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Presence of meaning and search for meaning as mediators between spirituality and psychological well-being in a South African sample

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Spirituality and meaning in life are important pathways to well-being. Research has conceptually and empirically linked spirituality, religiousness and meaning in life. The present study was concerned with investigating presence of meaning (MLQ-P) and search for meaning (MLQ-S) as mediators between spirituality (religious and existential well-being) and hedonic and eudaimonic well-being. A multi-cultural sample of 326 South African students completed the Meaning in Life Questionnaire (MLQ), Spiritual Well-Being Scale (SWBS), Questionnaire for Eudaimonic Well-Being (QEWB) and the Mental Health Continuum Short-Form (MHC-SF). Structural equation modelling in Mplus was used to study direct and indirect effects. Findings show that the presence of meaning in life explains more paths between spirituality and psychological well-being than search for meaning. MLQ-P mediated the paths between existential well-being and four of the five indices of psychological well-being. MLQ-S did not mediate any path between spirituality (existential and religious well-being) and psychological well-being outcomes.

Keywords: African context, meaning in life, mediation, spirituality, well-being

Recent literature shows a renewed interest in the role of spirituality and religion, particularly in positive psychology (e.g., Kashdan & Nezlek, 2012; Kwon, 2008; Plante, 2012; Steger, 2012; Tix, Dik, Johnson, & Steger, 2013; Van Dierendonck, 2012). Spirituality is such an important dimension of positive human functioning, that Van Dierendonck (2012) and Van Dierendonck and Mohan (2006) proposed its inclusion as an element of eudaimonic well-being. They specifically referred to the multidimensional Psychological Well-Being (PWB) model of Ryff (1989) and the basic psychological needs of Self-Determination Theory (SDT; Ryan & Deci, 2000). Ellison (1983; Ellison & Smith, 1991) argued that the spiritual dimension provides an integrative force that functions to bring order and vitality to both the mind and the body. In fact, Ellison (1983, p. 332) believed that “if we are spiritually healthy we will feel generally alive, purposeful and fulfilled, but only to the extent that we are psychologically healthy as well”. In a multinational study, Delle Fave, Brdar, Freire, Vella-Brodrick, and Wissing (2010) were surprised by the low frequency of the spirituality/religiousness life domain reported as a source or constituent of happiness and meaningfulness given that most people acknowledged following a religion. In the same study, the exception was South Africa, where religion and spirituality were rated highly in both happiness and meaningfulness. Nevertheless, according to Kashdan and Nezlek (2012) spirituality is a prevalent aspect of many people’s lives.

Spirituality

As much as there are conceptual/experiential differences between spirituality and religiousness, there are also shared similarities (Delle Fave, Brdar, Vella-Brodrick, & Wissing, 2013). In fact, Delle Fave et al. (2013, p. 121)

refer to the distinction between spirituality and religion as “spirituality is currently perceived as dynamic, functional to the search for existential meanings, rooted in the subjective experience of transcendence, and thus authentic and personalised, religion is described as an institutionalised system of prescriptions and dogmas that constrains the individual into a well-defined pathway”. At the same time, Steger (2012) acknowledges spirituality as an umbrella term that is inclusive of religious experience and individual transcendental experience. Previous research has shown important distinction between the two dimensions (e.g. Ivtzan, Chan, Gardner, & Prashar, 2013).

The present study conceptualised and operationalised spirituality as proposed by Ellison (Ellison, 1983; Ellison & Smith, 1991) who distinguishes between religious well-being and existential well-being. When reflecting on the work of Moberg (1979) on which Ellison’s (1983) construct is based, Van Dierendonck and Mohan (2006, p. 233) interpreted spiritual well-being as “a lifelong pursuit and application of living life in direct connection to God, Self, the community and the environment”. According to Ellison (1983) spiritual well-being represents “the sense of well-being that we experience when we find purposes to commit ourselves to, which involve ultimate meaning for life” (p. 330). In line with Ellison’s definition, spirituality can be conceptualised to consist of two dimensions: religious well-being and existential well-being (also see Temane & Wissing, 2006). Religious well-being is the vertical dimension referring to the sense of well-being in relation to God, while the existential well-being is the horizontal dimension and refers to a sense of life purpose and satisfaction (Ellison, 1983). The two dimensions always have the search for the sacred or transcendence as the common core.

Meaning in life

We also chose to conceptualise and operationalise meaning in life as provided by Steger (Steger, 2009; 2012; Steger, Frazier, Oishi, & Kaler, 2006). It is on the philosophical works (e.g., Plato) and existential psychology thinking (Frankl, 1963; Yalom, 1980) that the understanding of meaning in life as comprehension and purpose in one's life experiences is based (see Steger, 2012). This work by Steger is a major breakthrough in response to the numerous conceptual and measurement problems from preceding research as observed by, among others, Hicks and King (2009). Two core components are central in constituting meaning in life, which are comprehension and purpose. Comprehending is the cognitive component that allows people a firm grounding of their life experiences. Sense of purpose is the motivational component and propels people towards an overarching goal or life mission. To synthesise, Steger (2012) describes meaning in life as "the web of connections, understandings and interpretations that help us comprehend our experience and formulate plans directing our energies to the achievement of our desired future" (p. 165). Furthermore, Howell, Passmore and Buro (2013) postulated that these elements of meaning in life (i.e., self-transcendence, stable patterns and permanency, fitting within a larger scheme, feeling alive and connection) can be found in nature as one of the precursors to meaning. In the same vein, spirituality's conceptual link with meaning in life makes it (meaning) a probable determinant

The construct, meaning in life, is operationalised through two dimensions: presence of meaning and search for meaning. Presence of meaning is demonstrated through people understanding themselves and the world and how they fit in the larger scheme of things as well as having a grasp of their sense of the purpose they are pursuing (Steger, 2009; 2012). Search for meaning on the other hand represents the desire to establish and/or augment one's sense of meaning as encompassed in their comprehension, significance and purpose (Steger, 2009; Steger, Kashdan, Sullivan, & Lorentz, 2008). This search component is thought to propel "people to seek out new opportunities and challenges, [while] fuelling their desire to understand and organise their experiences" (Steger, Kashdan et al., 2008, p. 200). In fact, this search for meaning dimension which represents motivation to discover meaning is often associated with psychological distress (Schulenberg et al., 2014). Steger, Kashdan et al. (2008) have hypothesised that given the underlying motives, search for meaning and presence of meaning would have different correlates, thus demonstrating their independence. Consequently, the independence between search and presence means that those who may be experiencing meaning would still be inclined to search as they strive towards seeking deeper meaning and understanding (Steger, Oishi, & Kesebir, 2011).

Beyond the observation of negatively and moderately correlated search for and presence of meaning, more complex patterns between the two ought to also be expected (Schulenberg et al., 2014). In fact two empirical studies by Steger (i.e. Steger, Kawabata et al., 2008; Steger, Mann, Michaels, & Cooper, 2009) illustrate this dynamic complexity. Steger, Mann et al. (2009) investigated the

relationship of the two dimensions and their interaction with physical and mental health and found that, although high search was associated with worse health and higher anxiety, those people who reported high search and high presence reported comparable anxiety levels as, and did not report better health than those with high search. In another study Steger, Kawabata et al. (2008) reported presence of meaning to be playing a buffering role between search for meaning and happiness.

Psychological well-being

The construct 'psychological well-being' is used in this study as an umbrella term, in line with Delle Fave et al. (2011), to include both hedonic and eudaimonic conceptualisations and operationalisations. In a recent chapter aimed at reviewing conceptual and measurement issues in culture and well-being research, Oishi (2010) used the term well-being in a broad and inclusive way to generally refer to people being well. In this inclusive conceptualisation, he included *eudaimonia* which he saw as "a well-lived life" (p. 34), and distinguished it from *subjective well-being* which he viewed as cognitive evaluation, and *happiness* which was seen as an expression of favourable feelings or conditions (Oishi, 2010). This illustrates the complexity involved in the use of terminology to refer to (psychological) well-being concepts and phenomena. In a South African study, when referring to the structure of psychological well-being in a cultural context, Wissing and Temane (2008) presented theoretical and empirical support for a higher order General Psychological Well-being (GPW) factor comprising of an overlap of hedonic and eudaimonic well-being constructs. We therefore cannot study psychological well-being by only considering one of the two streams, excluding the other, while there is in fact support for their co-existence (see Henderson & Knight, 2012; Kashdan, Biswas-Diener, & King, 2008). The trend of multidimensional operationalisation of well-being is observed in a number of studies where well-being is an outcome variable in mediation analysis involving meaning in life as a mediator. First Steger and Frazier (2005) conceived of well-being as comprising of self-esteem, optimism and life satisfaction; second, Howell et al. (2013) operationalised well-being as emotional, psychological and social well-being and happiness; third, in Kashdan and Nezlek's (2012) study, self-esteem and positive and negative affect represented the well-being outcome.

Including hedonic and eudaimonic conceptualisations and operationalisations was seen as an advantage by Joshanloo (2012) who observed that previous studies did not take this difference into account in the interpretation of their findings on 'well-being'. We considered satisfaction with life (Diener, Emmons, Larsen, & Griffin, 1985) and the emotional well-being component of the Mental Health Continuum (MHC; Keyes, 2002) to represent the hedonic well-being dimension. The eudaimonic well-being dimension is conceptualised and operationalised by the Mental Health Continuum's psychological and social well-being components (Keyes, 1998; 2002) and the purposeful personal expressiveness component as identified

by Schutte, Wissing, and Khumalo (2013) being part of Waterman et al. (2010) eudaimonic well-being scale.

Spirituality, meaning in life and psychological well-being

Spirituality is linked to individuals' well-being on a number of levels through different ways such as their values and attitudes and views they hold of themselves and the world (Kashdan & Nezlek, 2013). Empirical research studies support the positive association between religiosity/spirituality, positive well-being and low levels of pathology indicators (see Park & Slattery, 2013, and Steger, 2012, for reviews). A number of studies have explored the role of meaning in the promotion and maintenance of health and well-being in different populations and contexts. Examples of this research include health behaviour among Romanian adolescents (Brassai, Piko, & Steger, 2011), acculturation in Australia and Hong Kong (Pan, Wong, Chan, & Joubert, 2008), mothers and older people (Zika & Chamberlain, 1992), comparison between American and Japanese students (Steger, Kawabata, Shimai, & Otake, 2008) and spirituality as a pathway to meaning and purpose among senior managers in South Africa (Mohan & Uys, 2006).

Meaning is an important ingredient for the promotion of well-being as it "provides a stable platform for creating and sustaining a well-lived life" (Kashdan & Nezlek, 2012, p. 1524). More specifically, Zika and Chamberlain (1992) found meaning to have stronger association with indices of positive well-being than with negative dimensions. It is plausible that the contribution of meaning in life to well-being rests on its core content and function, especially its inherent value that life matters (Kashdan & Nezlek, 2012; Steger (2012). Steger (2012) postulated that sense of meaning allows people to feel connected, that their lives matter and they can direct and channel their energy to achieve goals for their desired future. Characteristics of self-transcendence, stable patterns and permanency, fitting within a larger scheme, feeling alive and connectedness are in fact core elements of meaning in life (Howell et al., 2013). However, Schulenberg, Baczwaski and Buchanan (2014) and Steger (2012) have raised the concern that most of such empirical studies were of a correlational nature (e.g., Zika & Chamberlain, 1992) and therefore causality cannot be assumed.

Different dimensions of spirituality, and possibly via different pathways, can lead to different psychological well-being outcomes. The mechanisms through which spirituality influences well-being would explain how and why it is beneficial for well-being. Meaning in life is one of the factors that accounts for the possible mechanisms through which spirituality and religion are positively associated with mental health and psychological well-being (Byron & Miller-Perrin, 2009; Howell et al., 2013; Steger, 2012; Steger & Frazier, 2005; Zika & Chamberlain, 1992). According to Steger (2012) the conceptual link between spirituality and meaning in life is that spirituality is a source of and/or augmentative factor for finding and experiencing meaning. Those who have high religious satisfaction and lead spiritual lives also report high levels of meaning in life. Meaning in life is associated with both spiritual well-being

and religious devotion and can in fact help foster well-being by cultivating spiritual connection (Byron & Miller-Perrin, 2009; Steger, 2012). Steger and Frazier (2005) investigated meaning in life as a factor that mediates the relation between religiousness and psychological well-being. In their study Steger and Frazier (2005) found that meaning in life mediated the relationship between religion and well-being, where well-being was conceived as life satisfaction, self-esteem and optimism. In another study, Byron and Miller-Perrin (2009) investigated the mediation role of life purpose in the relationship between strength of faith and well-being. They arrived at findings that faith and purpose predict well-being and that the impact of faith on well-being is explained by life purpose.

Context and aim of the study

Studies on meaning and spirituality that have concerned themselves with African samples and contexts have explored psychometric properties (e.g., De Klerk, Boshoff, & Van Wyk, 2009), sources of meaning (e.g., Wissing, Khumalo, & Chigeza, in press), workplace spirituality and work motivation and commitment (e.g., De Klerk, 2005; De Klerk, Boshoff, & Van Wyk, 2006), as well as the link between spiritual well-being and meaning/purpose in life in adolescence across gender and culture differences (Burnell, Beukes, & Esterhuyse, 2009). The question of how facets of meaning in life interact with other psychological constructs and have an effect on hedonic and eudaimonic well-being among South Africans remains an important area of exploration. Based on previous empirical research, Steger, Oishi, and Kesebir (2011) suggested that the degree to or orientation through which people gain and maintain well-being as determined from meaning in life depends on their value orientation and thus will differ across individuals/groups. Value orientation is often driven and even determined by socio-cultural context and religious orientation, which are often intertwined (Joshnloo, 2012; Steger & Frazier, 2005). More specifically, "culture supplies people with the provisions to derive meaning from life" including being a source of values (Steger, Kawabata et al., 2008). At the same time, globalisation as a constant factor towards interconnectedness of the whole world is cited as an important element in expanding research on religion and spirituality beyond the Western nations (Park & Paloutzian, 2013). Previous research did not explore the dynamics of spirituality distinguishing between religious and existential well-being, meaning in life distinguishing between presence of and search for meaning, and psychological well-being distinguishing between eudaimonic and hedonic facets.

The current study is concerned with the question of whether meaning in life (search for and presence of meaning) mediates the influence of spirituality (religious and existential well-being) on psychological well-being as represented by indices of hedonic and eudaimonic dimensions in a multicultural group of South African students. Our study is therefore driven by three hypotheses. First, that there is a direct effect between religious well-being and existential well-being as determinants and hedonic and eudaimonic well-being indices as outcome variables. Second, that search for meaning and presence

of meaning in life present differential dynamics in the relationship between spirituality (religions and existential well-being) and hedonic and eudaimonic well-being. Our third hypothesis is that both spirituality and meaning in life are important pathways to psychological well-being for African students.

Method

Participants and setting

The data were collected from a convenience sample of 326 students at a South African university. The sample was made up of male (24.5%) and female (74.5%) students between the ages of 18 and 54, with an average age of 21 years. Sixty participants reported their mother tongue to be English, 61 Setswana, 22 Afrikaans, and the rest (174) indicated the option of "other" as home languages. The "other language" option referred to any other one of the eleven South African official and other languages spoken in the multicultural South Africa. Most of the participants ($n = 204$) reported practicing religion regularly, while 101 said they practiced occasionally and only 18 participants said they did not practice religion at all. Although participants in the present study were a multicultural group with English, Setswana and Afrikaans cumulatively representing 44% of the group's home languages, the questionnaires were presented in English.

Measuring instruments

Meaning in life

The MLQ (Steger et al., 2006) is a 10 item self-report questionnaire comprising two subscales: search for meaning (MLQ-S; 5 items), and presence of meaning (MLQ-P; 5 items), scored on a seven point likert scale. In a project to develop and validate the MLQ, Steger et al. (2006) used three studies and multiple samples to test for its internal consistency, temporal stability, factor structure and validity, and found the MLQ to be reliable and valid. They obtained Cronbach alpha coefficients ranging between 0.86 and 0.88, a two factor solution and good convergent and discriminant validity. In South Africa, Temane, Khumalo and Wissing (in press) found Cronbach alpha coefficients of 0.85 for MLQ-P and 0.84 for MLQ-S.

Spirituality

The SWS (Ellison, 1983; Ellison & Smith, 1991), which is a 20-item self-report measure comprising two 10-item sub-scales: religious well-being and existential well-being, was used. Empirical investigation by Ellison (1983; Ellison & Smith, 1991) into the psychometric properties of the SWS supported its reliability and validity. Empirical evidence for the measure's reliability has been found in other studies (Ellison & Smith, 1991; Mickley, Soeken & Belcher, 1992), with Cronbach alpha coefficients of between 0.78 and 0.84 for the total scale. South African studies found the SWS to have a Cronbach alpha index of between 0.92 and 0.88 (Temane & Wissing, 2006).

Psychological well-being

Psychological well-being is operationalised using various measuring instruments as a multidimensional construct

encompassing both eudaimonic and hedonic dimensions of well-being. It was therefore measured using the Satisfaction With Life Scale (SWLS; Diener et al., 1985), Questionnaire for Eudaimonic Well-Being (QEWB; Waterman et al., 2010) and the Mental Health Continuum (MHC-SF; Keyes, 2002; 2006; Keyes et al., 2008).

The SWLS (Diener et al., 1985) was developed to measure self-reported life satisfaction as the overall cognitive judgement of subjective well-being (Diener et al., 1985). The five-item measure is scored on a seven-point likert type response scale ranging from absolutely untrue to absolutely true. In the original and scale development study, Diener et al. (1985) reported Cronbach alpha coefficients of 0.87 and a two-month test-retest reliability of 0.82. A number of studies have found the scale to be reliable in African samples (Hofer & Chasiotis, 2003; Keyes et al., 2008; Wissing et al., 2010; Wissing & Temane, 2008).

The QEWB (Waterman et al., 2010) is a 21 item scale developed to measure well-being in a consistent manner with the eudaimonist philosophy. Aspects of self-discovery, perceived development of one's best potentials, sense of purpose and meaning in life, intense involvement in activities, investment of significant effort and enjoyment of activities as personally expressive are intended to be evaluated by the scale. The original QEWB by Waterman et al. (2010) requests participants to rate their agreement with each statement on a scale ranging from 0 (strongly disagree) to 4 (strongly agree). In this study, a scale ranging from 1 (strongly disagree) to 7 (strongly agree) was used in line with Schutte et al. (2013) in the Eudaimonic and Hedonic Happiness Investigation project (cf. Delle Fave et al. 2010). Waterman et al. (2010) managed the complexity and abstract nature of this construct by using parcelling and concluded that the QEWB was a unidimensional scale with a Cronbach alpha coefficient of 0.86. Schutte et al. (2013) explored the factor structure of this seemingly complex operationalisation among a sample of South African students. The results from Schutte et al.'s (2013) study showed a Cronbach alpha coefficient for the total scale of 0.80, but yielded three-factor and four-factor solutions as far as structure is concerned. In this study, we chose to use their recommended three factor solution which consists of the following factors: sense of purpose (6 items), purposeful personal expressiveness (9 items) and effortful engagement (6 items). In a similar way that Dezutter et al. (2014) omitted some QEWB items as a precaution against conceptual overlap, we only used the subscale of Purposeful Personal Expressiveness as a representation of eudaimonic well-being (in order not to overlap with items from the MLQ and MHC-SF). According to Schutte et al. (2013) purposeful personal expressiveness refers to "full and active engagement in activities that the individual finds meaningful" (p. 17).

The MHC-SF (Keyes, 2002; 2006; Keyes et al., 2008) is a 14 item scale used to measure positive mental health along a continuum from languishing to flourishing and includes one hedonic and two eudaimonic subscales. It consists of three subscales: emotional well-being (3 items), psychological well-being (6 items) and social well-being (5 items). For the purposes of the present study, the one item in the psychological well-being subscale that represented

meaningfulness was removed to prevent multi-collinearity problems. The measure has been used in numerous South African studies and found to be reliable and valid in adolescent, adult and student samples (e.g., Keyes, et al., 2008; Wissing & Temane, 2013; Khumalo, Temane, & Wissing, 2011; 2012).

Procedure and ethical aspects

The data were collected in a cross-sectional survey involving student groups. The present study formed a part of the FORT-3 research project which was given ethical clearance by the North-West University research ethics committee (ethics number: NWU-00002-07-A2). Recruitment of the participants took place through the students' lecturers. They completed the batteries of questionnaires in their lecture halls after having the information about the research project explained to them and signing written informed consent.

Data analysis

Data were analysed using SPSS, version 20 (see Field, 2013; Leech, Barrett, & Morgan, 2008; Pallant, 2011) and Mplus (Muthen & Muthen, 2012). Structural equation modelling in Mplus guidelines of Byrne (2012), Kline (2011), Muthen and Muthen (2012) were used. First the reliability and construct validity of the measuring instruments were examined. Instead of the Cronbach alpha index, often and easily generated by SPSS as an indicator of internal consistency, we used the CFA-based scale reliability recommended by Wang and Wang (2012). This is an advantage over the Cronbach alpha index since the latter does not take into account the possibility of the indicator items of the construct being tau-equivalent (Gu et al., 2013). Therefore the CFA-based scale reliability coefficient (ρ) considers that each item has a unique contribution or loading to the latent factor. The factor structure of search for (MLQ-S) and presence of (MLQ-P) meaning in life subscales were examined separately, each as a unidimensional construct and so was the satisfaction with life (SWLS). The purposeful personal expressiveness dimension (Schutte et al., 2013) of the Questionnaire for Eudaimonic Well-Being (Waterman et al., 2010) was also examined as a unidimensional construct using CFA. In line with the theoretical hypothesis that spirituality is a bi-dimensional construct (Ellison, 1983); its factor structure was examined as consisting of religious well-being and existential well-being.

The direct effects of search for and presence of meaning, religious and existential well-being, on purposeful personal expressiveness, satisfaction with life and emotional, psychological and social well-being as dependent variables were tested. Ultimately, the indirect effects of search for and presence of meaning were tested in order to explore the mediating role of meaning in life in the relationship between spiritual well-being and hedonic and eudaimonic well-being. The fit indices that were examined as an indication of model fit were the chi-square index, comparative fit index (CFI), Tucker-Lewis index (TLI), root mean square of approximation (RMSEA) and weighted root mean residuals (WRMR) (see Byrne, 2012; Kline, 2011). In accordance with the recommendations of Byrne (2012), Kline (2011),

and Muthén and Muthén (2012) we considered good fit to be characterised by a non-significant chi-square value, CFI and TLI values of 0.90 and higher, an RMSEA value between 0.06 and 0.07 with a 90% confidence interval of between close to 0 and less than 0.08, and WRMR close to 1. For both the direct and indirect effects, individual standardised regression coefficients (β) were examined for significance as indicated by their p -values and confidence intervals at 95%.

Results

The CFA-based reliability coefficients for the measured constructs ranged from 0.78 (SWLS) to 0.94 (religious well-being) (see Table 1). With the possible range of spirituality index being between 10 and 60, values of 52.97 for religious well-being and 47.46 for existential well-being can be considered to be high. The other indices also achieved mean scores above the midpoint on their possible range, but none were as high in proportion as the spirituality dimensions. The spirituality subscales attained a significant positive correlation with each other, as indicated by a Pearson correlation coefficient of ($r = 0.374$, medium effect size), while the presence of meaning and search for meaning subscales had a significant negative correlation ($r = -0.197$, small effect size). Although search for meaning is negatively correlated with life satisfaction ($r = -0.191$, small effect size), emotional well-being ($r = -0.161$, small effect size) and existential well-being ($r = -0.133$, small effect size), it showed no significant association with religious well-being ($r = 0.065$), purposeful personal expressiveness ($r = 0.061$) and psychological ($r = 0.001$) and social well-being ($r = -0.063$). All the other positive indices of well-being, spirituality and meaning, have positive and significant inter-correlations (see Table 1).

Three structural equation models representing direct effects of spirituality and meaning on hedonic and eudaimonic well-being were tested (see Table 2). Model 1 is characterised by the items that represent the purposeful personal expressiveness subscale (see Schutte et al., 2013). Model 2 has emotional, psychological and social well-being subscales of the MHC as primary level latent factors indicating positive mental health as a second level latent factor. In Model 3, both the eudaimonic well-being construct and positive mental health are second level latent factors. Eudaimonic well-being, as operationalised by the purposeful personal expressiveness subscale, is indicated by two primary latent factors, namely engagement in rewarding activities, and living from beliefs (see Schutte et al., 2013), while positive mental health is indicated by emotional, psychological and social well-being. In all models, the purpose in life item of the psychological well-being component (Ryff, 1989; Ryff & Keyes, 1995) in the MHC model (Keyes, 2002) was excluded.

Model 1 (CFI = 0.920; TLI = 0.915) allows us to study the direct effects from the two independent variables, namely religious and existential well-being and the mediator variables, namely search for and presence of meaning, to the five dependent variables: life satisfaction, purposeful personal expressiveness and emotional, psychological and social well-being (see Figure 1). The regression coefficients signifying the direct paths from religious

Table 1. Descriptive statistics, reliabilities and bivariate inter-scale Pearson correlations ($N = 326$)

	Range			Mean	SD	Reliability	Correlations											
	Min	Max					SWBR	SWBE	MLQ-P	MLQ-S	SWLS	MHC-EWB	MHC-PWB	MCH-SWB	QEWB-PPE			
SWBR	10	60		52.97	8.66	0.94	1											
SWBE	15	60		47.46	7.97	0.90	0.374**	1										
MLQ-P	6	35		25.90	6.10	0.89	0.206**	0.662**	1									
MLQ-S	5	35		26.82	6.61	0.89	0.065	-0.133*	-0.197**	1								
SWLS	6	35		23.23	5.81	0.78	0.139*	0.558**	0.561**	-0.191**	1							
MHC-EWB	2	15		10.33	2.82	0.80	0.139*	0.487**	0.468**	-0.161**	0.562**	1						
MHC-PWB	0	24		12.68	5.10	0.83	0.140*	0.421**	0.404**	0.001	0.344**	0.465**	1					
MHC-SWB	5	30		22.75	4.93	0.79	0.148*	0.588*	0.643**	-0.063	0.540**	0.605**	0.535**	1				
QEWB-PPE	13	63		51.03	7.27	0.81	0.256**	0.309**	0.355**	0.061	0.215**	0.256**	0.175**	0.372**	1			

SWBR = Spiritual Well-being-Religious; SWBE = Spiritual Well-being-Existential; MLQ-P = Meaning in Life-Presence; MLQ-S = Meaning in Life-Search; SWLS = Satisfaction With Life Scale; MHC-EWB Mental Health Continuum -Emotional Well-Being; MHC-PWB Mental Health Continuum- Psychological Well-Being; MHC-SWB Mental Health Continuum-Social Well-Being; QEWB-PPE = Questionnaire for Eudaimonic Well-being-Purposeful Personal Expressiveness; * Correlation is significant at the 0.05 level (2-tailed); ** Correlation is significant at the 0.01 level (2-tailed)

and existential well-being and search for and presence of meaning, to life satisfaction, purposeful personal expressiveness and emotional, psychological and social well-being are displayed in Table 3.

For each dependent variable, four paths were examined. Of the four independent variables, existential well-being ($\beta = 0.327$, $p < 0.005$) and presence of meaning ($\beta = .463$, $p < 0.005$) were significant predictors of life satisfaction. Religious well-being ($\beta = 0.343$, $p < 0.005$) and both search for ($\beta = 0.247$, $p < 0.005$) and presence ($\beta = 0.511$, $p < 0.005$) of meaning were significant determinants of purposeful personal expressiveness. Emotional well-being was significantly predicted by existential well-being ($\beta = 0.310$, $p < 0.005$) and both search for ($\beta = -0.160$, $p < 0.005$) and presence ($\beta = 0.259$, $p < 0.005$) of meaning. Psychological well-being was predicted by existential well-being ($\beta = 0.264$, $p < 0.005$) and presence ($\beta = 0.547$, $p < 0.005$) of meaning, while social well-being was only predicted by presence of meaning ($\beta = 0.345$, $p < 0.005$). These results show presence of meaning to predict all indices of well-being, in contrast with search for meaning which only predicts purposeful personal expressiveness and emotional well-being. With regard to spirituality, religious well-being only predicts purposeful personal expressiveness.

Beyond the direct effects, we show the indirect effects so as to demonstrate the presence of meaning (Table 4) and search for meaning (Table 5) as mediators between spiritual well-being (religious and existential) and hedonic and eudaimonic well-being. The presence of meaning in life successfully mediated the relationships between existential well-being and satisfaction with life ($\beta = 0.396$, $p < 0.005$, 95% CI = 0.187–0.605), purposeful personal expressiveness ($\beta = 0.437$, $p < 0.005$, 95% CI = 0.175–0.699), psychological ($\beta = 0.467$, $p < 0.005$, 95% CI = 0.209–0.725) and emotional ($\beta = 0.437$, $p < 0.005$, 95% CI = -0.002–0.445), but not social well-being. None of the paths from religious well-being to the five dependent variables had significant indirect effects through presence of meaning.

As indicated in Table 5, none of the paths from religious and existential well-being to the five dependent variables had significant indirect effects through search for meaning. This finding shows that in this group of students, search for meaning does not play a mediating role in how individuals' well-being benefits from spirituality.

Discussion

The primary aim of our study was to investigate whether meaning in life (search for and presence of) mediated or explained the influence of spirituality (religious and existential well-being) on hedonic and eudaimonic well-being outcomes. Thus, this study builds on previous empirical findings (e.g. Byron & Miller-Perrin, 2009; Howell et al., 2013; Steger & Frazier, 2005) in that the mediator is represented by not only the presence of meaning and/or purpose in life, but also the search for meaning. We also distinguished between two dimensions of spirituality as a subjective experience. It is important to note that Howell et al.'s (2013) study considered religious commitment as a determinant variable and Steger and

Table 2. Confirmation of structural models for direct effects

Model	Fit indices							
	χ^2 (df)	<i>p</i>	RMSEA	90% CI		CFI	TLI	WRMR
Model 1	2246.894 (1504)	0.000	0.044	0.041	0.048	0.920	0.915	1.184
Model 2	2271.204 (1516)	0.000	0.045	0.041	0.048	0.919	0.914	1.208
Model 3	2263.077 (1514)	0.000	0.044	0.041	0.048	0.919	0.915	1.202

χ^2 = Chi-square; df = degrees of freedom; *p* = probability value; RMSEA = Root mean square error of approximation; CFI = Comparative fit index; TLI = Tucker–Lewis index; WRMR = Weighted root mean square residual

Frazier (2005) used religious practice and subjective religiousness.

First, the expectation that spirituality influences well-being was partially supported by the data, with existential well-being proving to play a more dominant role than religious well-being. Second, as expected the two components of meaning in life played different roles as mediators between spirituality and well-being. In fact, we found that presence of meaning explains the paths between existential well-being (determinant) and life satisfaction, purposeful personal expressiveness and psychological well-being (outcomes). Presence of meaning in life did not mediate any path between religious well-being and hedonic and eudaimonic well-being. Similarly search for meaning did not mediate any path between the two components of spirituality and well-being outcomes. Third, the expectation and view that spirituality and meaning are important pathways to well-being in this group was partially supported by the data. The finding is in line with that of Kashdan and Nezlek (2012) in a study where they applied daily diary design to collect data.

Search for meaning and presence of meaning were inversely associated as shown by a significant negative bivariate relationship. Although search for meaning and presence of meaning subscales were proposed to be independent, and found to be negatively correlated (Steger, Frazier et al., 2006; Steger, Oishi, & Kesebir, 2011), the possibility of more complex dynamics and interrelations

between the two has been recently suggested (Schulenberg et al., 2014; Steger & Kashdan, 2013). Furthermore, presence of meaning was positively associated with both religious and existential well-being, while search for meaning was negatively related with existential well-being and not significantly associated with religious well-being.

Spirituality influences psychological well-being

While existential well-being influenced facets of both hedonic (emotional well-being of MHC and life satisfaction) and eudaimonic (psychological well-being of MHC) well-being, religious well-being only predicted one facet of eudaimonic well-being measured in this study, namely purposeful personal expressiveness. According to Ellison (1983), existential well-being is the socio-psychological, horizontal component of spirituality, reflecting one’s sense of fulfilment and purpose without any specific religious reference point. Religious well-being differs from the existential dimension in that it represents a “sense of well-being in relation to God” (p. 331). The distinction in the two dimensions as representing two different approaches to spirituality therefore has implications for ways of deriving well-being from religiosity/spirituality. Our findings therefore suggest that in this group of African students, existential well-being contributes to feeling good and experiencing self-acceptance, positive interpersonal relations, autonomy, environmental mastery and personal growth. At the same time,

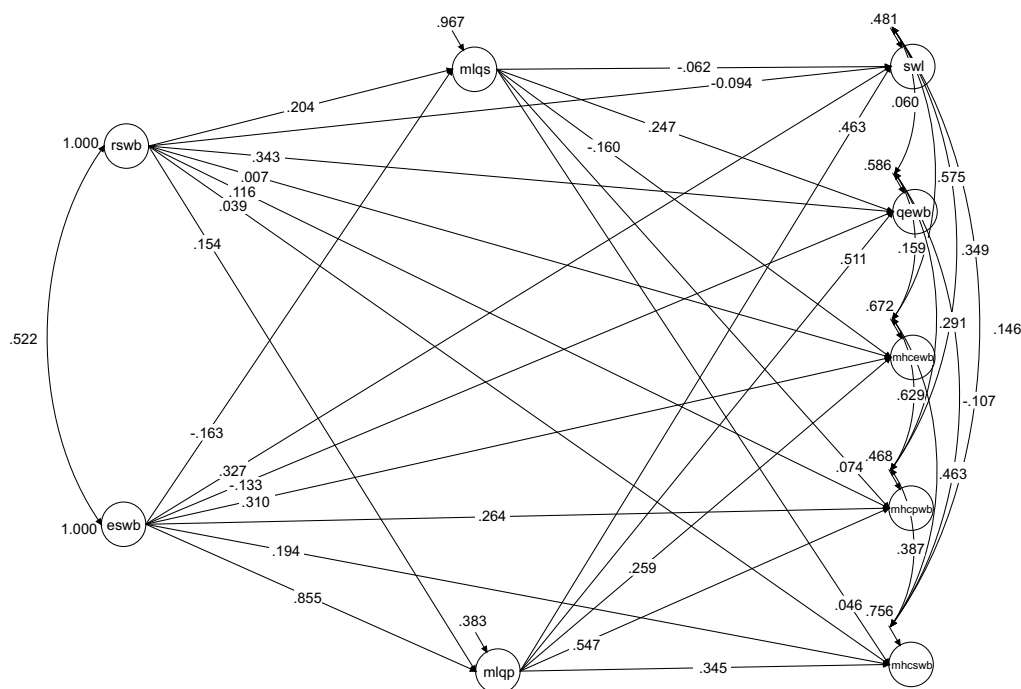


Figure 1. Structural model showing the total mediation model using latent variables

religious well-being seems beneficial for active engagement in activities appraised as meaningful. According to Emmons (1999, 2005), pursuing personally significant goals, whether they be spiritual or religious, contributes to

well-being. However, empirical findings by Kashdan and Nezlek (2012) support the specificity with which spirituality predicts psychological constructs. In their study,

Table 3. Direct effects (using model 3 from Table 2)

Independent variable	Dependent variable is satisfaction with life			
	Beta	SE	Est./SE	Sig.
SWBR	-0.094	0.072	-1.309	0.190
SWBE	0.327	0.112	2.921	0.003
MLQS	-0.062	0.054	-1.144	0.253
MLQP	0.463	0.093	4.982	0.000
Independent variable	Dependent variable is purposeful personal expressiveness			
	Beta	SE	Est./SE	Sig.
SWBR	0.343	0.066	5.208	0.000
SWBE	-0.133	0.133	-1.000	0.317
MLQS	0.247	0.054	4.552	0.000
MLQP	0.511	0.109	4.684	0.000
Independent variable	Dependent variable is emotional well-being			
	Beta	SE	Est./SE	Sig.
SWBR	0.007	0.079	0.090	0.928
SWBE	0.310	0.113	2.743	0.006
MLQS	-0.160	0.064	-2.480	0.013
MLQP	0.259	0.104	2.486	0.013
Independent variable	Dependent variable is psychological well-being			
	Beta	SE	Est./SE	Sig.
SWBR	-0.116	0.075	-1.540	0.124
SWBE	0.264	0.128	2.063	0.039
MLQS	0.074	0.064	1.146	0.252
MLQP	0.547	0.112	4.900	0.000
Independent variable	Dependent variable is social well-being			
	Beta	SE	Est./SE	Sig.
SWBR	-0.039	0.088	-0.439	0.660
SWBE	0.194	0.149	1.297	0.195
MLQS	0.046	0.068	0.675	0.500
MLQP	0.345	0.122	2.827	0.005

SWBR = Spiritual well-being-Religious; SWBE = Spiritual well-being-Existential; MLQ-S = Meaning in life-Search; MLQ-P = Meaning in life-Presence

Table 4. Mediator is presence of meaning

Dependent variable	Fit indices	Independent variable	
		RSWB	ESWB
Satisfaction with life	Estimate	-0.710	0.396
	SE	0.037	0.107
	Estimate/SE	-1.923	3.712
	<i>p</i>	0.055	0.000
	95% CI	[-0.144, 0.001]	[0.187, 0.605]
Purposeful Personal Expressiveness (Eudaimonic well-being)	Estimate	-0.079	0.437
	SE	0.048	0.134
	Estimate/SE	-1.628	3.267
	<i>p</i>	0.104	0.001
	95% CI	[-0.173, 0.016]	[0.175, 0.699]
Emotional well-being (MHC-EWB)	Estimate	-0.040	0.437
	SE	0.029	0.134
	Estimate/SE	-1.374	3.267
	<i>p</i>	0.169	0.001
	95% CI	[-0.097, 0.017]	[-0.002, 0.445]
Psychological well-being (MHC-PWB)	Estimate	-0.084	0.467
	SE	0.047	0.132
	Estimate/SE	-1.799	3.547
	<i>p</i>	0.072	0.000
	95% CI	[-0.176, 0.008]	[0.209, 0.725]
Social well-being (MHC-SWB)	Estimate	-0.053	0.295
	SE	0.040	0.151
	Estimate/SE	-1.340	1.949
	<i>p</i>	0.180	0.051
	95% CI	[-0.131, 0.025]	[-0.002, 0.591]

Table 5. Mediator is Search for meaning

Dependent variable	Fit indices	Independent variable	
		RSWB	ESWB
Satisfaction with life	Estimate	-0.013	-0.071
	SE	0.015	0.037
	Estimate/SE	-0.832	-1.923
	<i>p</i>	0.405	0.055
	95% CI	[-0.042, 0.017]	[-0.017, 0.037]
Purposeful Personal Expressiveness (Eudaimonic well-being)	Estimate	0.050	-0.040
	SE	0.028	0.029
	Estimate/SE	1.813	-1.408
	<i>p</i>	0.070	0.159
	95% CI	[-0.004, 0.105]	[-0.097, 0.016]
Emotional well-being (MHC-EWB)	Estimate	-0.033	0.026
	SE	0.021	0.019
	Estimate/SE	-1.553	1.342
	<i>p</i>	0.120	0.180
	95% CI	[-0.012, 0.064]	[-0.012, 0.064]
Psychological well-being (MHC-PWB)	Estimate	0.015	-0.012
	SE	0.017	0.016
	Estimate/SE	0.898	-0.772
	<i>p</i>	0.369	0.440
	95% CI	[-0.176, 0.008]	[-0.043, 0.019]
Social well-being MHC-SWB)	Estimate	0.009	-0.008
	SE	0.021	0.019
	Estimate/SE	0.439	-0.395
	<i>p</i>	0.661	0.693
	95% CI	[-0.033, 0.051]	[-0.045, 0.030]

although spirituality predicted meaning in life, it did not influence self-esteem and affect.

Meaning influences well-being

Search for meaning is not significantly associated with indices of eudaimonic well-being and it is negatively related to indices of hedonic well-being. Although both search for meaning and presence of meaning were predictors of well-being, presence of meaning was more dominant as demonstrated by a greater number of significant direct effects. Presence of meaning significantly predicted satisfaction with life and emotional well-being (feeling good) and purposeful personal expressiveness, psychological and social well-being (functioning well). Search for meaning on the other hand predicted emotional well-being and purposeful personal expressiveness. Our findings compare to those of Steger, Frazier et al. (2006, p. 89) to which they concluded that “[m]eaning seems to be an indicator of a healthy and appreciated life...”, and that a “less clear picture emerged regarding those who are searching for meaning”.

In another study, Cohen and Cairns (2012) found that presence of meaning is a protective factor, via moderation, when search for meaning would otherwise reduce levels of subjective well-being. In addition, if search for meaning represents an inclination towards being curious, seeking out novelty and pursuit for future goals as Steger, Kashdan et al. (2008) have postulated, then it ought to be a part of the normal developmental process of a group of students. Their life challenges, in line with developmental stage and tasks, would form the content of this healthy search for meaning.

Mediation

Experiencing meaning explained the indirect paths through which existential well-being predicted satisfaction with life, purposeful personal expressiveness and psychological well-being. It is almost tautological to state that since spirituality is concerned with the sacred, connectedness and ultimate concerns (Emmons, 1999; 2005; Steger & Frazier, 2005), experiencing meaning and living a purpose driven life must be at its core. Indeed existential well-being is the socio-psychological, horizontal component of spirituality reflecting one’s sense of fulfilment and purpose without any specific religious reference point (Ellison & Smith, 1991). Search for meaning, however, did not mediate any path between dimensions of spirituality and well-being. Search for meaning seems to be a more complex component. The elusive and apparent complex nature of the quest and motivation for discovery of meaning seems to be explained by its correlates, as found in previous studies. As much as it is related to seeking potentially novel experiences from the present, it is also associated with psychological distress and negative thinking (Schulenberg et al., 2014; Steger, Oishi, & Kesebir, 2011). In the context of religion, Martos et al. (2010) have opined that search for meaning is a complex construct linked to greater curiosity and reflecting a “restless quest to seek greater meaning in life” (p. 867).

Our findings show that presence of and search for meaning play different roles in how spirituality influences well-being. This finding is particularly important in the context of high spiritual and religious devotion, which also serve as sources of meaning and contribute to feeling good and functioning well (Delle Fave et al., 2011). Part of the thesis to support these empirical findings is that it is through psychological conditions or processes that

religiosity/spirituality contributes to well-being (Steger & Frazier, 2005; Steger, Hicks, Krueger, & Baouchard, 2011). Meaning in life is one such psychological process, in addition to social support, coping resources, sense of self-esteem and self-worth (Steger & Frazier, 2005). The unique aspect about meaning in life is that it shares meaningfulness as a conceptual core with spirituality and religiousness (Steger, Hicks et al., 2011). Based on their study's findings, Steger and Frazier (2005, p. 580) concluded that "religion creates a sense of meaning in life that in turn fosters well-being". These findings may have implications for psychotherapy taking a virtue ethics perspective as indicated by Sperry and Sperry (2012).

Limitations

A number of limitations are acknowledged and mentioned. The first refers to the convenient sample of students. Although this was a multicultural group of South African young people, it does not represent the greater South African population. The conceptual and empirical definitions of spirituality are also seen as a limitation. Piedmont (2009) views the field as populated by issues of poor clarity regarding constructs of religion and spirituality. Besides the fact that Ellison's (1983) measure has been criticised for its item content, it also does not distinguish between extrinsic and intrinsic religiousness (see Steger & Frazier, 2005). No control for the influence of other related predictors was implemented. Because of the cross-sectional nature of the study, the predictive claims that the study makes are limited to statistical interpretation. The concern with the limitations of correlational and cross-sectional studies with confounding factors among variables has been raised by Park and Paloutzian (2013), and Steger (2012). Last, Tix et al. (2013) suggested, as informed by empirical findings from their study among American students, that perhaps the positive influence of religiosity on subjective well-being is dependent on the tradition in which people practice their faith. Patel, Naidoo and Paruk (2013) reported a higher religious orientation in some South African faith traditions than in others. Faith tradition or denomination is something we did not look at and should be considered in future studies.

Conclusion and recommendations

Notwithstanding the limitations mentioned above, our study's contribution rests on three main aspects. In addition to examining a tri-foci dynamic relationship among meaning, spirituality and well-being in a previously under-researched group (cf. Temane & Wissing, 2006), it differentiates between hedonic and eudaimonic dimensions of well-being (cf. Joshanloo, 2011) and differentiates between the search for and presence of meaning (Steger, 2009; 2012). Unlike previous studies, the present study conceptualised and operationalised all three constructs as multiple dimensions and investigated their multidimensional associations. A similar study by Steger and Frazier (2005) was conducted among an American group of White college students and did not include the search for meaning dimension. Steger, Oishi, and Kesebir (2011) only had satisfaction with life as the outcome variable. Taking the findings of this study as a whole, Steger, Oishi and

Kesebir's (2011, p. 173) assertion that "whereas having meaning is rather uniformly thought to be beneficial, searching for meaning seems more controversial", seems to apply in this group of African students. Nevertheless, spirituality and meaning are important pathways to well-being for South African young people at tertiary education institutions.

The findings of this study have important implications for both research and counselling concerning positive human functioning (see Steger & Frazier, 2005). For example Sperry and Sperry (2012) have proposed a re-incorporation of the notion of promoting virtues and meaning as part of treatment of conditions such as depression. It is particularly obvious that more research effort is needed towards better understanding the dynamic relations between presence of meaning and search for meaning (see Cohen and Cairns, 2012). Future research in an African context must seek to understand patterns of meaning in life across developmental stages and tasks (see Steger, Oishi, & Kashdan, 2009; Wissing et al., in press). Last, the present study did not take into account the religious affiliation and faith denomination of the participants. We recommend that this variable be included in future research (see Martos et al., 2010; Steger, Pickering et al., 2010).

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