = .314$; $p = .576$] noted that locus of control did not mediate the relationship. In the final step, the interaction effect between transcendental relationship and locus of control (TRxLC) was investigated. The result indicates that a statistically significant interaction effect

was found on the 10% level [$\Delta R^2 = .027$, $F_{1; 99} = 2.779$; $p = .099$]. Therefore, it can be concluded that locus of control, to a certain extent, does moderate the relationship between transcendental relationship and life satisfaction among individuals in their early midlife.

The nature of the moderating effect was investigated by determining the relationship between transcendental relationship and the criterium (life satisfaction) for those with high and low scores on the moderator variable (locus of control), respectively. It is important to keep in mind that the lower the score on locus of control, the higher the person's internal locus of control would be. Two separate regression lines were calculated: one for those with high scores on locus of control (on or higher than the 75th percentile, $N = 25$; a score equal to or higher than 13) and one for those with low scores on locus of control (on or lower than the 25th percentile, $N = 26$; a score equal to or lower than 8). The regression lines are indicated in Figure 2.

Figure 2

Regression line for participants with respectively high and low levels of locus of control with transcendental relationship as predictor of life satisfaction



From Figure 2, it is clear that for those with low scores on locus of control (internal), a relatively sharp decline in the slope of the regression line is evident. For the group with a high locus of control scores (external locus), the slope of the regression line is almost horizontal. In the aforementioned instance a statistically non-significant correlation ($r = 0.01$; $p = .961$) between transcendental relationship and life

satisfaction exists, while in the group with an internal locus of control there is a statistically significant negative relationship at the 5% level ($r = -0.41$; $p = .037$) between transcendental relationship and life satisfaction. According to Cohen (1988), the aforementioned correlation coefficient shows a medium effect and it can, therefore, be accepted that the results rendered are of practical importance. Thus, it is clear that with an increase of transcendental relationships for those with an internal locus of control there is a significant decrease in life satisfaction, while this is not true for those with an external locus van control.

The analyses reflected in Table 8 investigated the main and interaction effect of communal relationship and locus of control in relation to life satisfaction.

Table 8

Hierarchical regression analysis predicting life satisfaction with communal relationship as independent variable and locus of control as intervening variable

	Step 1	Step 2	Step 3
	Standardised Regression Coefficients (Beta)		
Communal relationship (CR)	.138	.132	.122
Locus of control (LC)		-.020	-.016
CRxLC			.105
Model R^2	.019	.019	.030
Model ΔR^2	.019	.000	.011

*** $p \leq 0.01$

** $p \leq 0.05$

* $p \leq 0.10$

Table 8 shows that when communal relationship was entered (step 1) it was not significant on at least the 5% level. In step 2, locus of control was added. The additional variance explained by locus of control [$\Delta R^2 = .000$, $F_{1; 100} = .037$; $p = .849$] was also not significant. The results indicated that locus of control did not mediate the relationship. In the final step, the interaction effect between environmental relationship

and locus of control (CRxLC) was investigated. The result indicated no statistically significant interaction effect [$\Delta R^2 = .011$, $F_{1; 99} = 1.110$; $p = .295$] and therefore it can be concluded that locus of control did not moderate the relationship between communal relationship and life satisfaction of individuals in early middle adulthood.

To summarise, a hierarchical regression analysis was conducted to assess the possible role of locus of control in the relationship between spiritual well-being and satisfaction with life amongst individuals in early midlife. The results indicated that locus of control indeed moderated the relationship between the two spiritual well-being subscales (Transcendental- and Personal relationship) and satisfaction with life among individuals in their early midlife. Further investigation revealed that for the 25% participants with the highest external locus of control, a high effect size positive relationship at the 5% level ($r = 0.49$; $p = .013$) between personal relationship and life satisfaction was found. Therefore, an increase in personal relationships for those participants resulted in a significant increase in their satisfaction with life. Furthermore, for the 25% participants who had the highest internal locus of control, a medium effect size negative relationship at the 5% ($r = -0.41$; $p = .037$) between transcendental relationship and life satisfaction was found. Thus, an increase in a transcendental relationship for those participants coincided with a significant decrease in their satisfaction with life.

The discussion section that follows will review the results from the current study in more detail.

Discussion

For middle-aged adults, life is inherently full of challenges such as life transitions, managing chronic life problems, daily hassles, life crises and role strains (McGinnis, 2018; Palk, 2015). Although facing much the same patterns of stressors throughout adulthood, some individuals can consistently maintain high levels of well-being, while others experience depression or hopelessness (Jackson & Bergeman, 2011; McGinnis, 2018). The current study focused on assessing the role of locus of control in the relationship between spiritual well-being and satisfaction with life for individuals in early midlife that is from the middle-class socio-economic group living in South Africa. The scores on the four subscales of spiritual well-being were assessed

to better comprehend the possible role that locus of control plays in the satisfaction with life of individuals in early midlife. Accordingly, the mean satisfaction with life, locus of control and spiritual well-being scores of the participants will be discussed. This will be followed by a discussion of the correlations between satisfaction with life, spiritual well-being and locus of control, and finally, the moderator and mediator role of locus of control on the relationship between the scores of the spiritual well-being subscales and satisfaction with life will be discussed. This section will be concluded by a conclusion to the discussion.

The mean life satisfaction of the group is 23.66, which falls in the “slightly satisfied with their life” category. These findings suggest that most individuals in early midlife living in South Africa, who participated in the study, found effective ways to maintain the positive evaluation of their lives, despite all the possible negative circumstances that can be encountered. This result supports the findings of Baltes (1987) and McGinnis (2018), which indicated that most individuals in midlife cope quite competently with the demands of life despite dealing with a plethora of obstacles encountered during midlife. Similarly, it can be argued that most of the participants can find a complex balance and harmonisation of positive and negative aspects of life to stay satisfied with their lives, as proposed by Wong (2019).

Furthermore, the mean locus of control of the group was 10.21, which falls within the internal locus of control group, which suggests that most participants believed that they had control over most areas of their lives, despite the possible decline in control experienced in other areas of life. These results are in line with the findings of Lachman et al. (2009) who reported that most individuals in early midlife could find ways to compensate for or counteract the losses and declines in control by using assets, strengths, and skills. Similarly, Jackson and Bergeman (2011) suggested that adults under the age of 50 were still likely to be healthy and at the peak of their professional and family life, and therefore tended to experience a universally high level of perceived control.

The mean scores on the spiritual well-being subscales indicate that the transcendental relationship and personal relationship (with a respective score of 21.11 and 19.93) contributed most towards the total spiritual well-being of the participants,

which suggests, that most participants turn to a transcendental relationship, as well as inwardly during early midlife in search of a new and deeper meaning, value and purpose in life. These findings are supported by the views of Jung (1933) and Villani et al. (2019) that the passage through midlife is a spiritual journey, which is driven by a desire for introspection, transcendence, and the quest for new and deeper meaning in life.

In contrast, the mean scores on the spiritual well-being subscales indicate that communal (18.88) and environmental (17.95) relationships contributed the least towards the spiritual well-being of participants. This indicates that the busy lifestyles with multiple demands of work and family of individuals in early midlife have created a disconnect from the natural environment, as was reported by Biedenweg et al. (2017) and McMahan (2018). It could thus be argued that their busy lifestyles, coupled with advances in technology, create a decline in ordinary social behaviours which negatively affect their communal relationships (Elsobeihi & Abu Naser, 2017; Younes & Al-Zoubi, 2015).

In answering the first research question, a statistically significant relationship was found between environmental relationship ($r = 0.21$, $p \leq 0.05$) and personal relationship ($r = 0.29$, $p \leq 0.01$) and satisfaction with life. Thus, environmental and personal relationships for those in early midlife contribute significantly more towards the positive evaluations of their lives than transcendental and communal relationships. Although current literature did not reveal studies on the subscale scores of spiritual well-being and satisfaction with life, it is noteworthy that Villani et al. (2019) and King and Boyatzis (2015) reported that spirituality (specifically the introspection and quest for meaning in life dimensions) had a strong impact on life satisfaction of adults. Likewise, several researchers have found that searching for meaning in life (value and purpose of life, important goals, and spirituality) is strongly associated with life satisfaction in midlife (Russo-Netzer, 2018; Steger & Kashdan, 2007; Zika & Chamberlain, 1987).

Available research shows that having meaning and searching for meaning are two separate constructs, with the search for meaning being a stronger contributor to

life satisfaction (Steger et al., 2011; Tas & Iskender, 2018). Frankl (1963) proposed that happiness could perhaps never successfully be sought directly; rather, it tends to arise only as an indirect, mysterious by-product of engaging in other pursuits, such as a search for meaning. Thus, in line with Jung's (1933) process of individuation, it seems that during early midlife, individuals who turn inward in search of new and deeper meaning, value and purpose in life are more satisfied with their lives. Likewise, individuals in early midlife who take the time from their busy lives to feel a connectedness with the environment and have a sense of awe and wonder for the environment will experience higher levels of satisfaction with their lives (Biedenweg et al., 2017; McMahan, 2018). Connectedness with the environment, in turn, allow for a personal relationship during early midlife by facilitating self-transcendence and the belief that life fits within a larger scheme (Howell et al., 2013; Wong, 2010; Steger, 2009).

Locus of control has a negative relationship with the participants' subscale scores of spiritual well-being as was expected from the findings reported in the available literature. However, two subscales had a statistically significant medium size correlation with locus of control, namely that of communal relationship ($r = -0.30, p \leq 0.01$) and personal relationship ($r = -0.29, p \leq 0.01$). For those in early midlife, locus of control is more strongly associated with communal and personal relationships than with transcendental and environmental relationships. Hence, for participants in the current study who are in early midlife, a decrease in locus of control scores (internal locus) is associated with an increase in personal- and communal relationships. Similarly, Rovenpor and Isbell (2018) and Rovenpor (2014) found that having an internal locus makes an individual more likely to take part in relationships because of the possible benefits of the outcomes of both negative and positive situations. Thus, it can be inferred that as people accept personal responsibility and take control of their behaviours rather than believing that fate or other individuals control their lives, the more likely it is that they will be willing and able to engage in relationships with other people. It is important to note that communal relationships refer to others in general and not specifically to family. In the same way, it is suggested that as individuals accept personal responsibility and take control of behaviour rather than believing that

fate or other individuals control their lives, the more they will be willing and able to intra-relate with self in search for new and deeper meaning, value and purpose in life.

Furthermore, a correlation was indicated between satisfaction with life and locus of control ($r = -0.06$) in the expected direction. However, the result was not statistically significant. Lifespan development research suggests that a sense of control becomes more domain-specific with age, which implies that adults may feel both externally controlled and internally controlling, depending on the domain examined (Flori et al., 2006; Lachman, 1986). It could be argued that early midlife participants from the middle-class social-economic group have adapted to the context and history as proposed by Baltes (1987) of living in South Africa. This signifies that most participants have learned that their own ability could influence some aspects of life and the environment while accepting the fact that other aspects such as the political turmoil, unfair distribution of resources and life-fulfilling opportunities that are prevalent in a South African context, could be uncontrollable by the individual (April et al., 2012; Dykes, 2016; Gruner & Csikszentmihalyi, 2018). Since they both have an internal and external locus of control, it is conceivable that locus of control will not correlate significantly with their satisfaction with life.

Locus of control did not mediate the relationships between the subscale scores of spiritual well-being and satisfaction with life in the current study. These findings support Jackson and Bergeman (2011) who reported that the effects of religious/spiritual coping and spiritual experiences on subjective wellbeing were partially mediated by personal control in late midlife, but was not present in the early midlife group. Similarly, Flori et al. (2006) found that religiosity significantly predicted internal control for older adults but not for young adults.

However, a moderator effect of locus of control was found on two spiritual well-being subscales. This result answers the second research question. Thus, locus of control does differentially impact satisfaction with life through the spiritual well-being of individuals in early midlife. There is a statistically significant negative interaction effect of locus of control on the relationship between transcendental relationship and satisfaction with life ($r = -0.41$; $p = .037$). Thus, individuals with a high internal locus of

control who engage in a transcendental relationship (faith in God) tend to experience a reduced level of satisfaction with life. This result can be interpreted in line with the findings of Flori et al. (2006) and Jackson and Bergeman (2011) that an internal locus of control mediates the relationship between religiosity/spirituality and satisfaction with life in the period following early midlife but not during early midlife. Flori et al. (2006) concluded that individuals with a high internal locus of control have not yet learned to interpret the relinquishment of control to a higher power as “a purposeful, control-inducing act” (p. 258) during early midlife and still tend to favour more tangible ways of demonstrating their control. However, April et al. (2012), reported that it was important for the wellbeing of individuals with a high internal locus of control to recognise their own ability to influence their lives and the environment while having regard for the fact that certain aspects could be uncontrollable by the individual and could be attributed to outside resources (faith in God). Therefore, it can be argued that the act of relinquishing control to a higher power during early midlife could cause individuals with a high internal locus of control to fear losing control because they have not yet learned which areas to relinquish to religious control or a higher power. Relinquishing power in areas that they should accept control over might leave them disillusioned if the outcomes of trusting God were not in line with their expectations. The researcher, therefore, suggests that early midlife could be a time when the discomfort associated with a transcendental relationship for those individuals with a high internal locus of control, may coincide with the learning process during which individuals learn which aspects of control should be relinquished to a higher power as part of a purposeful control-inducing act.

Conversely, a statistically significant positive interaction effect of locus of control on the relationship between personal relationship ($r = -0.41$; $p = .037$) and satisfaction with life was found. Individuals with a high external locus of control should engage in a personal relationship to increase their satisfaction with life. Intra-relating to oneself regarding one’s values, meaning and purpose in life implies acting purposefully and taking a measure of control of one’s life (Tas & Iskender, 2018). Therefore, it can be inferred that it is important for individuals with a high external locus to recognise that although certain aspects may be uncontrollable by the individual and may be attributed to outside resources, other aspects can be changed by the

individual's ability to influence his/her life and the environment. Le et al. (2015) and Gonnerman et al. (2008) reported that an active spiritual health locus of control ('Even though I trust God to take care of me, I still need to take care of myself') rather than a passive spiritual health locus of control ('There is no point to taking care of myself when it's all up to God anyway') was associated with higher overall health promotion behaviour levels, higher stress management, and more spiritual growth. Similarly, in a sample of older adults, Krause (2010) found that God-mediated control beliefs (beliefs that God and the individual work together to influence the individual's life events) had a greater sense of meaning and optimism than those with weaker God-mediated control.

April et al. (2012) reported that a blend of internal control (personal responsibility) and external control (faith in God) would lead to greater levels of satisfaction with life for individuals. The researchers suggested that in respect of internal, external and bi-local expectancies, the middle-road that allows for a maximum level of well-being does not represent a polarisation of internal and external locus of control but rather a balanced locus of control. They emphasise the common concept of the importance of balance in life and a perception that extremities should be avoided for optimal well-being (April et al., 2012). These results align with Delle Fave et al.'s (2011) notion of harmonisation, definable as "balancing opposite elements into a whole" (p. 199) for optimal well-being. Therefore, the researcher proposes that midlife is a period when individuals learn how to balance and harmonise the light and dark aspects of life and find a balance in locus of control, which could ultimately lead to optimal satisfaction with life.

Conclusion, Limitations and Recommendations

Middle adulthood is a pivotal period in the life course of human development (Lachman, 2015; McGinnis, 2018). The current study revealed that most individuals in early midlife who participated in this study did cope competently with the demands they faced and could maintain a sense of control despite obstacles and limitations. However, findings of the current study suggest that some individuals find it difficult to cope and maintain a sense of control, which could impede their ability to stay mentally

stable and function optimally. The benefit of obstacles and limitations is that it can set several positive changes in motion that can ultimately be more conducive to the individual's wellbeing and therefore, because of the centrality of midlife, the wellbeing of the society at large (Calhoun & Tedeschi, 2013).

Busy lifestyles coupled with advanced technology that individuals have to juggle in early midlife seem to have created a disconnect from the natural environment (Biedenweg et al., 2017; McMahan, 2018) and negatively affect their communal relationships (Elsobeihi & Abu Naser, 2017; Younes & Al-Zoubi, 2015). The increase of a personal relationship and relationship with the environment is associated with a higher appraisal of satisfaction with life, pointing to the importance of an increased environmental relationship for those in early midlife not only for the direct relation to satisfaction with life (McMahan, 2018), but also for the facilitation of a personal relationship in search for meaning (Howell et al., 2013).

A personal relationship seems to be central during early midlife where individuals experience a heightened need to search for meaning in life (Levinson, 1933). Individuals search to find congruence between past experiences and values and possible present and future challenges (Tas & Iskender, 2018). This search for meaning often facilitates spiritual development in early midlife (Wink & Dillon, 2002). The findings of the current study suggest that individuals with an external locus of control should focus on a personal relationship to experience higher levels of satisfaction with life. Conversely, individuals with a high internal locus of control have not yet learned that the relinquishing of control to a higher power could be a purposeful control-inducing act. Thus, an increase in a transcendental relationship for those participants is associated with a decreased interpretation of their satisfaction with life. Therefore, the researcher proposes that midlife is a period when individuals learn how to balance and harmonise the light and dark aspects of life and find a balance in locus of control, which could ultimately lead to optimal satisfaction with life. The findings, therefore, support the dialectical nature of locus of control in the relationship between spiritual well-being and satisfaction with life of the participants in early midlife.

This study has several limitations that should be taken into consideration. All surveys were self-reported, a method that is suitable for assessing personal

motivations and subjective experiences (Sheldon & Lyubomirsky, 2007), but could also lead to some biases in participants' responses. Future research should consider using mixed methods, as interviews may contribute to discovering other layers of human experience and richness within the data that could be less apparent in quantitative research (e.g. dimensions that contribute to their evaluation of satisfaction with life) (Silverman, 2013). Interviews can facilitate a broadened understanding of individuals' perceptions, experiences and cultural factors (Delle Fave et al., 2011). As an individual and unique process, forging a sense of satisfaction with life may assume a fluctuating variety of patterns and pathways. Taking note of such varieties, nuances and individual differences is important when exploring such processes as different individuals may view and describe their evaluation of satisfaction with life in rather diverse ways. Furthermore, identifying characteristics of the setting that are empowering, liberating, and health-giving could give insight into contextual factors that influence the constructs under investigation.

Fisher (2010) developed the SHALOM questionnaire based on The Spiritual Well-Being Questionnaire (Gomez & Fisher, 2003) used in the current study. The SHALOM measures both the values/cognitive and reality/experience aspects of spirituality. This dual measurement enabled the researcher to evaluate possible tension between the respondent's (internal) spiritual values and the degree to which he or she acts upon them in daily life. In this way, the questionnaire measured spiritual health rather than general spirituality and examined the respondent's spirituality relative to him/her, and not only relative to the entire sample of individuals in early midlife (Fisher, 2011). Therefore, future research should consider using the SHALOM questionnaire to obtain a clearer understanding of an individual's spiritual well-being.

The best known and most widely used instrument to measure locus of control is Rotter's (1966) Locus of Control Scale that has been used in the current study. Several participants in this study reported that they found completing this scale very challenging and expressed the need to explain why they had chosen an option on specific scales. This indicates that in a South African context the forced choice between the options given might be more complicated and dialectic than envisaged. Furthermore, Furnham and Steele (1993) cite data suggesting that the most reliable,

valid questionnaire for adults is the Duttweiler scale. The Duttweiler (1984) Internal Control Index (ICI) addresses perceived problems with the Rotter scales, including the forced-choice format, susceptibility to social desirability and heterogeneity. Duttweiler's measuring instrument uses a Likert-type scale in which people must state whether they would rarely, occasionally, sometimes, frequently or usually behave as specified in each of the 28 statements. The ICI assess variables pertinent to internal locus: cognitive processing, autonomy, resistance to social influence, self-confidence and delay of gratification. Thus, it is proposed that future research should consider using the ICI to enable a deeper, more nuanced understanding of the construct and its role in the relationship between spiritual wellbeing and satisfaction with life.

The researcher found it challenging to recruit participants for this study because of their busy lifestyles. Participants had to be followed up regularly and reminded to either complete the questionnaires or to submit completed questionnaires to the identified individuals for collection. Therefore, the current study made use of a relatively small sample that was not representative of the demographics of the country. Thus, it is proposed that future research should include a larger sample size which is more representative of the South African demographics.

Overall, despite the aforementioned limitations, the results of this study have added to the existing body of research on early midlife by exploring the role of locus of control in relation to life satisfaction and spiritual wellbeing. The findings could contribute to the understanding of the manifestation of life satisfaction and spiritual wellbeing amongst individuals in early midlife within the South African context. As part of the venture to research and promote well-being and happiness, results from this study may also inform psychological interventions regarding the optimisation of life satisfaction in early midlife. Veenhoven (2018) believes that increased happiness can have far-reaching implications for the well-being of the individual and the country at large. Similarly, Nelson (2012) posits that spiritual wellbeing plays a critical role in the meaning-making and general wellbeing of people. In this regard, the results of this current study indicate that interventions should aim at promoting and facilitating a balanced locus of control and that extremities should be avoided to improve levels of life satisfaction.

With a specific focus on the centrality of meaning during early midlife, it is suggested that interventions should assist individuals to appreciate the life-sustaining strengths that can follow from choosing to find, and indeed create, meaning when faced with difficult experiences. Depending on the individual's locus of control, two different paths to meaning-making are proposed. Firstly, individuals with a high internal locus of control should be assisted in searching for meaning through a transcendental relationship whereby they can embark on a journey in which they learn how to relinquish control as part of a control-inducing act. Secondly, individuals with a high external locus of control should be assisted to accept responsibility for their own lives by searching for meaning through a process of turning inwardly and reappraising difficult circumstances as meaningful in their life journey.

Meaning-making in mental health settings has recently been linked to personal growth after experiencing adversity or critical incidences and is associated with gains in self-efficacy and positive reappraisal (Russo-Netzer et al., 2016). Wong (2019) propose that suffering is the foundation to explore how we can transform suffering into wellbeing and character strengths by integrating both negatives and positives to achieve optimal wellbeing. Similarly, Compton and Hoffman (2020) states that it is neither the skill to repair brokenness, nor the skill to increase strength, that should be the focus of psychological interventions, rather the skill to transform brokenness into strength, thus integrating healing with flourishing. The current study aligns itself with Russo-Netzer et al. (2016), who advocate that therapists working with early midlife individuals should take meaning-making seriously and use it as a tool to deepen and enrich the therapeutic process via connecting past meaning-making successes to new domains explored by individuals.

References

- Abele, A. E. (2014). Pursuit of communal values in an agentic manner: A way to happiness? *Frontiers of Psychology, 5*, 1320.
<https://doi.org/10.3389/fpsyg.2014.01320>
- Ackerman, C. (2019, November 19). Life satisfaction theory and 4 contributing factors. PositivePsychology.com. <https://positivepsychologyprogram.com/life-satisfaction/>
- Aguirre-Camacho, A., & Moreno-Jiménez, B. (2018). Depression and anxiety in patients with pulmonary hypertension: The role of life satisfaction and optimism. *Psychosomatics, 59*(6), 575-583.
<https://doi.org/10.1016/j.psych.2018.04.002>
- Aiken, L. S., West, S. G., & Reno, R. R. (1991). *Multiple regression: Testing and interpreting interactions*. Sage Publications.
- Allan, A. (2016). *Law and ethics in psychology: An International Perspective* (3rd ed). Inter-Ed Publishers.
- Anderson, E., Cochrane, A., Golding, J., & Nowicki, S. (2018). Locus of control as a modifiable risk factor for cognitive function in midlife. *Impact Journal on Aging, 10*(7), 1542–1555. <https://doi.org/10.18632/aging.101490>
- April, K., Dharani, B., & Peters, K. (2012). Impact of locus of control expectancy on level of well-being. *Review of European Studies, 4*(2), 124-135.
<https://doi.org/10.5539/res.v4n2p124>
- Aristotle. (1975). *The Nicomachean ethics*. Oxford University Press.
- Baird, B., Lucas, R. E., & Donovan, M. B. (2010). Life satisfaction across the life span: Findings from two nationally representative panel studies. *Social Indicators Research, 99*, 183-203. <https://doi.org/10.1007/s11205-010-9584-9>

- Baltes, P. B. (1987). Theoretical propositions of life-span developmental psychology: On the dynamics between growth and decline. *Developmental Psychology*, 23(5), 611-626. <https://doi.org/10.1037/0012-1649.23.5.611>
- Baltes, P. B., Lindenberger, U., & Staudinger, U. M. (2006). Life span theory in developmental psychology. In R. M. Lerner (Ed.), *Handbook of child psychology: Theoretical model of human development* (6th ed., Vol. 1, pp. 569–664). Wiley.
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Biedenweg, K., Scott, R. P., & Scott, A. T. (2017). How does engaging with nature relate to life satisfaction? Demonstrating the link between environment-specific social experiences and life satisfaction. *Journal of Environmental Psychology* 50, 112 – 124. <https://doi.org/10.1016/j.jenvp.2017.02.002>
- Blanchflower, D. G. (2020). *Is happiness U-shaped everywhere? Age and subjective well-being in 132 countries*. <http://www.nber.org/papers/w26641>
- Blatný, M., Millová, K., & Jelínek, M. (2019). Personality predictors of midlife generativity: A longitudinal study. *Journal of Adult Development*, 26, 219–231. <https://doi.org/10.1007/s10804-018-9323-z>
- Brim, O. G., Ryff, C. D., & Kessler, R. C. (2004). *How healthy are we? A national study of well-being at midlife*. University of Chicago Press
- Brown, S. M., & Shillington, A. M. (2017). Childhood adversity and the risk of substance use and delinquency: The role of protective adult relationships. *Child Abuse & Neglect*, 63, 211-221. <https://doi.org/10.1016/j.chiabu.2016.11.006>
- Calhoun, L. G., & Tedeschi, R. G. (2013). *Posttraumatic growth in clinical practice*. Routledge.

- Calhoun, L. G., Tedeschi, R. G., & Tedeschi, R. G. (2014). *Handbook of posttraumatic growth: Research and practice*. Routledge
- Chirico, F. (2016). Spiritual well-being in the 21st century: It's time to review the current WHO's health definition? *Journal of Health and Social Sciences*, 1(1), 11-16.
<https://doi.org/10.19204/2016/sprt2>
- Clark, E. M., Huang, J., Roth, D. L., Schulz, E., Williams, B. R., & Holt, D. L. (2017). The relationship between religious beliefs and behaviors and changes in spiritual health locus of control over time in a national sample of African Americans. *Mental Health Religion Culture*, 20(5), 449–463.
<https://doi.org/10.1080/13674676.2017.1356274>
- Coetzee, S., & Viviers, R. (2007). An overview of research on positive psychology in South Africa. *South African Journal of Psychology*, 37(3), 470-490.
<https://doi.org/10.1177/008124630703700307>
- Cohen, J. (1988). *Statistical power analysis* (2nd ed.). Erlbaum.
- Compton, W. C., & Hoffman, E. (2020). *Positive psychology: The science of happiness and flourishing* (3rd ed.). Sage.
- Cort, W. R., & Zacher, H. (2016). Considering generations from a lifespan developmental perspective. *Work, Aging and Retirement*, 3(2), 113–129.
<https://doi.org/10.1093/workar/waw019>
- Costanza, D. P., & Finkelstein, L. M. (2015). Generationally based differences in the workplace: Is there a there there? *Industrial and Organizational Psychology. Perspectives on Science and Practice*, 8, 308–323.
<https://doi.org/10.1017/iop.2015.15>
- Cotton, S., Zebracki, K., Rosenthal, S. L., Tsevat, J., & Drotar, D. (2006). Religion/spirituality and adolescent health outcomes: A review. *Journal of Adolescent Health*, 38, 472–480.
<https://doi.org/10.1016/j.jadohealth.2005.10.005>

- Critical Skills Survey*. (2018). Workpermit South Africa.
<https://www.workpermitsouthafrica.co.za/critical-skills-survey-results-2018/>
- Cummings, J., & Swickert, R. (2010). Relationship between locus of control and posttraumatic growth. *Individual Differences Research*, 8, 198-204.
- Daniels, R. C. (2007). *Skills shortages in South Africa: A literature review* (Working Paper No. 7). Development Policy Research Unit. ISBN: 978-1-920055-44-8
- Delle Fave, A., Brdar, I., Freire, T., Vella-Brodrick, D., & Wissing, M. P. (2011). The eudaimonic and hedonic components of happiness: Qualitative and quantitative findings. *Social Indicators Research*, 100(2), 185–207.
<https://doi.org/10.1007/s11205-010-9632-5>
- Diener, E. (1984). Subjective wellbeing. *Psychological Bulletin*, 95(3), 542-575.
<http://www.internal.psychology.illinois.edu>
- Diener E. (2000). Subjective well-being: The science of happiness, and a proposal for a national index. *American Psychology*, 55, 34–43.
<https://doi.org/10.1037/0003-066X.55.1.34>
- Diener, E., & Diener, M. (1995). Cross-cultural correlates of life satisfaction and self-esteem. *Journal of Personality and Social Psychology*, 68, 653–663.
<https://doi.org/10.1037//0022-3514.68.4.653>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment* 49, 71-75.
- Diener, E., Inglehart, R. F., & Tay, L. (2013). Theory and validity of life satisfaction scales. *Social Indicators Research*, 112(3), 497-527.
<https://www.psc.isr.umich.edu/pubs/abs/8704>
- Dogra, A. K., Basu, S., & Das, S. (2011). Impact of meaning in life and reasons for living to hope and suicidal ideation: A study among college students. *Psychology & Mental Health*, 18, 89-102.
- Donisi, S. (2017). *20 Years of participating in public policy; Structural unemployment in SA* (Briefing Paper No. 445). <http://www.cplo.org.za/wp->

content/uploads/2017/12/BP-445-Structural-Unemployment-In-SA-Dec-2017.pdf

- Duttweiler, P. C. (1984). The internal control index: A newly developed measure of locus of control. *Educational and Psychological Measurement*, 44(2), 209–221. <https://doi.org/10.1177/0013164484442004>.
- Dykes, G. (2016). Coping, resilience and posttraumatic growth: Adverse childhood experiences and social work students. *The Social Work Practitioner-Researcher*, 28(1), 18 – 35. <http://hdl.handle.net/10520/EJC194914>
- Ehrenreich, B. (2010). *Smile or die: How positive thinking fooled America and the world*. Granta. <https://www.theguardian.com/books/2010/jan/10/smile-or-die-barbara-ehrenreich>
- Elsobeihi, M. M., & Abu Naser, S. S. (2017). Effects of mobile technology on human relationships. *International Journal of Engineering and Information Systems*, 1(5), 110-125. <https://www.researchgate.net/publication/319212701>
- Erikson E. H. (1950). *Childhood and society*. Norton.
- Erikson E. H. (1959). *Identity and the life cycle*. Norton
- Erikson E. H. (1968). Generativity and ego integrity. In B. L. Neugarten (Ed.), *Middle age and aging* (pp. 85-87). University of Chicago Press.
- Etemadifar, S., Hosseiny, R. S., Ziraki, A., Omrani, A., & Alijanpoor, M. (2016). The relationship between spiritual well-being and life satisfaction in females with infertility. *Women Health Bull*, 3(4). <https://doi.org/10.17795/whb-32344>.
- Exline, J. J., Yali, A. M., & Sanderson, W. C. (2000). Guilt, discord, and alienation: The role of religious strain in depression and suicidality. *Journal of Clinical Psychology*, 56, 1481–1496. [https://doi.org/10.1002/1097-4679\(200012\)56:121481::AID-13.0.CO;2-A](https://doi.org/10.1002/1097-4679(200012)56:121481::AID-13.0.CO;2-A)
- Falb, M. D., & Parham, K. I. (2012). Relational mindfulness, spirituality, and the therapeutic bond. *Asian Journal of Psychiatry*, 5(4), 351-354. <https://doi.org/10.1016/j.ajp.2012.07.008>

- Falissard, B. (2016). Positive mental health, fighting stigma and promoting resilience of children and adolescents. Elsevier Inc. <https://doi.org/10.1016/B978-0-12-804394-3.00001-2>
- Fave, A. D., Brdar, I., Freire, T., Vella-Brodrick, D., & Wissing, M. P. (2010). The eudaimonic and hedonic components of happiness: Qualitative and quantitative findings. *Social Indicators Research*, *100*, 185–207. <https://doi.org/10.1007/s11205-010-9632-5>
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics: And sex and drugs and rock “N” roll* (4th ed). Sage
- Finke, M. S., Huston, S. J., & Sharpe, D. L. (2005). Balance sheets of early Boomers: Are they different from pre-Boomers? *Journal of Family and Economic*, *27*, 542–561. <https://doi.org/10.1007/s10834-006-9026-7>
- Fisher, J. W. (2016). Selecting the best version of SHALOM to assess spiritual well-being. *Religions*, *7*(5), 45. <https://doi.org/10.3390/rel7050045>
- Fisher, J. W. (2011). The four domains model: Connecting spirituality, health and well-being. *Religions*, *2*(1), 17–28. <https://doi.org/10.3390/rel2010017>
- Fisher, J. W. (2010). Development and application of a spiritual well-being questionnaire called SHALOM. *Religions*, *1*(1), 105–121. <https://doi.org/10.3390/rel1010105>
- Fisher, G., & Scott, I. (2011). Closing the skills and technology gap in South Africa; *Background Paper 3: The role of higher education in closing the skills gap in South Africa*. http://www.ched.uct.ac.za/usr/ched/docs/Fisher_Higher%20Education%20role.pdf
- Flori, K. L., Brown, E. E., Cortina, K. S., & Antonucci, T. C. (2006). Locus of control as a mediator of the relationship between religiosity and life satisfaction: Age, race and gender differences. *Mental Health, Religion & Culture*, *9*(3), 239–263. <https://doi.org/10.1080/13694670600615482>

- Frankl, V. E. (1963). *Man's search for meaning: An introduction to logotherapy*. Pocket Books.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, *56*, 218-226. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3122271/>
- Furnham, A., & Steele, H. (1993). Measuring locus of control: A critique of general, children's, health- and work-related locus of control questionnaires. *British Journal of Psychology*, *84*(4), 443–479. <https://doi.org/10.1111/j.2044-8295.1993.tb02495.x>.
- Gomez, R., & Fisher, J. W. (2003). Domains of spiritual well-being and development and validation of the Spiritual Well-being Questionnaire. *Personality and Individual Differences*, *35*, 1975-1991. <http://researchonline.ballarat.edu.au>.
- Gomez, R., & Fisher, J. W. (2005). The Spiritual Well-Being Questionnaire: Testing for model applicability, measurement and structural equivalencies and latent mean differences across gender. *Personality and Individual Differences*, *39*, 1383-1393. <https://doi.org/10.1016/j.paid.2005.03.023>
- Gonnerman, M. E., Lutz, G. M., Yehieli, M., & Meisinger, B. K. (2008). Religion and health connection: A study of African American protestant Christians. *Journal of Health Care for the Poor and Underserved*, *19*, 193–199.
- Gravetter, F. J., & Forzano, L. B. (2018). *Research methods for the behavioral Sciences* (6th ed.). Cengage Learning.
- Gruner, D. T., & Csikszentmihaly, M. (2018). Towards a new measure of societal well-being. In N. J. L. Brown, T. Lomas, & F. J. Eiroa-Orosa (Eds.), *The Routledge International handbook of critical positive psychology*. Routledge.
- Health Professions Council of South Africa (2016). *Guidelines for good practice in the health care professions; General ethical guidelines for the health care professions*. https://www.hpcs.co.za/Uploads/Professional_Practice/Conduct

- Held, S. H. (2004). The negative side of positive psychology. *Journal of Humanistic Psychology, 44*(1), 9-46. <https://doi.org/10.1177/0022167803259645>
- Howell, A. J., Passmore, H., & Buro, K. (2013). Meaning in nature: Meaning in life as a mediator of the relationship between nature connectedness and well-being. *Journal of Happiness Studies, 14*, 1681–1696. <https://doi.org/10.1007/s10902-012-9403-x>
- Holt, C. L., Clark, E. M., Kreuter, M. W., & Rubio, D. M. (2003). Spiritual health locus of control and breast cancer beliefs among urban African American women. *Health Psychology, 22*(3), 294–299. <https://doi.org/10.1037/0278-6133.22.3.294>.
- Hood, R. W., Jr., Hill, P. C., & Spilka, B. (2018). *The psychology of religion: An empirical approach* (5th ed.). Guilford Press.
- Howell, D. C. (2013). *Statistical methods for Psychology* (8th ed.). Cengage Learning
- Huebner, E. S., Suldo S. M., Smith L. C., & McKnight C. G. (2003). Life satisfaction in children and youth: Empirical foundations and implications for school psychologists. *Psychology in The Schools, 41*(1), 81-93. <https://doi.org/10.1002/pits.10140>
- Hughes, M. L., Agrigoroaei, S., Bruzzese, J. M., & Lachman, M. E. (2018). Change in cognitive performance from midlife into old age: Findings from the midlife in the United States (MIDUS) study. *Journal of the International Neuropsychological Society, 1*–16. <https://doi.org/10.1017/S1355617718000425>
- Huta, V. (2015). An overview of hedonic and eudaimonic well-being concepts. In L. Reinecke, M. B. Oliver (Eds.), *Handbook of media use and well-being*. Routledge.
- Iannello, N. M., Hardy, S. A., Musso, P., Lo Coco, A., & Inguglia, C. (2019). Spirituality and ethnocultural empathy among Italian adolescents: The mediating role of religious identity formation processes. *Psychology of Religion and Spirituality, 11*, 32–41. <https://doi.org/10.1037/rel0000155>

- Jackman, L. C., Thorsteinsson, E. B., & McNeil, D. G. (2017). Perfect imperfections: Locus of control, perfectionism, and postpartum depression. *SAGE Open*, 1(8). <https://doi.org/10.1177/2158244017710689>
- Jackson, B. R., & Bergeman, C. S. (2011). How does religiosity enhance well-being? The role of perceived control. *Psychology of Religion and Spirituality*, 3(2), 149–161. <https://doi.org/10.1037/a0021597>
- Jafaria, E., Dehshirib, G. E., Eskandarib, H., Najafic, M., Heshmatid, R., & Hoseinifarb, J. (2010). Spiritual well-being and mental health in university students. *Procedia Social and Behavioral Sciences*, 5, 1477–1481.
- Jung, C. G. (1933). *Modern man in search of a soul*. Harcourt, Brace & World.
- Jung, J. H. (2018). Childhood adversity, religion, and change in adult mental health. *Research on Aging*, 40(2), 155–179. <https://doi.org/10.1177/0164027516686662>
- Kesebir, P. (2018). Scientific answers to the timeless philosophical question of happiness. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. UT: DEF Publishers. <https://doi:nobascholar.com>
- Klein, J. D., & Keller, J. M. (1990). Influence of student ability, locus of control, and type of instructional control on performance and confidence. *The Journal of Educational Research*, 83(3), 140-146. <https://doi.org/10.1080/00220671.1990.10885945>
- Kim-Prieto, C., & Miller, L. (2018). Intersection of religion and subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. DEF Publishers. <https://doi:nobascholar.com>
- King P. E., & Boyatzis C. (2015). Religious and spiritual development. In M. E. Lamb, R. M. Lerner (Eds.), *Handbook of child psychology and developmental science: Socioemotional processes* (7th ed. Vol. 3, pp. 975-1021). John Wiley and Sons.

- Klonowicz, T. (2001). Discontented people: Reactivity and locus of control as determinants of subjective well-being. *European Journal of Personality*, 15(1), 29–47. <https://doi.org/10.1002/per.387>
- Koenig, H. G. (2012). Religion, spirituality and health: The research and clinical implications. *International Scholarly Research Notices Psychiatry*, 1-33. <http://www.hindawi.com>.
- Kostka, T., & Jachimowicz, V. (2010). Relationship of quality of life to dispositional optimism, health locus of control and self-efficacy in older subjects living in different environments. *Quality of Life Research*, 19(3), 351–361. <http://doi.org/10.1007/s11136-010-9601-0>
- Krause, N. (2010). God-mediated control and change in self-rated health. *International Journal for the Psychology of Religion*, 20, 267–287. <http://doi.org/10.1080/10508619.2010.507695>
- Kulshresta, U. & Sen, C. (2006). Subjective well-being in relation to emotional intelligence and locus of control among executives. *Journal of the Indian Academy of Applied Psychology*, 32, 93-98.
- Kunzmann, U., Little, T. D., & Smith, J. (2000). Is age-related stability of subjective well-being a paradox? Cross-sectional and longitudinal evidence from the Berlin Aging Study. *Psychology and Aging*, 15, 511–526. <https://doi.org/10.1037/0882-7974.15.3.511>
- Lachman, M. E. (2015). Mind the gap in the middle: A call to study midlife. *Research Human Development*, 12(3-4), 327–334. <https://doi.org/10.1080/15427609.2015.1068048>
- Lachman, M. E. (2004). Development in midlife. *Annual Review of Psychology*, 55, 305–331. <https://doi.org/10.1146/annurev.psych.55.090902.141521>
- Lachman, M. E. (2001). *Handbook of midlife development*. Wiley.
- Lachman, M. E. (1986). Locus of control in aging research: A case for multidimensional and domain-specific assessment. *Psychology and Aging*, 1, 34–40. <https://doi.org/10.1037/0882-7974.1.1.34>

- Lachman, M. E., & James, J. M. (1997). Charting the course of midlife development: An overview. In M. E. Lachman & J. B. James (Eds.), *Multiple paths of midlife development* (pp. 1-17). University of Chicago Press.
- Lachman, M. E., Lewkowicz, C., Marcus, A., & Peng, Y. (1994). Images of midlife development among young, middle-aged, and older adults. *Journal of Adult Development, 1*, 201–211. <https://doi.org/10.1007/BF02277581>.
- Lachman, M. E., Röcke, C., & Rosnick, C. (2009). The rise and fall of control beliefs in adulthood: Cognitive and biopsychosocial antecedents and consequences of stability and change over nine years. In H. B. Bosworth, C. Hertzog (Eds.), *Aging and cognition: Research methodologies and empirical advances* (pp. 143-160). American Psychological Association.
- Lachman, M. E., Teshale, S., & Agrigoroaei, S. (2015). Midlife as a pivotal period in the life course: Balancing growth and decline at the crossroads of youth and old age. *International Journal of Behavioral Development, 39*(1), 20–31. <https://doi.org/10.1177/0165025414533223>
- Lachman, M. E., & Weaver, S. L. (1998). The sense of control as a moderator of social class differences in health and well-being. *Journal of Personality and Social Psychology, 74*(3), 763–773. <https://doi.org/10.1037/0022-3514.74.3.763>
- Landes, S. D., Ardelt, M., Vaillant, G. E., & Waldinger, R. (2014). Childhood adversity, midlife generativity, and later life well-being. *The Journals of Gerontology, 69*(6), 942–952. <https://doi.org/10.1093/geronb/gbu055> .
- Langbein, L.I. (2012). *Public program evaluation: A statistical guide*. M.E. Sharpe.
- Lansford, J. E. (2018). A lifespan perspective on subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. UT: DEF Publishers. <https://doi:nobascholar.com>
- Lazarus, R. S. & Martin, L. L. (2003). Does the Positive Psychology movement have legs? *Psychological Inquiry, 14*, 93-109. <https://www.researchgate.net/publication/279926799>

- Le, D., Holt, C. L., Roth, D. L., Huang, J., & Clark, E. M. (2015). *Factor structure of a revised: Spiritual Health Locus of Control (SHLOC) Scale in a national sample of African Americans*. Presented at the annual meetings of the American Public Health Association. Chicago.
- Lee, B. (2018). Toward an integrative applied positive psychology. In N. J. L. Brown, T. Lomas, & F. J. Eiroa-Orosa (Eds.), *The Routledge International Handbook of Critical Positive Psychology*. Routledge.
- Levinas, E. (1987). *Time and the other essays*. Duquesne University Press.
- Levinson, D. J., Darrow, C. N., Klein, E. B., Levinson, M. H., & McKee, B. (1978). *The seasons of a man's life*. Knopf.
- Liu, Y., & Lachman, M. E. (2019). Socioeconomic status and parenting style from childhood: Long-term effects on cognitive function in middle and later adulthood, *The Journals of Gerontology*, 74(6), e13–e24, <https://doi.org/10.1093/geronb/gbz034>
- Lomas, T., Hefferon, K., & Ivtzan, I. (2014). The LIFE model: A meta-theoretical conceptual map for applied positive psychology. *Journal of Happiness Studies*, 16(5), 1347-1364. <https://doi.org/10.1007/s10902-014-9563-y>
- Lomas, T., & Ivtzan, I. (2016). Second wave positive psychology: Exploring the positive–negative dialectics of wellbeing. *Journal of Happiness Studies*, 16(4). <https://doi.org/10.1007/s10902-015-9668-y>
- López-Ortega, M., Torres-Castro, S., & Rosas-Carrasco, O. (2016). Psychometric properties of the Satisfaction with Life Scale (SWLS): Secondary analysis of the Mexican health and aging study. *Health and Quality of Life Outcomes*, 14,170. <https://doi.org/10.1186/s12955-016-0573-9>
- Lucas, R. E. (2007). Adaptation and the set-point model of subjective well-being. *Current Directions in Psychological Science*, 16(2), 75-79. <https://doi.org/10.1111/j.1467-8721.2007.00479.x>

- Lun, V. M., & Bond, M. H. (2013). Examining the relation of religion and spirituality to subjective well-being across national cultures. *Psychology of Religion and Spirituality*, 5(4), 304-315. <https://www.apa.org>
- MacDonald, D. A., (2018). Taking a closer look at well-being as a scientific construct; Delineating its conceptual nature and boundaries in relation to spirituality and existential functioning. In N. J. L. Brown, T. Lomas, & F. J. Riroa-Orosa (Eds.), *The Routledge international handbook of critical positive psychology*. Routledge.
- Malone, J. C., Liu, S. R., Vaillant, G. E., Rentz, D. M., & Waldinger, R. J. (2016). Midlife Eriksonian psychosocial development: Setting the stage for late-life cognitive and emotional health. *Developmental Psychology*, 52, 496–508. <https://doi.org/10.1037/a0039875>
- McAdams, D. P. (1993). *The stories we live by: Personal myths and the making of the self*. Guilford.
- McCullough, M. E., & Willoughby, B. L. B. (2009). Religion, selfregulation, and self-control: Associations, explanations, and implications. *Psychological Bulletin*, 135, 69–93. <https://doi.org/10.1037/a0014213>
- McGinnis, D. (2018). Resilience, life events, and well-being during midlife: Examining resilience subgroups. *Journal of Adult Development*, 25(3), 198–221. <https://doi.org/10.1007/s10804-018-9288-y>
- McMahan, E. A. (2018). Happiness comes naturally: Engagement with nature comes naturally: Engagement with nature as a route to positive subjective well-being. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. DEF Publishers. <https://doi:nobascholar.com>
- McNeish, D. (2017). Challenging conventional wisdom for multivariate statistical models with small samples. *Review of Educational Research*, 87(6), 1117-1151. doi.org/10.3102/0034654317727727
- Mirowsky, J., & Ross, C. E. (2003). *Education, social status, and health*. Series Title: Social institutions and social change. Aldine de Gruyter.

- Moodley, T., Esterhuyse, K. G. F, & Beukes, R. B. I. (2012). Factor analysis of the Spiritual Well-being Questionnaire using a sample of South African adolescents. *Religion and Theology*, 19(1-2), 122– 51. <https://doi.org/10.1163/157430112x650339>
- Moreno-Jiménez, B., & Aguirre-Camach, A. (2018). Positive psychology: Intellectual, scientific, or ideological movement? In N. J. L. Brown, T. Lomas, & F. J. Eiroa-Orosa (Eds.), *The Routledge international handbook of critical positive psychology*. Routledge,
- Mroczek D. K., & Kolarz, C. M. (1998). The effect of age on positive and negative affect: A developmental perspective on happiness. *Journal of Personality Social Psychology*, 75(5), 1333-1349. <https://doi.org/10.1037/0022-3514.75.5.1333>
- Mueller, P., Plevak, D., & Rummans, T. (2001). Religious involvement, spirituality, and medicine: Implications for clinical practice. Mayo clinic proceedings. *Mayo Clinic*, 76(12), 1225–1235. <https://www.ncbi.nlm.nih.gov/pubmed/11761504>
- National Interfaith Coalition on Aging (NICA). (1975). Spiritual well-being: A definition. NICA.
- Nelson, J. M. (2012). *Psychology, religion and spirituality*. Springer Science and Business Media.
- Owusu-Ansa, F. E. (2008). Control perceptions and control appraisal: Relation to measures of subjective well-being. *Ghana Medical Journal*, 242(2), 61–67. <https://doi.org/10.4314/gmj.v42i2.43597>
- Paloutzian, R. F., & Ellison, C. W. (1982). Loneliness, spiritual well-being and the quality of life. In L. A. Peplau, & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 224-236). John Wiley & Sons.
- Palk, L.C. (2015). *An exploratory study of midlife transition in South Africa: In search of the midlife crisis* (Unpublished masters dissertation). University of South Africa.

- Pargament, K. I. (2013). Searching for the sacred: Towards a nonreductionistic theory of spirituality. In K. I. Pargament, A., (Ed.), *APA handbook of psychology, religion, and spirituality: Context, theory, and research* (Vol. 1, pp. 257-273). American Psychological Association,
- Pargament, K., Grevengoed, N., Kennell, J., Newman, J. Hathaway, W., & Jones, W. (1988). Religion and the problem-solving process: Three styles of coping. *Journal for the Scientific Study of Religion*, 27, 90-104.
<http://doi.org/10.2307/1387404>
- Pargament, K. I., Mahoney, A., Exline, J. J., Jones, J. W., & Shafranske, E. P. (2013). Envisioning an integrative paradigm for the psychology of religion and spirituality. In K. I. Pargament, J. J. Exline, & J. W. Jones (Eds.), *APA handbook of psychology, religion, and spirituality: Context, theory, and research* (Vol. 1, pp. 3–19). American Psychological Association.
<http://dx.doi.org/10.1037/14045-001>
- Park, C. L., Edmondson, D., & Hale-Smith, A. (2013). Why religion? Meaning as motivation. In K. I. Pargament, J. J. Exline, & J. W. Jones (Eds.), *APA handbook of psychology, religion, and spirituality: Context, theory, and research* (Vol. 1, pp. 157–171). American Psychological Association.
<https://doi.org/10.1037/14045-008>
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Psychological Assessment*, 5(2), 164-172. <http://www.apa.org>
- Phillipson, C. (2013). *Ageing*. Polity Press.
- Pu, J., Hou, H., & Ma, R. (2017). The mediating effects of self-esteem and trait anxiety mediate on the impact of locus of control on subjective well-being. *Current Psychology*, 36, 167–173. <https://doi.org/10.1007/s12144-015-9397-8>
- Quevedo, R. J. M., & Abella, M. C. (2013). Does locus of control influence subjective and psychological well-being? *Personality and Individual Differences*, 60, S5.
<https://doi.org/10.1016/j.paid.2013.07.231>

- Ramsay, J. E., Tong, E. M., Chowdhury, A., & Ho, M. H. R. (2018). Teleological explanation and positive emotion serially mediate the effect of religion on well-being. *Journal of Personality, 87*, 676–689. <https://doi.org/10.1111/jopy.12425>
- Razali, Z. A. (2015). Midlife crisis: An Islamic perspective. *2ND USIM International conference on medicine and health 2015*.
<https://doi.org/10.13140/RG.2.1.3615.5124>
- Robinson, M. D., & Klein, R. J. (2018). What do subjective well-being judgments mean? Sources and distinctions, processes and mechanisms. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. DEF Publishers.
<https://doi:nobascholar.com>
- Robinson, S. A., & Lachman, M. E. (2017). Perceived control and aging: A mini review and directions for future research. *Gerontology, 63*, 435-442.
<https://doi.org/10.1159/000468540>
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcements. *Psychological Monographs: General and Applied, 80*(1), 1-28.
<https://doi.org/10.1037/h0092976>
- Rotter, J. B. (1954). *Social learning and clinical psychology*. Prentice-Hall.
- Rovenpor, D. (2014). Do control beliefs help people approach or avoid negative stimuli? Context-dependent effects of control beliefs. *Scholarworks@umass, Amherst*
- Rovenpor, D., & Isbell, L. (2018). Do emotional control beliefs lead people to approach positive or negative situations? Two competing effects of control beliefs on emotional situation selection. *Emotion, 18*(3), 313-331.
<https://doi.org/10.1037/emo0000353>
- Rowold, J. (2010). Effects of spiritual well-being on subsequent happiness, psychological well-being, and stress. *Journal of Religion and Health, 50*(4), 950-963. <https://doi.org/10.1007/s10943-009-9316-0>

- Russo-Netzer, P. (2018). Prioritizing meaning as a pathway to meaning in life and well-being. *Journal of Happiness Studies*, 20, 1863–1891. <https://doi.org/10.1007/s10902-018-0031-y>
- Russo-Netzer, P., Schulenberg, S. E., & Batthyany, A. (2016). *Clinical perspectives on meaning: Positive and existential psychotherapy*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-41397-6>
- Ryan, R., & Deci, E. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52(1), 141-166. <https://doi.org/10.1146//52.1.141>
- Ryan, M. E., & Francis, A. J. P. (2012). Locus of control beliefs mediate the relationship between religious functioning and psychological health. *Journal of Religion and Health* 51, 774–785. <https://doi.org/10.1007/s10943-010-9386-z>
- Ryff, C. D. (2014). Psychological well-being revisited: Advances in the science and practice of eudaimonia. *Psychotherapy and Psychosomatics*, 83(1), 10-28. <https://doi.org/10.1159/000353263>
- Ryff, C. D., & Singer, B. (2003). Flourishing under fire: Resilience as a prototype of challenged thriving. In C. L. M. Keyes, J. Haidt (Eds.), *Flourishing: Positive psychology and the life well-lived* (pp.15-36). APA.
- Sandage, S. J., Hill, P. C., & Vang, H. C. (2003). Toward a multicultural Positive Psychology: Indigenous forgiveness and Hmong culture. *The Counselling Psychologist*, 31(5), 564-592. <https://doi.org/10.1177/0011000003256350>
- Schjoedt, L., & Shaver, K. (2011). Development and validation of a locus of control scale for the entrepreneurship domain. *Small Business Economics*, 39(3), 713-726. <https://doi.org/10.1007/s11187-011-9357-0>
- Seligman, M. E. P. (2002). *Authentic happiness: Using the new possible psychology to realize your potential for lasting fulfillment*. Free Press.

- Seligman, M. E. P., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55(1): 5–14.
<https://doi.org/10.1037/0003-066x.55.1.5>.
- Seligman, M. E. P. (1999). The president's address. *American Psychologist*, 54, 559-562.
- Shafi, H., Bashir, H., Yousuf, U., Parveen, S., & Akhter, K. (2016). Relationship between spiritual well-being, life satisfaction and depression: A study of middle aged people. *The International Journal of Indian Psychology*, 3(2).
<http://oaji.net/articles/2016/1170-1452245879.pdf>
- Sheldon, K. M., & Lyubomirsky, S. (2007). Is it possible to become happier? (And if so, how?). *Social and Personality Psychology Compass*, 1(1), 129-145.
<https://doi.org/10.1111/j.1751-9004.2007.00002.x>
- Sheldon, Kennon M. & King, Laura (2001). Why positive psychology is necessary. *American Psychologist*, 56(3), 216-217.
<http://web.missouri.edu/~sheldonk/pdfarticles/AP01.pdf>
- Shubina, I. (2017). Locus of control, feeling of happiness and self-esteem: interrelation analysis. *International Journal of Scientific Research and Management*. 5(11), 7563-7575. <https://doi.org/10.18535/ijstrm/v5i11.27>
- Silverman, D. (2019). *Doing qualitative research (5th ed.)*. Sage Publications.
- SPSS Incorporated. (2017). *SPSS user's guide: Version 25.0*. Author.
- Statistics South Africa (2018). Statistical report P0302. Mid-year population estimates. https://www.beta2.statssa.gov.za/publications/P0302/P0302_2018.pdf
- Staudinger, U. M., & Bluck, S. (2001). A view of midlife development. In M. E. Lachman (Ed.), *Handbook of midlife development* (pp 3-39). Wiley.
- Steger, M. F. (2009). Meaning in life. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (2nd ed., pp. 679–687). Oxford University Press.

- Steger, M. F., & Kashdan, T. B. (2007). Stability and specificity of meaning in life and life satisfaction over one year. *Journal of Happiness Studies*, 8, 161–179. <https://doi.org/10.1007/s10902-006-9011-8>
- Steger, M. F., Oishi, S., & Kesebir, S. (2011). Is a life without meaning satisfying? The moderating role of the search for meaning in satisfaction with life judgments. *The Journal of Positive Psychology*, 6, 173–180. <https://doi.org/10.1080/17439760.2011.569171>
- Stephoe, A., Deaton, A., & Stone, A. A. (2015). Subjective wellbeing, health, and ageing. *The Lancet*, 385(9968), 640-648. [https://doi.org/10.1016/s0140-6736\(13\)61489-0](https://doi.org/10.1016/s0140-6736(13)61489-0)
- Stocks, A., April, K. A., & Lynton, N. (2012). Locus of control and subjective well-being – a cross-cultural study. *Problems and Perspectives in Management*, 10(1). <https://doi.org/10.12691/ajnr-7-2-8>
- Tagay, S., Erim, Y., Bra ¨hler, E., & Senf, W. (2006). Religiosity and SOC—protective factors of mental health and well-being? *Zeitschrift fur Medizinische Psychologie*, 15, 165–171.
- Taş, I., & İskender, M. (2018). An examination of meaning in life, satisfaction with life, self-concept and locus of control among teachers. *Journal of Education and Training Studies*, 6(1). <https://doi.org/10.11114/jets.v6i1.2773>
- Tov, W. (2018). Well-being concepts and components. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. DEF Publishers. <https://doi:nobascholar.com>
- Veenhoven, R. (2018). Subjective well-being in nations. In E. Diener, S. Oishi, & L. Tay (Eds.), *Handbook of well-being*. DEF Publishers. <https://doi:nobascholar.com>
- Veenhoven, R. (2017). *World Database of Happiness*. Erasmus University Rotterdam. <http://worlddatabaseofhappiness.eur.nl>

- Veenhoven, R. (2012). Happiness: Also Known as “Life Satisfaction” and “Subjective Well-Being”. In K. C. Land, A. C. Michalos, & M. J. Sirgy (Eds.), *Handbook of social indicators and quality of life research*. Springer Publishers. pp 63-77. https://doi.org/10.1007/978-94-007-2421-1_3.
- Villani, D., Sorgente, A., Iannello, P., & Antonietti, A. (2019). The role of spirituality and religiosity in subjective well-being of individuals with different religious status. *Frontiers in Psychology, 10*. <https://doi.org/10.3389/fpsyg.2019.01525>
- Vishkin, A., Bloom, P. B., & Tamir, M. (2019). Always look on the bright side of life: Religiosity, emotion regulation and well-being in a Jewish and Christian sample. *Journal of Happiness Studies, 20*(2), 427-447. <https://doi.org/10.1007/s10902-017-9956-9>
- Waterman, A. S. (1993). Two conceptions of happiness: Contrasts of personal expressiveness (eudaimonia) and hedonic enjoyment. *Journal of Personality and Social Psychology, 64*(4), 678-691. <https://doi.org/10.1037/0022-3514.64.4.678>
- Wethington, E. (2000). Expecting stress: Americans and the “midlife crisis”. *Motivation and Emotion, 24*, 85–103. <http://doi.org/10.1023/A:1005611230993>
- Wink, P., & Dillon, M. (2002). Spiritual development across the adult life course: Findings from a longitudinal study. *Journal of Adult Development, 9*(1), <https://doi.org/10.1023/A:1013833419122>
- Wolinsky, F. D., Van der Weg, M. W., Martin, R., Unverzagt, F. W., Willis, S. L., Marsiske, M., Rebok, G. W., Morris, J. N., Ball, K. K., & Tennstedt, S. L. (2009). Does cognitive training improve internal locus of control among older adults? *The Journals of Gerontology Series B: Psychological Sciences And Social Sciences, 65B*(5), 591-598. <https://doi.org/10.1093/geronb/gbp117>
- Wong, P. T. P. (2019). Second wave positive psychology’s (PP 2.0) contribution to counselling psychology. *Counselling Psychology Quarterly, 32*(3-4), 275-284. <https://doi.org/10.1080/09515070.2019.1671320>

- Wong, P. T. P. (2011). Reclaiming positive psychology: A meaning-centered approach to sustainable growth and radical empiricism. *Journal of Humanistic Psychology, 51*(4), 408–412. <https://doi.org/10.1177/0022167811408729>
- Wong, P. T. P. (2010). What is existential positive psychology? *International Journal of Existential Psychology and Psychotherapy, 3*, 1–10. <http://journal.existentialpsychology.org/index.php/ExPsy/article/view/166>
- Wong, P. T. P. (1995). A stage model of coping with frustrative stress. In R. Wong (Ed.), *Biological perspectives on motivated activities* (pp. 339–378). Ablex Publishing Corporation.
- Younes, M. B., & Al-Zoubi, S. (2015). The impact of technologies on society: A review. *Journal of Humanities and Social Science, 20* (2), 82-86. <https://pdfs.semanticscholar.org/4881/7443a7e508b3b88c4c45c1166c114db520b4.pdf>.
- Zarzycka, B., & Rydz, E. (2014). Explaining the relationship between post-critical beliefs and sense of coherence in Polish young, middle, and late adults. *Journal of Religion and Health, 53*, 834–848. <https://doi.org/10.1007/s10943-013-9680-7>
- Zhang, W., Liu, H., Jiang, X., Wu, D., & Tian, Y. (2014). A longitudinal study of posttraumatic stress disorder symptoms and its relationship with coping skill and locus of control in adolescents after an earthquake in China. *Plos ONE, 9*(2), e88263. <https://doi.org/10.1371/journal.pone.0088263>
- Zika, S., & Chamberlain, K. (1987). Relation of hassles and personality to subjective well-being. *Journal of Personality and Social Psychology, 53*(1), 155–162. <https://doi.org/10.1037/0022-3514.53.1.155>

ANNEXURE A

The Satisfaction with Life Scale developed by Diener et al. (1985).

Instructions: Below are five statements that you may agree or disagree with. **Using the 1 - 7 scale below, indicate your agreement with each item by placing the appropriate number on the line preceding that item.** Please be open and honest in your responding.

- 7 - Strongly agree
- 6 - Agree
- 5 - Slightly agree

- 4 - Neither agree nor disagree
- 3 - Slightly disagree
- 2 - Disagree
- 1 - Strongly disagree

_____ In most ways my life is close to my ideal.

_____ The conditions of my life are excellent.

_____ I am satisfied with my life.

_____ So far I have gotten the important things I want in life.

_____ If I could live my life over, I would change almost nothing.

ANNEXURE B

Locus of Control Scale developed by Rotter (1966)

For each question select the statement that you agree with the most

1. a. Children get into trouble because their parents punish them too much.
b. The trouble with most children nowadays is that their parents are too easy with them.
2. a. Many of the unhappy things in people's lives are partly due to bad luck.
b. People's misfortunes result from the mistakes they make.
3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.

- b. There will always be wars, no matter how hard people try to prevent them.
4. a. In the long run people get the respect they deserve in this world
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries
5. a. The idea that teachers are unfair to students is nonsense.
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.
6. a. Without the right breaks one cannot be an effective leader.
b. Capable people who fail to become leaders have not taken advantage of their opportunities.
7. a. No matter how hard you try some people just don't like you.
b. People who can't get others to like them don't understand how to get along with others.
8. a. Heredity plays the major role in determining one's personality
b. It is one's experiences in life which determine what they're like.
9. a. I have often found that what is going to happen will happen.
b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.
10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.
11. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
b. Getting a good job depends mainly on being in the right place at the right time.
12. a. The average citizen can have an influence in government decisions.
b. This world is run by the few people in power, and there is not much the little guy can do about it.
13. a. When I make plans, I am almost certain that I can make them work.
b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.
14. a. There are certain people who are just no good.
b. There is some good in everybody.
15. a. In my case getting what I want has little or nothing to do with luck.
b. Many times we might just as well decide what to do by flipping a coin.

16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
- b. Getting people to do the right thing depends upon ability. Luck has little or nothing to do with it.
17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
- b. By taking an active part in political and social affairs the people can control world events.
18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
- b. There really is no such thing as "luck."
19. a. One should always be willing to admit mistakes.
- b. It is usually best to cover up one's mistakes.
20. a. It is hard to know whether or not a person really likes you.
- b. How many friends you have depends upon how nice a person you are.
21. a. In the long run the bad things that happen to us are balanced by the good ones.
- b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.
22. a. With enough effort we can wipe out political corruption.
- b. It is difficult for people to have much control over the things politicians do in office.
23. a. Sometimes I can't understand how teachers arrive at the grades they give.
- b. There is a direct connection between how hard I study and the grades I get.
24. a. A good leader expects people to decide for themselves what they should do.
- b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.
- b. It is impossible for me to believe that chance or luck plays an important role in my life.
26. a. People are lonely because they don't try to be friendly.
- b. There's not much use in trying too hard to please people, if they like you, they like you.
27. a. There is too much emphasis on athletics in high school.
- b. Team sports are an excellent way to build character.
28. a. What happens to me is my own doing.
- b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a. Most of the time I can't understand why politicians behave the way they do.
- b. In the long run the people are responsible for bad government on a national as well as on a local level.

ANNEXURE C

The Spiritual Well-being Questionnaire developed by Gomez & Fisher (2003).

Instructions: Please indicate how you feel the twenty statements below describe your personal experience over the last 6 months. **Using the 1 – 5 scale below, indicate your agreement with each item by placing the applicable number on the line preceding that item.** Please be open and honest in your responding.

1. Very low
2. Low

- 3. Neutral
- 4. High
- 5. Very high

- ___ Developing a love of other people
- ___ Developing a personal relationship with God
- ___ Developing forgiveness towards others
- ___ Developing connection with nature
- ___ Developing a sense of identity
- ___ Developing worship of the creator
- ___ Developing awe at a breath-taking view
- ___ Developing trust between individuals
- ___ Developing self-awareness
- ___ Developing oneness with nature
- ___ Developing oneness with God
- ___ Developing harmony with the environment
- ___ Developing peace with God
- ___ Developing joy in life
- ___ Developing prayer life
- ___ Developing inner peace
- ___ Developing respect for others
- ___ Developing meaning in life
- ___ Developing kindness towards other people
- ___ Developing a sense of magic in the environment

ANNEXURE D

Biographical Questionnaire

- 1. DATE OF BIRTH _____
- 2. AGE _____
- 3. BIOLOGICAL GENDER
- MALE

FEMALE

4. HOME LANGUAGE

ENGLISH

AFRIKAANS

SOTHO

SPECIFY IF OTHER LANGUAGE

ANNEXURE E

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the researcher, Dawie Fivaz, asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation. I have read (or had explained to me) and understand the study as explained in the information sheet. I have had sufficient opportunity to ask questions and am prepared to participate in this study. However, I understand that once my questionnaires have been submitted it will be anonymously processed into a Master's dissertation, journal

publication and/or conference proceedings. However, under no circumstances will my name or identifying characteristics be included in any such documentation.

Please tick the appropriate box below. I agree to participate in the following quantitative data collection process:

*Questionnaires (Spiritual Well-Being; Locus of Control: Satisfaction with Life)

I understand that the data from the questionnaires will be treated as strictly confidential and will be available only to members of the research team.

Moreover, I understand that should I suffer emotional distress, I am eligible for psychological counselling. I may contact Dr Jordaan who will arrange 2-3 counselling sessions. As deemed necessary, free of charge.

In addition, should I have any concerns about the way in which the research has been conducted I may contact the administrator of the Faculty of Humanities' research Ethics Committee, Mrs Charné Vercueil on vercuilcc@ufs.ac.za or (051) 4017083.

I have received a signed copy of the informed consent agreement.

Full Name of Participant: _____

Signature of Participant: _____ Date: _____

Full Name of Researcher: _____

Signature of Researcher: _____ Date: _____

Participants are selected based on chain referral sampling. As individuals of different spheres of society such as church home cells, members of schools' parent representative bodies and certain business owners you are kindly approached to take part in the study. You will be asked to identify and refer other individuals that meet the sample requirements to further participate in this research. You will remain anonymous for confidentiality purposes.

WHAT IS THE NATURE OF PARTICIPATION IN THIS STUDY?

Participation in the study will require you to complete four questionnaires in terms of how the questions relates to areas in your life. Two questionnaires require you to indicate on a Likert scale ranging from (very low) to (very high) the degree to which you agree with statements. The third scale consists of 29 items where you choose either option (a) or (b) as an answer to questions. The fourth is a biographical questionnaire wherein limited personal information needs to be indicated. The expected duration of your participation and the time you will need to complete specific questionnaires will be approximately one hour.

CAN THE PARTICIPANT WITHDRAW FROM THE STUDY?

Participation in this study is voluntary and you are under no obligation to consent to participation. Since participation in this study is voluntary there will be no penalty or loss of benefit for non-participation. If you do decide to take part, you will be given this information sheet to keep and be asked to read and sign a written consent form. You are free to withdraw from the study at any time without providing a reason. However the project involves the submission of non-identifiable questionnaires and it would therefore not be possible to identify your questionnaires to withdraw once the questionnaires have been submitted.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

There are no direct benefits to participating in this study. However, the data obtained in this study will assist in understanding the contribution of spiritual well-being and locus of control on life satisfaction of people in this developmental stage. This study will add to the existing body of research in the field of Positive Psychology with specific reference to South African early middle adulthood.

WHAT IS THE ANTICIPATED INCONVENIENCE OF TAKING PART IN THIS STUDY?

Your participation requires you to complete specific questionnaires that will take approximately one hour of your time. The research requires a certain amount of time off your schedule in order to participate in the data collection process. We, the researchers, do not expect any direct physical harm to come from participation in the research. Should you as a participant suffer emotional distress, personal and/or cultural embarrassment during the process of participating in this study, you will be referred to the Adult Practice of the Department of Psychology of the University of the Free State for psychological counselling. Dr Jordaan, the coordinator, 051 401 2890 may be contacted for 2-3 sessions as deemed necessary at the initial consultation and the service will be provided free of charge. There will be no indemnity or insurance coverage for participants in this study.

WILL WHAT I SAY BE KEPT CONFIDENTIAL?

The data obtained in this study will be treated with the utmost levels of confidentiality. Your name will be kept separately from information collected so that no one will be able to link you to the information provided. Your answers will be assigned a fictitious code number and you will be referred to in this way in the data, as well as the Master's dissertation or other research reporting methods such as publications or conference proceedings. Further, your answers may be reviewed by the research auditor, as well as members of the Research Ethics Committee, who are responsible for ensuring that the research is conducted in a sound manner. These individuals will also not have access to any of your identifying details, and will sign a confidentiality agreement in order to ensure that any information that you share is protected. Your anonymous data may be used for the purposes of a Master's dissertation, journal articles, or conference presentations.

HOW WILL THE INFORMATION BE STORED AND ULTIMATELY DESTROYED?

Hard copies of your answered questionnaires will be stored by the researcher for a period of five years in a locked cupboard/filing cabinet at his home for future research or academic purposes. Electronic information will be stored on a password protected computer. Future use of the stored data will be subject to further Faculty Research Ethics Committee review and approval, if applicable. Information will be permanently deleted from electronic devices after five years and all hard copies will be shredded in order to prevent unauthorised persons from gaining access to confidential information.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

You will not receive any form of payment or incentive for participating in this study. There are no expected financial costs to be incurred by the participants.

HOW WILL THE PARTICIPANT BE INFORMED OF THE FINDINGS / RESULTS OF THE STUDY?

If you would like to be informed of the final research findings, please contact Dawie Fivaz on 0834504979 or email dawie@fivaztrust.co.za. The findings will be accessible by January 2020. Should you require any further information or want to contact the researcher about any aspect of this study, please contact Dawie Fivaz on the contact details as indicated above. Further, should you have any concerns about the way in which the research has been conducted you may contact the administrator of the Faculty of Humanities Research Ethics Committee, Mrs Charné Vercueil on vercuelcc@ufs.ac.za or (051) 4017083.

Thank you for taking time to read this information sheet and for participating in this study.