Attachment and Quality of Life in Australian Religious African Diasporas: A mixed methods study

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A Thesis Submitted in Fulfilment of the requirements for the Degree of Doctor of Philosophy (Ph.D.) Western Sydney University School of Social Sciences and Psychology

DEDICATION

Glory be to God Almighty Who has entrusted His treasure in an earthen vessel.

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STATEMENT OF AUTHENTICATION

The work presented in this thesis is original to the best of my knowledge and belief, except where acknowledged in the text. I hereby declare that I have not submitted this material, either in full or in part, for a degree at this or any other institution.



(Victor Counted)

OUTCOMES OF THIS THESIS

This PhD thesis-by-publication has been presented as a series of six primary papers (published, accepted, and in press or review etc) and four additional manuscripts emerging from the study data and related to the research topic. Some of the study drafts will also be published in the volume "Religion and Place: Psychological Perspectives", which I am currently co-editing for Palgrave MacMillan. I am the first author of each of the papers and had the full responsibility for collecting and analysing the data reported in each paper along with the development and management of the research project. I prepared the drafts for each chapter and my co-authors and supervisors provided feedback on each draft. Co-authors' contributions include assistance in the study design, reviewing the data analysis, and suggestions with regards to redrafting the manuscripts.

Publications

Published Journal Articles

- Counted, V., Possamai, A., Meade, T. (2018). Relational Spirituality and Quality of Life 2007 to 2017: An integrative research review. *Health and Quality of Life Outcomes* 16:75. <u>https://doi.org/10.1186/s12955-018-0895-x</u>
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- Counted, V. (2018). Sense of Place Attitudes and Quality of Life Outcomes among African Residents in a Multicultural Australian Society. *Journal of Community Psychology* 47(2), 338-355 <u>https://doi.org/10.1002/jcop.22124</u>
- 4. Counted, V. (2018). Domains of Religious Coping Behaviour among African Christians in NSW Australia: An Exploratory Qualitative Study. *Journal of Spirituality in Mental Health* 21(30), 215-236 <u>https://doi.org/10.1080/19349637.2018.1476948</u>
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Under Review Journal Articles

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- 7. Counted, V., Possamai, A., McAuliffe, C., Meade, T. (in press). Place, Spirituality, and Quality of Life: Why and How Environmental and Religious Attachments Matter for Health Promotion. In: Counted, V. & Watts, F. *The Psychology of Religion and Place: Emerging Perspectives*. New York: Palgrave MacMillan.
- 8. Counted, V. (in review). In search of a secure base: God, Place, and Experiences in Human Relationships.
- 9. Counted, V. (in review). "Because You Are Not Like Them": Pro-environmental coping strategy as a response to forced acculturation among migrants of African background in NSW Australia.
- 10. Counted, V. (in review). Adult Attachment Profiles and Health-related Quality of Life Outcomes among African Diasporas in New South Wales.

Conference Presentations (2016 - 2018)

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- 1. Paper: Attachment and Quality of Life in African Migrants. A presentation at the "Psychology Research @ Western" event, Western Sydney University, 13 Dec. 2018.
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- 1. Paper: *African Diaspora, Attachment, and Quality of Life.* A presentation at the African Studies Association of Australasia and the Pacific Conference, University of South Australia, Nov. 23-24, 2017.
- Paper: Place Spirituality and Quality of Life in Australia. A presentation at the International Association for the Psychology of Religion Conference, Hamar, Norway: 21 – 25 August 2017.
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- 4. Paper: *Missional Therapy: Towards a Missional Hermeneutic of Care in Youth Work.* A presentation at the International Association for the Study of Youth Ministry Conference, Sydney, Australia: 4-7 January 2017.

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- 2. Paper: *Relational Spirituality*. A paper to be presented at The Australian Association for the Study of Religion Annual Conference (26 November 2016), hosted by the Institute for Religion, Politics, and Society, Australian Catholic University, Melbourne Australia.
- Paper: Spirituality and Well-being in African Youths. A paper presented at the Spirituality, Culture, and Wellbeing Conference at Excelsia College Sydney, Australia (4 – 5 Oct. 2016).

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GLOSSARY AND ABBREVIATIONS

QoL - Quality of Life HQoL - Health-related Quality of Life PA - Place Attachment PI - Place Identity PD - Place Dependence SOP - Sense of Place AG - Attachment to God SAG - Secure Attachment to God IAG - Insecure Attachment to God ATG - Attitudes toward God WHOQoL - World Health Organisation Quality of Life African Diaspora – AD Relational Spirituality – RS Educational Achievement - EA

ABSTRACT

Developmental processes involving social relationships and attachment behavioural system have been extensively studied over the last two decades. However, little is known about how these experiences may contribute to health-related quality of life (HQoL) outcomes in migrant contexts, including that of the African diaspora. This project aims to contribute to cross-cultural psychological experiences by examining how different types of attachment in adults are understood to inform relationships and coping with stress and place change in a migration context. This is done by investigating the relationships between attachment to Australia, attachment to God relational spirituality, and HQoL outcomes (including psychological health, environmental health, physical health, and social relationship quality) among Australian African diasporas using both quantitative (N=261) and qualitative (N-15) research methods.

In the quantitative phase of the study, it was first hypothesised that attachment to Australia and other sense of place attitudes will be positively associated with HQoL outcomes; this hypothesis received firm support. Second, it was estimated that the adult attachment experience of the participants, involving relational spirituality, in the form of attachment to God will be positively associated with HQoL outcomes; it was further proposed that this relationship will be contingent on the educational background of the participants. This hypothesis was confirmed in a moderation analysis, suggesting the moderating role of attachment to God in the link between educational background and HQoL outcomes. Third, it was further hypothesised that there will be an interaction effect between attachment to Australia and attachment to God on HQoL outcomes. However, contrary to proposed hypothesis there was no significant interaction effect between both attachment processes, suggesting that they may be developing from a different attachment motivational system. Results show strong levels of attachment among the participants, in that they were

attached to Australia as an important place in their lives and attached to God as a source for negotiating their day-to-day quality of life.

In the qualitative phase, results of the quantitative studies were examined in more depth using follow-up interviews. First, it was found that indeed the respondents were developing pro-environmental coping strategies by developing place affect, place behaviour, and place cognition in response to the experience of forced acculturation that they are confronted with. Although respondents' pro-environmental coping strategies were helpful in regulating their quality of life and social belonging in Australia, they were rather used as a maneuver to respond to the stigma associated with being perceived as 'immigrants' or 'outsiders' in their new abode. Second, respondents' relational spirituality was expressed as a multidimensional religious coping construct involving personal, social, and environmental dimensions, which were central in dealing with their migration challenges and life stressors.

Findings about the role of attachment in a migration context could be considered as an adjustment/support strategy that those working with migrants could integrate in the support services that they offer them. Healthcare professionals working with migrants need a more sophisticated understanding of their attachment processes and adaptability to place change in relation to their coping behaviours and quality of life. This can include creating training workshops on the efficacy of adult attachment styles for building resilience in migrant communities; awareness about the challenges associated with migration and migrant attachment; and funding for research on the negative impact of attachment separation in migrant communities.

PART 1 Theoretical Background and Literature Review

Chapter 1 Introduction

This chapter introduces the three key concepts that were explored in this study: place attachment, relational spirituality, and quality of life. The first part of this chapter presents theoretical frameworks underpinning those concepts. The second part presents relevant empirical literature and how it has informed the study aims and hypotheses. Methodological and ethical considerations are then outlined followed by an overview of the thesis.

CHAPTER 1

INTRODUCTION

1.1 Aim of the study

This study aims to examine the relationship between place attachment (PA) conceptualised as attachment to Australia, relational spirituality (RS) in the form of attachment to God, and outcomes of quality of life (QoL); reflecting on how the individual's positive bond to place and attachment-based spirituality helps in negotiating day-to-day QoL. This study expands on how psychological adjustments in the context of attachment to a significant place can influence the religious life and contribute to QoL, thus clarifying the salutary effects of attachment processes on outcomes of QoL. Attachment is the enduring emotional bond that connects people to their relational others across time and space (Ainsworth, 1973; Bowlby, 1969). The theory of attachment is central to the understanding of QoL in this study, as it contributes to gaining meaningful insights into the role of PA (in geographic places) and RS (in a relationship with God) in a health context as symbolic objects of attachment. This study falls within the disciplines of psychology and religion, particularly the sub-disciplines of psychology of religion, environmental psychology, health psychology, religious studies, and social scientific study of religion, given that themes such as PA, RS, and QoL are important respective themes in these subfields.

Although several studies have positioned attachment as a typology for understanding relationships with important symbolic attachment objects in interpersonal contexts (e.g., Fraley et al. 2011; Fraley & Spieker, 2003; Ainsworth et al. 1978; Bowlby, 1973, 1982, 1988), PA literature (e.g., Ramkissoon, Weiler, & Smith, 2010; Rollero & De Piccoli, 2010; Scannell & Gifford, 2017, 2016), and RS research (e.g., Bradshaw & Kent, 2017; Counted, Possamai, & Meade, 2018; Counted & Mostapha, 2017; Miner, Bonab, & Dowson, 2017; Kirkpatrick, 2005; Cicirelli, 2004), little is known about how these objects of attachment are experienced among the African diaspora and especially, how they serve as important lived experiences related to quality of life outcomes. In understanding the nature of QoL in place

and religious contexts, this study further explores the concept of PA as a pro-environmental coping behaviour for negotiating QoL and the extent to which this is applicable for the Australian African diaspora. In addition, the dynamics of RS is also explored as a religious coping behaviour for negotiating quality of life among the African Australian diaspora.

There are reasons to believe that the experiences of PA and RS may be associated with QoL outcomes and applicable to the Australian African diaspora, in that they may serve as coping mechanisms in the quest to negotiate social belonging, diaspora identity, and better health outcomes among members of the group. This thesis primarily seeks to investigate the role of adult attachment processes involving place, religion, and human others on QoL in the Australian African diaspora in New South Wales. This study aims at identifying:

- 1. The association between PA, RS, and QoL.
- 2. Demographic background factors related to differences in PA, RS, and QoL.
- 3. The relationship between place experiences and QoL outcomes.
- 4. The relationship between AG and QoL outcomes in relation to a moderator.
- 5. The role of AG as a religious coping strategy for negotiating identity, social belonging, and QoL.
- The role of PA as a pro-environmental coping strategy for promoting sense of belonging and QoL.

1.2 Definitions of Key Terms

Place Attachment (PA) is conceptualised in this study as the positive emotional bond with a specific place, in that an imagined relationship is experienced with a spatial setting as reflected in the way individuals are drawn/attached to such settings.

Relational Spirituality (RS) is discussed in this study as the attachment bond between a Christian religious believer and God, such that the believer turns to God as a safe haven in times of danger and as a secure base for their individual growth. RS is also discussed as

attachment to God (AG) in this study since research in this area for the last decade has positioned RS as an attachment-based model (Counted, Possamai, & Meade, 2018).

Place Spirituality is the extent to which the individual's place attachment is related to their relational spirituality, revealing the complex dynamics of emotional bonds with religious attachment figures in a place people are emotionally drawn (Counted, 2018; Counted & Watts, 2017). In the context of the study, we are looking at the Australian spatial setting as a place of attachment where spirituality is a social reality for individuals (Counted, Possamai, McAuliffe, & Meade, 2018).

Experiences in Close Relationships/Human Relationship Experiences is a term used in this study to describe participants' attachment relationship with important people in their lives (e.g. mother, father, friends, romantic partner).

Health-related Quality of Life (HQoL) is used in this study to refer to the individual's general well-being reflecting their actual psychological health, environmental health, physical health, and social relationships.

African Diasporas (AD) refers to African migrants from sub-Saharan Africa who are outside their ancestral continent through voluntary migration.

1:3 Background to the study and theoretical frameworks

1.3.1 Adult Attachment Theory and Objects of Attachment

Existing literature on adult attachment theory is guided by the premise that the same system of motivational drive that gives rise to the parent-child emotional bond is responsible for the attachment bond formed in adults through emotionally attuned relationships (Fraley et al. 2011). Bowlby's (1973, 1982, 1988) evolutionary perspective on attachment theory focused on the nature of parent-child relationships, which he believed evinced the human reality from 'cradle to the grave'. Years after the initial proposition of attachment theory, subsequent researchers have contributed to this theory, focusing on expanding the individual differences in attachment processes (e.g., Ainsworth et al. 1978), and extending

the idea of adult attachment experiences in the context of romantic relationships in adults (e.g., Fraley & Shaver, 2000), relationship experiences with geographic places (Low & Altman, 1992; Scannell & Gifford, 2014; Counted & Watts, 2017), and representation of God as an attachment figure (Kirkpatrick & Shaver, 1992; Granqvist & Kirkpatrick, 2016; Counted, 2016a, 2016b).

The above-mentioned studies conceptualised attachment theory as a typology that can be used to understand the nature of attachment processes during infancy and adulthood (Fraley & Spieker, 2003). This perspective posits that the emotional bond in adult attachment experiences are partly a function of the same attachment working model that was formed during the early stages of life with a primary caregiver. Fraley and Spieker (2003), along with Hazan and Shaver (1987), have positioned both adult attachment relationship and parentchild relationship experiences to share similar features. First, they argue that individuals in these relationships feel safe and protected when they are in close proximity with their attachment figures. Secondly, the primary goal of an attachment relationship is to seek proximity with an attachment figure through engaging in close, intimate, or imaginary contact. Thirdly, individuals experiencing any of these relationships can feel insecure when the attachment figure is unavailable or insensitive to their emotional feelings, such that the experience may lead to a separation anxiety and negative emotional states. Insecure individuals are either anxiously attached (worrying over unmet attachment needs or feeling abandoned in close relationships) or avoidantly attached (appearing to be self-reliant and independent), while securely attached individuals are confident in the availability of the attachment figure in relationships (Ainsworth, 1989). Insecure adults can also develop what Main and Solomon (1990) referred to as a disorganised attachment, in which they display contradictory behaviour that is both fearful and dismissal of their close others. Fourthly, the attachment bond serves as a secure base from which the individual explores the world around them, and plays in, and learns from, their environment.

Several studies have positioned adult attachment as a useful but fluid concept in guiding behavioural activities in close relationships (e.g., Fraley & Shaver, 2000; Fraley et al.

2011), while others (e.g., Granqvist & Kirkpatrick, 2016) have problematized the concept of adult attachment, warning against extending attachment theory beyond its valid limits. However, contrary to the criticisms, adult attachment theory, like parent-child attachment theory, is a relational-theoretical perspective that sheds light on the normative aspects of attachment processes in adults as observed in lifespan attachment development (Cicirelli, 1991a, 1991b). This form of attachment-theoretical formulation draws attention to the wide-ranging variability and individual differences of relational experiences and behaviour in relationships with symbolic objects in the lives of people to whom/which an attachment is constructed.

One might ask how attachment can be developed with geographic objects and divine entities that are not analogous to a prototypical human person, given that Bowlby's attachment theory involves a physical interaction with another human. Cicirelli (2004) addresses this concern by linking adult attachment maturation to increased cognitive abilities in adults whom are often satisfied by the visual and verbal contact with the non-observable caregiver (e.g. a parent) who may be far away, and eventually depend on the mere knowledge of the whereabouts of the caregiver. The treatment of adult attachment theory in Sroufe and Waters (1977) also suggests that maintaining proximity with an object of attachment through verbal and visual contact is undertaken due to the goal of the attachment system - 'felt security'. Adults demonstrate this sense of felt security, when they are geographically separated from a parent, through exhibiting attachment behaviours such as making phone calls, sending letters, and staying connected with the caregiver via social media sites in order to maintain proximity with the parent despite the distance between them. The goal of having a sense of felt-security is also central in attachment relationships, as the attached individual meets their goal of attachment through emotionally attuned communications with a place, as well as with God.

1.3.1.1 Place and Attachment

Low and Altman (1992) have presented place as an example of an object of attachment in the study of environmental psychology and human geography. The place attachment (PA) thesis emphasizes the existence of a cognitive-emotional bond to meaningful geographic locations across cultures and religions (Lewicka, 2010; Mazumdar & Mazumdar, 2004). Relph (1976) was among the first set of scholars to conceptualise place attachment as a part of human nature that involves knowledge of significant places. Studies have demonstrated how PA overlaps with the principles of interpersonal attachment in terms of proximity to place, separation from place, exploration of place, and how a place can serve as a safe haven for many people (e.g., Scannell & Gifford, 2014; Fried, 2000). For example, Ryan and Ogilvie (2001) reveal that proximity to place may involve taking photographs of an important place or displaying images of objects from such a place, or even buying a home in a geographic location that has the 'magic' magnetic wand to draw people and change emotional states. Kelly and Hosking (2008) have also proposed that proximity to place can involve going on vacation to the same location year after year, or, in a worst-case scenario, refusing to leave a place even when such a place is no longer safe (e.g., Billig, 2006; Donovan, Suryanto, & Utami, 2012). These conceptualisations suggest that places can be perceived as havens of safety among those who are attached to them (Brown, Perkins, & Brown, 2003), and loss of attachment to such places through natural disasters, death of a loved one associated with a place may lead to separation anxiety (Cox & Perry, 2011). Other studies (e.g., Feeney & Thrush, 2010; Gustafson, 2001) have shown that perceiving a place as a secure base can promote exploration of the broader environment for individual growth and identity formation.

1.3.1.2 Attachment and Relational Spirituality

Although Bowlby's original thesis on attachment largely focused on evolutionary perspectives in terms of attachment system and its manifestation in parent-child relationships, he also noted that attachment processes may have a broad implication for

psychological developments across a person's life. It is here that psychologists of religion (e.g. Cicirelli, 2004; Hall 2007a, 2007b; Granqvist & Kirkpatrick, 2016) propose the idea of a relational spirituality (RS) which can be interpretable in terms of attachment dynamics and defined as perceived relationship with unseen, divine entities. Granqvist and Kirkpatrick (2016) refer to this as the maturational aspect of adult attachment development resulting from their increased cognitive ability. Bretherton (1987) argues that developing attachment with an imaginary divine figure is expected among adults since they have more cognitive ability (e.g. processing speed, voluntary response suppression, working memory) (Hale 1990; Fischer, Biscaldi, & Gezeck, 1997) than children (Luna et al. 2004), which makes it possible for them to develop and maintain attachments through visual and verbal interactions with imaginary figures.

In addition, RS has also been presented as an aspect of adult attachment development and a meaningful construct for both Christians and Muslims (Miner et al., 2014, 2017). Several studies in psychology of religion have interpreted believer-God relationships in monotheistic religions as a RS (Kirkpatrick & Shaver, 1990; Pargament, 1997; Kirkpatrick, 1998, 1999; Counted, 2016b) or as a 'care-giving faith' (Counted, 2016a; Counted & Miller, 2018) in which the criteria for an attachment in parent-child relationship can be applied to the relationship with God. These studies amplify the religious believers' perceptions of God as a safe haven, a secure base, a target for proximity, or as a response to separation anxiety or loss. Leading this motion are developmental psychologists Granqvist and Kirkpatrick (2016) who have argued that Christian religion, in particular, teaches followers to maintain a personal relationship with God through Jesus Christ, who is considered as a wise, almighty, and loving figure. The desire to maintain a relationship with God is often satisfied through emotionally attuned communication with God in the form of prayer (e.g., Reed, 1978; Hood et al. 1996), reading or quoting religious texts (e.g. Counted, 2016a, 2016b), and participating in religious rituals or services, among others. In a believer-God relationship, particularly in Christianity, God seems to clearly capture the attribute of a protective figure and pictured as always sensitive and available for his people, serving as a source of hope,

security, and comfort for those in need. For instance, the bible text in Matthew 11:28 expatiates this attribute: "Then Jesus said, come to me, all of you who are weary and carry heavy burdens, and I will give you rest." Wenegrat (1989) demonstrates how biblical Psalms nuance this projection of God as a symbolic attachment figure in the way a parent is mentally represented by an infant. The emotional quality of faith, according to Johnson (1945), is grounded in the assurance that it gives in terms of confidence and security, as opposed to fear and hopelessness. This understanding of faith is reflective of Bowlby's descriptions of a secure base from where an attached individual develops confidence to explore their environment (Granqvist & Kirkpatrick, 2016).

1.3.2 Health-related Quality of Life

QoL is a concept used to describe the individual's subjective well-being "affected in a complex way by [their] physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment" (WHOQOL Group 1995, p.1404). Researchers recognise QoL as a multidimensional concept in terms of its objective, culture/spirituality, and subjective constructs, while at the same time identifying the relationship between the domains (e.g., Wilson et al. 2001; Efficace & Marrone 2002; Hacker 2003; Cimete et al. 2003). Marshall (1990) mentions income, education, and housing as examples of objective aspects in the definition of QoL. Similar factors are conceptualised in other studies (e.g., Lee & Park, 2010), which saw unemployment and financial difficulties as factors accounting for QoL. Collinge and colleagues (2002), along with the World Health Organisation, recognise 'culture/spirituality' as an important domain of QoL. Angermeyer and Kilian (2006) propose a subjective satisfaction model, which conceptualises quality of life in relation to one's physical health, psychological health, social relationships, environmental health, and general perceptions of well-being; showing how the individual's actual living conditions meet their needs, wants, and wishes. The subjective satisfaction aspect is the most researched domain in the QoL literature (e.g., Collinge et al. 2002; Hacker 2003). Hence, QoL shows how better mental functioning can improve one's subjective well-being

(Jakovljević 2010; Angermeyer & Kilian, 2006) and covers several aspects of life and individual needs satisfaction that contribute to one's overall experience (The WHOQoL Group, 1998; Skevington, Lotfy & O'Connell, 2004).

Aside from the subjective satisfaction domain of QoL, the objective and spiritual or cultural domains are also important aspects of QoL that are operationalised in terms of specific measurements. For example, ratings to subjective health assessments (Albrecht, 1996), access to health care education (Scobie et al. 2006), access to employment (Turner & Turner, 2004), mortality rates (Landman et al. 2010), home ownership (Halket & Vasudev, 2014) and other forms of specific QoL measures assessed by access to greenspace (Barton & Rogerson, 2017), levels of church involvement (Horton, 2002), among others. Perhaps Rule's (2007) study is an example of this, as he measures QoL in terms of cultural and spiritual aspects, household access to modern conveniences, level of satisfaction with government institutions, along with the subjective aspect that looks at self-reported life satisfaction. Similar proposition was seen in other studies (e.g. Efficace & Marrone, 2002; Horton, 2002), concluding that one's spiritual well-being is an important aspect of QoL that influences the subjective domain. The concept of QoL considers overall life satisfaction that should do with the individual's physical, mental, and spiritual functioning.

Aspects of subjective QoL describe the extent to which the individual appraises and perceives their own life in relation to a range of factors. Psychological functioning focuses on a person's ability to achieve their own goal of self-actualisation in relation to their mental health, emotional well-being, and behaviour (Limbos, Joyce, Chan, Kesten, 2000). Physical health describes a state of well-being that is determined based on the functionality of all internal and external body parts, tissues, and organs, which enable the individual to be physically fit to perform their daily routines (Anokye et al. 2012). Environmental health has much to do with how aspects of the natural and built environment may affect an individual's perceptions of QoL (Meyer & Owen, 2008). The social relationship domain emphasizes the effects of relationship connections and social ties in people's lives, in terms of quality of relationships, social integration, social networks, and social isolation, as important factors

influencing individual health and QoL (Umberson & Montez, 2010). QoL also has much to do with individual satisfaction with key areas of life that enhance a general sense of physical and emotional well-being among adolescents (Meade & Dowswell, 2016), women (Chiu et al., 2008), migrants (Puder et al., 2013; Zhicui et al., 2009), older adults (Suzuki et al., 2002), religious people (Bradshaw & Kent, 2017), and non-religious groups (Rahman et al., 2011) among others.

As a context-specific concept (e.g., Roberts & Clifton, 1992), studies have also shown that QoL has much broader implication for digital equality (Park & Jayaraman, 2003), physical environment and architectural design (Barnes, 2002), health care (Lowe, 2002), and job satisfaction (Cimete et al., 2003; Faragher et al. 2005). In addition, measures of QoL are used to assess the individual evaluation of their health-related outcomes, and in recent cases modified for assessing disease-specific outcomes. For examples, a variety of assessment measures have been developed to assess disease-specific QoL outcomes such as measures for the HIV/AIDS-targeted QoL (e.g., Lee et al., 2014), Geriatric quality of lifedementia (GQOL-D) (Moon & Kim, 2013), QoL – Alzheimer's Disease Scale (e.g., Nagpal et al. 2014), and Heart-disease Specific QoL Scale (e.g., Miller et al. 2007) among others.

Overall, there are reasons to believe that demographic background factors may be relevant in the assessment of QoL outcomes. Szatur-Jaworska (2005) suggests that age is a contributing factor in QoL since older people tend to suffer deficiencies in physical and mental conditions. Slavin (2005) presented age as an important factor that affects physical health, particularly among elderly people since physical strength decreases with age. Psychological health was also linked to age difference, with young people having poor emotional functioning than elderly people due to financial strain, mistrust of public institutions, and housing problems (Watson et al. 2016; Uchmanowicz et al. 2016). Level of education and one's professional status have been presented as factors accounting for environmental health in QoL (Szynkiewicz et al. 2013), given that people with better social status or educational background are likely to have easier access to resources in the environment than those who are not educated and have no elite social status. Szynkiewicz

et al. (2013) argue that marital status and being in a relationship may affect perception of QoL due to the psychological benefits that come with having a significant other. A number of studies have also found place of residence and region of origin as possible factors influencing perceptions of QoL (e.g., Heleniak, 2009; Anton & Lawrence, 2014). On the contrary, Szynkiewicz et al. (2013) have found that place of residence does not influence the assessment of QoL. These studies suggest socio-demographic factors as important covariates for the examination of QoL.

This thesis mainly draws on the subjective satisfaction model to examine QoL as a person's sense of well-being that stems from satisfaction or dissatisfaction with areas of life that include physical health, psychological health, environmental health, social relationships and overall wellbeing (WHOQoL Group, 1995; Ferrans & Powers, 1992). These domains would help in the appraisal and analysis of how individual's spiritual functioning and sense of place is associated with outcomes of QoL. In terms of how QoL was assessed in the quantitative phase of this study, the World Health Organisation Quality of Life - BREF (WHOQoL Group, 1995) was used for assessing dimensions of QoL. Hence, physical health (assessing the functionality of the internal and external body organs), psychological health (aspects of wellbeing such as positive emotions, self-image and self-esteem), environmental health (the extent to which one's living condition and physical environment contributes to QoL), social relationships (quality of social interactions with important people in one's life) and general QoL (level of satisfaction with life in general) was measured in this study in relation to participants sense of relational spirituality involving attachment to God and their sense of place attitudes which examine their attachment to Australia. These dimensions are measured in Chapters 4 to 7 of the quantitative component of the study. The qualitative aspect of our study will examine aspects of objective and spiritual or cultural QoL that are determined by one's migration experiences, access to better living conditions, and general spiritual functioning, as discussed in Chapters 8 and 9.

1.3.3 Adult Attachments and Health-related Quality of Life Outcomes

Several studies show that achieving satisfaction in areas of life associated with QoL is related to the connection to the sacred in the form of religion (e.g., Abdala et al, 2015; Idler et al. 2009) and to geographic places (e.g., Rollero and De Piccoli, 2010; Tartaglia, 2013; Gattino et al. 2013; Marcheschi et al. 2015). There are implications for conceptualising adult attachment theory in terms of people-place and believer-God relationships. First, the same internal working models in relationships with primary caregivers are also in operation in adult attachment developments, which also involve but are not limited to PA and RS developments. Secondly, if place and God are perceived as important objects of attachment, then the same panoply of individual differences in parent-child relationships in people-place and believer-God relationships would be evident. Hence, both secure and insecure attachment styles may be developed with places and divine entities as symbolic objects of attachment. Although taking different forms, the individual differences in attachment experiences with places and divine entities may be a partial reflection of affective experiences with imagery attachment figures, and can be relevant to QoL outcomes and wellbeing in general (e.g., Harris, Werner, Brown, & Ingebritsen, 1995; Rollero & De Piccoli, 2010; Marcheschi et al. 2015; Bradshaw & Kent, 2017).

Evidence shows that adult attachment developments are related to QoL and wellbeing (Harris, Werner, Brown, & Ingebritsen, 1995; Meredith, Strong, Ford, & Branjerdporn, 2016). Studies indicate that individuals with healthy attachment appear to be psychologically healthier. This may be because individuals with secure cognitive-attachment bonds, or mental representations, convince the self that it is worthy of care due to the proximity and availability of their object of attachment. Such feeling of felt attachment security in adults allows the individual to maintain and promote positive emotions that reduce emotional distress and anxiety, whilst negotiating the QoL (Marganska et al. 2013). Attachment relationships serve as determinants of health outcomes (Maunder & Hunter, 2008). Studies have reported a significant association between secure attachment styles and QoL (e.g., Bodner & Cohen-Fridel, 2010; Bradford & Lyddon, 1994; Feeney, 1999).

Alternatively, insecure attachments have also been linked to lower scores of QoL and higher psychological distress (e.g., Bethany & Lorne, 2008; Kirkpatrick & Shaver, 1992; Meredith et al. 2016). While these studies examine attachment processes in human relationships, little is known about how attachment-affiliation with non-human objects is linked to QoL.

1.3.3.1 Place Attachment and Quality of Life

PA is one of the most researched topics in environmental psychology, with most studies focusing on the emotional benefits of having a sense of community and factors contributing to residential or neighbourhood attachment (Bonaiuto et al. 2002, 2006; Scannell & Gifford, 2017). Despite its importance, the way in which PA is related to QoL remains unclear, even though this relationship has been investigated in a number of studies. Rollero and De Piccoli (2010) have dealt with this topic from a social support theoretical perspective that positioned perceptions of QoL in places of attachment as the outcome of relational factors. In particular, their study suggests social relationship experiences in terms of social interactions and support from attachment figures as important predictors in PA. Tartaglia (2013) linked the quality of social relations with important relational objects in the experience of PA as an important factor promoting QoL in an urban environment. Gattino and colleagues (2013) corroborate this finding, suggesting that QoL is largely influenced by one's sense of community, and not by PA in itself. These findings are similar to those of other studies (e.g., Marcheschi et al. 2015; Scannell and Gifford, 2016, 2017) which highlight the association between PA and QoL as the outcome of the social and environmental gualities of a place, afforded by support and proximity to other objects/figures. This theoretical perspective is well-documented in social support theory (e.g. Cohen & Lakey, 2000). Hence, there is no clear link between PA and QoL but rather both are an outcome of other factors such as level of social interactions, social support from human others, and the environmental qualities of a place. The indirect link between PA and QoL may differ in a migrant context as migrants may not have sufficient social contacts and support system in a new abode, thus one would expect a direct link between PA and QoL in migrants.

Another interesting perspective in the PA and QoL literature is the conceptualisation of PA as a pro-environmental coping strategy used in achieving greater QoL (Ramkissoon et al. 2012; Scannell & Gifford, 2010a; Jorgensen & Stedman, 2001). Coping strategies can take the form of conscious pro-environmental actions or behaviour performed by the individual in order to minimize the effects of life stressors and enhance quality of life (Jensen, 2002; Kollmuss & Agyeman, 2002). As a pro-environmental coping behaviour, PA refers to the emotional responses toward a particular environment, represented by an affective bond, beliefs, perceptions, intentions, knowledge, and behavioural commitments that help the individual to adjust to life in a particular context (Halpenny 2006; Jorgensen & Stedman, 2001).

1.3.3.2 Relational Spirituality and Quality of Life

Furthermore, research evidence also suggests the health benefits of religious believers' attachment to God through engaging in proximity-seeking behaviour that promotes emotionally attuned communication and spiritual coping in the form of prayer, reading sacred texts, meditation, and religious involvement (e.g., Kirkpatrick & Shaver, 1992; Reed, 1978; Hood et al. 1996; Idler et al. 2009; Saffari et al. 2013; Miller et al. 2007; Counted, 2016a, 2016b). Other studies have also found that secure attachment in a believer-God relationship is related to life satisfaction (Bradshaw et al. 2010), better QoL and health status among patients (Saffari et al. 2013), positive emotions (Schore, 2003), adjustment to stress and less anxiety-related disorders (Marganska et al. 2013; Ellison et al. 2014) and psychological distress (Bradshaw et al. 2010), among others. In addition, secure attachment to God has been reported to moderate the effects of stressful life events and mental health outcomes in two longitudinal studies (e.g., Ellison et al. 2012; Bradshaw et al. 2010).

Several other recent studies point to the different ways that spiritual and religious experiences are significantly related to QoL (VanderWeele et al. 2016; Cole-Lewis et al. 2016; Yang et al. 2016). For example, evidences show positive association between religious gathering and lower levels of depression amongst different age groups (e.g.,

Frankl, 1962; Beck, 1967; Burnard, 1990; Swinton, 2001; Koenig, 2009; Koenig, McCullough, & Larson, 2001). A number of studies have identified significant association between RS and some aspects of QoL but only few have explored the potential impact of RS on QoL (e.g., Weaver, Flannelly, Garbarino, Figley, & Flannelly, 2003; Shaw, Joseph, & Linley, 2005). The impact of spirituality in dealing with emotional distress and mental health issues cannot be ignored, as the above studies amplify the importance of spirituality as an essential QoL narrative.

However, not all studies on spirituality and health show a positive effect of the former on the latter (e.g. Koenig, 2007; Exline, 2002; Ellison, Burdette, & Hill, 2009). Several studies have reported no association between attachment to God spirituality and physical health QoL (e.g., Nagpal et al. 2014; Miller et al. 2007; Nguyen et al. 2010; Bradshaw & Kent 2017; Rohani et al. 2015). In a recent review (Counted, Possamai, & Meade, 2018), it was argued that the lack of association between spirituality and physical health might be due to the illness context since spiritual attachment may provide psychological comfort, but it may not change the physical health status of the individual. Furthermore, some individuals may develop feelings of excessive guilt because of falling short of the moral demands of their spirituality (Exline, 2002; Koenig, 2007; Counted, 2016a, 2016b). Swinton (2001) examined the relationship between spirituality and anxiety, arguing that anxiety can have spiritual symptoms that suggest a loss of meaning in life, obsessional religious thoughts, feelings of alienation, loss of previous spiritual belief, fear of the consequences of sins, and inability to focus on their god. These negative experiences are referred to as 'insecure attachment indicators', experienced when relating to God as an attachment figure (Counted, 2016a, 2016b). However, "it seems to depend to some extent on the way in which spirituality is expressed," since increased mental health problems are often found amongst those with a strict religious upbringing (Cornah 2006, p.3). This suggests the importance of exploring the quality of one's life through the lens of spirituality, given that it is not standard practice among mental health professionals. For instance, Cornah of the Mental Health Foundation expressed that many clinicians either ignore the religious life of mental health sufferers

completely or treat their spirituality as nothing more than an expression of psychopathology. Hence, there is a need to explore the relationship between spirituality as a relational dynamic and QoL domains, thus providing clarity on the associations and identifying where the gaps are in research (Miller et al. 2013).

1.3.4 Place Attachment, Relational Spirituality, and Quality of Life

The empirical literature above indicates a significant association between attachment processes (others, place, god) and QoL. What is yet to be explored is if or how these different types of attachment may relate and interact in relation to QoL, showing how RS can have a profound effect on people's QoL in relation to their relationships to places. Studying places as sacred spaces not only differentiate such kind of spaces from ordinary, but through its aesthetics and *sacredness*, embody the quality that contributes to maintaining a positive QoL (Mazumdar & Mazumdar, 2004). This kind of experience represents what Mazumdar and Mazumdar refer to as having a certain "ethos", "disposition" and "worldview" about a particular place (2004, p. 387).

Seeing that the feelings people develop toward certain places are in themselves defined by the symbolic experiences they have at such places (Giuliani, 2003), it might be of significance to understand how a relationship experience with a divine entity in a particular place could relate to QoL. More specifically, the compensation and correspondence models of attachment theory provide the lens for exploring the affective link between experiencing a place and the divine in relation to QoL (Counted, Possamai, McAuliffe, & Meade, 2018; Counted & Zock, in press; Granqvist & Kirkpatrick, 2016). For example, when there are disruptive experiences in a place, or perceived emotional insecurity with human others, individuals may seek relationships with the divine as a way of compensating for the lost relationship with their place of attachment, thus maintaining a mental wellbeing. The same can happen when there is an insecure attachment experience with the divine or a human figure. An individual at this point may tend to explore a place in order to down-regulate any threat to their quality of life, in such a way that the environmental setting becomes a safe

haven for negotiating QoL. On the other hand, people may decide to explore a place for the sake of fascination, and not because they are having an insecure attachment at their current relationship. Hence, whether attachment to place or attachment to the divine or closeness to a human partner in experiencing place spirituality, the individual is re-initiating a caregiving process that sustains or maintains attachment with their relational partners in such a way that assures positive mental wellbeing (Counted, Possamai, McAuliffe, & Meade, 2018; Counted & Watts, 2017; Counted, 2018; Counted & Zock, in press).

1.4 Study Context: Attachment and African Diasporas in Australia

Migration is a significant life changing experience that involves all three features of the attachment discussed earlier. Therefore, researching the relationship between place attachment, relational spirituality, and quality of life might be especially important for migrants since expressions of spirituality are easily identifiable among migrants and individuals outside the margins of society due to their experience of marginalization, racism, discrimination, and other forms of abuse in a new abode (e.g., Ratia & Notermans, 2012; Campbell & Afework, 2015Thomas, 2007; Poikāne-Daumke, 2006). Thomas (2007) shows how spirituality (as it occurred in micro-level church relations within the sacred space of religious worship) helped transform black South Africans in a way that empowered them to persevere and find comfort in a hostile apartheid system. Hence, in order to adjust to a place that is unsafe or unwelcoming, an attachment may be developed with God as a way of negotiating QoL in a difficult place. This attachment-affiliation process aids in coping with certain determinants of poor quality of life that are applicable to migrants. Such attachment bonding is undertaken as a way of alienating group-felt marginalization and negotiating QoL, social belonging, and identity in a new place.

An African diasporic reflection presents the need to conceptualize the lived experience of the African diaspora. Discussions on the African diaspora involve huge transnational migration movements and a surge in the population of Africans of diverse cultures and religious traditions, resulting from the processes of globalization and African

transnationalism. This is seen in the interactions that connect people and institutions across the borders of homelands and, consequently, around the globe (Vertovec, 2000; Schiller, Nina & Blanc, 1992). This kind of interconnectedness is synonymous to African migrant groups in a diaspora context, representing an important wave of diaspora phenomenon, which takes the form of transnationalism. Religious and place interactions of many kinds, linking African institutions and people of African diaspora through globalisation, and interactions between peoples of Africa and others, can also affect the changing face of the concept of African diaspora. Despite the above unfolding history, African diaspora has been presented as a marginalized group subject to a range of inequities when they arrive in a new place, which impact on their quality of life and sense of well-being (Ratia & Notermans, 2012). Some important questions need to be asked to put things in perspective, such as whether or not it could be that the inequities experienced by African migrants in a diaspora context, when they arrive in a new place, are a source of emotional distress. And if it could be that the reason why African migrants seem to be more religiously inclined than the locals are because they are experiencing life and socio-cultural stressors (e.g. Higgins, 2012; Ratia & Notermans, 2012), thus drawing strength from a religious source much 'stronger' and wiser' so as to engage in a meaning-making process that would transform their QoL. If the latter is true, it might be worthwhile to explore how to tackle the determinants of poor quality of life amongst African migrants by paying closer attention to their attachment experiences (to place and God) as constellations of their quality of life narrative. Additionally, when populations of the African diaspora are having spiritual struggles (Pargament, 1997), showing withdrawal from and anxiety with God, it might help to consider what social and environmental qualities are out there that can be leveraged to satisfy needs for survival and ensure a better quality of life.

There are reasons to believe that there are health benefits when African diasporas develop attachment to their host country or maintain a relationship with God as a symbolic attachment figure. First, Cicirelli (2004) suggests that adult attachment may be developed due to geographical separation from significant others (e.g. mother, father, immediate family

etc) who are likely to be in a different country. African migrants who have left or fled their home-countries due to conflict, violence, and human rights violations, and have lost their primary attachment figures due to these conflicts, may be in need of surrogate attachments in their new abodes. Since most members of the African diaspora are geographically separated from their loved ones and primary caregivers (e.g. mother, father, family) in homecountries due to migration, they may be in need of a surrogate attachment while abroad. Second, living in Australia as an African migrant has been linked to a range of socio-cultural inequities and feelings of loneliness, depression, and displacement due to the symbolic and material burden of identity and black bodies (e.g., Mapedzahama & Kwansah-Aidoo, 2017). Due to the socio-cultural inequities associated with migration, African migrants in Australia may seek for a secure base from which/whom to explore the Australian space; one that might give them a sense of meaning, identity, and belonging in their new abode. These migrants may also model their lives and forge identity around their objects of attachment (e.g. place identity, religious identity), making them to build confidence and self-esteem in themselves, thus improving their QoL in the process. Thus, God may become an increasingly valuable source for negotiating quality of life, comfort, self-worth, and hope, and serving as a symbolic attachment figure during moments of depression, low self-esteem, and loneliness, among other negative emotions.

Several studies on Australian African diaspora have focused mainly on the public health and acculturation experiences of Sub-Saharan African migrants in Australia (e.g., Renzaho, 2006; Renzaho, 2009; Renzaho, Bilal, & Marks, 2014; McCann, Mugavin, Renzaho, & Lubman, 2016). This is partly understandable given the challenges associated with adjusting to life in a new country; this can include learning a new language, lack of knowledge and distrust of services, and socio-cultural barriers, among others. These issues lead to poor mental health literacy and stigma within the African diaspora communities in Australia. While there might be stigmas associated with help-seeking for health problems within African migrant communities, help-seeking spaces are common in these communities albeit through informal settings and networks (McCann et al. 2016). A study by Lindert,

Schouler-Ocak, Heinz, and Priebe (2008) on African migrants shows that such informal helpseeking sources can be found within family structures and religious institutions than formal settings. The transition period of settling in Australia can be a challenging experience for most African migrants who also feed into the new narrative of African diaspora collective. This is why the migration experiences of this particular group is of great importance to the researcher in relation to their spirituality and health outcomes.

While Sub-Saharan Africans cannot easily be defined as a homogenous group due to their cultural and ethnic diversity, several studies show that they share similar diaspora and migration experiences in Australia, and thus constitute a sense of homogeneity as migrants and foreigners at the margins of a multicultural Australian society (Mapedzahama & Kwansah-Aidoo, 2017; McCann, Mugavin, Renzaho, & Lubman, 2016; Poikāne-Daumke, 2006; Renzaho, 2009). Hence, the interest is not to examine the cultural diversity of African migrants in Australia in relation to their attachment and QoL. Rather, it is to explore how this migrant group seeks and maintains attachment with relational objects and how such bond shapes their quality of life. Equally, since the African diaspora group is often represented to be more religiously inclined than the 'locals' (Higgins, 2012), it is also fruitful to see why this is happening, and the specific role that religion plays in their experience of a new place. This study explores the changes in the QoL of this unique population having an attachment experience in Australia. There is no control group in this study since it is an exploratory study examining how attachment patterns and QoL are related. Generating data on a representative control group (e.g. non-Christian or non-religious migrants) might be challenging due to the stigma associated with identifying as non-religious or non-Christian in highly religious communities since religion play a major role in their communal life (Abbott & Mollen, 2018).

1.5 Methodology

1.5.1 Study Design: Sequential explanatory mixed methods

This thesis reviewed existing literature on PA, RS, and HQoL, and collected empirical data for analyses through quantitative and qualitative research methods. This sequential mixed methods approach (Ivankova, Creswell, & Stick, 2006) was used to elicit understanding of the experiences of Australian-based African diasporas in relation to their PA, RS, and HQoL. The mixed methods design has been recommended for enlarging the social psychology and psychology of religion research (e.g., Davis, Cuthbert, Hays et al., 2016; Davis & Tisdale, 2016; Mccusker & Gunaydin, 2014; Christenson & Gutierrez, 2016). A mixed methods design was appropriate for the study, whereby allowing data collection and analysis to be done through both quantitative and qualitative phases. The quantitative phase captured key measures in a larger sample, followed by the qualitative phase which explored those findings further.

1.5.2 Quantitative Component

- To examine the relationship between PA, RS, and QoL, quantitative data were generated to examine the following study hypotheses: Adult attachment profiles of the respondents are positively related to HQoL.
- 2. There is a positive association between PA and HQoL, and this relationship is contingent on AG (RS).
- 3. The main effect of PA is positively associated with HQoL outcomes.
- There is a positive correlation between AG and HQoL and this relationship will vary based on sociodemographic background factor such as level of educational achievement.

1.5.2.3 Participants and Procedures

Cross-sectional data were collected on members of the African diaspora in New South Wales. Participants were African-Australians, expats, students, refugees, skilled and unskilled migrant workers from sub-Saharan Africa who were outside of their ancestral continent through post-colonial migrations. In terms of the region of origin of the 261 participants in the study, 1% were from Central Africa, 2% Eastern Africa, 39% Southern Africa, and 58% from Western Africa. Due to issues of distribution, data were not collected based on the participants specific countries. Study participants were African migrants between 16 and 70 years (M=37). 54% of the respondents were female, and of the total sample 81% had a tertiary education background. Among the respondents, 62% identified themselves as married, 32% single, and the rest 6% either divorced, separated, or widowed. Participants were of Christian religious background, residents of New South Wales, members of transnational African churches in New South Wales, and from sub-Saharan African regions, with more than half (58.8%) of the sample from West Africa and others from southern Africa, eastern Africa, and central Africa (38.8%, 2.4%, and 0.4% respectively). The research was conducted in New South Wales, which has one of the fastest growing population of Africans after Victoria (43,429) with an estimated number of 37,735, according to the Australian Bureau of Statistics (2016). This makes New South Wales a melting point for African diasporas in Australia.

Before embarking on this study, it was approved by the Human Ethics Committee of Western Sydney University and the study was first pilot tested among a group of migrants (N=10) to make sure that they grasp the statements in the measures. Before the psychometric measurements were administered I made sure that the statements were modified for the migrant population, for example, it emphasised Australia as their place of attachment. A snowball sampling procedure was used in the recruitment process to identify potential participants for this study since members of the Australian African diaspora might be hard to locate (Renzaho, 2009). Participants attended weekly church and community meetings in different suburbs of New South Wales such as Revesby, Penrith, Merrylands, Blacktown, Yagonna, Bankstown, Glenfield, Minto, Seven Hills, Auburn, and Glendenning. Access to participants were made possible through initial contact with leaders of the

respective communities and churches. About twenty different African church and community groups participated in the survey. The researcher relied on recommendations from some community leaders to recruit participants for the study. This snowballing technique helped in reaching participants that might not otherwise be reached. Once consent was given, the researcher was invited to explain the study objectives to the communities and churches, and make an open call for participants. During one of the meetings, after explaining the aim of the study, they were invited to complete the study surveys usually after their meetings. The surveys were either completed at that time, returned the following week, or mailed.

1.5.2.4 Measures

The measures included in the survey (Appendices A - F) are summarized below.

Socio-demographic variables included in this study were: gender, age, country of origin, educational level, and marital status.

Sense of Place Scale (SOP; see Appendix B) (Jorgensen & Stedman, 2001) is a 12item scale which assesses three place domains (place attachment, PA; place identity, PA; and place dependence, PD) and is rated on 5-point Likert scale, ranging from '0 = strongly agree' to '5 = strongly disagree'. Each subscale contains 4 items and higher scores in any of these domains or overall measurement indicate a strong positive connection to place. The SOP variables cover the three different attitudes toward place: *affect (PA), behaviour (PD)*, and *cognition* (PI). The alpha levels of the variables for the study were moderate: overall SOP (α =. 80); PA (α =.81); PD (α = .72); PI (α =.67).

Attitudes toward God Scale (ATSG-9) (Wood et al, 2010) is a 9-item scale which measures RS in terms of relationship experiences with (see Appendix D). ATSG-9 measured two domains: *positive attitudes toward God* (3 items), and *disappointment and anger with God* (6 items). These variables help in estimating how the participants feel about their relationship with God. Hence, negative experiences with God would translate to higher scores in the *disappointment and anger with God* subscale, whereas positive relationship experience with God would indicate higher levels of *positive attitudes toward God*. The 9 items are rated on a 11-point Likert response scales ranging from 0 = Not at all to 10 = Extremely. Alpha levels for the study were moderate: positive attitudes toward God (α .84) and Disappointment and anger with God (α .71).

Attachment to God Measure (AGM) (Sim & Loh, 2003) is a 16-item scale which was used to assess the four dimensions of secure AG: perceiving God as a Safe Haven, Secure Base, developing proximity to God, and perceiving God as a response to Separation (see Appendix C). Each dimension contains 4 items and higher scores in each subscale indicates the strength of their state-based attachment with God. Participants responded to each of the 16 items by indicating how much they agree or disagree with it using response scale rating from 1 to 6. The alpha values for the subscales used for this study are quite moderate: total AG (α .89); Proximity to God (α .71); God as a secure base (α .83); God as a safe haven (α .72); God as a response to separation anxiety (α .73).

Experiences in Close Relationships Questionnaire (ECR-RS; see Appendix E) (Fraley et al. (2011) was used to the level of attachment to important people in one's life (e.g. family, friends, loves ones). This 9-item measure is divided into two subscales, one for assessing global avoidant-attachment and the other taps on global anxious-attachment. Items 1, 2, 3, and 4 were reverse coded, and response ratings ranged from 1 = strongly disagree to 7 = strongly agree. In this study, both subscales demonstrated moderate alphas: attachment anxiety (α =.80); attachment avoidance (α =.77).

World Health Organisation Quality of Life - BRIEF (WHOQoL-BREF) (The WHOQOL Group, 1998) is a 26-item measure (see Appendix F) used to assess the four domains of HQoL discussed in the literature: Physical health (7 items), psychological health (6 items), social relationships (3 items), environmental health (8 items), general QoL (2 items). Each of the twenty-six items was subjectively scored by the participants on a 5-point response scale. The physical health variable includes statements on daily activities, functional capacity, mobility, energy, pain, and fatigue. Psychological health domain assesses items such as negative thoughts, self-image, positive attitudes, self-esteem, spiritual well-being, learning ability, and memory concentration. The social relationships

variable includes questions on social support, personal relationships, and sex life. While the environmental health items cover place-related issues such as financial resources, safety, health and social services, place of residence, opportunities in an environment, mobility in an environment, and general knowledge of a place (Vahedi, 2010). Higher scores in any of the subscale indicate better QoL in that particular domain, whereas lower scores reflect poor QoL. WHOQoL-BREF is designed to produce a profile with four domain-scores and two individually scored statements about the individual's overall subjective perception of their QoL. Three items in the WHOQoL measure were reversed, two of which are in the physical health domain (i.e. 'To what extent do you feel that physical pain prevents you from doing what you need to do?', and 'How much do you need any medical treatment to function in your daily life?'). The other reversed item is found in the psychological domain, in particular, "How often do you have negative feelings such as blue mood, despair, anxiety, depression." HQoL domains show moderate alpha levels in this study: Psychological health (α =.76); Environmental health (α =.79); Physical health (α =.77); Social relationships (α =.71); General QoL (α =.63).

1.5.2.5 Statistical Analyses

Data analyses were carried out using the SPSS software, version 21.0. Summary of the analytical strategies associated with each study in the quantitative phase have been outlined below:

Study 1: Attachment Profiles and Health-related Quality of Life (Chapter 4)

As reported in chapter 4, data analyses were done in three stages: (a) descriptive statistics were performed to calculate the percentiles and variable means, (b) the differences in participants' attachment profiles based on their socio-demographic background factors. These were estimated using ANOVA and t-test, along with post hoc tests, Levene's test, and Dunnett's T3 test, with p values of *< 0.05 and **<0.01 or less considered significant, and, (c) correlation analysis was conducted using the Pearson Product Moment Correlation to explore how participants' attachment profiles relate to their HQoL outcomes.

Study 2: Attachment to Australia, Attachment to God (Spirituality), and Quality of Life Outcomes (Chapter 7)

Data analyses were done in three steps, as shown in chapter 7. First, (a) descriptive statistics were calculated for study variables. Secondly, (b) bivariate analysis was estimated using the Pearson product-moment correlation coefficient to verify study hypotheses. This was followed by (c) multivariate analyses using hierarchical multiple regression models to confirm the correlation analyses. The models included both the main and interactive effects of PA and AG on QoL outcomes. All covariates with a p-value <.10 were entered in the models, with significance set at p<0.05. To minimize the effects of multicollinearity, perpendicular terms were mean-centered prior to generating the cross-product terms for the interaction effects between study variables.

Study 3: Educational Achievement, Attachment to God, and Quality of Life Outcomes (Chapter 6)

As presented in chapter 6, statistical analyses were conducted in four steps using SPSS version 24. First, descriptive statistics were calculated with the percentiles and variable means. Secondly, bivariate correlations were estimated using the Pearson correlation coefficient. Thirdly, multivariate analyses were computed using the multiple regression analysis controlling for socio-demographic background factors to estimate the extent of the bivariate correlations. Fourthly, using a hierarchical moderated regression analysis, we examined the extent to which EA is related to HQoL outcomes based on the moderator variable AG. Before calculating for statistical interactions, items were mean-centered to minimize the effects of multicollinearity with cross-product terms (Aiken & West, 1991). Study covariates with a p-value < .10 were entered in the adjusted regression models and significance was set at p< .05.

Study 4: Sense of Place Attitudes and Quality of Life Outcomes (Chapter 5)

As shown in chapter 5, descriptive statistics with summary of study data are presented with the percentiles and variable means. Univariate and multivariate analyses were calculated to examine the main effects of sense of place attitudes (PA, PI, and PD) on QoL outcomes, and all covariates with a p-value <.10 were entered in the adjusted model examining the relationship between sense of place attitudes and QoL outcomes. For each outcome, two models are presented: (a) the unadjusted model and (b) the covariate-adjusted model. Significance was set at p<0.05.

1.5.3 Qualitative Component

1.5.3.1 Design and philosophical foundation

A phenomenological psychology method is used to generate data to account for the results presented at the quantitative phase of the study, while also addressing some impending research questions. This method is used to gain insights regarding topics related to human behaviour and lived experiences from the perspectives of both the researcher and the respondents. Phenomenological psychology is a unique technique of qualitative inquiry for understanding subjective experiences wherein the researcher unearths previously unnoticed issues, exploring the necessary and universal structures of lived-experiences using phenomenology (Wertz et al., 2011). Rather than making inferences, the purpose of phenomenological psychology is to reveal hidden meanings and identify the impact of a phenomenon while providing rich descriptions that help in understanding the experience of being in that 'life-world' (Cairns, 2010; Wertz et al. 2011). This method of qualitative inquiry is grounded in transcendental analysis which examines the necessary conditions that influence human experience. As a philosophical paradigm, phenomenological psychology draws on Husserl's (1983) epoché or "bracketing": suspending judgment about the lived experience of a contemplated entity and setting aside questions about its very objective nature. The aim of bracketing or epoché is to achieve objectivity (Baillie, 1996). By bracketing the existence of a contemplated entity, there is a systematic phenomenological

activity aimed towards peeling away the symbolic meanings until only the entity or phenomenon itself, as meant and experienced, remains. The text data information collected at the qualitative phase are used to explain the findings of the statistical data and to better understand the context and lived-experience of being in the 'life-world' of African migrants in Australia.

1.5.3.2 Sample and data collection

The results from the quantitative study was used to purposefully select fifteen respondents from the quantitative sample (n=261) for follow-up interviews at the qualitative phase. The fifteen respondents are selected based on their mean scores in the measurements of health-related quality of life. Specifically, five (n=5) with above average mean score of HQoL were selected (i.e. group with higher QoL score). Another five (n=5) with average mean scores in the HQoL scale (i.e. group with moderate QoL level) were also selected for interviews. And finally, the last five (n=5) with lower mean scores in HQoL were selected for interviews (i.e. group with poor level of QoL). These fifteen respondents were purposely selected to further explain the role of place experiences and relational spirituality in negotiating quality of life, diaspora identity, and social belonging in a migration context. While the qualitative component of this study is important, priority was given to the quantitative phase since it represents a major component of data collection and analyses. The qualitative study, however, helped in achieving depth finding explanations of the results from the quantitative phase of the study, which come first in sequence to reveal the statistical power of potential conditions and correlations of place experiences, relational spirituality, and quality of life outcomes. The results of the quantitative study are used to develop the research questions for the qualitative study, while the findings in the qualitative phase of the study are used to explain the statistical correlations and predictive power of the quantitative results.

The data collection at the qualitative phase of this study was done by capturing the audio recording of in-depth semi-structured interviews with respondents selected for the

qualitative study from January to March 2018. Open-ended questions (see Appendix G) were initiated which enabled respondents to lend their voices on their lived experiences. While making notes and audio-recording the interviews, follow-up questions or further probing was done by the researcher to clarify statements and 're-open the door' to a particular experience that sheds light on the research themes. The interviews were conducted mostly face-to-face or via telephone, depending on the preference of the respondents. The interviews were transcribed and then thematically analysed. The identity of the respondents remained anonymous, as pseudonyms were used to assure confidentiality during the data analysis.

1.5.3.3 Research questions

The qualitative component of this study addressed the following research questions:

- What are the common migration experiences experienced by the respondents and how are those experiences related to their understanding of place, spirituality, and quality of life?
- 2. What religious coping strategies are helpful for coping with migration stressors and negotiating identity, social belong, and quality of life among African Christians in NSW, Australia?
- 3. What pro-environmental coping strategies are resourceful for the respondents in terms of negotiating their identity, social belonging, and quality of life within Australia?

1.5.3.5 Data analysis

Thematic analyses were done by following the five-step procedure of data analysis in the phenomenological psychology research methods (Karlsson, 1995). These five-steps includes having a good grasp, meaning units, eidetic induction, situated contexture, and summarising final result in general characteristics and typology. These steps are summarised in the table below:

Data analysis steps	Contents
Good grasp	Perusal of all the transcribed interviews to understand the whole.
Meaning units	Classification of the interview text in meaningful units where a shift in meaning was identified in accordance to the purpose of the study.
Eidetic induction	Eidetic interpretation was done from the participants everyday language to find the characteristics of the phenomena in the narratives by the participants.
Situated contexture	Summary of the meaning units into a whole in order to describe how the phenomenon is lived and what the phenomenon is.
Finally: result in general characteristics and typology	First, a specific description for each interview to compare thereafter the detailed interview subtitles with each other to achieve a general or a typical description of the phenomenon

The above outlined steps will be undertaken as a mode of discovering and patterning the immediate experiences, activities, and contacts that make up the world of the respondents in relation to their place attachment, relational spirituality, and QoL. Data collected were grouped around research questions and conceptualised as individual studies and concluding remarks and recommendations for further studies were made in studies 5 and 6 to inform future research on place, spirituality, and quality of life across different cultural contexts.

Study 5: Migration, Pro-Environmental Behaviour, and Forced Acculturation: Recognising Place Attitudes as Coping Strategies (see Chapter 8).

As presented in Chapter 8, study 5 explores the role played by pro-environmental coping in negotiating identity, quality of life, and social belonging. Semi-structured interviews were conducted with individuals of African descent who are residents of New South Wales and an interpretative phenomenological analysis was used to inform study design and data analysis which generated several themes used to conceptualised pro-environmental coping

as a multidimensional construct involving three major domains of attitude: affect, behaviour, and cognition.

Study 6: The Multi-Dimensionality of Attachment-Related Religious Coping Strategy (see Chapter 9).

As shown in chapter 9, study 6 examines the domains of religious coping strategies among African Christians in New South Wales, Australia, and the role they play in negotiating quality of life and life stressors. Study themes were drawn from interview transcripts on the positive and negative aspects of religious coping, involving multiple domains including personal, social, and environmental attributes. Of particular interest were the correlations that respondents drew between their personal biographies, environmental stressors, human-based coping, and religious coping behaviour.

1.6 Ethical considerations

This research is considered a medium risk research. Chances are that some of the respondents might experience some emotional discomfort while answering questions about their quality of life, relationship with God, or experiences in Australia. Respondents are allowed to cancel the interview session if they feel uncomfortable or inadvertently upset about the study/questions, although none of the respondents expressed discomfort during the interview sessions. Furthermore, an informed consent form was signed by respondents before they granted interviews and no reference was made to any individual or religious body in the final report of the studies and strict anonymity was maintained using pseudonyms. No information was shared with others, including the community and religious leaders, or even with the university officials. All information related to this study were kept confidential.

1.7 The significance of the study

A study that explores the contribution of how adult attachment bonds, in relation to God and a geographic place, can make a contribution to one's QoL is quiet novel. The main significance of this research is in the gap that is been addressed in terms of the relationships between PA, RS, and QoL in a migration context. This is the first study to examine the complex relationship between place and spiritual attachment in relation to QoL, thus giving an interpersonal understanding of migrants' relationship with their new abode. Another significance of this study is in its mixed-method arrangements of quantitative and qualitative methods in addressing the relationship between of place attachment, spirituality, and the quality of life. There is an over-reliance on quantitative research which is a key limitation to much of the research in the field of spirituality and health. Quantitative research outputs fall short of fully accessing the "meaning [that] spiritual activity has for the individual" as these studies "isolate the impact of one activity [e.g. church attendance, community, selfawareness etc] upon another [e.g. level of depression, health outcomes, etc], which may not always capture the rich and complex interactions of other factors on any association found" (Cornah 2006, p.25). This is equally stressed in other similar studies (e.g., Davis, Cuthbert et al. 2016; Davis & Tisdale, 2016).

Chapter	Title	Aim	Status	Structure
1	Introduction	Introducing the scope	Not published	Introduction and
		and nature of the		theoretical
		entire study, including		background
		the baseline research		
		questions		[Part 1]
2	Relational spirituality	Reviewing recent	Published in	Literature review
	and quality of life: a	evidence of the links	Health &	
	literature review	between relational	Quality of Life	
		frameworks of	Outcomes	[Part 1]
		spirituality and quality		
		of life		

1.8 Overview	v of the thesis
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	literature review	between place		[Part 1]
		attachment and		
		quality of life		
4	Adult attachment	Basic profiling of	In review	Quantitative
	profiles and health-	study data and		Component
	related quality of life	intercorrelations		(descriptive statistics
		between the		& correlation
		measures		analysis)
				[Part 2]
				Study 1
5	Sense of place	Examining the	Published in	Quantitative
	attitudes and quality of	relationship between	the Journal of	Component
	life outcomes	place attachment as	Community	(multivariate analysis)
		an aspect of sense of	Psychology	
		place attitude and		[Part 2]
		health-related quality		
1				
		of life outcomes		Study 4
6	Educational	of life outcomes Examines the	In review	Study 4 Quantitative
6	Educational achievement,		In review	
6		Examines the	In review	Quantitative
6	achievement,	Examines the relationship between	In review	Quantitative Component
6	achievement, attachment to God,	Examines the relationship between attachment to God spirituality and quality of life, and how the	In review	Quantitative Component (multivariate and moderation analyses)
6	achievement, attachment to God,	Examines the relationship between attachment to God spirituality and quality of life, and how the educational	In review	Quantitative Component (multivariate and
6	achievement, attachment to God,	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the	In review	Quantitative Component (multivariate and moderation analyses) [Part 2]
6	achievement, attachment to God,	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a	In review	Quantitative Component (multivariate and moderation analyses)
	achievement, attachment to God, and quality of life	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix.		Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3
6	achievement, attachment to God, and quality of life Attachment to	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link	Published in	Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 Quantitative
	achievement, attachment to God, and quality of life Attachment to Australia, attachment	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link between place	Published in the <i>Journal of</i>	Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 Quantitative Component
	achievement, attachment to God, and quality of life Attachment to	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link between place attachment and	Published in the <i>Journal of</i> <i>Spirituality in</i>	Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 Quantitative Component (multivariate and
	achievement, attachment to God, and quality of life Attachment to Australia, attachment	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link between place attachment and quality of life as	Published in the <i>Journal of</i>	Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 Quantitative Component
	achievement, attachment to God, and quality of life Attachment to Australia, attachment to God, and quality of	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link between place attachment and	Published in the <i>Journal of</i> <i>Spirituality in</i>	Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 Quantitative Component (multivariate and
	achievement, attachment to God, and quality of life Attachment to Australia, attachment to God, and quality of	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link between place attachment and quality of life as	Published in the <i>Journal of</i> <i>Spirituality in</i>	Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 Quantitative Component (multivariate and
	achievement, attachment to God, and quality of life Attachment to Australia, attachment to God, and quality of	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link between place attachment and quality of life as moderated by	Published in the <i>Journal of</i> <i>Spirituality in</i>	Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 [Part 2] [Part 2] [Part 2]
7	achievement, attachment to God, and quality of life Attachment to Australia, attachment to God, and quality of life	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link between place attachment and quality of life as moderated by attachment to God spirituality	Published in the Journal of Spirituality in Mental Health	QuantitativeComponent(multivariate andmoderation analyses)[Part 2]Study 3QuantitativeComponent(multivariate andmoderation analyses)[Part 2]Study 2
	achievement, attachment to God, and quality of life Attachment to Australia, attachment to God, and quality of	Examines the relationship between attachment to God spirituality and quality of life, and how the educational background of the participants plays a role in this mix. Examines the link between place attachment and quality of life as moderated by attachment to God	Published in the <i>Journal of</i> <i>Spirituality in</i>	Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 Quantitative Component (multivariate and moderation analyses) [Part 2] Study 3 [Part 2] [Part 2] [Part 2]

	Behaviour, and Forced	used at this stage to		(interpretative
	Acculturation:	develop interview		phenomenological
	Recognising Place	questions, exploring		analysis)
	Attitudes as Coping	how place		
	Strategies	experiences in the		[Part 3]
		form of pro-		
		environmental coping		Study 5
		may help in		
		negotiating quality of		
		life.		
9	The Multi-	Quantitative results in	Published in	Qualitative
	Dimensionality of	phase 1 were used to	the <i>Journal of</i>	Component
	Attachment-Related	develop interview	Spirituality in	(interpretative
	Religious Coping	guide for this study,	Mental Health	phenomenological
	Strategy	exploring how the		analysis)
		sense of spirituality		
		(i.e. attachment to		
		God) of the		[Part 3]
		respondents were		
		used as a coping		Study 6
		mechanism for		
		negotiating quality of		
		life and dealing with		
		migration and life		
		stressors in Australia.		
		This chapter explores		
		the multi-		
		dimensionality of		
		attachment-related		
		religious coping		
		strategy.		
10	Why and how	Study findings are	To be	General Discussion &
	environmental and	synthesized at this	published as a	Conclusion
	religious attachments	stage to articulate	chapter in the	
	matter for quality of life	and summarise	edited volume	[Part 4]
		emerging theories on	on "Religion	
		the intersection of	and Place:	
		place, spirituality, and	Psychological	
		quality of life.	perspectives"	

	for Palgrave	
	Macmillan.	

Chapter 2 Relational Spirituality and Quality of Life: A Literature Review

This chapter provides a background to the frameworks of relational spirituality and quality of life used in this study, emphasizing the attachment-based model of spirituality and the multidimensionality of quality of life. Most importantly, this chapter reviews evidence-based studies on the links between relational spirituality and quality of life from 2007 to 2017, thus setting the scene for understanding the complexity of such links. This chapter has been published in *Health and Quality of Life Outcomes* (2018), a leading premier medical journal published by BioMed Central covering research on health-related quality of life.

REVIEW

Open Access



Relational spirituality and quality of life 2007 to 2017: an integrative research review

Victor Counted^{*}, Adam Possamai and Tanya Meade

Abstract

Background: Despite the increasing number of evidence-based research on relational spirituality (RS) and quality of life (QoL) in medical-health research, little is known about the links between RS and QoL outcomes and the mechanisms by which RS aspects are functionally tied to QoL.

Objective: To determine how RS is perceived/positioned in relation to QoL, we (a) examined recent available data that identify and appraise the links between RS and QoL; (b) identified themes emerging from the association between RS and QoL, and (c) discussed the implications of the effects of RS on QoL outcomes.

Methods: We conducted an integrative research review of English-language peer-reviewed articles published between 2007 to March 2017 which examined an association between RS and QoL, as identified from a search of three databases: PubMed, PsycINFO, and ScienceDirect.

Results: A total of 20 studies were analysed. Of these, twelve (60%) reported positive association between RS and QoL, three (15%) studies reported inverse associations, whereas five (25%) studies showed evidence of lack of association (with two out of the five studies showing an indirect association). Physical health and psychological functioning were the most researched domains of QoL, and some studies suggest an attachment-based model of RS in the last 10 years of RS and QoL research. Studies conducted with participants with serious illnesses ranging from dementia, cardiac arrest, and breast cancer reported no association between RS and physical health. Our review shows evidence of both the direct and/or indirect effects of RS on QoL as a possible spiritual coping model for complementary alternative health therapy, albeit occurring through several religious-related psychosocial conduits.

Conclusion and implication: RS appears to be associated with health benefits as indicated across QoL domains. General medical practitioners and other healthcare agencies could benefit from the understanding that a spiritual coping model could aid their patients, and therefore their clinical practices, in the healing process.

Keywords: Relational spirituality, Quality of life, Integrative research review

Background

There is a growing body of research that promotes spirituality as an internal locus of control in terms of regulating negative emotional states [1, 2]. These studies assert spiritual activities as helpful means of attaining self-transcendence and coping with life stressors. Chaney and Southwick [3] made such a claim in their book *Resilience*, describing how people overcome life's challenges

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by searching for connectedness and seeking comfort in spirituality based on what is transcendent. Spirituality differs in many ways from 'religiosity/religiousness'. The former emphasizes the personal character of spiritual transcendence in terms of the changing, developing constitutive trait and dynamic attribute one has from cradle to grave [4], whereas the latter is considered in terms of the institutionalised character of religious beliefs. In this paper, we refer to relational spirituality (RS) as the former—as an important platform for personal development that draws people to forge meaning in life through spiritual transcendence [5]. Piedmont [6] ascribes a

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special role to RS with regards to spiritual transcendence, arguing that it should be considered as the sixth domain of personality since it represents a broad-based motivational domain and language term (e.g., universality, prayer fulfilment, and connectedness) that capture adaptively important psychological qualities that are comparable to The Big Five personality: Neuroticism, extraversion, openness to experience, conscientiousness, and agreeableness. Several other authors have weighed in on the concept of spirituality and provided different definitions. For example, as "the personal quest for understanding answers to ultimate questions about life" [7], "an organised system of beliefs and symbols designed to facilitate closeness to the sacred" [8], an aspect of quality of life [9, 10], "as subjective belief systems that incorporate self-awareness and reference to a transcendence dimension" ([11]: 288), as a perceived relationship with a 'divine attachment figure' [12], and the "unique window into attachment processes in adulthood" ([13]: 917).

In examining the above definitions, it seems that RS is mostly discussed within two categories: (1) as a cognitive appraisal of existential issues and (2) as the experiential knowledge of the divine [14]. The former recognises RS in connection to the cognitive appraisal of stressors and interpersonal struggles when the individual is in a relationship with the sacred and often referred to as the 'head-knowledge of God' [15]. The latter focuses more on the 'heart-knowledge of God' [15] in its application of attachment theory and developmental psychology. Both perspectives of RS draw largely from a relational perspective [16], and will be used for guiding this review in terms of the conceptualisation of RS as implicit relational and experiential representations of the sacred that are essential to faith development, spiritual transcendence, and appraising life stressors and QoL.

QoL is used in health-related research to study life satisfaction and the extent to which an individual evaluates their holistic life experience from a subjective point of view [67]. It is a broad-ranging concept "affected in a complex way by the person's physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment" ([75], p.1404), and covering several aspects of individual needs satisfaction that constitute aspects of life that contribute to overall experience.

QoL has much to do with individual satisfaction with key areas of life that enhance a general sense of physical and emotional well-being. Research shows that this concept is applicable for adolescents [17], women [18], migrants [19, 20], older adults [21], religious people [22], non-religious groups [23], among others. Studies have also shown that QoL has much broader implication for health care [24] and life satisfaction [25]. As a contextspecific construct [26], measures of QoL are used to assess the individual evaluation of their health-related outcomes, and in recent cases, modified for assessing disease-specific QoL outcomes. These include, HIV/AIDS-targeted QoL [27], geriatric quality of life-dementia (GQOL-D) [28], QoL—alzheimer disease scale (e.g., [29]), and heart-disease specific QoL scale (e.g., [30]).

Researchers recognise QoL as a multidimensional concept in terms of its subjective, objective, and culture/ spirituality components, while at the same time identifying the relationship between these aspects (e.g., [9, 25, 31, 32]). Marshall [33] and Rule [34] mention income, education, and housing as examples of objective aspects of QoL. Collinge et al. [35], along with O'Connell and Skevington [36], spirituality' as/spirituality' as an important aspect of QoL.

The subjective satisfaction aspect is the most researched aspect in QoL literature, as it mostly assesses physical health, psychological health, social relationship health, and environmental health (e.g., [31, 35]). While QoL is likely to be related to individual contexts, as well as to the subjective satisfaction aspects, we argue that the spiritual aspect may be related to beneficial health outcomes and should be positioned as an additional conceptualisation of RS. A similar proposition can be seen in other studies (e.g., [9, 10]), concluding that one's spiritual well-being is an important aspect of QoL since it influences the subjective domain. The concept of OoL is continuum in nature since it considers overall life satisfaction that is connected with the individual's physical, mental, environmental, social, and spiritual functioning. Nonetheless, QoL is constantly changing, depending on the lived experience resulting from several factors that control one's life, especially ones related to self-transcendence and the connection to the sacred [37].

Based on this theoretical and empirical background, RS may be perceived as a relational dynamic and an implicit relational representation (e.g., [16]) that highlights a perspective which seeks to understand the human need for an object of devotion and spiritual functioning, guiding the quest for meaning and attachment to the sacred (e.g., [16, 38, 39]), in terms of its association with QoL. This relational perspective is largely drawn from the works of object relations theorists (e.g., [40-42]), and recently, RS has been theorized from an attachment theoretical perspective [16]. Although the original thesis on attachment proposed by Bowlby [43] largely assumed an evolutionary perspective and its manifestation in parent-child relationships, he also noted that attachment processes may have a broad implication for psychological development throughout a person's life. Cicirelli [44] studied lifespan attachment developments among older adults, with empirical evidence supporting a strong sense of attachment to God among older adults. Other studies (e.g., [16, 37, 45]) have proposed an idea of a RS that can be interpreted in terms of an attachment-based model, one defined as a perceived relationship with the sacred. Granqvist and Kirkpatrick [13] refer to this as the maturational aspect of attachment development resulting from the increased ability in core specific cognitive tasks such as processing speed (e.g., [46]), voluntary response suppression (e.g., [47]), and working memory (e.g., [48]), which are usually immature in childhood [49].

Several studies (e.g., [13, 16, 50]) have integrated the principles of Bowlby's [43] attachment theory into the study of religious and spiritual development. Aspects of RS as an attachment-based model of spiritual development have been reported in studies (e.g., [37]) suggesting that attachment relational variables consistently emerge as predictors of various outcome variables that match spiritual and psychological well-being. For example, Augustyn et al. [37] report that RS (through spiritual practices such as prayer, awareness of God, spiritual meaning, and forgiveness) strengthens the link between spiritual well-being and psychological outcomes. Bradshaw and Kent [22] report that RS in terms of an attachment connection to the sacred strengthens the relationship between prayer and psychological outcomes. However, Sloan et al. [51, 52] have criticized empirical studies' claim of health benefits associated with religiosity, arguing that about 83% of the studies making such claims were methodologically flawed and misrepresented data; thus, there is no empirical basis for asserting that religious involvement is related to positive health outcomes. Miller and Thoresen [53] have argued that the consistency of empirical reports on the effects of spirituality on health-related outcomes point toward salutary effects. Other studies (e.g., [54, 55]) have linked adverse effects to beliefs in a punitive divine figure, extrinsic religiousness, and upholding a religious moral standard.

Recent literature reviews (e.g., [56, 57]) have shown evidence of positive links between spirituality/religiosity and QoL, albeit these studies were mostly limited to organizational religious affiliation among elderly adults in South America (e.g., [56]) and how religious participation correlates to mental disorders (e.g., [57]). These two reviews found empirical support for the association between several aspects of religiosity and health and mental health outcomes. For example, Bonelli and Koenig's [57] review provides evidence to show that religious involvement is associated with better mental health outcomes in 72.1% of the studies, while Abdala et al. [56] concluded, based on the positive association in 75% of the studies, that the religious affiliation of elderly South Americans is associated with better outcomes of quality of life. However, it seems that the conceptualisation used in these studies differ from that offered in our proposed study in terms of our definitions of RS and QoL. There appears to be no recent review study which appraises RS as (1) a domain of QoL that relates to spiritual functioning, and (2) a relational dynamic in terms of the relationship connection with a symbolic sacred object or figure, either through spiritual transcendence, prayer fulfilment, attachment to God, or other implicit relational conduits. In addition, while much has been done in promoting RS as an aspect of QoL, little is known about the broader perspective regarding the association between RS and QoL in disease-specific medical-health research. With debate around the salutary effects of RS on health outcomes, this paper contributes to the ongoing debate on how RS functioning is associated with perceptions of QoL. This study will thus: (1) review recent available data that identify and appraise the links between RS and QoL; (2) determine how RS is perceived/positioned in relation to QoL; (3) identify emerging themes emerging from the association between RS and QoL and (4) discuss the results and implications of the association between RS and QoL.

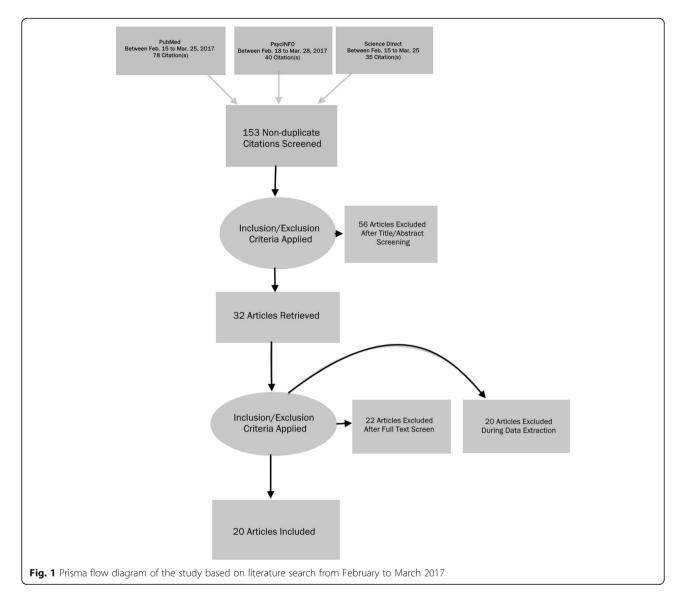
Methods

Review design

An integrative research review (IR) design is used to appraise the existing literature on RS and QoL. IR is a 'systematic' process "restricted to relevant studies that point to new data related to the study goals" ([58]: 12). The choice of an IR allows for synthesizing knowledge from diverse disciplinary sources to better describe a subject [59]. The use of this method to conduct a systematic literature review is especially appropriate for interpreting complex subjects. This is because it deconstructs theoretical and interdisciplinary domains related to such topics in order to formulate new reliable models, research agendas, or a meta index of meanings and definitions [60]. An IR contrasts with metaanalysis in that its aim is to have a comprehensive collection of literature, especially when the subject is in one knowledge domain. An IR is comparative for review of subjects from diverse knowledge domains, as is the case in this review, and consistent with previous review on the subject (i.e., [56]). An IR also has a more flexible and inclusive review design (involving both quantitative and qualitative studies), compared to other types of review methods. It allows for a more purposeful selection and inclusion of diverse data sources and empirical contributions which show the association between RS and QoL in diverse and broad sampling frames. Hence, we have targeted and integrated representative sources of research which have the potential to identify and appraise the links between RS and QoL.

Data sources

As shown in Fig. 1, a search was carried out between February and March 2017 using three online databases



(i.e., PubMed, PsycINFO, and ScienceDirect) with DeCs¹ and MeSH² keywords such as 'religion' or 'spirituality' and 'quality of life' or 'health,' and later specified using the following keyword strings: 'spirituality and quality of life'; 'religion and quality of life'. We chose PubMed, PsycINFO, and ScienceDirect as reliable electronic databases for our literature search because they are leading sources for assessing scientific, technical, and medical research, which have not been used in previous literature reviews, except for Bonelli & Koenig [57] who used PubMed in their literature review search. Abdala et al. [56], on the other hand, used different sources for their literature search, including Virtual Health Library, Latin American and Caribbean Health Sciences Literature (LI-LACS), Scientific Electronic Library Online (SciELO), Medical Literature Analysis and Retrieval System Online (Medline), and the U.S. National Library of Medicine.

A variety of online database routes were explored in order to ensure that relevant studies related to RS and QoL were retrieved, especially ones that had not been covered in previous reviews. PubMed, PsycINFO, and ScienceDirect were informative in regard to literature reporting on the effects of RS on QoL. Study abstracts bearing the relevant keywords were extracted and read by the first author (see Fig. 1), and the outcome of the studies was reviewed by the second and third authors. Over 185 articles were found in the initial online search, from which 32 articles were selected after reading the abstracts while 153 were rejected due to their lack of clarity in terms of the conceptualisations of RS and QoL offered in the studies. After extensive data screening and full-reading of the 32 selected articles, as of the time of conducting this review (March 2017), 12 studies were rejected for not meeting the selection criteria, leaving 20

for review. Studies were either included or excluded for the review based on the following criteria:

Inclusion criteria

- Date of publication: 2007 to March 2017.
- English-language peer-reviewed articles with published abstracts on PubMed, PsycINFO, and ScienceDirect.
- Empirical, cross-sectional, longitudinal, quantitative, and qualitative studies.
- Studies reporting on the association between RS and QoL.
- Studies that explored either one or two or all aspects of QoL in terms of its subjective, objective, and spiritual/cultural factors.
- Studies that conceptualised RS as a domain of QoL concerned with spiritual functioning and a relational dynamic that represents attachment to a sacred object or figure.

Exclusion criteria

- Non-English publications.
- Reviews, theoretical articles, books, chapters, dissertations, conference proceedings, blog articles, and working papers.
- Studies not indexed by either PubMed, PsycINFO, or ScienceDirect.
- Studies published before 2007 and after March 2017.

Data analysis

Information was collected regarding several study characteristics, including the name of the author(s), country where the study was conducted, sample size, research design, context, and sample characteristics. Data were extracted from studies examining the association between RS and QoL and an IR was conducted following the five-step guideline recommended by Whittemore and Knafl [59]:

- Recognise the research problem and/or analysis purpose
- II) conduct a systematic literature search of recent studies
- III) appraise and summarise the quality and results of the selected articles
- IV) review selected quality articles to identify possible themes
- V) organise the themes and critically analyse them in relation to the research problem.

First, the purpose of our review is to address the claims about RS and QoL outcomes so as to determine how RS is perceived/positioned in relation to QoL and

the emerging themes that can help in interpreting the association between RS and QoL. We summarized results from previously conducted studies to appraise the conclusions from all studies relating to the claims of the effects of RS on QoL. As shown in Tables 1^3 and $2,^4$ we summarized and compared empirical data in our IR to allow for the achievement of general conclusions about the research problem [58], and analysed results as direct evidence, indirect, positive, and negative associations and lack of associations.

Based on Whittemore and Knafl's [59] second guideline, literature search of recent studies between 2007 to March 2017 was carried out using three online databases (e.g., PubMed, PsycINFO, and ScienceDirect) with the aim of identifying studies that have investigated the links between RS and QoL. Third, to appraise and evaluate the quality and results of selected studies, we presented a clear and synthetic description of study data using Tables 1 and 2. Summarizing the data in tables allowed for the identification of knowledge gaps and pointed out the state of the art of the scientific production that results from selected studies examining the effects of RS on QoL [58]. For this reason, Tables 1 and 2 are drawn as concepts matrix [61] to help highlight study characteristics and summarise key themes from each study. The use of tables also aim to clarify the different contexts and themes that have been explored by the researchers, showing the procedures adopted to examine it, as well as their contributions on the subject.

The fourth element of the 5-step guideline for IR involved reviewing selected studies in order to identify emerging themes that may help in conceptualizing the association between RS and QoL, as shown in Table 2. Themes summarized here help to identify areas for future studies and disclose relevant potential questions central to RS and QoL. Finally, emerging themes from our review were organized and critically analysed in the discussion section in relation to addressing the research problem on claims about the association between RS and QoL. Analysing study themes generated from reviewing diverse research output is expected to account for the integrated framework in terms of understanding the complexity of RS and QoL research. In conducting an IR, the authors addressed questions which related to existent knowledge regarding about the links between RS and QoL, the quality and complexity associated with these links, and steps for future research into investigating the effects of RS on QoL [58].

Results

All selected studies have been summarised in Table 1, showing evidence of positive (***), indirect (#*), negative association (**), and lack of association (#) between RS and QoL. A total of 132,053 participants were involved across the 20 selected studies. In particular, 70% of the

References	Context & Method	Outcome/Findings
***ldler et al. [62].	A prospective study. Interviews ($n = 499$) from 1982 to 1994 with terminally ill elderly persons in the last year of their lives. Gender (M = 41%, F = 59%) Age range: 65 years and over Mean Age: 74.5 Country: USA	Those who had a sense of religious attachment were more likely to see friends, and they had better QoL, fewer depressive feelings, and were observed by the interviewer to find life more exciting compared with the less religious respondents.
*** Saffari et al. [63].	Cross-sectional survey design (n-362) with Muslim patients undergoing haemodialysis. Gender (M = 46.1%, F = 53.9%) Age range: 20 years and older Mean Age: 57.81 (SD = 9.67) Country: Iran	Spiritual/religious factors were related to QoL and health status. Regression models revealed that demographics, clinical variables, and especially spiritual/religious factors explained about 40% of variance of QoL and nearly 25% of the variance in health status.
# and #* Nagpal et al. [29].	Quantitative interviews and cross-sectional design with 111 Individuals With Dementia (IWD) and their family caregivers from two service-based organizations in the San Francisco Bay Area and Cleveland, Ohio. Age range: 30 to 90+ Mean Age: Caregiver (M = 61.20, SD = 14.00); IWD (M = 76.80, SD = 8.90). Country: USA	After controlling for care-related stress, one's own religiosity is not significantly related to individuals' or caregivers' perceptions of the QoL of individuals with Dementia. However, when modelled for both the individuals and their caregivers, effects of religiosity on perceptions of QoL, caregivers' religiosity was positively related to the QoL of individuals with Dementia whereas the religiosity of individuals with Dementia was negatively associated with caregivers' perceptions of IWDs' QoL.
# Miller et al. [30].	Cross-sectional survey with 44 (dyads) couples between 49 and 73 years of age following a first-time cardiac event. Gender: Patient Males ($n = 35$) and Females ($n = 9$). Age range: Patients (49 to 73 years of age); Spouses (47 and 71 years of age). Mean Age: Spouses (M = 59.1, SD = 12.6); Patients (M = 61.6, SD = 11.8).	The findings suggest that there is no association between dimensions of spirituality and QoL and perception of the patient's physical self-efficacy following a first-time cardiac event.
# Nguyen et al. [75].	A prospective study. Data was analysed from the 2002 National Health Interview Survey ($n = 106,000$) that covered responses regarding use of complementary therapies reported by older adults aged 55 to 85 and the association with health outcomes assessed in the 2003 US Medical Expenditure Panel Survey ($n = 1683$). Gender: ($M = 40.5\%$, $F = 59.5\%$) Age range: 55 to 85 years of age. Mean Age: ($M = 68.5$, SD = 0.3) Country: USA.	Even though there was no association between prayer and functional status or QoL, results show that the use of prayer for health was the most common complementary alternative medical therapy reported by those aged 55 to 85 (52.3%), which was more than twice as common as any other category of complementary therapy in term of users of biologically based therapies (20.4%) which predicted better functional status.
***Ai et al. [64].	Quantitative interviews with 294 middle-aged and older patients following open-heart surgery. Gender: (M = 58%, F = 42%) Age range: aged 35 to 89 years of age. Mean Age: (M = 62) Country: USA.	Results show support for adaptive faith-based coping in patients, suggesting that prayer coping was positively associated with cognitive and behavioural changes, as well as perceived social support from family, friends, and significant others at the time of participant's surgery.
***Calvo et al. [70].	Quantitative interviews with 75 consecutive Amyotrophic Lateral Sclerosis (ALS) patients and their informal caregivers, using tests evaluating religiosity, QoL, satisfaction with life. Gender: Caregivers (26 males and 49 females); Patients (40 males and 35 females) Mean Age: Caregivers (M = 55.8, SD = 12.0); Patients (M = 63.6, SD = 9.2)	Results showed that the QoL of the caregivers of patients with ALS was associated with their private religiousness (i.e. subjective religiosity) whereas their satisfaction with life related to their overall religiosity.
***Kashdan & Nezlek [72].	A 1239 days daily diary study on 87 college students using lagged analysis to examine whether spirituality is causing greater well-being or vice versa. Gender: (M = 23.5%, F = (76.5%) Mean Age: (M = 21.62, SD = 2.36) Country: USA.	There was a significant positive relationship between daily spirituality, self-esteem, meaning in life, and positive affect. Furthermore, present-day spirituality was associated with next day's meaning in life. There was no evidence shown that supports that meaning in life predicted next day spirituality. Lower positive affect and greater negative emotion on 1 day was associated with greater spirituality on the next day.
***Nolan et al. [65]	Quantitative interviews were conducted with stable outpatients with schizophrenia ($n = 63$), mostly African-Americans (nearly two-thirds of the sample size) living in south-eastern United States to examine the role of religion in coping with their disorder. Gender: (M = 52%, F = (48%) Mean Age: (M = 42.2, SD = 11.6)	Results show that about 68% of the participants were involved in one form of religious activity that involved their religious others. 64% of the participants indicated that being connected to a faith community was important to them. 91% indicated that they were involved in private religious activities that involve praying at least once a day. These kinds of positive religious coping (i.e., religious forgiveness, seeking

Table 1 Articles re	lated to relational spirituali	ty and quality of life for	or the last 10 years

References	Context & Method	Outcome/Findings
	Country: USA.	spiritual support, collaborative religious coping, spiritual connection, religious purification, and benevolent religious reappraisal) were associated with greater QoL ($r = .28$, $p = .03$ and psychological health (b = .72, $p = .05$) whereas negative religious coping (i.e., spiritual discontent, reappraisal of God a punishing, interpersonal religious discontent, reappraisal of demonic powers, and reappraisal of God's powers) in the form of feeling abandoned by God was associated with worse QoL ($r = .30$, $p = .02$).
#* and # Bradshaw & Kent [22].	Longitudinal study. Data collected from nationwide Religion, Aging, and Health Survey from 1024 older Americans. Gender: (M = 38.3%, F = (61.70%) Mean Age: 75.15 Counter JLCA	Prayer is not directly associated with improvements in psychological well-being. However, when moderated by attachment to God there was a relationship between prayer and psychological well-being. This association was only seen in individuals with secure attachments and not with those
# Sorensen et al. [66].	Country: USA A cross-sectional survey from a sample of 2086 cancer patients and 6258 cancer-free controls from the Nord- Trøndelag Health Study in Norway that took place between 2006 and 2008. Mean Age for cancer patients (Sample), 6.9 years; cancer cases (Sample 2a), 7.7 years; cases of breast, prostate, or colorectal cancer (Sample 2b), 6.3 years. Country: Norway	who are insecurely attached to God. Spirituality in terms of 'seeking God's help' was associated with lower levels of sexual QoL in the unadjusted model, but when adjusted for other factors (e.g., gender, age, anxiety, neuroticism, extraversion, follow-up time, daily smoking, infrequent exercise, negative outlook, and positive outlook) it did not remain significant for life satisfaction or to QoL measures. There was a lack of association between 'Seeking God's Help' and Life Satisfaction among patients, nor was 'Seeking God's Help' associated with Disease-Specific QoL in patients with breast, prostate, or colorectal cancer.
**Yun et al. [67].	A prospective cohort study of 481 terminally ill Korean cancer patients. 76% ($n = 466$) were interviewed till the time of death. Mean age: Users of complementary alternative medicine (CAM) (58.2 years); Nonusers of CAM (59.0 years). Gender: Users of CAM (Males = 42%, Females = 58%) Nonusers of CAM (Males = 42%, Females = 58%) Country: Korea	Those who used mind-body interventions (e.g. meditation, prayer therapy, music therapy, art therapy, yoga, horticultural therapy) experienced a significant decline in their QoL compared to non-users. Participants using prayer therapy showed a significantly worse survival of insomnia.
**Levin [73].	Data collected from a cross-sectional survey of a random national sample of Jewish participants ($n = 1287$) who are 50 years and older. Mean age: 64.4 years Context: Israeli sample in Europe	Frequency of prayer was inversely related to self-rated health, and positively associated with activity limitation, physical symptoms, and poor physical functioning.
***Moon & Kim [28].	A cross-sectional survey with older Koreans (<i>n</i> = 274) 65 and over, living alone in Chuncheon, South Korea. Mean age: (M = 76.76, SD = 6.18) Gender: Females = 82.1%, Males = 17.9%.	There were associations between dimensions of depression, QoL, and spirituality. Spirituality explained the variance on depression and QoL amongst Christians, but did not account for the difference in the Buddhist sample.
***Krumrei et al. [74].	A cross-sectional survey with 208 Jewish men and women. Mean age: $M = 42$, $SD = 12$ Gender: 74.5% (Females), 25.5 (Males). Participants were based in U.S. (83%), Canada (7%), Israel (6%), and other countries (4%)	There was a positive correlation between physical health and trust in God (r.14, $p < .05$), and inverse relationship with mistrust in God (16, $p < .05$) and negative religious coping (r.14, $p < .05$). When adjusted for gender and age, correlation with physical health remained significant, especially in trust in God and physical health.
***Lee et al. [27].	A cross sectional study with 198 persons with HIV/AIDS in urban Philadelphia. Mean age: 44.89 years Gender: 60.5% male (female = 39.5%) Country: USA	Results of the multiple hierarchical analyses reveal that negative religious coping was significantly related to low levels of QoL when adjusted for demographic and clinical variables. Positive religious coping was also significantly associated with positive affect and life satisfaction, but not with overall QoL.
***Currier et al. [68].	A cross-sectional data on 678 military Veterans with posttraumatic stress disorder (PTSD). Mean age: 51.57 years (SD = 9.57 Gender: 94.8% male, 5.2% female Country: USA	When adjusted for demographic risk factors, combat exposure, and severe PTSD symptoms in the structural equation modelling, results revealed that spirituality was significantly associated with forgiveness and QoL. "Higher levels of spiritual functioning were associated with fewer forgiveness problems among these Veterans, and their propensity to forgive self and others was also concurrently linked with QOL" (p.175).

Table 1 Articles related to relational spirituality and quality of life for the last 10 years (Continued)

References	Context & Method	Outcome/Findings
***Canada et al. [69].	Mediation analyses was conducted on data collected from the American Cancer Society's Study of Cancer Survivors-II (<i>n</i> = 8405). Mean age: 63 years Gender: Female (55.1%), Male (44.9%) Country: USA	Results show evidence that faith was strongly associated with meaning and peace in uncontrolled analyses. The mediation analyses show that faith had a significant positive effect on mental functioning (when mediated with greater meaning) and physical functioning (when mediated by both meaning and peace).
***Krause et al. [76].	Data were collected from a nationwide survey with adults (<i>n</i> = 1774) from 18 years above. Mean age: 53.1 years (SD = 18.7 years) Gender: Males (38%), Females (62%) Country: USA	The structural equation modelling analyses revealed that those who received spiritual support from members of a faith community experienced stronger benevolent images of God (B = .362, $p < .001$) which influenced QoL. Results also suggest that those who have gratitude to God had more hope about the future (B = .214, $p < .001$), and hope was associated with better physical health (B = .330, $p < .001$)
# Rohani et al. [71].	A cross-sectional survey with Iranian women with breast cancer ($n = 162$). Mean age: Breast cancer patients: M = 46.1, SD = 9.8; control group: M = 46.6, SD = 8.4 Country: Iran	Spirituality and positive religious coping was not associated with increases in QoL in Iranian patients.

Table 1 Articles related to relational spirituality and quality of life for the last 10 years (Continued)

Note: Showing evidence of: *** positive association between RS and QoL. #* indirect association between RS and QoL. ** negative association between RS and QoL. # lack of association between RS and QoL

studies were conducted with participants suffering from one form of mental or physical health-related challenge which included: 499 terminally ill elderly persons [62], 362 Muslim patients undergoing haemodialysis [63], 111 individuals with dementia [29], 44 couples (dyads) following a first-time cardiac event [30], 294 patients following an open-heart surgery [64], 63 outpatients with schizophrenia [65], 1024 older American adults [22], 8344 Norwegian cancer patients [66], 481 terminally ill cancer patients [67], 198 HIV/AIDS infected patients [27], 678 military veterans with PTSD [68], 8405 cancer survivors [69], 75 ALS patients and their caregivers (dyads) [70], and 162 Iranian women with breast cancer [71]. The remaining 30% were conducted with other study populations, including 87 college students [72], 1287 older Jews in Europe [73], 208 Jewish men and women [74], 274 older Koreans living alone in Chuncheon [28], 107, 683 older adults in a national health survey [75], and 1774 American adults [76].

All the 20 studies selected for the review employed quantitative research designs, while one study adopted a mixed-methods design (i.e., [29]). With the exception of a few prospective cohort studies (e.g., [22, 62, 67, 75]), for the most part a cross-sectional design was used.

Summarizing the frequency of association between RS and QoL

Positive association between RS and QoL

As shown in Table 1, of the 20 articles used for the predictive analyses outcomes, 12 (60%) of the studies with 12,917 participants reported positive associations between RS and QoL (e.g., [27, 28, 62–65, 68–70, 72, 74, 76]). Participants in these studies reported on the main effects of RS on their QoL, showing correlations between measures of RS and QoL. For example, Saffari et al. [63] found that spiritual resources accounted for substantial variance to better QoL and health; Idler et al. [62] reported that individuals with stronger religious attachment were more likely to have better QoL and fewer depressive feelings. In another report (e.g., [64]), RS, through adaptive faithbased coping mechanism such as prayer, was positively associated with psychological functioning among cardiac patients; this relationship was also strengthened by perceived social support from family, friends, and significant others at the time of participant's surgery. The study showed the indirect influence of using prayer for coping on short-term QoL and positions prayer to functions as "the mediation of cognitive coping and perceived social support". Calvo et al. [70] reported that QoL and life satisfaction of the caregivers of patients with ALS was associated with aspects of RS. Kashdan and Nezlek [72] reported a significant positive relationship between daily RS and psychological functioning (i.e., self-esteem, meaning in life, and positive affect).

Evidence shows that RS was associated with greater QoL and psychological health in a study [65] with mainly African American Christians in South-eastern United States (commonly identified as the Bible Belt region), where 98% of the respondents were involved in various aspects of RS that include religious activities such as prayer meetings, being connected to a religious community, praying once a day, meditation, and spiritual reading; as well as religious coping activities such as practising forgiveness, seeking spiritual support, collaborative religious coping, spiritual connection with God, religious purification, and benevolent religious reappraisals. Krumrei et al. [74] report a positive correlation between measures of physical health and RS in terms of

References	Domain of QoL & Instrument	Meaning of RS & Instrument	Main Idea
ldler et al. [62].	Health status and functional ability, family and friendship networks, and psychological well-being Instrument: 20-item Center for Epidemiological Studies Depression Scale.	The idea of a connection to the sacred through religious rituals or experiences that serve as sources of strength and comfort in the last year of life. Instrument: Designed variable for ratings of subjective religiosity	QoL in the last year of life is positively related to subjective religiosity due to the social support that is gained in the process of associating with religious believers.
Saffari et al. [63].	Mobility, usual activities, self-care, pain/discomfort and anxiety/depression Instrument: EQ-5D-3 L (which includes the EQ-5D assessing mobility, self-care, usual activities, pain/discomfort, anxiety/depression; and the Visual Analogue Scale (EQ-VAS) that allows respondents to rate their current health status from 0 to 100.	Intrinsic religiosity and private religious activities that draw a sense of connection to the sacred. Instrument: Spiritual Coping Strategies (SES) and The Duke University Religion Index (DUREL)	Spiritual resources may contribute to better QoL and health status among haemodialysis patients.
Nagpal et al. [29].	Perceived QoL, behavioural competence, psychological status, and interpersonal environment Instrument: The Quality of Life -Alzheimer's Disease Scale (QoL-AD)	Prayer, meditation, and subjective ratings of religiosity Instrument: Designed variable for subjective ratings of religiosity (How religious or spiritual would you say you are?) answered on a Likert scale from 1 (not at all religious/ spiritual) to 4 (very religious/ spiritual).	The religiosity of a caregiver for an individual with Dementia may affect the perception of QoL of the individual they are looking after. In contrast, one's own perception of spirituality does not guarantee QoL.
Miller et al. [30].	Emotions, confidence, self-esteem, physical health Instrument: Heart disease specific QOL questionnaire	Prayer or meditation, consequential religiosity for coping with personal problems, theological belief system, experiential religiosity pertaining to feeling of religious comfort. Instruments: The Spiritual and Religious Concerns (SRC) questionnaire; The Religiosity Measure (RM); Religious coping activities scale.	The distress following a cardiac event may require support from religious behaviour and spiritual beliefs. However, if there is no such support, as shown in the results, the authors argue that lower perceptions of QoL may trigger negative forms of religious coping and put the couples at risk of spiritual distress.
Nguyen et al. [75].	Functional status, physical health, and mental health Instrument: Assessed indicators of physical HRQoL and mental HRQoL using the MEPS which includes the 12-item of the Medical Outcomes Study questionnaire (SF-12v2)	Self-prayer Instrument: Asked respondents if they used self-prayer as a form of complementary therapy within the past year. Responses to the item were combined to create a dichotomous variable reflecting the prayer and other five complementary therapies recognized by the US National Center of Complementary and Alternative Medicine (NCCAM), including alternative medical systems (i.e., any use of acupuncture, Ayurveda, homeopathy, or naturopathy), biologically based therapies (i.e., any use of chelation therapy, folk medicine, herb use, diet-based therapy, or megavitamin therapy in the past year), manipulative and body- based methods (i.e., any use of chiropractic and massage in the past year), mind-body medicine (i.e., any use of biofeedback, relaxation techniques such as meditation, hypnosis, movement therapies such as yoga, or healing rituals in the past year),	Prayer and having a sense of connection to the sacred may be a complementary health practice among older adults since it is used more than as any other alternative health therapy. However, this position may change over time since it is not necessarily associated to QoL.
Ai et al. [64].	Psychological functioning (behaviour coping, cognitive coping, levels of distress, anger coping, avoidant coping, depression), physical functioning (fatigue symptoms), social relationships (perceived social support). Instruments: Short-term postoperative quality-of-life (SPQOL) (levels of distress, fatigue symptoms, levels of coping, and perceived social support) was measured by modifying several scales: 14-item Fatigue Scale, Center for Epidemiologic Studies Depression Scale (CES-D), Multidimensional	Coping by praying in private Instrument: 3 items of the Using Private Prayer as a Means of Coping (Ai et al., 2002) was used to assess prayer coping based on its appraisal ("Private prayer is important in my life"), efficacy ("Prayer does not help me to cope with difficulties and stress in my life"), and intention to use (e.g., "I will use private prayer to cope with difficulties and stress associated with my cardiac surgery")	"Psychosocial factors may explain the potential role of using prayer for coping on short-term postoperative QoL" (p. 471).

Table 2 Emerging themes related to relational spirituality and quality of life for the last 10 years

References	Domain of QoL & Instrument	Meaning of RS & Instrument	Main Idea
	Coping Scale, and the 12-item Multidimensional Scale of Perceived Social Support		
Calvo et al. [70].	Physical health and overall QoL (i.e. emotional health, social well-being, and spiritual and financial aspects); psychological functioning (i.e., levels of anxiety, symptoms of depression, life satisfaction) Instruments: McGill Quality of Life Questionnaire (MQoL); Satisfaction with Life Scale (SWLS); Zung Depression Scale (ZDS); Spielberger 's State and Trait Anxiety Inventory (STAI)	Private/subjective religiosity Instrument: 4-item Idler Index of Religiosity (IIR)	The religiosity of caregivers of patients with ALS can be a helpful coping resource for negotiating their own QoL. Hence, "Health care professionals caring for ALS patients should consider that the needs of the caregivers include religious/spiritual concerns" (p.168).
Kashdan & Nezlek [72].	Psychological well-being, meaning in life, positive affect, self-esteem. Instrument: Items were adapted from existing scales to assess self-esteem (Rosenberg Self-Esteem Scale), meaning in life (using two items, e.g., "How meaningful did you feel your life was today?" "How much did you feel your life had purpose today?"), and responses to negative (nervous, embarrassed, upset, disappointed, bored, and sad) or positive (enthusiastic, excited, happy, calm, satisfied, and relaxed) affects as the conceptualisation of QoL	Daily spirituality, Personal relationship with a power greater than one's self, the spiritual part of one's life. Instrument: 22-item Spiritual Involvement and Beliefs Scale (SIBS-R) assessing Core Spirituality (e.g., "I have a personal relationship with a power greater than myself"; "I solve my problems without using spiritual resources")	The study shows that spirituality is used as a coping strategy to deal with negative emotions. This is because the negative emotion experienced on 1 day is likely to predict increases in spirituality on the next day.
Nolan et al. [65].	Physical health, psychological health, social relationships, environmental health. <i>Instrument: World Health Organization</i> <i>Quality of Life–BREF (WHOQoLBREF)</i>	Religious coping, being connected to God through participating in prayer groups, meetings, and religious activities, meditation, spiritual reading, religious forgiveness, spiritual connection to God, benevolent religious reappraisal Instrument: 14-item RCOPE consisting of the positive religious coping pattern (e.g., religious forgiveness, seeking spiritual support, collaborative religious coping, spiritual connection, religious purification, and benevolent religious reappraisal) and the negative religious coping pattern (e.g., spiritual discontent, reappraisal of God as punishing, interpersonal religious discontent, reappraisal of God's powers).	Spirituality or religious coping in the form of community prayer services and devotior to God is an important factor that may have a major impact on the treatment of patients of African-American origin with Schizophrenia.
Bradshaw & Kent [22].	Psychological Well-Being Instrument: three measures of psychological well-being: self-esteem, optimism, and life satisfaction	Attachment to God through prayer Instruments: Attachment to God Scale and frequency of prayer was based on a single item (How often do you pray by yourself?)	A relationship with God makes prayer effective: the impact of prayer on one's QoL depends on one's perceived relationship (attachment) with God.
Sorensen et al. [66].	Psychological wellbeing, physical health symptoms, self-image, sexuality Instrument: Psychological wellbeing in terms of life satisfaction was measured by the item: "Thinking about your life at the moment, would you say that you, by and large, are satisfied with life, or are you mostly dissatisfied?", with response option dichotomised into 'Dissatisfied with Life' and 'Satisfied with Life'. In addition, physical health was assessed using The EORTC breast cancer module (BR-23), prostate cancer module (CR-29) which cover symptoms, self-image, sexuality, and specific complaints	Seeking God's Help. Instrument: A sub-scale of the Instrument of Religious Coping (RCOPE) (e.g., "I seek God's help when I need strength and solace") was dichotomized into two response options: 'Seeking God's Help' and 'Not Seeking God's Help'.	Cancer patients in Norway are not likely to seek God's help to negotiate their QoL.
	during the previous week.		

Table 2 Emerging themes related to relational spirituality and quality of life for the last 10 years (Continued)

References	Domain of QoL & Instrument	Meaning of RS & Instrument	Main Idea
Yun et al. (2012).	Instrument: European Organization for Research and Treatment of Cancer quality-of-life questionnaire core-30 (EORTC QLQ-C30) instrument	Instrument: Investigated participants' use of mind-body intervention (yoga, meditation, prayer therapy, music/dance therapy, art therapy, and horticultural therapy).	Using mind-body interventions (e.g. prayer) may not be helpful for Korean cancer patients.
Levin [73].	Physical health Instrument: Activities of Daily Living Scales and variables on indicators of physical health such as self-rated health, long-term health problems, activity limitation, diagnosed chronic diseases, physical symptoms.	Frequency of prayer Instrument: Designed variables for synagogue activities (e.g., "Have you done any of these activities in the last month? Taken part in a religious organisation [church, synagogue, mosque, etc.])", prayer (e.g., "Thinking about the present, how often do you pray?"), and religious education (e.g., "Have you been educated religiously by your parents?")	Religious involvement in the Synagogue is a much stronger predictor of better physical health than prayer, among Jewish people.
Moon & Kim [28]	Physical health status, mental health status, social relationships, and the environment. Instrument: Geriatric quality of life-dementia (GQOL-D)	Subjective religiosity. Instrument: Duke religion index (DUREL)	Subjective religiosity may account for the difference in QoL based on one's religious background
Krumrei et al. [74]	Physical health Instrument: Physical Component Summary score of the Short Form Health Survey (SF-12)	Trust/mistrust in God and religious coping Instrument: Brief Trust/Mistrust in God Scale; Jewish Religious Coping Scale (JCOPE); 2 items of the intrinsic religiosity subscale of the Duke Religion Index	"Beliefs about the Divine activate coping strategies during times of distress, which in turn impact psychological health" (p.327). Highlights spirituality as having a clinical significance in mental health among Jews
Lee, Nezu, & Nezu [27].	Life satisfaction, Health worries, Financial worries, Medication worries, HIV mastery, Disclosure worries, Provider trust, and Sexual functioning <i>Instrument</i> : The 34-item HIV/AIDS-targeted quality of life (HAT-QoL)	Spiritual connection for religious coping Instrument: Religious Coping Scale (RCOPE),	Religion is an important resource for people living with HIV/AIDS
Currier et al. [68].	Physical health, psychological health, social and environmental QoL. Instrument: World Health Organization's Quality of Life Scale (WHOQOL-bref)	Spiritual functioning in terms of forgiveness of self, others, and God. Instrument: Brief Multidimensional Measure of Religiousness and Spirituality (BMMRS)	Forgiveness is an important factor to consider when modelling for spirituality and QoL.
Canada et al. [69].	Mental functioning, physical functioning, spiritual functioning. Instrument: SF-36 Physical and Mental Health	Feelings of comfort and strength Instrument: Functional Assessment of Chronic Illness Therapy–Spiritual Well-being Scale	Faith makes an important contribution to the QoL of cancer survivors.
	Summary Scales		
Krause et al. [76].	Physical health Instrument: Physical health was measured using the Physical Component Summary score of the Short Form Health Survey (SF-12). Depressive symptoms were also assessed as an aspect of psychological QoL functioning using a short form of the Center for Epidemiologic Studies Depression Scale (CES-D).	God image representations; intrinsic religiosity; trust in God Instrument: 6-item Brief Trust/Mistrust in God Scale (e.g., "God cares about my deepest concerns"; "God hates me"); 16-item Jewish Religious Coping Scale (JCOPE) (e.g., "I try to see how God may be trying to teach me something," "I question my religious beliefs, faith and practices," and "I look for a stronger connection with God"). Intrinsic religiosity was measured using three items from the Duke Religion Index which are also present in the Religious Orientation Scale and the Hoge Intrinsic Religion Scale (e.g., "My religious beliefs are what really lie behind my whole approach to life," "In my life, I experience the presence of the Divine (i.e., God)," and "I try hard to carry my religion over in to all other dealings in life").	Spiritual/social support from fellow members of a church influences one's perception of God as benevolent and gratitude to God, which in turn leads to better health.
Rohani et al. [71].	Physical health Instrument: European Organization for Research and Treatment of Cancer QLQ-C30; Sense of Coherence (SOC) scale	Spiritual behaviours and views that are developed through private prayer or meditation Instrument: Spiritual Perspective Scale; the Brief Religious Coping Scale	Spirituality is not associated with QoL for Iranian women with breast cancer.

Table 2 Emerging themes related to	relational spirituality and quality	of life for the last 10 years (Continued)
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'trust in God' in both the adjusted and unadjusted models, and an inverse association between physical health and mistrust in God (i.e., didn't trust God). RS accounted for the variance in depression and QoL among older Christian Koreans, with results showing significant associations between measures of RS and QoL [28]. However, this was not the case for Buddhist older Koreans who seem to attend religious meetings less regularly than the Christian respondents, based on the observations of the authors. Currier et al. [68] report on the salutary effects of spiritual functioning in terms of forgiveness of self and others on QoL outomes, noting that "Higher levels of spiritual functioning were associated with fewer forgiveness problems among Veterans, and their propensity to forgive self and others was also concurrently linked with QOL" (p.175). Other studies further show evidence of a positive association between a person's faith experience and mental and physical functioning (e.g., [69]), and between spiritual behaviours and views developed through prayer and increases in QoL (e.g., [71]).

All these 12 studies make a case for the effects of RS on QoL and provide evidence to show that RS accounted for the variation in QoL and health status, particularly among older adults [28, 62, 64], military Veterans [68], cancer patients [69], persons with HIV/AIDS [27], Jewish men and women [74], lonely elderly Koreans [28], outpatients with schizophrenia [65], college students [72], patients with Amyotrophic Lateral Sclerosis [70], patients recovering from heart surgery [64], patients undergoing haemodialysis [63], and patients with posttraumatic stress disorder [68].

Indirect association between RS and QoL

The study with individuals with dementia (IWD) coded in the 'no association' (#) index in Table 1 (e.g., [29]) reported a lack of association between RS and QoL, but recorded an indirect relationship when a third party is involved (IWD caregivers). Nagpel and colleagues concluded that the spirituality of a caregiver of IWD may influence perceptions of QoL among IWD. Another study coded in the 'no association' category (e.g., [22]) reveals that prayer (as an activity of RS) is not directly associated with improvement in QoL, except when moderated by attachment to God (having a relationship with God). The study by Bradshaw and Kent suggests that without a relationship with God the frequency of prayer is ineffective in terms of improvements in psychological well-being. These indirect associations reflect the complexity of the positive relationship between RS and QoL, showing that the effects of RS on QoL may be dependent on other factors and activities of RS that translate into better health outcomes. Our findings support the salutary effects of RS on QoL, be it through direct or indirect associations, as shown in Table 1.

Negative association between RS and QoL

As shown in Table 1, three (15%) studies with 10,112 participants reported inverse associations between RS and QoL [66, 67, 73]. Sorensen et al. [66] report that the prevalence of RS in terms of 'seeking God's help' was negatively associated with sexual QoL, although this relationship was not retained when controlled for other factors such as gender, age, anxiety, neuroticism, extraversion, follow-up time, daily smoking, infrequent exercise, negative outlook, and positive outlook.

Yun et al. [67] report that the RS of terminally ill Korean cancer patients showed a significantly worse survival of insomnia and change in health-related QoL subscales. Yun and colleagues examined the health outcomes of Complementary and Alternative Medicine (CAM) among users and non-users. In comparing CAM users and non-CAM users, they found that CAM users did not have better survival ratio than nonusers. Prayer was identified as an aspect of CAM, but results showed worst insomnia survival and cognitive functioning for terminally ill cancer patients who use it as a religious coping behaviour, compared to that of nonusers. Yun et al. concluded that CAM use is associated to worst health outcomes, even though some patients often used CAM in the hope that it will cure their illness. Yun et al. also pointed to the limitations of the study as the possible reasons for the results. First, they note that it is difficult to draw firm conclusions from the results due to the nonrandomized design used for data collection. Secondly, they reasoned that due to the small sample size used for the analysis of CAM subcategories (e.g. meditation, prayer therapy, music therapy, art therapy, yoga, horticultural therapy), the statistical power might have been too weak to detect benefits of CAM use.

Levin [73] reports that RS in terms of prayer was negatively related to physical health QoL among Jewish respondents age 50 and above [73]. In the unadjusted model, prayer was negatively correlated to self-rated health, but positively associated with physical symptoms, poor physical functioning, and activity limitation. Adjusting for covariates (e.g., age group, gender differences, education background, relationship status, and birth place) and mediators (e.g., drinking, smoking, and help received from outside the home), the frequency of prayer retained its negative association with self-rated health, and positively correlated with physical symptoms, poor physical functioning, and activity limitation. In contrast, Synagogue participation had a better physical health outcome for Jewish respondents who seem to have a strong attachment to the Synagogue. According to Levin, the dynamics of Jewish spirituality may explain

the negative relationship between prayer and physical health since it comparatively has to do with integration into a synagogue community than it does with using prayer as a coping mechanism. As Levin suggests, both findings may in part result from the effects of preventing Synagogue participation and focusing on using prayer as a religious coping behaviour, since "certain expression of religiousness may decline with poor health (e.g., synagogue attendance) and others may increase as a coping response (e.g., prayer)" ([73]: 598).

No association between RS and QoL

As shown in Table 1, the results reveal that five (25%) studies showed no direct association between aspects of RS and outcomes of QoL [22, 29, 30, 71, 75], even though two of these studies (i.e., [22, 29]) later reported an indirect association between RS and QoL via psychosocial factors such as secure attachment to God and perceived social support from caregivers who have a relationship with God. In addition, participants in three of these studies had serious illnesses, ranging from dementia [29], cardiac arrest [30], and breast cancer [71], while data from the two other studies [22, 75] were also retrieved from health-related contexts. This connotes that the lack of association in the illness context between RS and physical health-related QoL may be due to the salutary effects of RS, which provide comfort but do not change the physical status of the patients. In contrast, RS was strongly correlated with psychological functioning, as shown in other studies (e.g., [62, 64]).

It is possible that the different results in terms of the positive, negative, indirect or not detected associations between RS and QoL could be due to conceptualisation and operationalisation of key variables and different study designs (see Table 2). For example, most of the 'no association' studies used health-specific QoL measures to assess the physical health domain of participants. Nepgal et al. [29] examined QoL using the Quality of Life Alzheimer's Disease Scale (QoL-AD); Miller et al. [30] used a Heart-disease specific QoL questionnaire; the same approach was taken by Nguyen et al. [75]. Studies that showed 'positive association' (e.g., [27, 28, 63, 68, 74]) mostly employed cross-sectional designs which make it impossible to make firm claims about causality in the IR. However, it is also possible that the estimated effects of aspects of RS on outcomes of QoL are conditional upon each other, e.g., that the effects of RS that are perceived as both positive (e.g., seeking spiritual support) and negative (e.g., spiritual discontent) religious coping emotions and behaviours could be especially consequential for QoL outcomes. These complex patterns warrant further investigation.

Identifying emerging themes

This section identifies themes used in conceptualising RS and QoL. First, we examine themes used in all the studies for examining RS as a domain of QoL that relate to spiritual functioning and a relational dynamic in terms of attachment with a symbolic sacred object or figure via implicit relational conduits. Second, we further identify themes used for the conceptualisation of QoL in all the studies as aspects of individual needs satisfaction with key areas of life that contribute to overall wellbeing.

Meanings of RS

Although the study data contain different definitions of RS as shown in Table 2, it still conveys similar relational ideas of attachment to the sacred (e.g., [22, 27, 76]). The meanings attached to these relational experiences serve as sources of strength and comfort in one's life [62], taking the form of private spiritual activities that draw one closer to the sacred [63], and a personal relationship with a power greater than one's self or the spiritual part of one's life [22, 72]. RS was also commonly interpreted as 'subjective religiosity' [28, 29, 70], 'intrinsic religiosity' [63], 'experiential and consequential religiosity' [30], 'spiritual connection' [27], 'attachment to God' [22], 'spiritual functioning' [68], 'God image representations' [76], spiritual behaviours and views [71], and as an aspect of spiritual functioning that has to do with forgiveness of self and others [68].

In addition, most of the studies referred to RS as a frequency of 'prayer' or as a form of spiritual transcendence that is achieved through private prayer (e.g., [29, 30, 64, 67, 71, 73, 75]). However, Bradshaw and Kent [22] interpreted RS differently as an attachment to God experience achieved through prayer. Nolan et al. [65] saw RS as a connection to the sacred that is facilitated through the context of a faith community. This is similar to the findings of Nagpal et al. [29] and Ai et al. [64] who also stressed the role played by psychosocial factors in terms of perceived social support and community prayer services in their conceptualisation of RS. One study [69] had a vague definition of RS as 'feelings of comfort and strength,' even though this generally suggests an idea of spiritual functioning.

Levin [73] presents a different understanding of RS which considers the intersection of religion and place as a conceptualisation of Jewish RS, which is formed within the context of the Synagogue experience. Different RS themes and perspectives were identified in the selected studies. As shown in Table 2, the results from these studies are likely to be influenced by the different conceptualisation used by respective researchers. In addition, the results from the studies may also be linked to an operationalisation problem since RS was assessed based on a variety of designs. For example, some studies

measured the RS construct using unstandardized subjective ratings of religiosity (e.g., [29, 62, 75]), while other studies (e.g., [22, 30, 63, 74]) measured RS using psychometric assessments such as The Spiritual and Religious Concerns questionnaire, The Religiosity Measure, Religious coping Activities Scale, Attachment to God Scale, Brief Trust/Mistrust in God Scale, Jewish Religious Coping Scale (JCOPE), Duke Religion Index.

Domains of QoL

Results on aspects of QoL reported in all the studies are presented in Table 2. Aspects of QoL assessed in some of the studies were not clearly defined, even though the concepts used to describe QoL corroborate our theoretical assumptions. All the reviewed studies assessed several QoL domains that include psychological, physical, social, and spiritual functioning, while few studies seem to integrate other health-related factors as aspects of QoL. For example, we observed that a number of studies conceptualised QoL in terms of a single indicator such as depressive symptoms (e.g., [62, 63, 70, 76]), fatigue symptoms (e.g., [64]), and levels of anxiety (e.g., [63]). As expected, these unconventional definitions led to using instruments that are not necessarily designed for measuring QoL, such as the Fatigue Scale, Center for Epidemiologic Studies Depression Scale, Medical Outcomes Study questionnaire. However, two QoL aspects (i.e., psychological functioning and physical health) are the most researched domain of QoL in medical-health research, as all the studies assessed either one or both aspects.

Interestingly, Calvo et al. [70] took a more holistic approach in their examination of QoL, as they investigated physical health, psychological functioning, and other aspects of QoL that are related to social well-being, spiritual functioning, and financial aspects among Amyotrophic Lateral Sclerosis patients. Canada et al. [69] integrated aspects of mental functioning, physical functioning, and spiritual functioning in their study of faith and QoL of cancer survivors. As shown in Table 2, most of the QoL scales used in selected studies were modified, based on specific cases of interest, such as the HIV/AIDS-Targeted QoL (e.g., [27]), Geriatric QoL-dementia (GQOL-D) [28], QoL - Alzheimer's Disease Scale (e.g., [29]), Heart-disease Specific QoL Scale (e.g., [30]), McGill QoL Questionnaire (e.g., [70]), Physical and Mental Health Summary Scales (e.g., [69]), World Health Organisation QoL Scale (WHOQoL-BREF) (e.g., Currier et al. [68], and the European Organization for Research and Treatment of Cancer QoL Questionnaire (e. g., [67]). Other assessment techniques were based on designing categorical variables (e.g., nominal, dichotomous, or ordinal) on subjective ratings of questions connected to aspects of health-related QoL that may have health implications for the participants (e.g., [66, 72, 73]).

Discussion

Among the most important findings has been the fairly consistent positive correlation between RS and QoL. This finding contrasts with the classical thesis which underestimates the continuing social influence of religion on healthcare, as religion can sometime be perceived as involving moral restrictions that contribute to guilt and, hence, negative emotions that predispose to depression and poor QoL [57]. As presented in Tables 1 and 2, our review of the association between QoL and RS reveals the following:

- There is good evidence that RS is associated with better outcomes of QoL in the areas of physical health, psychological wellbeing, social relationship quality, and spiritual functioning.
- II) The effects of RS on QoL may take the form of direct and/or indirect associations, depending on the psychosocial factors (e.g., perceived social support by fellow members of the church, a religious caregiver, or group prayer services) and contexts (e.g., illness, secular, or religious) involved.
- III) The effects of RS on QoL may depend on the right application of meaning in terms of how it is defined (conceptualisation) and measured (operationalisation).
- IV) RS coping activities and beliefs (e.g., trusting in God, prayer, positive spiritual connections, or forgiving self and others) activate coping strategies during times of distress, leading to better outcomes of QoL.

These findings highlight the significance of RS as an important component for negotiating day-to-day QoL. While most of the studies identify RS as a form of coping strategy with health benefits, in 75% of the reviewed studies (*** and #*), others showed the role of perceived social support in enhancing the effects of RS on QoL via caregivers who are religious [29], being part of a faith community [64], or seeking spiritual support and collaborative religious coping through community prayer services [65]. Psychosocial activities that include practices of RS became a helpful coping recourse for achieving better QoL and played a major role in the way participants experienced spirituality and negotiated their QoL.

The role of prayer in moderating the effects of RS is also noteworthy in the IR (e.g. [22, 64, 75]). Prayer was often used by the participants as a spiritual conduit for assessing the sacred and an important aspect of RS, with studies referring to 'prayer' as a form of religious coping behaviour. Overall, prayer was the most commonly used aspect of religious coping behaviour among older adults, and was positively associated with cognitive, behavioural and psychological changes.

However, religious coping behaviour may not be used as a coping therapy in every context, as demonstrated in studies conducted within the illness context (e.g., Miller et al.; [29, 30, 71, 75]), secular context (e.g., [66]), and religious context (e.g., [28, 73]), which highlight this shift in perspective. First, we see this shift in health-specific studies (except for [74]) reporting on a variety of patients (e.g., dementia, cardiac arrest, and breast cancer patients), which found that RS was not related to physical health QoL. This suggests that even though RS may have provided comfort, it does not necessarily change the physical health status of the patients. Second, we also found that the same applies for participants in the secular Norwegian context (e.g., [66]) whose RS did not translate to better health outcomes.

Third, another study (e.g., [28]) also support that the effects of RS on QoL is context-driven, and may be different depending on individual religious background, or how RS is practiced as in the case of Jewish participants (i.e., [73]) whose integration into the Synagogue community was a significant predictor of better physical health than their prayer life. Moon and Kim reported that spirituality accounted for the variance in QoL among Korean Protestants and Catholics, but not for the Buddhist sample. One interpretation given for this result was that "Buddhists usually attend religious meetings less regularly than Protestant or Catholics" ([28]: 298), and that Buddhists had lower RS outcomes than Protestants and Catholics. These different perspectives suggest varying accounts of the salutary effects of RS on QoL, which seem to vary based on the individual's social context. In other words, even though RS may have provided symbolic beneficial experiences (e.g., a sense of meaning, social support, and spiritual connection) that are good for negotiating QoL, these health benefits can also be because of other sources such as the social context that affect the spiritual role. To better understand the role of RS on health outcomes, we need to consider the "ways in which culture influences religion's expression of the spiritual" ([77]: S54).

This IR has shown the discrepancies in themes used to describe RS and QoL over the last 10 years. Table 2 shows the different themes associated with all the studies, although the various conceptualisations still point to some sort of relational dynamics that involve attachment to the sacred and aspects of spiritual functioning. Of the 20 studies identified, none exclusively used the term "relational spirituality", even though the conceptualisations bear semblance with our definitions of RS. The specific terms used in describing RS in most of the studies are "religion", "religiosity", "faith", "spirituality", "complementary therapy", "private prayer", "religious coping", "attachment to God", "seeking God's help", "Jewish spirituality", and "images of God." In using these terms, most of the studies failed to clearly define RS as a relational dynamic that deals with attachment to the sacred. Instead, they used measures and categorical variables that assess aspects of RS that involve intrinsic aspects, such as meditation, prayer, and attachment to a higher power. Conceptually, RS continues to change while retaining the relational dynamic of its tradition.

At present, an attachment-based model of RS, though achieved through prayer and other religious-related activities with others and positive perceptions of the divine, seems to be the overriding theme in studies examining RS and QoL over the past 10 years. God image representations and trust/mistrust in God as seen in the works of Krause et al. [76] and Krumrai et al. [74] also re-emphasize similar relational perspectives, along with other studies which demonstrate a similar attachment-religion connection. These conceptualisations are likely because of the operation of Bowlby's [43] proposed internal working models of attachment which, even though developed during the early years of life, remain active in one's lifespan attachment development [44] and determine the extent to which a potential object of attachment is experienced, even in the RS context (e.g., [13, 16, 37]).

Long [78] found a significant correlation between measures of attachment to God RS, parental bonding, and religious coping. The ability to regulate emotional states in RS contexts due to the internal working model of the attachment system may be the very key to unfolding spiritual coping model for negotiating QoL when drawn to the sacred. The direct and/or indirect associations with QoL suggest the activation of a spiritual coping model that helps in relational processes and in dealing with stressful life situations, based on the connection to what is transcendent. The idea of the transcendent can take different directions, as shown in our IR as spiritual functioning, forgiving self, forging a meaningful relationship with others, and building a sense of attachment to God. This framework of a spiritual coping model is more active in the third aspect in terms of the association between RS and OoL.

The limitations across these 20 studies include the following: mostly focused on older adults with younger people unrepresented; mostly quantitative design which lacks in-depth perspectives capture; mostly crosssectional studies with limited causality examination; lack of QoL specific measures; and the use of categorical rather than continuous operationalization of RS and QoL.

Although study findings show evidence of the links between RS and QoL in medical-health research for the last decade, we were unable to retrieve some studies related to RS and QoL during our initial literature search due to indexing problems and date of publication. After conducting a manual search of related articles reporting on the links between RS and QoL, we found some related studies (e.g., [16, 37, 79–83]), but were not able to report them because they were either not indexed in the selected databases (i.e., PubMed, ScienceDirect, and PsycINFO), using a different conceptualisation of QoL (e.g., levels of emotional distress), or were published after our deadline of literature search (i.e., March 2017). However, the results from these "missing" studies also support the salutary effects of an attachment-based model of RS on levels of psychological wellbeing. We are confident that the studies selected for this IR are good representatives of relevant studies published within the past 10 years demonstrating how RS has been perceived/positioned in relation to QoL.

Conclusion

The findings from this review have broad implications for the role of RS in relation to QoL in medical-health contexts. Existing models of RS coping are better understood by integrating spiritually-based perspectives that include identifying aspects of faith and individual life that may be understood as a contextual 'biopsychosocial spirituality' [64]. Greater awareness of the importance of RS among healthcare professionals may improve cultural competence in healthcare services and community support in addressing patient's spirituality, and strengthen collaborative relationship between healthcare and faithbased organizations. Further research on the relation between RS and QoL should be conducted across different population and health contexts.

Endnotes

- ¹Health Science Descriptors
- ²Medical Subject Headings

³Table 1 explores and summarizes the general categories of the articles in terms of the study characteristics.

⁴Table 2 contains themes and meanings that emerge from the studies for describing the link between RS and QoL.

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Availability of data and materials

References of all data generated or analysed during this study are included in the reference list of this article.

Authors' contributions

VC drafted the initial version of article and contributed in designing the study, acquisition of data, analysis and interpretation of the data, critical revision of the manuscript, and final approval of the article. PA contributed to the data interpretation, critical revision of the article, and final approval of the version to be published. TM contributed to the conception of the review, data analysis and interpretation, critical revision of the article, and final approval of the version to be published.

Ethics approval and consent to participate

Not applicable.

Competing interests

The authors declare that they have no competing interests.

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Chapter 3 Place Attachment and Quality of Life: A literature review

Sequel to the previous review chapter on the links between relational spirituality and quality of life, this chapter reviews relevant research on the relationship between place attachment and quality of life. This is an important chapter since it shows the reader how and why place is related to health outcomes based on place attachment theory. However, this chapter is not a typical review article as the researcher experiments on a new approach for data collection recommended by Wright and colleagues (2014) and known as the citation-search technique. This approach is based on collecting data through citations of a published peer-reviewed paper to identify further studies instead of undertaking a predefined online search to retrieve relevant studies. Based on this principle, the review chapter determined how the work of Rollero and De Piccoli (2010) published with the *European Review of Applied Psychology* has been dealt with in terms of the relationship between place attachment and quality of life, and to determine how these models have been conceptualised and analysed in recent years.

Chapter 3

How Does Place Attachment Relate to Quality of Life? A literature review

3.1 Chapter summary and relevance to the thesis

The paper aims to determine how the work of Rollero and De Piccoli (2010) has been dealt with in terms of the relationship between place attachment (PA) and quality of life (QoL), and to determine how these models have been conceptualised and analysed in recent years. A systematic review and citation search was conducted using three online databases (Google Scholar, Scopus, and Web of Science) and the seminal publication of Rollero and De Piccoli. Our results reveal that the relationship between PA and QoL still retains it social support theoretical framework as was demonstrated in the work of Rollero and De Piccoli, while also maintaining that much still needs to be done in terms of broadening the definitions and developing population-specific scales for predicting PA and QoL outcomes. Implications of these results were also discussed.

3.2 Introduction

PA theory is an interesting conceptual framework in environmental psychology and human geography that emphasises the positive and meaningful attributes of connection to place in fulfilling people's fundamental needs and improving well-being (Low & Altman, 1992). Human geographer Relph (1976) positions PA as a universal connection that fulfils felt need for security in adults and is therefore an integral part in the lives of people. This conceptualisation of adult 'felt security' aligns with Sroufe and Waters' (1977) treatment of adult attachment theory which demonstrates how older children and adults have a much stronger cognitive capacity than infants that enables them to develop attachments through

imagined and visual connections with abstract objects of attachment, in which 'place' is an example. Unlike infants who rely on the physical interaction with their caretakers to develop attachment bonds, adults depend upon the knowledge of the whereabouts of imaginary, objects of attachment like place for their attachment satisfaction (Sroufe and Waters, 1977; Cicirelli, 1991a, 1991b; Scannell & Gifford, 2014, 2016, 2017). There are some overlaps between key aspects of PA theory and the basic tenants of interpersonal attachment. Scannell and Gifford (2014) had reasoned that both PA and interpersonal attachment involve maintaining physical or symbolic proximity to an important person or a place, and offering a sense of security and safety (cf. Brown, Perkins, & Brown, 2003; Lewicka, 2010). While infants develop attachment proximity to their caregivers in interpersonal attachment processes through clinging toward them (Bowlby, 1969; 1982; Ainsworth, 1967), physical proximity in PA may be experienced through purchasing a home in a particular city, displaying photos of an important place (Ryan & Ogilvie, 2001), visiting a particular place on regular basis (Kelly & Hosking, 2008), visualising an important place (Scannell & Gifford, 2017), or, in extreme situation, refusing to leave a place even when it is under threat (Donovan, Suryanto, & Utami, 2012; Billig, 2006). These experiences facilitate processes that make the individual perceive a place as a haven of safety to turn to in times of danger and a secure base from which to explore the world (cf. Brown, Perkins, & Brown, 2003; Lewicka, 2010).

The phenomenology of PA, as an interpretation of adult attachment experience in a place, have been furthered developed as a multi-faceted construct focusing on different meanings of adult-place relationships (Scannell & Gifford, 2010; Seamon, 2014). For instance, 'places' of attachment have been positioned over the years as 'enclaves' (Gans, 1962), 'fields of care' (Relph, 1976), 'African compounds' (Pellow, 1992), 'childhood homes' (Cooper-Marcus, 1992), 'religious places' (Bowen, 2002), 'childhood places' (Giuliani, 2003), 'sacred places' (Mazumdar & Mazumdar, 2004), 'graffiti' (McAuliffe, 2012), and 'biblical places' (Counted & Watts, 2017). Scannell and Gifford (2010) have organised the different

multi-faceted meanings and interpretations of PA into a comprehensive model, proposing that human-place interactions occurs at three levels. The first level was described by Scannell and Gifford as the "person dimension" of PA which simply refers to the individual and collective meanings attributed to a place in terms of the unique atmosphere, character, or language of a place that influences the individual to forge place identity (cf. Twigger-Ross & Uzzell, 1996). The psychological dimension of PA on the other hand includes the affective, cognitive, and behavioural components of attachment that draw people to a place, making the individual depend on a place for their psychological functioning (Scannell & Gifford, 2010; Counted, 2016). Psychological PA is developed due to long residence and familiarity with a place, closely linked to the everyday life (Rivlin, 1982; Scannell & Gifford, 2016). The psychological experience of a place deepens place dependency and transforms a place into a 'safe haven' in such that proximity to place implies pleasure whereas separation from place may be sorrowful (Dovey, 1985). In addition, the place dimension was originally proposed by Shumaker and Taylor (1983), and positioned by Scannell and Gifford (2010, 2016) as the third level of attachment which emphasizes the natural and physical characteristics of a place that draw people to such a setting. This may include but is not limited to architecture, graffiti, spatial level, wildlife, buildings, and pathway layout, among others (cf. Shumaker and Taylor, 1983; Mazumdar & Mazumdar, 2004; Scannell & Gifford, 2010; McAuliffe, 2012). This plenitude of perspectives on place meanings and attachments show how significant places are positioned as important facet of the human experience that assure attachment affiliation, felt security, social well-being, psychological needs satisfaction, identity formation, ontological security, exploration satisfaction, psychological benefits, and improvements in QoL (Brown & Perkins, 1992; Billig, 2006; Rollero and Piccoli, 2010; Tartaglia, 2013; Gattino et al. 2013; Marcheschi et al. 2015; Afshar et al. 2017; Scannell & Gifford, 2016; Scannell & Gifford, 2017).

According to Bowlby (1969; 1973, 1982), separation distress in attachment processes could result to the experience of grief, alienation, and disorientation following the

loss of an important attachment. PA separation distress may have a significant adverse effect among people who seem to loss their places of attachment, resulting to poor QoL. The reverse of PA would trigger negative emotional states and distress expressed by those who are dissatisfied with a place or loss their attachment (Fullilove, 1996). This kind of negative place experience has been studied in disaster psychology (Brown & Perkins, 1992; Cox, & Perry, 2011; Aten et al. 2014), where disruptions of people's PAs and forced dislocations demonstrate how fundamental they are to the human experience and in forging meaning in everyday life. Brown and Perkins' reason that the loss of PA through disasters, burglaries, or voluntary relocations, can create a stressful period of disruption "followed by a postdisruption phase of coping with lost attachments and creative new ones" (1992, p.279). According to Ng (1998), this same experience can be seen in migration situations where the migrant learns about how to adapt in a new place and tries to cope with an unfamiliar culture - the initial stages of place adaptation - which eventually leads to migrant PA. Giuliani, Ferrara, and Barabotti (2003) have also emphasized the negotiating effects of place mobility on well-being and attachment, especially among older adults. They reason that the lack of ownership in terms of place mobility may be influencing dissatisfaction with place, since data show that a sense of ownership is positively related to PA. The experience of place disruption, place adaptation, or lack of ownership in a place, among other reasons, may be examples of common denominators weakening the intensity of place-bonds. These contributing factors may have adverse effects on people's place experiences and significantly affect their QoL in general.

QoL on the other hand is commonly used to describe people's well-being and to evaluate an individual's holistic experience of life from a subjective point of view. QoL is the degree of one's needs satisfaction (Hornquist, 1982). QoL is a broad ranging concept "affected in a complex way by the persons' physical health, psychological state, level of independence, social relationships, and their relationship to salient features of their environment" (WHOQOL Group 1995, p.1404). It covers several aspects of life and

individual needs that ought to be met - psychological well-being, physical health, environmental quality, and social relationships (cf. WHOQoL Group, 1998; Skevington, Lotfy, & O'Connell, 2004; Walker, 2010). These aspects of QoL describe the extent to which the individual appraises and perceives their own life. QoL in terms of psychological functioning focuses on a person's ability to achieve their own goal of self-actualisation in relation to their mental health, emotional well-being, and behaviour (Limbos, Joyce, Chan, Kesten, 2000). Physical health-related QoL can be described as a state of physical well-being that is determined based on the functionality if all internal and external body parts, tissues, and organs which enable a person to be physically fit to perform their daily routines (Anokye et al. 2012). Environmental QoL has much to do with how aspects of the natural and built environment may affect an individual's perceptions of QoL (Meyer & Owen, 2008). The social relationships dimension of QoL position the relationship connections and social ties that exist between people, in terms of quality of relationships, social integration, social networks, social isolation, as important factors influencing individual health and QoL (Umberson & Montez, 2010). Overall, QoL has much to do with individual satisfaction with key psychological, environmental, social life areas which enhance a general sense of physical and emotional well-being (Chibnall & Tait, 1990; Vandergriff, 1995).

PA is relevant to the study of environmental and individual perceptions of QoL. Assessing perceptions of QoL in relation to experiences of PA can be an important research pathway for two reasons. Firstly, it points to the need of a cultural change in people-place relationship experiences with the goal of promoting what Meyer and Own (2008) referred to as a 'resident-centred care' and 'home-like' environments (cf. Boggatz, 2014). Secondly, determining the success or failure of such cultural changes would require a careful evaluation of the residents' QoL in relation to their PA. Hence, reviewing how research should and/or have examined PA interventions designed to improve residents' QoL could create evidence for practice. Despite its importance, the way in which PA is related to QoL remains unclear, even though the relationship between PA and QoL has been explored by a

number of studies. Commonly, the focus has been on specific context, for example with Jewish settlers' experience of Gaza (Billig, 2006; Billig, Kreitler, Zadernovsky, & Alkalay, 2016), experience of individuals with mental illness in Sweden (Marcheschi et al. 2015), Italian residents' perception of their QoL (Rollero and De), rural west community attachment perceptions (Brehm, Eisenhauer, Krannich, 2004), neighbourhood stability in Saskatoon in relation to perceptions of QoL (Randell, Kitchen, & Williams, 2008), park users experience (Campbell et al. 2015), PA in public places (Firouzmakan & Danashpour, 2015), tourists assessment of island destinations (Ramkissoon, 2016), among others.

Brehm and colleagues (2004) provide a robust theoretical background for exploring PA and its possible connection to well-being in terms of 'collective action' and 'perceptions of open communication'. While the study of Brehm and colleagues may mark a significant paradigm shift in PA research in terms of its connection to well-being, their conceptualisation of QoL is not adequate even though it highlights the importance of communal action and social communication in PA. Rollero and De Piccoli (2010) have also reasoned that how people experience a place in their social experiences and meanings, in terms of social integration, acceptance, contribution, actualisation, and coherence, are related to their perceptions of QoL (social well-being). Similar studies conducted by Evangelinos, Jones, and colleagues suggest that higher levels of social capital, in terms of social and institutional trust, social norms, and social networks, may lead to improved perceptions of environmental QoL (Evangelinos & Jones, 2009; Jones et al. 2009). These studies seem to highlight the importance of relational factors in PA as the basis for experiencing QoL in environmental settings. Although much research has been done on PA, little is known about its direct and/or indirect relationship to QoL, especially how this relationship has been conceptualised and how recent studies have dealt with this topic. Thus, the research objectives for this systematic review are as follows:

• Objective 1: to identify studies that show how PA is related to QoL and how these studies have been positioned.

- Objective 2: to determine how PA and QoL have been assessed and applied.
- Objective 3: to determine how the paper of Rollero and DePiccoli has been dealt with in terms of how PA is related to QoL.

3.3 Materials and Methods

3.3.1 Search Strategy

The systematic review was performed using a citation search strategy to identify relevant peer-reviewed papers that demonstrate how QoL is related to PA. Instead of performing a predefined online search to retrieve relevant papers, citation searching uses published peer-reviewed papers to identify further papers (Wright et al. 2014). The cited paper used for this initial search was by Rollero and De Piccoli (2010), published in the European Review of Applied Psychology. While Brehm et al's (2004) work may be considered a seminal introduction of the relationship between PA and well-being and has been instrumental in the subsequent studies, this systematic review is drawing on the conceptual framework of Rollero and De Piccoli to organise and evaluate studies that were subsequently informed by their model. There are two reasons why the work of Rollero and De Piccoli was chosen as the key paper for this systematic review. First, due to the methodology and frameworks used in their study, which are consistent with current models in PA and QoL research, unlike Brehm et al. who did not use a standardized measure of QoL. Secondly, most of the studies linking PA and QoL cited the seminal work of Rollero and De Piccoli compared to that of Brehm and colleagues, partly due to the reason given above in terms of the frameworks used and conceptualisation.

The three citation index databases searched, from April 4 to May 10 2017, for the systematic review were Scopus, Web of Science, and Google Scholar. These databases were used since they are considered the most effective citation sources (Wright et al. 2014). The search yield 60 citations from Google Scholar, 29 from Scopus, and 20 from Web of

Science. To generate studies that cited Rollero and De Piccoli (2010), their paper title "Does Place Attachment affect social well-being" was used for the online search in databases. In Google Scholar and Scopus, the search string was REF (Does PA affect social well-being) whereas in Web of Science, the search string was TITLE (Does PA affect social well-being), and the number of times the study was cited provided links to a full list of studies and citations of the original paper by Rollero and De Piccoli. We then downloaded the full texts of all the generated articles for our systematic review.

3.3.1.1 Inclusion Criteria

- Prospective studies have been written in the English language.
- Studies have cited and used the original paper by Rollero and De Piccoli.
- Prospective studies reporting on the relationship between PA and QoL.
- Empirical, cross-sectional, longitudinal, quantitative, qualitative, and peer-reviewed studies.

3.3.1.2 Exclusion Criteria

- Non-English publications.
- Reviews and theoretical articles, dissertations, conference proceedings, blog articles, and working papers.
- Studies that did not use standardized measures of PA or QoL are not included for the review.

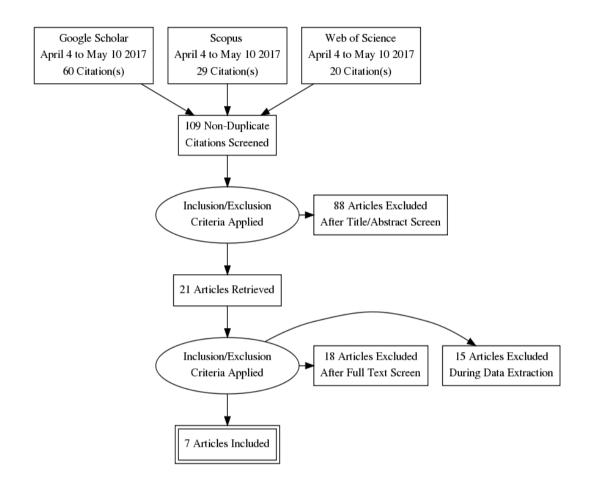
3.3.2 Study Selection Process

The database search was performed by the first author (VC). The second author (TM) then reviewed and confirmed the search process. The first author conducted data extraction and a full text analysis of included studies, to address the systematic review research questions. It is also noted that no initial screening was done due to the review search strategy employed which was based on citations of the study by Rollero and De Piccoli. The second

author reviewed the extracted content. A consensus was reached between the authors about the selected studies and content interpretations.

3.3.3 Data Extraction and Analysis

Data were extracted for the methodology of study, authors, country of origin, sample characteristics (age mean, gender), domains assessed, and tools used for assessing PA and/or QoL. Furthermore, data analysis was done using a framework analysis approach which allowed us to synthesize the included studies into three main themes and objectives (Ritchie et al. 2013). The authors designed tables that arrayed contents extracted from the data (see Tables 1 and 3), recording for themes and findings extracted from included studies (Gale et al. 2013). Five steps were undertaken to accomplish the framework analysis. The first step was the familiarisation phase where the study team reviewed all the included articles for familiarity. At the second phase, the themes for the analysis were identified based on the research objectives. Steps three and four involve highlighting, indexing, and articulating extracted themes and results of included studies into a matrix table with agreement by the study team. The last step in our data analysis process is the interpretation and mapping phase where extracted data and themes are interpreted and applied for clarity in relation to the study objectives with the aim of developing a coherent, overarching systematic review.



Reference	Country	Methods	Study population	No. of	Conclusions
(Year)		(Design)		participants	
Afshar et al. (2017)	Iran	Quantitative (cross-sectional data)	 60 to 94 years old adults living in a metropolitan area of Tehran, Iran Mean age (M=66.39, SD=6.98) Gender (M=58.9%, F=41.1%) 	550	Changes in PA in terms of place identity, place dependence, and social relations in place leads to changes in the social well- being of older adults. There were found correlations between PA and social well- being in all its dimensions (i.e. social integration, social acceptance, social contribution, social actualization, and social coherence). PA place identity (b = .34), place dependence (b = .26), and social relations in a place (b = .09) accounted for social integration. The same variables were significant predictors for social acceptance, as well as for social contribution and social actualization.

Table 1: Summary of reviewed studies reporting on PA and QoL

Gattino et al.	Italy	Quantitative	• 18 to 88 years adult residents of	344	PA was positively associated with all QoL
(2013).		(cross-sectional	Piedmont, Italy		dimensions, except for social relationships.
		data)	• Mean age (M=40, SD=15)		PA in terms of living in a small town and
			• Gender (M=43%, F=57%)		having a greater psychological sense of
					community enhanced the perceived
					environmental QoL. These findings
					suggest that in terms of the environmental,
					psychological, and social relationship
					domains, QoL are better for people who
					live in small towns than for those who live
					in large towns.
Marcheschi et	Sweden	Quantitative	Clinical sample	72	Perceived physical and social-
al. (2015).		(cross-sectional	• 25 to 83 years individuals with long-		environmental qualities in supported
		data)	term severe mental illness		housing facilities predicted perceptions of
			• Mean age (M=52.5)		quality of life, accounting for the 32% of
			• Gender (M=60%, F=40%)		variance. There was a relationship
			• 20 housing facilities in southern part		between physical-environment quality and
			of Sweden		perceived QoL (F(4,60) = 3.4, p<.01). This

					variance increased when PA was entered to the equation (F (5, 59) $\frac{1}{4}$ 20.7, p < .001). In the second regression, there were found relationship between social-environment quality and perceived QoL (F (4, 60) $\frac{1}{4}$ 6.42, p < .001), as well as PA was associated with QoL (F (5, 59) $\frac{1}{4}$ 16, p < .001). Social-environment quality and PA account for 45% of QoL variance among people with severe mental illness. Hence, PA is a significant mediator of the effects of environment quality in terms of its physical and social dimensions and QoL.
Rollero and Piccoli (2010)	Italy	Quantitative (cross-sectional data)	 18 to 30 years first-year undergraduates Mean age (M=21.43, SD=3.68) Gender (M=37.7%, F=62.3%) 	443	PA globally affects social well-being. Positive correlations were found among measures of PA (city attachment) and all the dimensions of QoL (social well-being), whereas PA in terms of neighbourhood

					attachment was positively related to social integration and social actualization, and negatively connected to social coherence.
Scannell & Gifford (2016)	Canada	Quantitative (cross-sectional data)	 19 to 34 years undergraduate university students Mean age (M=20.00, SD=2.34) Gender: M (n=28), F (n=91) 	133	Visualising a place of attachment enhances psychological need satisfaction in terms of meaning, self-esteem, and belonging.
Scannell & Gifford (2017)	Canada	Mixed methods (Content analysis)	 18 to 53 years old Canadian residents Mean age (M=27, SD=8.47) Gender M (n=43), F (n=49) 	97	Thirteen observed categories of psychological QoL benefits of PA were observed which include: memories, belonging, relaxation, positive emotions, activity support, comfort-security, personal growth, freedom, entertainment, connection to nature, practical benefits, privacy, and aesthetics.
Tartaglia (2013)	Italy	Quantitative (cross-sectional	 Residents of Turin, Italy Mean age (M=38.19, SD=17.35) 	343	Perceived social support and PA promotes QoL. In particular, QoL physical

	data)	• Gender (M=40.5%, F=59.5%)	health was positively influenced by
			perceived social support from family (b =
			.16) and from friends (b = .14), and through
			PA (b = .20). Qol psychological status was
			positively associated with perceived social
			support from family (b = .15) and friends (b
			= .14), and PA (b = .20). QoL social
			relationship dimension was associated with
			social support from friends (b = .42), and
			from a significant other ($B = .22$), and with
			PA (B = .12). In addition, QoL
			environmental health was positively
			associated with perceived social support
			from friends (b = $.21$), and PA (b = $.19$).

Abbreviations: PA, Place Attachment; QoL, Quality of Life.

Table 2: QoL and PA instruments used in included studies

Reference	Goals	PA and Qol Instruments	Domains and Reliability
Afshar et al. (2017)	To determine the effect of PA dimensions on QoL (social well- being) of older adults	PA = P-PAS QoL = Persian version of SWS	 PA = 8 items (α=.95) assessing three domains of PA: place identity (α=.97), place dependence (α=.97), social relations (α=.95) in the neighbourhood. QoL = 33 items(α=.94) assessing five dimensions of social relationship QoL:
Gattino et al. (2013).	To assess the role of PA in terms of	PA= ISCS, RAS;	 social integrity (α=.89), social acceptance (α=.87), social contribution (α=.83), social actualisation (α=.90), social coherence (α=.86).
Gattino et al. (2013).	sense of community on health-	FA= 1000, KAO,	assess sense of place (community)

	related QoL.	QoL= Italian WHOQoL-BREF	(α=.84).
			In addition, PA was also assessed
			using RAS, tapping on Residential
			(place) attachment (α84).
			QoL = 24 items assessing 4
			domains:
			• physical health,
			• psychological health,
			• social relationships,
			environmental health
Marcheschi et al. (2015).	The extent to which PA (supported	PA = POE-Index, COPES, SSP;	PA = perception/quality of the
	through housing facilities) account		physical environment was assessed
	for variations in perceived QoL	QoL = MANSA	using POE-index (α=.74).
	among people with severe mental		
	illness		Secondly, social-environment quality
			was assessed using the short
			version of the COPES (α =.67).

			8 items (α =.82) SSP tapped on other
			levels of sense of place which
			assessed placelessness,
			attachment, involvement, and
			rootedness.
			QoL = perceived quality of life was
			assessed using 16 items of MANSA,
			tapping on objective and subjective
			levels of life satisfaction with regard
			to the domains of work, economic
			situation, friendships, leisure time
			activities, housing conditions,
			personal safety, relationship with
			other residents/neighbours, family
			and physical and psychological
			health (α =.84)
Rollero and Piccoli (2010)	Exploring the influence of PA in	PA = RAS;	PA = 8 items assessing two
	relation to neighbourhood and city		dimensions:

	on Ool (cooriel well being)	QoL=SWS	a = aity attachment (a = 80)
	on QoL (social well-being).	QUL=SVVS	• city attachment (α = .89)
			 neighbourhood attachment (α =
			.88).
			QoL = 33 items assessing five social
			relationship QoL dimensions:
			• social integration (α = .80),
			 social acceptance (α = .83),
			• social contribution (α = .73),
			 social actualisation (α = .78),
			 social coherence (α = .60).
Scannell & Gifford (2016)	To evaluate whether PA visualizing	PA = 12 items of SOP Scale, 6 items	PA: Adopted 20 items were adopted
	could enhance satisfaction of	of Billig et al. (2006) measure of PA	from three measures to assess
	aspects of QoL (psychological	to Gaza region, and Brown &	overall PA:
	needs).	Perkins' (1992) PA scale	12 items of the SOP Scale (place
			identity, place dependence, place
		QoL = N-TS	attachment)
			6 items from Billig et al.'s measure of

			place attachment, tapping on
			spiritual connection to place, a sense
			of "at homeness", an intention to
			stay, and other aspects of person-
			place bond
			2 items from Brown & Perkins (1992)
			assessing feelings of pride and
			attachment toward place.
			QoL = 20 items assessing four
			central Psychological needs:
			Belonging
			Self-esteem
			Meaning
			Control
Scannell & Gifford (2017)	To explore the QoL (psychological)	PA and QoL = Participants were	PA was defined as feeling connected
	benefits of PA.	asked to write their responses to four	to a place that is meaningful to one.
		open-ended questions related to	

		their connection to a place that is	QoL was defined as psychological
		meaningful to them:	health in terms of memories,
		(1) Describe this place in detail.	belonging, relaxation, positive
		Where is it? What is it like?	emotions, activity support, comfort-
		(2) Why do you feel attached to this	security, personal growth, freedom,
		place? Please provide one or two	entertainment, connection to nature,
		reasons.	practical benefits, privacy, and
		(3) When you are not at this place,	aesthetics.
		what makes you want to go there?	
		Please give one or two reasons. If	
		you don't want to go there, please	
		explain why.	
		(4) What psychological and other	
		benefits do you experience from	
		being connected to this place?	
		Please provide two or three benefits.	
Tartaglia (2013)	The study aimed at comparing the	PA = RAS;	PA = 8 items assessing overall
	effects of different predictors in		residential attachment (α = .85)

urban Environment in terms of socio-	QoL=WHOQoL BREF	
demographic characteristics, quality		QoL = 24 items assessing:
of social relations, perceived social		• physical health (α = .78),
support, residential attachment, and		• psychological status (α = .76),
healthy lifestyle on the dimensions of		 social relationships (α = .64),
QoL.		 environment (α = .76).

Abbreviations: PA, Place Attachment; QoL, Quality of Life; RAS, Residential Attachment Scale (cf. Bonaiuto et al. 2002, 2006); SWS, Social Well-being Scale (cf. Kayes, 1998); WHOQoL BREF, World Health Organisation Quality of Life Brief Scale (cf. WHOQoL Group, 1998); ISCS, Italian Sense of Community Scale; POE-Index, post-occupancy evaluation questionnaire (cf. Evans, 2003); COPES, Community Oriented Programs Environmental Scales (cf. Moos, 1987); SSP, Scale of Sense of Place (cf. Shamai, 1991; Shamai & Ilatov, 2005); MANSA, Manchester Short Assessment of Quality of Life (cf. Priebe et al. 1999); P-PAS, Persian version of Place Attachment Scale (cf. Khodaee, Rafiean, Dadashpoor, & Taghvaei, 2015); N-TS, Need-Threat Scale (cf. Williams, 2009); SOP Scale, Sense of Place Scale (Jorgensen & Stedman, 2001).

3.4 Results and Discussion

3.4.1 Objective 1: Studies that show how PA is related to QoL

3.4.1.1 Included studies

At the initial study selection process, the first author retrieved 109 studies that cited the seminal paper guiding our study from three databases (see Figure 1). The preliminary search identified 21 studies on PA and QoL. After the full text analysis of the selected 21 studies, the first author excluded studies that did not meet the inclusion criteria, therefore reducing the selected studies to only 5. Five studies were further reviewed by the second author (TM). During this review phase, one additional study met the inclusion criteria and was then added, along with the original study by Rollero and De Piccoli, to generate a total of 7 studies for the systematic review. Studies that met our inclusion criteria, citing the key paper, are summarised in Tables 1 and 3. The eligible studies were all written in English language and published between 2010 and 2017. However, other relevant studies that did not meet the inclusion criteria but explored the links between PA and QoL were also summarised in Table 2, even though they are not included in the review.

3.4.1.2 Study Design and Population

As shown in Tables 1 and 2, two of the studies were conducted with Italian residents (Tartaglia, 2013; Gattino et al 2013), one with Canadian residents (Scannell & Gifford (2017), two with older adults (Gattino et al. 2013; Afshar et al. 2017), while another two with undergraduate students (Rollero & De Piccoli, 2010; Scannell & Gifford, 2016). Only one study was conducted with a clinical sample of 72 males (60%) and females (40%) with severe mental illness living in 20 housing facilities in southern part of Sweden (Marcheschi et al. 2015).

The selected studies used a variety of developed and validated instruments for data collection. Scannell and Gifford (2016) purposefully integrated items from three separate PA instruments for their assessment, on the basis that no one instrument represents the broader definition of PA. Rollero and De Piccoli examined how PA in terms of residential attachment globally affects social well-being among first-year undergraduates, M=21.43, SD=3.68. Tartaglia explored how PA promotes QoL through perceived social support, M=38.19, SD=17.35, while Gattino and colleagues examined how QoL is affected by sense of place in small town areas among older adult residents in the city of Piedmont in Italy (M=40, SD=15). Another two studies were conducted in Canada (Scannell & Gifford, 2016, 2017), focusing on the psychological benefits of place attachment. We identified a PA and QoL study with older Iranian adults in Tehran, M=66.39, SD=6.98 (Afshar et al. 2017). Marcheschi et al.'s Swedish study with individuals with mental illness shows evidence that supports PA qualities as determinants of perceptions of QoL, accounting for almost 32% variance in the sample population.

Of the seven studies included for the systematic review, six of the selected studies employed a quantitative method design (Rollero & De Piccoli, 2010; Tartaglia, 2013; Gattino et al. 2013; Marcheschi et al. 2015; Afshar et al. 2017; Scannell & Gifford, 2016). However, data were collected in one study using a mixed methods design (Scannell and Gifford, 2017). No longitudinal study was recorded. In total, the total sample generated from the reviewed studies are 1,982 participants, including diverse sample populations from undergraduate students, older adults, Italian and Canadian residents, and individuals with mental illness.

3.4.2 Objective 2: How PA and QoL have been assessed and applied

3.4.2.1 PA Measures

As shown in Table 1 and 2, a total of nine different instruments were used in six

studies to assess PA. Seven of these were generic instruments. Among them are the Residential Attachment Scale (RAS) (Bonaiuto et al. 2002, 2006), Post-Occupancy Evaluation Questionnaire (Evans, 2003), Community Oriented Programs Environmental Scales (COPES) (Moos, 1987), Scale of Sense of Place (cf. Shamai, 1991; Shamai & Ilatov, 2005), and Sense of Place Scale (Jorgensen & Stedman, 2001). In addition, 8 items were adapted from the PA measures of Billig et al. (2006) and that of Brown and Perkins (1992) in the study by Scannell and Gifford (2016). Population specific measure of Persian Place Attachment Scale was designed in one of the study (Afshar et al. 2017). In addition, the Sense of Community Scale was also modified for an Italian population and used to measure PA among older adults in Italy (Gattino et al. 2013). The RAS instrument was the most used tool for assessing PA among Italian populations since it was used in all the three studies conducted in Italy. However, the approach undertaken by Scannell and Gifford (2016), in terms of integrating items from three different PA instruments, seems to broaden the definition of PA in a more nuanced and heuristic way which include aspects of PA that emphasize place dependency, place identity, attachment toward place, spiritual connection to place, a sense of at-homeness, an intention to stay, and feelings of pride toward place. In terms of PA, the RAS instrument was the most consistent measure used for assessing PA, mostly by Italian researchers. RAS maintained a good internal consistency in the Italian studies (Rollero & Piccoli, 2010; Tartaglia, 2013; Gattino et al. 2013). However, COPES was not almost reliable (α =.67) with a below average Cronbach alpha in the study of Marcheschi et al. (2015).

3.4.2.2 QoL Measures

The World Health Organisation QoL brief (WHOQoL BREF) (WHOQoL Group, 1998) and Social Well-being Scale (Kayes, 1998) were the two most used instruments for assessing QoL in the reviewed studies (Table 2). The former covers four QoL domains: psychological health, physical health, social relationships and environment. The latter

assesses QoL in terms of five domains of social functioning: social integration, social acceptance, social contribution, social actualisation, and social coherence.

Other health and QoL-related instruments used in the studies are Manchester Short Assessment of Quality of Life (MANSA) which was adopted for assessing QoL in the study with individuals with severe mental illness (Marcheschi et al. 2015). MANSA includes several life domains: work, economic situation, relationships, leisure activities, housing conditions, personal safety, and physical and psychological functioning (see Table 2). Another QoLrelated measure used in the study aside MANSA is the Need-Threat Scale which conceptualised QoL in terms of psychological needs of belonging, self-esteem, meaning, and control. As for the reliability of the PA and QoL instruments used, it is acknowledged that most of the instruments were internally consistent, except for few scales which recorded poor Cronbach alpha (see Table 2). In particular, SWS and WHOQoL seem to be the most reliable measures of QoL in the selected studies, with a robust internal consistency in almost all the studies, except for SWS social coherence (α = .60) in the seminal paper (Rollero & Piccoli, 2010) and WHOQoL social relationships ($\alpha = .64$) in just one study (Tartaglia, 2013). The Iranian version of the SWS measure maintained a very good reliability in all the five dimensions: social integrity (α =.89), social acceptance (α =.87), social contribution (α =.83), social actualisation (α =.90), and social coherence (α =.86).

3.4.2.3 Selection and use of PA and QoL domains and constructs

In addition to PA and QoL assessment measures, all eligible studies reported on diverse PA and QoL constructs and domains, broadening our preliminary conceptual definitions. Rollero and De Piccoli (2010) for example conceptualised PA as 'city attachment' and 'neighbourhood attachment', and positioned QoL as a social construct having to do with social integration, acceptance, contribution, actualisation and coherence. In comparing the effects of different PA predictors to QoL, Tartaglia (2013) first presented PA as a residential

attachment in assessing the four subjective domains of QoL (see Table 2). This same pattern of QoL assessment was seen in the work of Gattino and colleagues (2013) who presented QoL as a multidimensional construct while also assessing PA in terms of residential attachment and sense of community. There seems to be a consistency in the conceptualisation of PA and QoL in the Italian studies, as shown in the designs of their studies (see Table 2).

In the Swedish study of individuals with severe mental illness, QoL was defined in terms of the individual perception of physical and social environmental qualities of a place (Marcheschi et al. 2015). This conceptualisation enabled Marcheschi and colleagues to include a definition of QoL that involves predictors of placelessness, attachment, involvement, and rootedness in a place. Afsher and colleagues (2017) in their study with older adults in Tehran defined PA as forging place identity, place dependence, and in terms of the social contacts that one have in a place of attachment which, according to the authors, are important PA facets central to achieving social well-being among older adults.

The studies of Scannell and Gifford (2016, 2017) and their conceptualisations of PA visualisation seem to broaden our understanding of PA theory in relation to QoL. According to Scannell and Gifford (2016), PA can serve as a "manipulated independent variable, which broadens the options for internally valid, methodologically diverse PA research" (p.375). Scannell and Gifford emphasized the importance of their PA visualisation theory. According to them, PA visualisation has huge implications for future PA and QoL research in terms of how person-place bonds can involve negative emotions and experiences since a visualised place of fond childhood memories may also have its "shadow side", especially for people that experienced abuse and oppression in such a place (Manzo, 2003). Scannell and Gifford encourage researchers to examine this area of negative PA visualisation research in relation to well-being. The conceptualisation of QoL in the study of Scannell and Gifford (2016) in terms of sense of belonging, self-esteem, and meaningfulness tends to support the notion that PA and interpersonal attachment have common characteristics. The results in the study

of Scannell and Gifford are consistent with results in interpersonal attachment research which positions attachment as a predictor of belonging (La Guardia et al., 2000), self-esteem (Kumashiro & Sedikides, 2005; Mikulincer & Shaver, 2007), and meaning (Mikulincer & Shaver, 2005).

3.4.3 Objective 3: How is PA related to QoL?

In our final objective, we review how PA is related to QoL with regards to how the seminal paper of Rollero and De Piccoli (2010) has been dealt with in the selected studies. Earlier in the study, we pointed out that Rollero and De Piccoli positioned the relationship between PA and QoL based on a social support theoretical perspective which saw perceptions of QoL in places of attachment as the outcome of relational factors. They positioned social experiences and meanings in terms of social integration and social actualisation as important relational predictors of people-place bonds based on their findings which suggest correlations between measures of PA and levels of social well-being. This conceptual model seems to be nuanced in the selected studies, highlighting an underlying relational support component as the basis for the association between PA and QoL. The included studies demonstrate that healthy social relations, social interactions, or social support in a place of attachment through friends, family, or social amenities are important determinants explaining the variance in QoL. Table 1 summarises the outcomes of the studies, suggesting PA as a phenomenon that occurs due to the social and physical attributes of relational support in a place.

Rollero and De Piccoli offer how PA affects social well-being, pointing to how attachment satisfaction is directly influenced by social integration and being a member of a community. Tartaglia (2013) linked the quality of social relations in the experience of PA as an important factor promoting QoL in urban environment. This finding was similar to that of Gattino and colleagues (2013) who reasoned that QoL is largely influenced by one's sense

of community, and not by PA in itself. Gattino et al showed how QoL are better for people who live in small towns than for those who live in big cities. PA was associated with QoL dimensions in all the studies, particularly in places where there were a greater sense of community. In other words, the community centeredness of a place, the availability of family, friends, or a significant other, is the magnetic draw that contributes to improvements in QoL.

This way of thinking about the relations between PA and QoL has taught us that people are most likely to have better quality of life if they have strong social and community support in a place of attachment. This same pattern of reasoning in terms of relational factors in PA and QoL research was highlighted in the study done by Marcheschi et al. with individuals with mental illness. Marcheschi and colleagues concluded that the relationship between PA and QoL is enhanced through the effects of social-environmental qualities of a place, afforded by supported housing facilities scheme. This emerged as an important predictor accounting for about 32% QoL variance (Marcheschi et al. 2015).

In asking participants to visualise their own places of attachment in an experimental design, most of the Canadian students in the study of Scannell and Gifford (2016) pointed to significant places in their own lives that had so much to do with priming their feelings of attachment. Scannell and Gifford (2017) further expanded on this definition of PA in their second study, as they uncovered thirteen *ingredients* underlying the psychological benefits of a place of attachment. Among them are "memories, belonging, relaxation, positive emotions, activity support, comfort-security, personal growth, freedom, entertainment, connection to nature, practical benefits, privacy, and aesthetics" (p. 256). These categories of benefits also suggest a social support theoretical perspective in which social contextual 'places' are visualised in terms of promoting QoL and well-being in general. Scannell and Gifford went further to show how these social support systems are activated for enhancing psychological needs satisfaction in their content analysis, suggesting that these supportive resources can take the form of emotional, informational, companionship, or tangible/intangible support.

Interestingly, the community factor in PA and QoL relationship seems to suggest a conceptual overlap and also highlights the determinant of community or social support theory as a component of QoL in terms of its social relationship dimension. This could mean that people's PA would be positively associated with their social relationship QoL, as seen in most of the studies (e.g. Tartaglia, 2013; Rollero and De Piccoli, 2010; Gattino et al. 2013; Ashfar et al. 2017). In addition, this intersection may also mean that PA may more likely be interpreted based on people's perception of their social relationships in a place. Similarly, QoL may also be conceptualised in terms of social-environmental quality, as shown in some of the studies (Marcheschi et al. 2015; Scannell & Gifford, 2016, 2017). A social support theory seems to be the overarching framework here supporting the link between PA and QoL since both constructs are influenced by relational factors.

These findings seem to parallel with Cohen and Lakey's (2000) theoretical perspectives on social support theory, as they describe three conceptual backgrounds to understanding this trajectory of knowledge. First, they identify the stress and coping perspective, proposing that social support contributes to improvements in QoL by helping to regulate the adverse effects of stress in a place. This perspective has been argued in most of the reviewed studies. Secondly, social support theory is conceptualised as a social constructionist perspective, one which identifies social support as a mechanism that directly contributes to promoting QoL, despite the presence of stress in a place. The included studies also shed light on this perspective in relation to the systematic on PA and QoL. Thirdly, the included studies also support a social support theory that conveys a relational social perspective wherein QoL is negotiated based on relationship processes and effects of social, community support as important qualities in a place. These three mechanisms of social support theory are well represented in our systematic review. Hence, our point of departure in this paper is that the relationship between PA and QoL is directly and/or indirectly influenced by a prevailing social support theory.

3.5 Limitations

Our citation search strategy was limited to studies that cited the paper of Rollero and De Piccoli in three selected databases (Google Scholar, Scopus, and Web of Science). The search strategy was employed to guide the selection of studies that cited the original article based on the inclusion and exclusion criteria. Some studies were not included for the review since they did not cite the original article; these studies have been summarized in Table 3. Hence, it is acknowledged that the citation search technique used for conducting this review may have been one of the limitations of this study. However, citation search has been lauded by Wright, Golder, and Rodriguez-Lopez (2014) as a critical approach for conducting systematic reviews since it traces how a particular topic has been dealt with based on an original paper. While the paper might have successfully addressed one of our objective which is to determine how PA is related to QoL based on the study of Rollero and De Piccoli, a complete synthesis on the other two objectives may have not been undertaken. This is because in order "to identify studies that show how PA is related to QoL" and "to determine how PA and QoL have been assessed and applied" a more integrative, less-restrictive data collection strategy could have helped in the selection process so as to generate a comprehensive collection of available studies, even though this approach may have implications for the study.

Future reviews with more comprehensive list of studies on PA and QoL research may provide unique insights that might further inform the models influencing how PA affects QoL. For example, Brehm, Eisenhauer, Krannich (2004) in their study examined dimensions of community attachment and their relationship to well-being in the amenity-rich rural west. Muhajarine, Labonte, Williams, and Randall (2007) have investigated the relationship between place-bond, perception, and QoL. Randell, Kitchen, and Williams (2008) have equally taken a different approach on PA and QoL research to explore how perceptions of QoL in PA stability are influenced by place mobility. Other interesting studies contributing to PA and QoL research (see Atari, Luginaah, & Baxter, 2011; Antonio, Maria, & Fernando,

2013; Brehm, Eisenhauer, & Stedman, 2013; Zhang, van Dijk, Tang, & van den Berg, 2015; Campbell et al., 2015; Laurence, 2015; Firouzmakan & Danashpour, 2015; Ramkissoon, 2016; Billig, Kreitler, Zadernovsky, & Alkalay, 2016; Weziak-Bialowolska, 2016; Lovell, Gray, & Boucher, 2016) may also provide additional insights into the paper objectives, even though they were not included for the systematic review since they did not meet the inclusion and exclusion criteria.

Table 3: Summary of ineligible studies reporting on PA and QoL but excluded based on the inclusion and exclusion criteria

References	Main idea/Titles
Brehm, Eisenhauer, Krannich	Dimensions of community attachment and their relationship to
(2004).	well-being in the amenity-rich rural west
Muhajarine, Labonte,	Person, perception, and place: what matters to health and
Williams, and Randall (2007)	quality of life
Randell, Kitchen, & Williams	Mobility, perceptions of quality of life and neighbourhood
(2008).	stability in saskatoon
Atari, Luginaah, and Baxter	Residents' everyday life experiences of living in a stigmatized
(2011)	community
António, Maria, & Fernando	
(2013)	The relationship between quality of life and place attachment.
Brehm, Eisenhauer, and	
Stedman (2013).	Examining the role of place meaning and place attachment
Zhang, Y., van Dijk, T. Tang,	Green space attachment and health: a comparative study in
J., van den Berg, A.E. (2015).	two urban neighborhoods.
	A social assessment of urban parkland: analyzing park use
Campbell et al. (2015).	and meaning to inform management and resilience planning.

	The long-term effects of job displacement on generalised trust
Laurence, J (2015).	over the adult lifecourse.
Firouzmakan & Danashpour	Promoting quality of Life through increase in place attachment
(2015)	in public places
	Place satisfaction, place attachment and quality of life:
	development of a conceptual framework for island
Ramkissoon (2016)	destinations
Billig, Kreitler, Zadernovsky,	The impact of place attachment and coping on the quality of
& Alkalay, (2016)	life of Jewish and Druze children in Israel
	Quality of life in cities – empirical evidence in comparative
Weziak-Bialowolska (2016)	European perspective
	Place, health, and community attachment: Is community
Lovell, Gray, & Boucher	capacity associated with self-rated health at the individual
(2016).	level?

3.6 Conclusion

Based on the systematic review we conclude that how the paper of Rollero and De Piccoli has been dealt with in the selected studies is not far from what was originally proposed. Selected studies still point to a prevailing social support theory at the centre of the relationship between PA and QoL research, as reasoned by Rollero and De Piccoli. Selected studies support the association between measures of PA and dimensions of QoL; however this relationship was often stronger when controlled by relational and social-physical factors whether in the form of social relations (Ashfer et al. 2017), psychological sense of community (Gattino et al. 2013), supported housing facilities (Marcheschi et al. 2015), social integration and social actualization (Rollero and Piccoli, 2010), social support from family and friends (Tartaglia, 2013), belonging, practical benefits, activity support, comfort security, personal growth, freedom, connection to nature, and aesthetics (Scannell & Gifford, 2017).

In terms of the assessment of PA, we recommend Scannell and Gifford (2016; 2017) who have broadened the definition of PA, integrating the spiritual connection to place, sense of at-homeness, intention to stay, feelings of pride toward place, along with the place identity and place dependence models as important components that better explain PA. Although the WHOQoL and SWS measures have been considered the most used models for assessing QoL in the review, it is also noted that they were mostly used as classification models than as guides for generating hypothesis for conducting PA and QoL research. Hence, the use of population-specific QoL measures, as done in Ashfar et al (2017), Gattino et al. (2013), and Scannell and Gifford (2017), will provide more opportunities for refining and testing available models and provide evidence about how a particular QoL measure could be applied to different populations. Finally, achieving optimal measurement and conceptualisation of PA and QoL still remains challenging due to the fairly complex characteristics in people-place experiences in terms of culture and contextual issues. Future studies with the aim of designing and validating population-specific QoL and PA measures could significantly contribute to expanding this research area, since it has huge implications for public policy, public health, and public space designs, particularly among young adults, students, older adults, and individuals with severe mental illness.

3.7 References

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Chapter 4 Adult Attachment Profiles and Quality of Life Outcomes

Sequel to previous theoretical chapters and literature reviews, this chapter is the first empirical report on the relationship between attachment to Australia, relational spirituality, and quality of life. This profile chapter is exploratory and mostly descriptive in nature as it focuses on the descriptive statistics, subgroup differences, and correlational results. Chapter 4 explores how the attachment profiles of the participants differ based on their demographics and how these attachment profiles correlate with their quality of life outcomes.

Chapter 4

Adult Attachment Profiles and Quality of Life Outcomes

4.1 Chapter summary and relevance to thesis

Using a cross-sectional sample (n=261; Female, 54%) of African residents in New South Wales, the study explored whether measures of adult attachment experiences in terms of experiences in close relationships, people-place bonds, and believer-God relationships may relate to HQoL and if those vary, based on participants' (n=261; Female, 54%) sub-group socio-demographic differences. Results reveal that (a) profiles of attachment experiences in terms of attachment anxiety, attachment avoidance, place attachment, and attachment to God were related to all domains of HQoL, except for (b) the domain of social relationships which was not associated with attachment avoidance, and (c) the general QoL and psychological health domains which showed no correlation with attachment anxiety. Furthermore, (d) avoidant attachment in close relationships was more felt among study participants who were educated, and among those from Southern and Eastern Africa, while (e) attachment to God was more likely to be experienced by participants who are either single, divorced, separated, or widowed. Study findings position attachment as an important resource for negotiating HQoL, especially for the African diaspora in Australia.

4.2 Theoretical and Empirical Background

Attachment experiences have been studied by a variety of scholars for the past couple of decades, although little is known about how this concept is related to the African diaspora. Knowledge of how individuals maintain attachment towards several symbolic objects is vital to the understanding of attachment as an evolutionary perspective that projects the function of the attachment figure or object as that which assures safety and security for the attached individual (Bowlby, 1969/1982; Ainsworth, 1989). According to Cicirelli (1991a, 1991b, 2004), most adults have at least one meaningful attachment figure to which they are emotionally connected and which gives them a sense of felt security and meaning in life. Those attachment experiences have been considered in relation to people's close relationships (e.g., Brennan et al. 1998; Fraley et al. 2011; Moreira et al. 2015), experiences with places (e.g., Altman & Low, 1992; Lewicka, 2010; Raymond et al. 2010; Scannell & Gifford, 2017), and believer-God relationships (e.g., Kirkpatrick, 1998, 1999; Pargament, 1997; Granqvist & Hagekull, 2000; Counted, 2016a, 2016b; Granqvist & Kirkpatrick, 2016; Miner et al. 2017).

Knowledge of the attachment experiences of the African diaspora is paramount, as it shows the role of attachment in relation to migration and forced displacement, implicit bias, identity, and health promotion. Due to the geographical separation from significant others (e.g. mother, father, immediate family etc) who are likely to be in home-countries, there is a possibility that other surrogate attachment objects (e.g., place or God) may become an increasingly valuable source of comfort, hope, and security for African diasporas. For instance, some members of the African diaspora might have left or fled their home-countries due to conflict, violence, and human rights violations. They could have lost their primary attachment figures due to these conflicts and therefore in need of a surrogate attachment in their lives. In addition, due to migration, most members of the African diaspora are geographically separated from their loved ones and primary caregivers (e.g. mother, father, family) in home-countries, thus in need of an object of attachment to turn in their new abodes. A new study (i.e. Mapedzahama and Kwansah-Aidoo, 2017) shows that most Australians are bias towards black African migrants due to race-related stereotypes. This often makes most African migrants to feel alienated from their host community, as they seek for a secure base from which/whom to explore the Australian space; one that might give them a sense of meaning, identity, and belonging in their new abode. Some members of the African diaspora also model their lives and forge identity around their objects of attachment (e.g. place identity, religious identity), making them to build confidence and self-esteem in themselves through their relationships with such objects.

This paper aims to contribute to cross-cultural attachment experiences and identifies the individual demographic differences in attachment experiences of African migrants in terms of their place-bonds, close relationships, and attachment to God, and how these adult attachment experiences are related to outcomes of QoL among the Australian-based African diaspora group.

4.2.1 Attachment experiences in close relationships

Attachment is a behavioural system that is developed during the early years of life with primary caregivers (Bowlby, 1969/1982; Ainsworth, 1989). The caregiver, often in the form of a parent, caretaker, or a family member, serves to provide physical comfort, security, and protection for the infant, and also functions as a secure base from where growth takes place as the infant explores their environment. Several studies (e.g., (Fraley et al. 2000; Fraley et al. 2011; Saypol & Farber, 2010) have compared the *working models* of attachment in the early years of life with that of adult attachment development, suggesting that adults develop mental representations, or attachment working models, of the self and that of close others based on their interpersonal relationship experiences.

Fraley et al. (2011) have proposed a self-report questionnaire for assessing the quality of attachment working models in close relationship experiences that allows participants to focus on a specific relationship to which they are emotionally connected. Fraley et al.'s treatment of adult attachment theory refines the common practice of relying exclusively on global measures of attachment to one that is designed to assess attachment-related avoidance and anxiety in "four kinds of relationships: relationships with mother, father, romantic partners, and friends" (2011, p. 616). Attachment experiences in close relationships show that working models of the attachment behavioural system are also applicable in lifespan attachment processes (Bretherton, 1987; Cicirelli, 1991a, 199b, 2004; Scannell & Gifford, 2014; Granqvist & Kirkpatrick, 2016).

4.2.2 Place attachment experiences

Along with the growing body of research indicating that attachment experiences in close relationships contribute to adult attachment processes, related theories, such as place attachment theory (PA) (Altman & Low, 1992; Raymond, Brown, Weber, 2010; Lewicka, 2011), also suggest the presence of working models of attachment in people's relationship experiences with places. Emotional connection to a meaningful place, conceptualised as PA in environmental psychology, has been compared to interpersonal attachment in terms of the set-goals of such bonds. First, both paradigms of attachment involve maintaining and seeking physical or symbolic proximity to a significant person or place. While an individual develops attachment proximity to their close *others* in interpersonal attachment processes through turning to them (Bowlby, 1969/1982; Ainsworth, 1967), proximity in PA contexts may be experienced through purchasing a home in a particular city to which one is drawn, displaying photos taken in an important place (Ryan & Ogilvie, 2001), visiting a particular place on a regular basis (Kelly & Hosking, 2008), visualising an important place (Scannell & Gifford, 2017), or, refusing to leave a place even when it is under threat (Donovan, Suryanto, & Utami, 2012; Billig, 2006).

Similarly, physical proximity to a close *other* offers a perceived sense of safety and security in interpersonal attachment (Bowlby 1969/1982), in PA the individual perceives a place as a haven of safety to which they can turn to in times of danger (Brown et al. 2003; Lewicka, 2010). Places of attachment often serve as secure bases from which to explore the broader environment (Fried, 2000; Gustafson, 2001) just as, in the context of interpersonal attachment, the security of the working model with an attachment figure can promote individual growth (Feeney & Thrush, 2010).

It follows then that separation distress (Bowlby, 1969, 1973, 1982) may occur not only in relation to losing an attachment figure, but also to losing a place of attachment. PA separation distress may have a significant adverse effect on people who feel they have lost a sense of connection to their places of attachment, resulting in poor psychological outcomes (Marcheschi et al.2015; De Rollero & Piccoli, 2010). Brown and Perkins reason

that the loss of PA through disasters, burglaries, or voluntary relocations can create a stressful period of disruption "followed by a post-disruption phase of coping with lost attachments and creative new ones" (1992, p.279). According to Ng (1998), this same experience can be seen in migration situations where the migrant learns how to adapt in a new place and tries to cope with an unfamiliar culture—the initial stages of place adaptation—which eventually leads to migrant PA.

4.2.3 Attachment to God experiences

Several empirical studies (e.g., Cicirelli, 2004; Granqvist, 2002, 2012; Granqvist et al. 2010; Counted, 2016a, 2016b) have provided evidence that positions the believer-God relationship as an attachment experience. The quality of love experienced in a relationship with God may share the same semblance with that of an interpersonal attachment in that God may be perceived among believers as a haven of safety and a secure base, as nuanced in several sacred texts (e.g., Bible and Koran); as an 'absolutely adequate attachment figure... as a protective and caring parent' (Kaufman, 1981, p67). Granqvist and Kirkpatrick (2016) refer to this as the maturational aspect of adult attachment development, and cognitive capacity, that enable the formation of attachments with abstract and unseen figures.

Attachment to God also involves maintaining proximity to a symbolic divine entity through religious practices, sacred texts, prayer, devotion to a sacred space, and other forms of religious attachment attributions (Williams & Watts, 2014; Ellison et al. 2014; Granqvist & Kirkpatrick, 2016). Cicirelli (2004) presents attachment to God as an aspect of adult attachment development, arguing that when adults are separated from their primary caregivers for a long period of time, a surrogate attachment figure often emerge as part of the working model of attachment. In other words, the adult becomes drawn to a symbolic attachment figure that represents the primary caregiver. The fear of losing attachment with such divine objects or being abandoned by God may also have a negative impact on the

experience of the religious believer, often leading to spiritual struggles (Exline et al 2014), separation anxiety with God (Counted 2016b), and adult religious psychopathology (Counted, 2017).

4.2.4 Attachment and socio-demographic factors

Several studies show that attachment experiences vary, depending on several factors relating to demographic background. These include: gender (i.e. Barry et al 2015); age and education (Lewicka, 2010). Females are perceived to be more attached (Rose et al, 1998), as are older people (Cicirelli, 2004) although some studies suggest that older people have more insecure attachment patterns than younger people (Magai et al, 2000). Married individuals, more than single individuals, have stronger attachments possibly due to having a partner (Collins et al. 2002; Coan et al. 2006).

4.2.5 Attachment experiences and quality of life

QoL is largely derived from the satisfaction of basic attachment needs (Deci & Ryan, 2000; Scannell & Gifford, 2016). Health-related QoL (HQoL) relates to the individual's evaluation of life satisfaction with key psychological, environmental, physical, and relational areas of life which enhance a general sense of well-being. Physical health-related QoL can be described as a state of well-being that is determined based on the functionality of all internal and external body parts, tissues, and organs which enable the individual to be physically fit to perform their daily routines (Anokye et al. 2012). Psychological functioning focuses on the individual's ability to attain their own goals in relation to their mental health, emotional well-being, and behaviour (Limbos et al. 2000). Environmental health relates to how aspects of the natural and built environment may affect an individual's QoL (Meyer & Owen, 2008). The social relationship domain points to the relationship connections and social ties that exist between people, in terms of quality of relationships, social integration, social networks, and social isolation, as important factors influencing the individual's health and QoL (Umberson & Montez, 2010).

Separation distress, following the possible loss of an object of attachment or experiences that threaten the attachment processes with close others (Quinn et al 2009), place Rollero & De Piccoli, 2010, Tartaglia, 2013; Gattino et al, 2013, Scanell & Gifford, 2016; Afshar et al, 2017; Scannell & Gifford, 2017), or a divine entity Idler et al 2009; Currier et al 2015; Canada et al, 2015) may lead to declines in HQoL and attachment-related psychopathology (Kobak et al. 2016). In contrasts, when attachment bonds are intact, they are positively related to attachment security, HQoL, and eudemonic well-being (Homan, 2014).

4.2.6 Research questions

Given that the current research highlights the close link between QoL and the three forms of attachment, the aim of the current study is to explore the relation between those variables in the context of African diaspora experience. This study examined three key questions: (i) levels of adult attachment experiences in terms of place attachment, attachment to God, and close relationships; (ii) if the attachment experience of the African diaspora vary based on socio-demographic factors; and (iii) the relationship between their attachment experiences and HQoL.

4.3 Methods

4.3.1 Participants

The sample consisted of 261 African migrants (54% female and 46% male) from New South Wales, Australia, aged between 16 and 70 years (M = 36.9, SD= 11.7). This number was appropriate based on an a priori analysis performed using G*Power 3 to calculate the optimal effect size for the total sample (Cohen, 1988; Faul et al. 2009). All participants were born in Sub-Saharan Africa, with the majority (70%) having lived in Australia for more than 5 years. Sub-Saharan Africa is the designation "commonly used to indicate all of Africa except northern Africa, with the Sudan included in sub-Saharan Africa" (UN Statistics Division, 2013). The regions of African origin of participants stretch across the length and breadth of

sub-Saharan Africa, with the majority coming from countries in Western (58.4%) and Southern (38.8%) Africa regions, whereas participants from countries in Eastern and Central Africa regions (2.4% and 0.4% respectively) were under-represented in the sample. Most of the participants (81%) had received tertiary education with the remaining (19%) having completed high school. Approximately 62% of participants were married, 32% were single, and 6% were either widowed, divorced, or separated. Geographically, the study population was limited to African migrants residing in New South Wales, Australia, one of the largest state of the fastest growing sub-Saharan Africans populations (37, 735) (Australian Bureau of Statistics, 2016).

4.3.2 Measures and Variables

HQoL domains. HQol was measured using the World Health Organisation Quality of Life - BREF (WHOQoL-BREF) (WHOQOL Group, 1995). The WHOQoL-BREF assessed five HQoL domains: QoL (2 items, $\alpha = .63$), Physical health (7 items, $\alpha = .77$), psychological health (6 items, $\alpha = .76$), social relationships (3 items, $\alpha = .71$), environmental health (8 items, $\alpha = .79$). Each of the items are subjectively scored by the participants, ranging from 1 (not at all) to 5 (completely) on a five-point response scale. The physical health domain includes statements on daily activities, functional capacity, mobility, energy, and fatigue. Psychological health domain assesses subjective experiences such as negative thoughts, self-image, positive attitudes, self-esteem, emotional well-being, learning ability, and memory concentration. The social relationship domain includes questions on social support, personal relationships, and sex life. While the environmental health items cover placerelated issues such as financial resources, safety, health and social services, place of residence, general knowledge of a place, opportunities and mobility in an environment (e.g., Vahedi, 2010). Higher scores suggest better HQoL.

Attachment experiences. Attachment experiences were gauged using items from existing scales for experiences in close relationships (Fraley et al. 2011), place attachment (Jorgensen & Stedman, 2001), and attachment to God (Sim & Loh, 2003).

Experiences in close relationships was measured with nine items from the Relationship Structures (ECR-RS) Questionnaire, originally developed by Fraley et al. (2011). Participants were asked to rate the items with respect to important people in their lives. The items were divided into two subscales, one for assessing global attachment-related avoidance with reverse-coded items such as: "It helps to turn to people in times of need" and "I usually discuss my problems and concerns with others." Three ECR-RS items tap on attachment-related anxiety: "I often worry that other people do not really care for me," "I'm afraid that other people may abandon me," "I worry that others won't care about me as much as I care about them." Items 1, 2, 3, and 4 were reverse coded, and response ratings ranged from 1 = strongly disagree to 7 - strongly agree. In this study, both scales demonstrated strong reliability: attachment anxiety (α =.80); attachment avoidance (α =.77).

Place attachment was measured with the following four adapted items from the Sense of Place Scale (Jorgensen & Stedman, 2001), assessing participants' emotional bond with Australia as a country: "I feel relaxed when I'm in Australia," "I feel happiest when I'm in Australia," "This place is my favorite place to be," and "I really miss Australia when I'm away for too long." Higher scores suggest significant psychological connection and strong emotional attachment to place (Australia). Response scales ranged from 1 - strongly disagree to 5 = strongly agree. The 4-item scale used for measuring place attachment demonstrates strong reliability (α =.81).

Attachment to God was measured with all the sixteen items from the Attachment to God Measure (Sim & Loh, 2003) which gauge individual perception of God as an attachment figure, serving the function of a safe haven (e.g., When I am afraid or anxious, I know that God is there for me), secure base (e.g., My relationship with God gives me the courage to face new challenges), and in terms of developing proximity to God (e.g., I seek to be close to God), and turning to God as a response to separation anxiety (e.g., I cannot bear to think of life without God). Response ratings ranged from 1 = strongly disagree to 6 = strongly agree. The 16-item scale used for this study demonstrated excellent reliability, α .89.

Socio-demographic background factors. The socio-demographic factors for the present study included: length of residence in Australia (1= below 5 years; 2 = above 5 years), region of origin (1=central Africa; 2=eastern Africa; 3=western Africa; 4=southern Africa), gender (1=male; 2=female), relationship status (1=single (not in any relationship); 2=married; 3=divorced/widowed/separated), and level of education (1=high school or less; 2=tertiary education).

4.3.3 Procedure

Between November 2016 to May 2017, cross sectional data were collected from a total sample of 261 African migrants using a snowball sampling technique, an approach preferred for studying migrant and hard-to-reach populations in Australia (Renzaho et al. 2013). Participants attended regular community meetings as religious and cultural groups on weekly basis. The first author toured far and wide within New South Wales to participate in different cultural and religious events and meetings organised by community leaders with whom he was in contact. Upon arrival at these events, the first author was given a few minutes to explain the study to the communities, and they were invited to complete the survey, generally at the end of the meeting. It was explained that the study was looking at the extent to which their attachment to the Australian environment and relationship experiences with God and important people in their lives, helped them negotiate their day-to-day QoL. Over 450 volunteers responded to the initial invitation (collecting copies of the surveys) at the community meetings and events, of which 261 returned completed surveys either on the spot, the following week, or by mail. The study was approved by the Human Research Ethics Committee, Western Sydney University.

4.3.4 Data Analysis

Statistical analyses were conducted using SPSS, version 21.0. Data analysis was done in three stages: (a) descriptive statistics were performed to calculate the percentiles and variable means, (b) the differences in participants' attachment experiences based on

their socio-demographic background factors. These were estimated using ANOVA and t-test, along with post hoc tests, Levene's test, and Dunnett's T3 test, with p values of *< 0.05 and **<0.01 or less considered significant, and, (c) correlation analysis was conducted using the Pearson Product Moment Correlation to explore how participants' attachment profiles relate to their HQoL outcomes. Study results are summarized and presented in Tables 3, 4, and 5.

4.4 Results

4.4.1 Descriptive Analysis

Means and standard deviations for the total study sample (n=261) on avoidant attachment, anxious attachment, place attachment, attachment to God, and HQoL are shown in Table 1. In regards to experiences in close relationships on a 1 to 7 scale, study participants were more avoidantly attached (M=4.46, SD=1.19) than anxiously attached (M=2.95, SD=1.42) to important people in their lives. On a 1 to 6 rating scale, participants showed a strong attachment to God (M=5.69, SD=0.46), and M=3.61 on a scale of 1 to 5 for place attachment. Participants' QoL (M=4.86, SD=0.48) and social relationships quality (M=4.03, SD=0.77) were stronger (on a 1 - 5 scale), compared to their environmental health (M=3.98, SD=0.57), physical health (M=3.77, SD=0.69), and psychological health (M=3.71, SD=0.47).

Table 1: Descriptive Statistics for n=261								
Variable descriptors	м	SD	Minimum	Maximum				
Dependent variables: QoL								
General QoL	4.8644	0.4801	3	5				
psychological health	3.7172	0.4744	2.60	5				
environmental health	3.9818	0.5708	2.25	5				

physical health	3.7740	0.6929	1.40	5
	4 0007	0 7707	4	-
social relationships	4.0297	0.7727	1	5
Independent variables: attachment experiences				
attachment avoidance	4.462	1.192	1	7
attachment anxiety	2.951	1.415	1	7
place attachment	3.608	0.769	1	5
attachment to God	5.691	0.455	3	6
Socio-demographic factors (%)				
Age	36.9	11.7	16	70
Residents less than 5 years (30%) (Ref. = Over 5 years,				
70%)	1.700	0.455	1	2
Central Africa (0.4%) (Ref. = Eastern Africa, 2.4%; Western				
Africa, 58.4%; Southern Africa, 38.8%)	3.356	0.538	1	4
Female (54%) (Ref. = Male, 46%)	1.539	0.498	1	2
Single (32%) (Ref.= Married, 62%;				
Widowed/divorced/separated, 6%)	1.744	0.558	1	3
High school or less (19%) (Ref. = Tertiary education, 81%)	1.825	0.398	1	2

4.4.2 Attachment Experiences and Socio-demographic Factors

To determine whether individual differences in attachment experiences were associated with demographic background factors, one-way ANOVAS were performed for length of residence, region of origin, gender, education background, and relationship status (Table 2). Attachment experiences were also calculated for age differences, but it is not statistically significant for the study sample. Table 2: Comparison of attachment experiences across socio-demographic factors amongAfrican migrants (N=261)

Demographic Sub-groups	Attachment Anxiety		iety	Attachment Avoidance			Place Attachment			Attachment to God		
	M(SD)	f	р	M(SD)	f	р	M(SD)	f	р	M(SD)	f	р
Age	2.92(1.39)	1.080	NS	4.49(1.18)	0.701	NS	3.65(0.75)	0.537	NS	5.70(0.44)	0.630	NS
Length of Residence		1.916	NS		0.071	NS		0.851	NS		2.360	NS
Under 5 years	3.10(1.52)			4.45(1.21)			3.55(0.72)			5.77(0.36)		
Over 5 years	2.84(1.33)			4.50(1.18)			3.65(0.78)			5.67(0.48)		
Region of Origin		0.363	NS		4.443	.005		1.489	NS		2.268	NS
Central Africa	2.67()			2.75()			4.50()			5.81()		
Eastern Africa	2.89(1.52)			4.71(0.91)			3.96(0.51)			5.85(0.16)		
Western Africa	3.03(1.42)			4.28(1.22)			3.65(0.73)			5.64(0.53)		
Southern Africa	2.85(1.34)			4.78(1.07)			3.52(0.81)			5.78(0.31)		
Gender		.975	NS		1.152	NS		3.366	NS		.685	NS
Male	2.85(1.27)			4.55(1.20)			3.70(0.73)			5.67(0.47)		
Female	3.02(1.52)			4.39(1.18)			3.53(0.80)			5.71(0.46)		
Education Background		1.505	NS		5.786	.003		2.634	NS		.975	NS
High school or less	3.19(1.59)			3.94(1.20)			3.78(0.72)			5.62(0.43)		
Tertiary education	2.84(1.34)			4.58(1.17)			3.56(0.78)			5.71(0.47)		
Relationship Status		2.754	NS		1.603	NS		.843	.NS		4.904	.008
Single	2.97(1.30)			4.35(1.17)			3.67(0.73)			5.58(0.62)		
Married	2.87(1.38)			4.57(1.16)			3.60(0.77)			5.76(0.33)		
Separated/widowed/divorced	3.73(1.97)			4.14(1.40)			3.40(0.78)			5.58(0.55)		

NS = Statistically not significant.

It appears that attachment avoidance scores in close relationship experiences are significantly related to the region of origin of the participants, F(3, 246) = 4.443, p < .005. Participants from Southern Africa (M=4.78, SD=1.07) were more likely to be avoidantly attached in their close relationships than those from Eastern Africa (M=4.71, SD=0.91), Western Africa (M=4.28, SD=1.22), and central African migrants (M=2.75). In addition, there was a statistically significant difference between participants' attachment avoidance in close relationships and their education background as determined by one-way ANOVA (F(2,254) =5.786, p < .003). In particular, African migrants with tertiary education backgrounds (M=4.58, SD=1.17) were far more likely to exhibit the avoidant attachment tendency, compared to those with High school education certificates (M=3.94, SD=1.20).

Participants' attachment to God experience was statistically related to their relationship status, F(2, 253) = 4.904, p < .008. For relationship status, African migrants who are single (M=5.58, SD=0.62) and those who are either separated, divorced, or widowed (M=5.58, 0.55) had a stronger attachment to God than married couples (M=5.76, SD=0.33)

4.4.3 Attachment Experiences and Quality of Life

Table 3 summarises results for the Pearson product-moment correlations between measures of attachment and HQoL. All the attachment experiences were significantly correlated (p <. 05) to domains of HQoL. In particular, attachment anxiety in terms of experiences in close relationships was negatively related to environmental health, r = -.305, p<. 000, physical health, r = -.267, p<. 000, and social relationships, r = -.183, p<. 003. Attachment-related avoidance was positively correlated with all domains of HQoL (QoL, r= .137; psychological health, r= .147; environmental health, r= .183; physical health, r= .151), except for the correlation with social relationships which was only .003, suggesting, as expected, that individuals with avoidant attachment are the least interested in social relationships.

In addition, both scales of place attachment and attachment to God were also significantly related to all domains of HQoL respectively: QoL (r = .157, p < .011; r = .399, p < .000), psychological health (r = .278, p < .000; r = .207, p < .001), physical health (r = .353, p < .000)

.000; r = .165, p< .008), environmental health (r = .281, p< .000; r = .239, p< .000), and social relationships (r = .196, p< .001; r = .281, p< .000).

Table 3 Correlations coefficients (Pearson's r) of attachment experiences with HQoL for total group (n=261)

Variables	Attachment Anxiety		Attachment	Avoidance	Place Att	achment	Attachment to God		
	r	p	r	p	r	p	r	p	
General QoL	048	NS	.137*	.027	.157*	.011	.399**	.000	
Psychological Health	101	NS	.147*	.018	.278**	.000	.207**	.001	
Environmental Health	305**	.000	.183**	.003	.281**	.000	.239**	.000	
Physical Health	267**	.000	.151*	.015	.353**	.000	.165**	.008	
Social Relationships	183**	.003	.098	NS	.196**	.001	.281**	.000	
NS = Not statistically sign	ificant.								
*. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).									

4.5 Discussion

The purpose of this study was to examine the experience of African migrants (in a multicultural society like Australia) in terms of their attachment and quality of life, and how such attachment is related to socio-demographic factors. Analysis of cross-sectional data from a sample of 261 participants revealed meaningful correlations between measures of attachment experiences and HQoL outcomes. Study data also show the statistically significant differences on the experience of attachment based on participants' region of origin, education background, and relationship status.

There was a statistically significant difference in the way participants' region of origin correlated with their avoidant attachment experience. Similar results have been reported in other studies (e.g., Heleniak, 2009; Anton & Lawrence, 2014) with researchers pointing to the significant role of place of residence and region of origin as correlates of attachment expectations of persons migrating out of the Russian North (Heleniak, 2009, p.31), or those living in rural and urban areas in south-west Western Australia (Anton & Lawrence, 2014). The question then is how to interpret this result in light of previous studies, as our data showed migrants from Southern and Eastern Africa having a slightly higher avoidant attachment tendency than those from other regions. One speculative possibility could be that members of the Southern and Eastern African diaspora in Australia are more self-reliant and independent than other African groups in terms of depending on other people. They could be avoidantly attached due to several reasons. For example, Eastern Africans may have been avoidantly attached in their human relationships as a result of the effects of economic and political conflicts in their home countries (e.g. South Sudan, Eritrea, Somalia) which may have affected the way they relate with people in general in terms of their avoidant attachment (Salas-Wright et al. 2014). Dommisse (1986) has attributed the avoidant tendency to the effects of Apartheid in Southern Africa. These negative experiences may have led to distortions and alienations in their personality development in terms of being independent of other people (Dommisse, 1986). Heleniak (2009) has also linked such avoidant outcome to weak sense of community and attachment to place.

Our findings also revealed the statistically significant mean difference among avoidantly attached African migrants who are well-educated with university degrees and those that are not. This finding shows that educated migrants are more avoidantly attached than those with high school education or less. This corroborates similar reports from other studies on the role of education in determining attachment experiences (e.g., Counted & Mostapha, 2017; Moghadam et al. 2016), which confirm a classic modernization theory that predicts that individuals with a higher education background are more likely to be

independent, avoidantly attached, and more critical in their thinking (Maliepaard et al. 2010; Vogt, 1997; Jackman & Muha, 1984).

In addition, relationship status was observed as a statistically significant factor in the attachment to God experiences of African migrants in Australia. Their attachment to God across the three domains of relationship status shows that married migrants were more securely attached to God than those who are single and not in any relationship. Overall, the correlation between attachment and relationship status says much about the role of spiritual attachment in African diaspora communities.

Study findings also show that participants' attachment experiences were associated with HQoL outcomes. Insecure-avoidant attachment was positively related to all outcomes of HQoL, except for social relationships. However, it is interesting to find our study data demonstrating that higher scores of avoidant attachment was related to better HQoL in terms of psychological health, environmental health, and physical health, even though the correlation coefficients were quite low (see Table 3). Sockalingam et al. (2011) found similar results in bariatric surgery candidates. A possible explanation may be the role played by emotional regulation strategies in coping with attachment insecurities in experiences in close relationships (Brumariu, 2015). Pascuzzo et al. (2015) found that emotion-focused strategies mediated the association between attachment insecurity and different psychological states in adults. This suggests that avoidantly attached migrants may adopt a self-reliant disposition and independent of others as a coping strategy to remove or reduce the cause of a potential stressor or negative emotions associated with "unreliable" relationships (e.g., Orlova & Gruzevskis, 2014; Compas et al., 2001; Ayers et al., 1996). Furthermore, attachment anxiety was negatively related to environmental health, physical health, and social relationships. This may suggest that lower levels of anxiety are likely to correlate with higher levels of HQoL.

In addition, the results of the current study indicate that higher scores of place attachment, having a positive emotional bond to Australia as a place, were related to better HQoL. This corroborates previous findings in environmental psychology research on place

attachment (e.g., De Rollero & Piccoli, 2010; Gattino et al. 2013; Tartaglia, 2013; Scannell & Gifford, 2016, 2017), suggesting that changes in place-bonds are related to changes in wellbeing. Gattino et al. (2013) describe this place attachment attribute as being similar to living in a small town and having a greater sense of community. Marcheschi et al. (2015) saw this association as a function of several predictors, particularly experiences that enhance the physical and social qualities of the environment, which may include, but is not limited to, building supported housing facilities and providing adequate resources and opportunities for minority groups. Marcheschi et al. found that the social-environmental quality of place attachment promoted quality of life. In another study by Tartaglia (2013), improvements in quality of life were linked to perceived social support from family and friends, and through place attachment. These studies, along with our findings, conceptualise place attachment as an important relational correlate of quality of life, one that is often experienced due to the effects of strong social and community support in a place. This finding highlights an underlying relational support component as the basis for the correlation between place attachment and HQoL, as well-documented in social-support theory (e.g. Rholes et al. 1998).

Based on the study results, attachment to God and general QoL had the strongest correlation (*r* = .40). This finding is consistent with other studies in psychology of religion and health research (e.g., Saffari et al. 2013; Currier et al. 2015; Canada et al. 2015; Krause et al. 2015). The ability to regulate emotional states due to the internal working model of attachment to God may be the very key that unfolds a spiritual coping model for negotiating HQoL at a subjective level (Exline et al. 2014). The activation of a spiritual coping model (e.g., Nolan, 2012) may have helped the participants to deal with stressful life situations, socio-cultural inequities, and emotional issues based on their connection to what is transcendent. This study is highly relevant as generally most African migrants face issues of alienation and isolation, and are in need of meaningful relationships in their new abodes (Mapedzehama & Kwansah-Aidoo, 2017). African migrants are likely to seek attachment to God in order to build resilience amid migration and economic challenges.

A number of study limitations should be acknowledged. These include: the use of self-report measures could have been enhanced with a structured interview to better understand the relationship between specific attachment experiences and HQoL outcomes; a cross-sectional study design prohibits causal inferences; a narrow sample distribution within sub-group data limits the statistical results; the study sample included African migrants from only one Australian state and therefore may not be representative of a broader migrant population. Notwithstanding these limitations, this study adds to the understanding of a relationship between attachment and HQoL in a specific migrant population residing in Australia. Its key finding highlights differences in the attachment and HQoL experience of migrants from Sub-Saharan Africa based on their respective geographical regions. Further studies could look at how countries in each specific region experience attachment in host countries and the impact this has on their quality of life.

4.6 Conclusion

In summary, this study suggests that HQoL may be linked to the centrality of relationships with objects of attachment (e.g. place, God, or close others) within African diaspora communities. Anxiously attached participants experienced poor HQoL, compared to avoidantly attached migrants who had better outcomes of HQoL. However, place attachment and attachment to God were meaningful, healthy experiences for the participants, in that they are strong correlates of HQoL. We argue for a greater consideration of the attachment of migrant groups when discussing issues related to their HQoL. Future studies are needed to extend this research in other migrant populations, examine the interactive nature of those three attachment experiences and to what degree they individually or collectively predict HqoL.

4.7 References

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Chapter 5 Sense of Place and Quality of Life Outcomes

This chapter is an attempt to investigate the association between place attitudes and quality of life in a sample of 261 African residents in a multicultural Australian society using bivariate and multivariate analysis. While place is conceptualised as an object of attachment in this chapter and positioned as a multidimensional construct, attention was mostly focused on how place is related to outcomes of quality of life including physical health, environmental health, psychological health, and social relationship quality.

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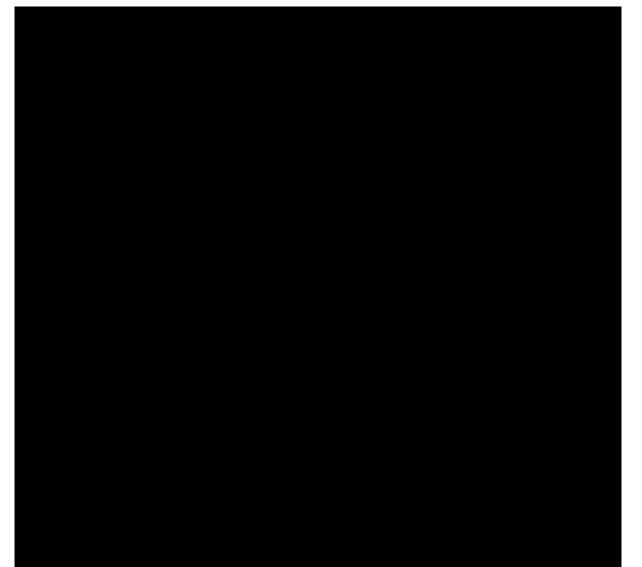
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Sense of place attitudes and quality of life outcomes among African residents in a multicultural Australian society

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Chapter 6 Educational Achievement, Attachment to God (Relational Spirituality), and Quality of Life

This chapter helps the reader to gain insight into the role of attachment to God as a moderator on the link between educational achievement and quality of life; thus, helping the reader to understand the complex relationship between relational spirituality and health outcomes outside the context of place. The chapter suggests an indirect link between educational achievement and quality of life through an attachment-based model of relational spirituality.

Chapter 6

Educational Achievement, Attachment to God (Relational Spirituality), and Quality of Life

6.1 Chapter summary and relevance to thesis

This study draws broadly on insights from adult attachment theory to investigate the links between educational achievement (EA), attachment to God (AG), and health-related quality of life (HQoL) outcomes in a cross-sectional sample of Australian-based African Christians (N=261; mean age = 36.9; 54% Female). Participants completed measures of AG, World Health Organisation Quality of Life Scale (WHOQoL-BREF), and demographic variables. Correlational results reveal that AG was positively associated with all outcomes of HQoL while EA was unrelated with the moderator AG. Results of the hierarchical moderated regression analyses indicate the moderating effect of attachment to God in the link between EA and quality of life—accounting for approximately 25% variance, thus suggesting that greater educational achievement is associated with greater quality of life when there is more secure attachment to God. A sense of spirituality may have a potential to enhance quality of life despite one's EA. Study limitations and implications are carefully discussed.

6.2 Introduction

This study examines how educational achievement (EA) is related to health-related quality of life (HQoL) based on the individual differences in attachment to God. This is partly because a sense of spirituality, or a felt relational security with the sacred, may well be helpful in maintaining HQoL as one climbs the educational ladder. EA is encouraged and desired by individuals base on the premise of greater life opportunities and better HQoL, through knowledge and access to health services and informed decision making. EA can also be operationalised as an aspect of objective QoL outcome since achieving educational

excellence may positively wellbeing (Hahn & Truman, 2015). However, EA is also associated with negative HQoL such as anxiety and depression (e.g., Elias, Ping, & Abdullah, 2011; Penny, Miedema, and Mazmanian, 2015). The reasons for that include the exposure to critical thinking and risk factors associated with psychological over-excitabilities (corporeal sensations during interactions) and liberal worldviews (Karpinskia, Kolb, Tetreault, and Borowski, 2018). Several other literatures have shown a positive relationship between anxiety and EA, IQ, and learning ability, thus positioning EA as a negative correlate of psychological well-being (e.g. Coplan et al. 2011; Karpinski et al. 2018). According to Turashvili and Japaridze (2012), this is partly due to the effects of life stressors and the increasingly unsettling political climate, which reflect on the performance of academic achievers and impact their emotional stability and HQoL.

It is proposed that the health benefits of EA may be influenced by the core sense of oneself in the world, as identified through a significant attachment which starts with that developed with the primary carer and later supplemented or replaced by other attachments, including that of an attachment to God (AG). Educated individuals may seek security and comfort in an object of attachment in order to resuscitate their sense of self and HQoL amid a difficult situation, in such a way that the surrogate attachment plays a moderating role between their EA and level of HQoL. According to adult attachment theory, proximity to an object of attachment who serves as a safe haven in times of crisis and secure base for individual growth, promotes psychological and health-related adjustments (Bowlby, 1969, 1982; Ainsworth, 1989; Kirkpatrick, 2005). Studies point to evidence of the representation of God as a symbolic attachment figure in most monotheistic religions (e.g. Miner et al. 2017; Ellison et al. 2014; Bradshaw, Ellison, Marcum, 2010), and among people of different races (e.g., Counted & Moustafa, 2017; Counted, 2016a, 2016b; Wei et al. 2012; Schaap-Jonker et al. 2008), and classes (e.g., Cicirelli, 2004; Kent, Bradshaw, & Uecker, 2017). Attachment processes can mature (Granqvist & Kirkpatrick, 2016) and continue into adult life, as the attached individual seeks to maintain proximity with God who affords the functions of a divine attachment figure (Cicirelli, 2004; Counted, 2016b; Magai & Consedine, 2004). The

aforementioned studies stress the existence of God as an attachment figure among religious believers; and whether or not such relational experience exists is a philosophical question and not the concern of psychology (Cicirelli, 2004).

Based on the theory of lifespan attachment development (e.g. Cicerelli, 1991a, 1991b, 2004), we propose that the believer-God relationship is an aspect of attachment development that moderates the relationship between EA and HQoL in adulthood. If the believer-God relationship serves the same psychological functions as the parent-child relationship, then presumably it is expected that individuals with secure AG will show stronger outcomes of HQoL. Secure AG is an aspect of attachment-religion experience where the believer is confident in the availability of God as their attachment figure, compared to the insecure AG where there is a lack of confidence in God's sensitivity to emotionally-attuned communication. The predictive effect of secure AG on HQoL outcome is expected regardless of the individual's EA due to the possible moderating role of AG.

AG is equally important for people of any level of education due to its state-based or experiential representation as a felt relational security compared to its trait-based operationalisation in terms of the internal working models—the cognitive framework established during a previous relationship from which the individual explores future relationships. It is therefore reasoned that AG may be relevant for the African Christian diaspora in Western societies separated geographically from their loved ones and homecountries, as they negotiate identity and HQoL in new abodes. The present study investigates this prospect in a sample of African Christian diaspora in New South Wales, Australia, by asking the relationship between EA and HQoL and the extent to which this relationship is moderated by the presence of AG.

6.2.1 Educational Achievement and Quality of Life

Penny, Miedema, and Mazmanian (2015) tested the relationship between health outcomes and educational achievement (EA) of intelligence levels in patients with anxiety disorders, including generalized anxiety disorder, social anxiety disorder, and depression.

Their results show that verbal intelligence is related to depression and generalized anxiety disorder symptoms. While Penny et al. (2015) argue that anxiety is highly related to increased intelligence, it is also possible that anxiety is related to higher EA. Higher EA and increased intelligence equip the individual with many choices, thus perhaps lead to anxiety and poor QoL when making a decision. In another study, it was found that patients with anxiety disorders and poor psychological health have higher IQ and EA than healthy control participants (Coplan et al. 2006). In a more recent study, Karpinskia et al. (2018) examined the relationship between EA in intelligence levels and neuropsychological disorders, showing those with high EA had higher risk for psychological disorders and physiological diseases. In this study, Karpinskia et al. (2018) recruited more than 130 Mensa individuals. The study reported that poor psychological functioning is much higher (almost double) in the Mensa individuals than in the general populations. One other study conducted with students reported that stress rates are much higher among students with higher EA and academic progress than other students (Elias, Ping, & Abdullah, 2011). Specifically, using a correlational analysis, they found that the Grade Point Average (GPA) scores of the undergraduate students were related to stress levels and poor QoL.

In contrary, philosophers, such as Rousseau (1762), have argued for the satisfaction that comes with educational pursuit. According to him, the educational settings make educated individuals more creative, socially competent, and imaginative, thus empowering them to cope with life stressors and as a result have better quality of life. His views are also in agreement with more recent social sectional theory (Miech et al. 1999), arguing that low educational attainment will prevent some individuals from achieving social mobility and thus lead to stress and poor QoL. While this can be true in certain contexts, this is not always the case. This view on EA and QoL has been discredited by recent scientific studies, showing a negative correlation between both constructs, especially among minority groups (e.g. black men, white women) (Glenn & Weaver, 1981). This relationship is interlaced in a multiplicity of ways, nonetheless, since it is not clear how EA is related to quality of life.

6.2.2 Attachment to God and Quality of Life

When attachment figures are perceived as safe, caring, protective, and available, the resultant attachment model is secure, positive, and healthy emotions that promote QoL, eudaemonic well-being (originally used by Aristotle to refer to a sense of meaning and self-realization) and confidence in the attachment figure (Homan, 2014). Contrary to the outcomes of positive and stable interactions in close relationships, inconsistent interactions with unavailable and insensitive attachment figures render the individual more susceptible to poor QoL. This may be due to the lack of confidence in such relationships, which internalises the negative view of self as unworthy and perception of others as unreliable.

A growing number of studies have linked AG to better QoL (Wood et al. 2010; Exline & Martin, 2005). Religious believers with secure AG have reported reduced loneliness, distress, symptoms of anxiety-related disorders (Bradshaw, et al. 2010; Ellison et al. 2014), increased psychological well-being and better mental health outcomes (Kirkpatrick, 2005; Kent et al. 2017; Bradshaw & Kent, 2017). University students who felt loved by God (i.e. Homan & Boyatzis 2010), show that their AG was related to reduced levels of the risk of eating disorders, thus improving their psychological and physical health. Koenig et al. (2001) also found AG related to positive outcomes in physical health while others have reported AG to be a resource for coping with life's stressors and therefore predictive of positive emotional outcomes (Pargament, 2007; Pargament, Ano, & Wacholtz, 2005). Similarly, Hernandez, Eaton, Fairlie, Chun, and Spirito (2010) found that university students utilized their AG relationship as a constructive coping style that helped in having less alcohol consumption. Several studies have also identified the insecure AG experience, involving anxiety with and avoidance of God, to be a source of conflict and spiritual struggles and predictive of negative QoL (Counted, 2017; Benson & Spilka, 1973; Pargament et al. 2000). These studies suggest that AG experience may be related to QoL, with a more positive outcomes when the AG is secure.

6.2.3 Educational Achievement, Religious Attachment, and Quality of Life

The effect of educational achievement (EA) on quality of life (QoL) based on the individual differences in attachment-religion processes requires further explanation. Studies from the secularization thesis and classic modernization theory predict that people with a higher education may be less religious or less likely to be drawn to God, as they progress through the educational ladder and develop a more critical and liberal worldview (e.g., Jackman and Muha, 1984; Vogt, 1997; Bruce 1999; Maliepaard, Lubbers, & Gijsberts, 2010; Norris & Inglehart, 2004). This is a contested view as other studies have shown evidence that supports the notion that attaining EA has little influence on religious values (e.g., Stark, Iannaccone, Finke, 1996; Maliepaard and Lubbers, 2013). It is also possible that studies which promote less religiosity as the outcome of higher education might have come to such conclusion based on how religion was conceptualised and measured in those studies. Due to the strong focus on categorical groups defined by religious affiliation within the secularization thesis, hardly any attention has been paid to the possible effects of experiential religion in terms of the representation of God as a symbolic attachment figure. The use of categorical variables to measure religious aspects may have contributed to the conclusions in the secularization thesis, which considers above-average EA to be associated with lower levels of religious participation and membership (e.g., Need & de Graaf 1996; Phalet, Gijsberts, & Hagendoorn, 2008; van Tubergen 2007). Thus, secure or insecure AG may help explain the conflicting results in the field.

Several studies have also shown a link between EA and QoL, suggesting that individuals with high IQ or with above-average education background are less likely to have better QoL due to the emotional and financial distress associated with EA (Coplan et al. 2011). Karpinskia et al. (2018) considered EA and intelligence as risk factors associated with psychological overexcitabilities. These disorders come as a result of the intense emotional responses of educated individuals to their environment, thus leading to intense worry and rumination (Penney, Miedema, & Mazmanian, 2015). Depressive disorders and poor mental health outcomes are related to ruminative cognitive styles (Nolen-Hoeksema, 2000),

resulting to an increased cognitive capacity (hpyer brain) and increased psychological and physiological responses (hyper body) (Karpinskia et al. 2018). This has been welldocumented in the hyper brain/hyper body theory of Karpinskia and colleagues. On the other hand, Turashvili and Japaridze (2012) have argued that the association between EA and QoL could be attributed to the effects of environmental stressors and unexpected educational reforms that intensify feelings of insecurity. Therefore, individuals who are exposed to such stressors may turn to an external resource for comfort and to help in times of perceived danger within their environment. This resource could also come in the form of a relationship with the object of attachment (e.g. Divine entity) who regulates the negative effects of such educational reforms and hyper brain/hyper body processes, which may be triggering poor health outcomes. Even though it is not clear how EA and AG may interact in relation to HQoL, this study seeks to examine that and explore the extent to which AG could moderate the relationship between EA and HQoL.

6.2.4 Attachment to God, Quality of Life, and the African Religious Diaspora

The effects of an education-occupation mismatch may lower the expectations of educated religious migrants in a host country (Villarreal, 2016), therefore making them turn to God as a source of comfort and hope. However, the effects of such relationship will depend on the individual attachment differences when considering the association between educational achievement (EA) and quality of life (QoL) among the African diaspora population. First, Cicirelli (2004) suggests that AG may be developed in adults due to geographical separation from significant others (e.g. mother, father, or immediate family). Second, living in a foreign land such as Australia as an African migrant has been linked to a range of socio-cultural inequities and feelings of loneliness, depression, and displacement due to the symbolic and material burden of identity and other socio-demographic factors (e.g., Mapedzahama. & Kwansah-Aidoo, 2017). Thirdly, in a new setting the EA of African migrants are often not recognised so they can't draw on them to secure optimal work opportunities. This migrant-job mismatch frustrates the potential benefits EA can offer in

diaspora contexts. Thus, God may become an increasingly valuable source of hope and security for negotiating QoL and identity, and serving as a symbolic figure during moments of depression, low self-esteem, and loneliness, among other negative emotions that are associated to EA among the African diaspora population.

Several other factors may be pertinent to the attachment-religion thesis of African religious diasporas as a predictor of health-related QoL outcomes involving psychological health, environmental health, physical health, and social relationship quality. One such factor is their length of residence in another country or years of separation from family members and friends in Africa (especially among Africans from war-torn regions who are living in other countries as refugees), which may account for their representation of God as an attachment figure. Studies suggest that gender is related to the mental health outcomes of AG among individuals of African background (Counted & Moustafa, 2017). In addition, the relationship status of African religious diasporas may also account for their AG, especially among those who are not in a relationship due to divorce, separation, or death of a partner (Beck & McDonald, 2004). It is also possible that socio-demographic variables such as age, educational level, gender, relationship status, length of residence, and region of origin may serve as important confounding factors influencing the effects of AG and QoL among the African religious diasporas, even though little to no studies have directly investigated this phenomenon.

Though conceptualised within the adult attachment theoretical context, the purpose of this study is to examine the extent to which EA influences health-related QoL outcomes, and the role of secure AG in this relationship. This is because the potential relationship between EA and HQoL may be disrupted in this group (African diaspora) due to geographical relocation and the mismatch between migrants' skills, qualifications, and job opportunities. African migrants with religious background may subsequently rely more on their AG than their EA for HQoL. We hypothesized that relationships would be observed among variables of EA, secure AG, and HQoL, thus anticipating positive correlations between EA and AG, AG and QoL, and EA and QoL. We further estimate that the

relationship between EA and HQoL will be contingent on secure AG, and that secure AG would moderate the association between EA and HQoL, due to the role played by a divine attachment figure as a secure base from whom to explore life's challenges and a safe haven to turn to in times of difficulty.

6.3 Methods

6.3.1 Participants and Procedure

This study, approved by the Human Research Ethics Committee of Western Sydney University, was conducted between November 2016 and May 2017. Of the potential 450 participants, 261 participated in the study. Respondents were African Christian residents in New South Wales between the ages of 16 to 70, with an average mean of 37 years old (SD=11.7). 54% of the respondents are female, 81% of the total sample had a university education and 70% of the respondents have been residents in Australia for more than five years. Respondents identified their regions of origin as sub-Saharan Africa, with more than half (58.8%) of the sample from West Africa and others from southern Africa, eastern Africa, and central Africa (38.8%, 2.4%, and 0.4% respectively). Approximately 62% of the sample is married, 32% single, and the remaining 6% either divorced, separated, or widowed.

African migrants with a Christian religious background were selected for this study due to the growing population of this community in New South Wales, which hosts the second largest number of Africans (37, 735) in Australia (after Victoria), according to a recent report by the Australian Bureau of Statistics (2016). 261 respondents were recruited from several church communities in New South Wales using a snowball sampling technique. Respondents congregated for weekly church services and bible study sessions targeted at encouraging members of the community through preaching and teaching the bible in order to keep them spiritually *healthy* and *sound* in their relationship with God. These church communities, often referred to as African transnational networks (Knibbe, 2011; Okyerefo, 2014), are led by leaders who are responsible for the spiritual well-being of those in their pastoral care. After touring New South Wales, the first author attended church services and

events, and made contact with the church community leaders, briefing them about the study. Upon their agreement to participate in the study, the leaders then informed members of their respective churches about the study, and encouraged them to participate. Interested church communities organised a date and a place (usually the church address) for potential participants to complete the questionnaires and invited the first author to introduce the study. Most of the participants completed the questionnaires at that time while others returned them to the first author the following week, or by mail.

6.3.2 Measures

6.3.2.1 Dependent Variables

Health-related quality of life was measured using the 26-item World Health Organisation QoL - BREF (The WHOQOL Group, 1998). This measure assessed respondents' physical health (α =.77), psychological functioning (α =.76), social relationships (α =.71), environmental health (α =.79), and general QoL (α = .63). Items of physical health (e.g., How satisfied are you with your ability to perform your daily living activities?) assess the functionality of internal and external body parts, tissues, and organs that enable respondents to be physically fit to perform their daily routines (Anokye et al. 2012). Measure of psychological functioning (e.g., To what extent do you feel your life to be meaningful?) taps on respondents' psychological well-being such as their positive emotions, self-image, self-esteem, absence of sadness, concentration and learning ability (Limbos et al. 2000). Scale of social relationship state (e.g., How satisfied are you with the support you get from your friends?) measures the quality of interactions with friends, family, and the community, and the extent to which respondents feel loved and supported within their concentric circle. Environmental health (e.g., How satisfied are you with the conditions of your living place?) has much to do with the extent to which the physical environment contributes to QoL (Meyer & Owen, 2008). Measures demonstrated satisfactory Cronbach alpha levels and were

scored on a five-point rating scale ranging from 1 (not at all) to 5 (completely). Higher scores in each of the domains suggest better QoL, whereas lower scores reflect poor QoL.

6.3.2.2 Independent Variable

Educational achievement of the participants was measured as a categorical variable by participants' responses to the question: "Identify your educational background?" Responses were categorised as: 1=high school or less; 2=tertiary education. Individuals with tertiary background were considered high educational achievers compared to those with high school or no educational background.

6.3.2.3 Moderator Variable

Secure attachment to God moderator items were adapted by integrating the four existing scales of the 16-item *Attachment to God Measure* (Sim & Loh, 2003), which assesses the state-based representation of God as an attachment figure in terms of four attachment language criteria: proximity to God (e.g., I feel the need to stay close to God), perceiving God as a safe haven (e.g., When I face difficulties, I turn to God), and secure base (e.g., My relationship with God provides me the confidence to explore things around me), and considering God as a response to separation anxiety (e.g., I cannot bear to think of life without God). These items measure AG and were scored on a 1 (strongly disagree) to 6 (strongly agree) rating scale. Higher scores of the AG scale suggest the strength of the respondents' representation of God as an attachment figure and the extent to which participants are securely attached to God as an object of attachment while lower scores suggest that they are insecurely attached. The scale demonstrated satisfactory levels of internal consistency (α .89).

6.3.2.4 Socio-demographic variables/covariates

Non-identifiable demographic background questions were administered regarding age, length of residence in Australia, region of origin in Africa, gender, and relationship status. These variables were used as study covariates.

6.3.3 Data Analysis

As shown in Table 1, study scales met acceptable reliability coefficient (of α =.63 to 89). Statistical analyses were conducted in four steps using SPSS version 24. First, descriptive statistics were calculated and presented in Table 1 with the percentiles and variable means (see Table 1). Secondly, bivariate correlations were estimated using the Pearson correlation coefficient (see Table 2). Thirdly, multivariate analyses were computed using the multiple regression analysis controlling for socio-demographic background factors to estimate the extent of the bivariate correlations in Table 2 (see Table 3). Fourthly, using a hierarchical moderated regression analysis, we examined the extent to which EA is related to HQoL outcomes based on AG. Before calculating for statistical interactions, items were mean-centered to minimize the effects of multicollinearity with cross-product terms (Aiken & West, 1991). Study covariates with a p-value < .10 were entered in the adjusted regression models and significance was set at p< .05.

6.4 Results

6.4.1 Descriptive Analysis

A total of 261 African Christians in New South Wales participated in this crosssectional study. The mean age of respondents was 36.9 + 11.7 years. As shown in Table 1, data from respondents indicate strong levels of AG (M=5.69, SD= 0.46) on 1 to 6 rating scale. According to the mean scores presented in Table 1, the outcomes of health-related quality of life (HQoL) were relatively strong. Environmental health, psychological health, physical health, and social relationship QoL had means of 3.98, 3.72, 3.77, and 4.03 (on 1 -5 scale), respectively.

Table 1: Descriptive Statistics						
Variable descriptors	α	М	SD	Minimu m	Maximu m	
Dependent Variables: Quality of Life Scales						
General QoL (2 items)	.63	4.86	0.48	3	5	
Environmental Health (8 items)	.79	3.98	0.57	2.25	5	
Psychological Health (6 items)	.76	3.72	0.47	2.60	5	
Physical Health (7 items)	.77	3.77	0.69	1.40	5	
Social Relationship Quality (3 items)	.71	4.03	0.77	1	5	
Independent Variable: EA						
High school or less (19%) (Ref. = Tertiary education, 81%)	-	1.83	0.40	1	2	
Moderator: AG						
AG	.89	5.69	0.46	3.06	6	

6.4.2 Bivariate Correlations

Correlation coefficients were calculated to estimate bivariate correlations among the three variables of interest: educational achievement, attachment to God, and HQoL outcomes. These results are presented in Table 2. All HQoL measures were positively correlated with each other, with environmental health and physical health showing a substantially stronger relationship. AG was unrelated with the independent variable EA but positively related to general QoL, environmental health, psychological health, social relationship HQoL.

Table 2. Intercorrelations among measures of educational achievement, attachment to

God, and quality of life outcomes

Measures	Education al Achievem ent	Secure attachm ent to God	General QoL	Environ mental Health QoL	Psychol ogical Health QoL	Physica I Health QoL	Social Relatio nships QoL
Educational Achievement	-	.067	.021	.059	.066	.086	.011
Secure attachment to God		-	.399***	.239***	.207***	.165**	.281***
General QoL			-	.458***	.389***	.374***	.300***
Environment al Health QoL				-	.587***	.713***	.642***
Psychologica I Health QoL					-	.544***	.495***
Physical Health QoL						-	.505***
Social Relationships QoL							-

Note: N = 261; *p < .05, **p < .01, ***p < .001.

6.4.3 Multivariate Analysis

The results of the multivariate analysis are presented in Table 3. In the multivariate analysis adjusting for age, gender, relationship status, length of residence, and region of origin, there was no association between EA and HQoL outcomes. However, AG was positively associated with outcomes of HQoL and this relationship was retained even after adjusting for control variables such as age, relationship status, length of residence, and

region of origin. This suggests that AG is a predictor of HQoL among Australian-based African Christians regardless of whether socio-demographic factors are held constant.

As shown in Table 3, ad hoc results show that outcomes of HQoL are positively associated with the age of the participants, length of stay (among participants who have been Australian residents for over five years than those below five year) and related to the relationship status of married African residents compared to their divorced/separated/widowed counterparts.

Variables	Environme ntal Health	Psychologi cal Functionin g	Physical Health	Social Relation ships	General QoL
	(95% CI)	(95% CI)	(95% CI)	(95% CI)	(95% CI)
Age	007 (014 to .001)†	001 (007 to .005)	010 (020 to001)**	009 (019 to .001)†	002 (009 to .005)
Gender					
Male	Ref	Ref	Ref	Ref	Ref
Female	.033 (106 to .172)	068 (184 to .048)	103 (277 to .072)	001 (189 to .186)	.003 (116 to .123)
Relationship Status					
Divorced/ Widowed/ Separated	Ref	Ref	Ref	Ref	Ref
Single	.366 (.082 to .650)**	.177 (059 to .414)	.078 (320 to .476)	.153 (274 to .580)	.148 (141 to .438)
Married	.372 (.103 to .641)**	.301 (.074 to .529)**	.135 (213 to .483)	.566 (.193 to .939)***	.182 (071 to .435)
Length of Residence					
Below 5 Years	Ref	Ref	Ref	Ref	Ref

Table 3: Summary of the unstandardized estimates (95% confidence interval in
parentheses) from the regression of study variables

Above 5 Years	.159 (.009 to	.005 (120 to	.260 (.062 to	.117 (095 to	.087 (057 to
	.309)**	.130)	.459)**	.330)	.231)
Region of origin					
Central Africa	Ref	Ref	Ref	Ref	Ref
Eastern Africa	287 (842	.370 (093 to	033 (783	482 (-1.287	.004 (542 to
	to .268)	.834)	to .717)	to .323)	.550)
Western Africa	055 (391	.174 (107 to	212 (679	369 (869 to	187 (526 to
	to .281)	.454)	to .254)	.131)	.153)
Southern	.091 (255	.158 (131 to	.031 (452 to	278 (796 to	097 (449 to
Africa	to .436)	.446)	.515)	.240)	.255)
Attachment to	.301 (.152	.181 (.054 to	.212 (.018	.400 (.203 to	.559 (.429 to
God	to .450)***	.307)**	to .407)**	.597)***	.689)***
Educational achievement	.065 (120	.095 (060 to	.133 (094 to	030 (277 to	.009 (154 to
	to .250)	.250)	.360)	.218)	.172)
Educational x Attachment to God	.149 (.060 to .237)***	.098 (.023 to .173)**	.092 (018 to .202)†	.255 (.138 to .372)***	.298 (.229 to .367)***

Adjusted for age, relationship status, length of residence, and region of origin. All models included control for covariates with a p-value <.10.

Notes: $\uparrow P < .10$. *p < .05. **p < .01. ***p < .001.

Ref, reference group; CI, Confidence Interval.

Interaction items were zero-centered at their means.

6.4.4 Moderation Analysis

Given the outcomes of the bivariate correlations, we conducted a moderation

analysis to examine the extent to which EA is related to HQoL on the basis of AG.

Moderation analysis examined whether state-based attachment to God interacted with

educational achievement in impacting health-related quality of life outcomes. In this analysis,

educational achievement was the independent variable, attachment to God was the

moderating variable, and HQoL outcomes were the dependent variables. Covariates were

age, relationship status, and length of stay. As shown in Table 3, the hierarchical moderated

regression analysis on the interaction effects model shows a significant positive association

between EA and AG on HQoL outcomes. The analysis showed a trend towards attachment

to God interacting with educational achievement in impacting environmental health, b=.149, 95%CI: 060, 237, p< .001; psychological health, b=.098, 95%CI: 0.023, 0.173, p< .01; social relationship quality, b=.255, 95%CI: 0.138, 0.372, p< .001; and general quality of life, b= .289, 95%CI: 0.221, 0.358, p< .001. The standard error for the interaction effect for environmental health was .05, and the standard error for the interaction effects for psychological health, social relationship quality, and general quality of life were .04, .06, and .04 respectively. These interaction effects, except for the physical health outcome, remained statistically significant even after controlling for age, length of residence, region of origin, and relationship status, thus suggesting that educational achievement is positively associated with HQoL outcomes among participants with secure AG regardless of whether socio-demographic variables are held constant. The moderation analysis suggests that educated participants with secure AG experienced a trend towards better quality of life.

6.5 Discussion

Drawing on the adult attachment theoretical framework, the present study aimed to determine the extent to which EA influences HQoL outcomes, and the moderating role of AG in this relationship. After examining study assumptions and using a cross-sectional data of 261 African Christians in NSW, we found that AG is a predictor of HQoL among Australian-based African Christians, and that AG moderated the relationship between EA and HQoL outcomes, accounting approximately 25% of the total effect in general quality of life alone. These findings position AG as an important religious coping behaviour for negotiating HQoL, thus corroborating findings in other studies (e.g., Kirkpatrick, 2005; Bradshaw et al. 2010; Ellison et al. 2014; Bradshaw & Kent, 2017). However, merely having an EA may not directly influence one's health outcomes, since this depends on the nature of the individual's AG—the mental representation of the self in relation to God.

Part of the reasons why EA was not directly related to HQoL might have been explained earlier in the literature, including the exposure to critical thinking and risk factors associated with learning outcomes and intellectual excitabilities (Karpinski et al., 2018). As

discussed by Coplan and colleagues (2011), the connection to anxiety may also explain the lack of direct association between EA and QoL in this migrant sample group. This is partly because of the effects of migration-related life stressors which impact the performance of migrant academic achievers, and thus affecting their HQoL and emotional stability. Another important factor to consider that might have affected the lack of relationship between EA and QoL among this migrant population is the poor mental health outcomes associated with ruminative cognitive styles. This ruminative tendency is likely to be common among professional and educated migrants in an international and competitive work environment where their performance is evaluated and measured (Nolen-Hoeksema, 2000). Such professional demands may have accounted for the lack of relationship between EA and QoL.

According to our study results, EA was indirectly associated with better HQoL among participants with high level of AG and was unrelated in those with low level of AG. This interaction effect suggests the moderating role of AG in the relationship between EA and HQoL, indicating that greater EA is associated with greater quality of life when there is more secure attachment to God. Although EA may not be directly related to HQoL, this is not the case when the individual is securely attached to God. This outcome is best explained with attachment theory, showing how a secure base achieved through an attachment relationship or proximity to an object which becomes an agency for psychological and health-related adjustments (Bowlby, 1969, 1982; Kirkpatrick, 2005). When a believer is confident in the availability of God as their attachment figure, this assurance can sustain their susceptibility to academic-related life stressors due to the psychological functions of the attachment behavioural system as an agency of support and a framework of security and protection against environmental and ontological threats (e.g. hyper brain/hyper body processes).

The interaction results may further reveal the coping effects of an attachment-based spirituality in terms of AG. AG seems to be an attachment model of relational spirituality that is beneficial for HQoL (Counted, Possamai, & Meade, 2018). This result could also mean that persons who are securely attached to God are less likely to experience the negative

effects of EA, thus serving as a protective factor. AG appears to help the individual to have a deeper sense of connection with God as a reliable factor to turn to in times of crisis and a secure base from which to explore the broader environment and deal with the issues related to one's EA, thus leading to better health outcomes. Based on the results of the moderation analyses presented in Table 3, the indirect relationship between EA and HQoL is managed by AG, thus serving as a moderator to the relationship.

Overall, study results suggest the moderating role of AG as an important resource for religious coping and protective factor among educated participants. Religious coping is a meaning-making process that involves having confidence in the relationship with God as a haven of safety in times of distress and a secure base for individual growth. This basic confidence serves the function of satisfying the search for meaning, identity, and intimacy with others (Pargament, 1997). The emotional quality of AG, which is also analogous to the experience of falling in love (Granqvist & Kirkpatrick, 2016), may have accounted for the positive outcomes of QoL. This emotional quality of faith is central to people's relationship experiences with God (Granqvist & Kirkpatrick, 2016). Perhaps what distinguishes AG as a predictor of QoL is the emotional quality of such experience, as summarized by psychologist of religion, Johnson (1945, p.191): "The emotional quality of faith is indicated in a basic confidence and security that gives one assurance. In this sense faith is the opposite of fear, anxiety, and uncertainty." This description of the emotional quality of faith in terms of AG is similar to Bowlby's (1973, p.202) position on the psychological benefits of a secure base: "When an individual is confident that an attachment figure will be available to him whenever he desires it, that person will be much less prone to either intense or chronic fear than will an individual who for any reason has no such confidence." Nonetheless, there is no easy way to interpret the interaction results, especially since EA and HQoL were unrelated. This makes it difficult to conclude if AG truly moderates the relationship between EA and HQoL. However, we submit that it is possible that EA may be a side effect or anomaly of the link between AG and HQoL.

Further ad hoc results support that length of residence and relationships status are related to outcomes of HQoL. It is fair to assume that residing in a particular geographic location for a long period would influence better HQoL, as several studies corroborate this finding (e.g., Lee & Park, 2010; Das, 2008). These studies link this relationship to housing satisfaction and access to resources in a host country among long-term residents. However, Tseng and Wang (2001) have reported a negative association between length of residence and QoL among older adults who are nursing home residents. Relationship status on the other hand is another important predictor of HQoL, especially among respondents that are in a long-term relationship or married (e.g., Dush & Amato, 2005; Han et al. 2014). This suggests that "singlehood may be deleterious to life satisfaction [and HQoL] because of the higher loneliness and lower social support from a significant other" (Adamczyk & Segrin, 2015, p.196).

Our study has a number of limitations. Due to its cross-sectional nature, it is difficult to make firm claims about the associations found in the results. For this reason, a longitudinal study may be required to further confirm the claims of causality in the interaction between EA and AG on outcomes of HQoL. It is also possible that respondents may have been feeling particularly spiritually uplifted about their relationship with God at the time of data collection, since most of them completed the questionnaires immediately after their church service. If respondents were excited about their relationship with God at the time of completing the questionnaires, due to their involvement in the church/worship service, this may have affected their self-reports, thus affecting the strength of their AG. Another limitation is the skewed nature of the sample with 81% of the participants having a tertiary education background, compared to 19% of those with high school education. In addition, the non-correlation between EA and HQoL creates doubts about the linear moderation analysis results. While our findings may be of significant theoretical importance for AG theory, they should be interpreted with caution due to these limitations. However, despite these limitations the study has some merits, as it makes an original contribution to the

understanding of the role of AG in the relationship between EA and HQoL outcomes, especially among an understudied population in the psychology of religion literature. The strength of the study is the sample, and as such, the study has an opportunity to offer cultural generalizability evidence for the construct of AG.

6.6 Conclusion

AG was associated with better outcomes of HQoL before and after controlling for socio-demographic factors, but EA was not related to any HQoL outcome. In the moderation analyses, there was a statistically significant interaction between EA and AG on HQoL outcomes among Australian-based African Christians. These findings offer some additional attachment theoretical perspective in terms of interpreting the effects of emotional quality in a religious context regardless of one's EA. Hence, even though increased EA had no relationship with QoL, our data shows the presence of an indirect relationship between EA and QoL through AG among those with high level of attachment than those with low spiritual attachment.

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Chapter 7

Attachment to Australia, Attachment to God (Relational Spirituality), and Quality of Life Outcomes

This is the main chapter of this study as it investigates the links between attachment to Australia, attachment to God (relational spirituality), and quality of life outcomes. All the key themes in the overall study were examined in this chapter, thus making it a novel contribution to literature in the psychology of religion. The chapter was published in the *Journal of Spirituality in Mental Health* which is a leading interdisciplinary professional journal that is devoted to the scholarly study of spirituality as a resource for counselling and psychotherapy.



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Attachment to Australia, attachment to God, and quality of life outcomes among African Christian diasporas in New South Wales: A cross-sectional study

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Chapter 8 Migration, Pro-Environmental Behaviour, and Forced Acculturation: Recognising Place Attitudes as Coping Strategies

This is the first qualitative chapter following the four quantitative chapters (4, 5, 6, 7) and survey in previous pages. Based on the interview transcripts, the findings in this chapter show that attachment to Australia is a form of pro-environmental coping strategy employed by the participants to cope with their migration experiences. This strategy is quite complex. Based on the findings during the follow-up interviews, the positive relationship between place experiences and health outcomes in the quantitative chapters may have been a cover-up to a much deeper issue of forced acculturation faced by migrants of African background in Australia.

Chapter 8

Migration, Pro-Environmental Behaviour, and Forced Acculturation: Recognising Place Attitudes as Coping Strategies

8.1 Chapter summary and relevance to thesis

This study explores the intersection of migration and pro-environmental coping strategies in a sample of African residents in New South Wales (Australia), and the role played by proenvironmental coping in negotiating identity, quality of life, and social belonging. Semistructured interviews were conducted with fifteen individuals of African descent who are residents of New South Wales. An interpretative phenomenological analysis was used to inform study design and data analysis which generated several themes used to conceptualise pro-environmental coping as a multidimensional construct involving three major domains of attitude: affect, behaviour, and cognition. Study findings indicate that domains of pro-environmental coping were developed in response to experiences of forced acculturation and the need to develop a sense of belonging. More specifically, the multidimensionality of pro-environmental coping in relation to place affect, place behaviour, and place cognition involves aspects of social coping attitudes such as environmental dependency, identity, attachment, and social bonding, which were used for negotiating quality of life, identity, and social belonging. Study implications are discussed. Psychologists working with African migrants need a more sophisticated understanding of African migrants and their migration experiences and adaptability to Australia in relation to their mental health. In addition, there is need to reduce the stigma around migration and the negative news reporting about African migrants since this has an impact on their wellbeing and quality of life.

8.2 Introduction

Dominant theories of coping literature conceptualise the experience of coping as a psycho-biological, universal phenomenon influenced by a range of personal and sociocultural factors (Folkman, 2011). Despite the broad coverage on coping literature, little is known about the correlation between place- or environmental-related coping and migration. Ramkissoon, Weiler, and Smith (2012) have called for the exploration of place experiences and pro-environmental behaviours as forms of coping strategies that may be relevant for the tourism industry. Place or environmental coping theory is an important theme for understanding coping strategies in a globalized world, especially among migrants and during place change and mobility. Much of the literature in place or environmental coping theory has been conceptualised as 'pro-environmental behaviour,' showing how individuals use available place resources to deal with life stressors in order to support their need for place satisfaction, attachment, and belonging (Ramkissoon et al. 2012).

Coping strategies can take the form of conscious pro-environmental actions or behaviour performed by the individual in order to minimize the effects of life stressors and enhance quality of life (Jensen, 2002; Kollmuss & Agyeman, 2002). Several studies, drawing on the attitude-behaviour relationship model, have suggested sense of place attitudes such as place attachment, place identity, and place dependence as examples of proenvironmental coping behaviours (e.g. Ramkissoon et al. 2012; Scannell & Gifford, 2010a; Jorgensen & Stedman, 2001). This attitude-behaviour model demonstrates how the individual is motivated to undertake certain affective, behavioural, and cognitive responses toward an object of attachment (Fishbein & Ajzen, 1975; Rosenberg & Hovland, 1960), of which "place" is an example (e.g. Counted, 2018; Scannell & Gifford, 2010b). As a proenvironmental coping behaviour, place attachment refers to emotional responses toward a particular environment, represented by emotional bond, beliefs, perceptions, intentions, knowledge, and behavioural commitments (Halpenny 2006; Kyle et al. 2005; Jorgensen & Stedman, 2001). As a coping strategy, place identity refers to the cognitive link between the

self and the environment, showing how the individual embodies the character, culture, memories, and identity of a place (Gu & Ryan, 2008; Devine-Wright & Clayton, 2010). As a correlate of place identity, place dependence is also conceptualised as the functional use of a place in terms of how the individual interacts with their environment when depending on activities and events in such a setting (Stokols & Shumacker, 1981).

Furthermore, Homburg and Stolberg (2006) have conceptualised pro-environmental coping behaviours as behavioural domains and appraisal processes consisting of involvement in environmental activism (social engagement), petitioning on issues related to the environment, and involvement in private and public spheres of environmentalism (e.g. saving energy, product design, waste management). In contrast, Ramus and Killmer (2007) positioned pro-environmental coping as a form of social behaviour performed with the intention of promoting the welfare of individuals within an environment. Ultimately, the goal of pro-environmental coping behaviour is to enhance the quality of life of individuals living within a particular environment.

Pro-environmental coping behaviour has been conceptualised based on a number of theories, including the theory of planned behaviour (Boldero, 1995; Sparks & Shepherd, 1992; Taylor & Todd, 1995), norm activation theory, values belief norms theory, and social cognitive theory. As a planned behaviour, pro-environmental coping is predicted by behavioural intentions that are influenced by the individual's favourable response toward such behaviour and his/her understanding of norms regarding the behaviour. Both of these behavioural intentions depend on the extent to which the individual sees the behaviour at hand to be under their control. For example, Boldero (1995) has shown that the need to recycle newspapers was related to recycling intentions, such that the intention to recycle newspapers could influence the individual to get more involved in recycling as a sustainable solution to waste management. Another study (e.g. Sparks & Shepherd, 1992) suggests that the pro-environmental behaviour toward green consumerism was associated with intentions to eat Vegan foods.

According to the norm activation model, pro-environmental coping behavior is activated due to an individual's understanding of the effect of their actions: awareness of consequences, ascription of responsibility, and personal norms (Sawitri et al. 2015). This framework serves as a theory of intervention behaviour, suggesting how the individual takes action when they are aware of the consequences of events and experiences in place that they believe to be harmful to themselves and others (Stern et al. 1995; Schwartz, 1977). Another theory of pro-environmental coping behaviour is the values-beliefs-norms theory which promotes pro-social behaviour and argues that place coping strategies are stimulated when the norms of helping self and others are activated. Such norms can be activated based on personal values and attributes (Ramkissoon et al. 2012). They can also be activated based on beliefs that such values and attributes are threatened and that the individual experiencing such threats is in a position to be able to minimize or alleviate it (Stern, 1999). Social cognitive theory also provides an additional framework for assessing proenvironmental behaviour, in that it shows how there is a reciprocal interaction between personal attributes, the environment, and overt behaviour. Personal agency is central to the social cognitive theory, since it is the capacity to direct actions for a given goal and is influenced by one's skill and self-efficacy in carrying them (the actions) out. In this agentic pro-environmental coping model, individuals may not be reacting to external factors but able to proactively self-regulate within their own environments (Bandura, 1999, 2000).

Despite the rich theoretical insights gathered from place coping literature, as discussed above, little is known about what constitutes the pro-environmental coping of African migrants in Australia. The migratory patterns of people who migrated from Africa to Australia require a closer look, such that one considers how they deal with the challenges of place change and place mobility in a multicultural society like Australia and the determinants of such coping processes. Migration-related pro-environmental behaviour can be complex, especially among migrant groups like the African diasporas, as it can be strongly influenced by culture (e.g. Western individualism vs African migrant collectivism), pre- and post-migration factors (e.g. visa status, refugee status, skilled migration, availability of local items,

employment opportunities), settlement experiences (e.g. stereotypes, discrimination, and personal biographies etc.). Besides studies looking at sense of belonging of African migrants rarely examine migration-related pro-environmental behaviour, a gap the current study seeks to address. Given that pro-environmental coping strategies may vary based on various place and socio-cultural factors, findings from other studies cannot be generalised for the African diaspora population in Australia. Therefore, this study explores the dynamics of proenvironmental coping behaviour among male and female African migrants of New South Wales in order to estimate its direct impact on identity, social belonging, and quality of life, as well as its relation to migration experiences. This study adopted an interpretative phenomenological qualitative methodology to inform the design and analytical framework. Such a methodological approach aid in peeling away the objective nature of proenvironmental coping and enriching the understanding of the concept in a migration context.

8.3 Methods

8.3.1 Design

The goal of the study is to explore the migration experiences of African residents in New South Wales (NSW), Australia, and how those experiences are related to their sense of place and pro-environmental behaviour. More importantly, this present study examines the role of pro-environmental behaviour as a coping mechanism employed for negotiating quality of life among the Australian African diaspora. An interpretative phenomenological analysis (IPA) (Smith, Jarman, & Osborn, 1999; Brocki & Wearden, 2006) was used to understand respondents' migration experiences and pro-environmental coping behaviour. This methodological approach (IPA) helped in describing the complex pro-environmental coping behaviour of African residents in NSW, who were confronted by a range of socio-cultural migration challenges such as English language proficiency, job selection procedures, different religious beliefs, familiarity with the legal and industrial regulations, overseas skills/qualification recognition, lack of local work experience, and racism. The proposed analytical approach offers insights into how these individuals, within a diaspora context,

made sense of their daily migration experiences, negotiated their quality of life, and coped with the challenges of living in a multicultural society.

Brocki and Wearden (2006) proposed adopting semi-structured interviews to guide IPA data collection process. This recommendation is employed and thus interview sessions are consisted of open-ended questions and probes (see Appendix 1) aimed at gaining additional insights into respondents' lived experiences, in the event that they gave short or direct responses.

8.3.2 Sample and Procedure

All respondents participated in an earlier study with a sample of 261 African residents in New South Wales completing a survey regarding their attitude towards a sense of place (Jorgensen & Stedman, 2001) and health-related quality of life outcomes (WHOQOL Group, 1995). On a scale of 1 to 5, participants (n=261) had moderate levels of sense of place attitudes in terms of their place attachment (M=3.61), place identity (M=3.38), and place dependence (M=3.43). The overall quality of life outcome for the total survey sample (n=261) was above average, with a mean score of 3.94 on a scale of 1 to 5.

A purposeful sampling method (Patton, 1990) was used for the present study to identify 15 African residents from the original sample (n=261) who could articulate their migration experiences, sense of place, and pro-environmental behaviour. Respondents for this present study were recruited based on their scores in the *World Health Organization Quality of Life-Bref Scale*, which was used to assess their health-related quality of life. Selected respondents demonstrated above-average (n=5), average (n=5), and below-average (n=5) mean scores of overall health-related quality of life in a previous study (Counted, Possamai, McAuliffe, & Meade, 2018).

A total of 15 respondents aged between 18 and 69 years old (female 60%, n=9) were recruited for this study. Respondents were contacted by the author and invited to participate in the interview sessions which lasted between twenty nine minutes and one hour nineteen minutes. These interviews were done one-to-one either by telephone, skype, or face-to-face,

depending on their preferred medium of communication. Interview conversations were recorded and transcribed verbatim by the author using a phone application after which he conducted the data analysis.

8.3.3 Research Questions

- 1. What are the common migration experiences reported by the respondents in Australia and how are those experiences related to their pro-environmental coping?
- 2. What pro-environmental coping strategies are resourceful for the respondents in terms of negotiating their identity, social belonging, and quality of life within Australia?

Name (pseud onym)	Ag e	Ge nde r	Relatio nship Status	Country of origin	Lengt h of Stay	Education	QoL Level	Duration (Minutes)
Olilia	40	F	Married	Zimbabw e	10	Master's Degree	Above Average	40
Kwata	69	М	Married	Ghana	44	Bachelor's Degree	Above Average	35
Henry	30	М	Married	Nigeria	3	Master's Degree	Average	58
Thamb e	22	F	Single	Zimbabw e	14	Bachelor's Degree	Above Average	39
Martin	32	М	Married	Ghana	26	Master's Degree	Above Average	79
Cosma s	38	М	Married	Zimbabw e	10	Master's Degree	Below Average	34
Anna	18	F	Single	Ghana	4	High School	Above average	45
Cika	42	F	Married	Zimbabw e	5	Bachelor's Degree	Average	38
Esther	20	F	Single	Zimbabw e	9	Master's Degree	Average	29
Mary	26	F	Single	Ghana	2	Bachelor's Degree	Average	46

Table 1 Profile of respondents

Rebecc a	N/ A	F	Single	Ghana	20	High School	Below Average	56
Winner	42	М	Married	Zimbabw e	14	Bachelor's Degree	Below Average	34
Abeta	27	F	Married	Ghana	12	Master's Degree	Below Average	38
Ernest	30	М	Married	Zimbabw e	7	Master's Degree	Below Average	42
Monica	48	F	Divorce d	Zimbabw e	11	Bachelor's Degree	Average	33

8.3.4 Background and Biases of the Researcher

The author is an Australian-based African researcher in the fields of psychology of religion, human geography, and social psychology. He is known for his scholarly works on the role of relational spirituality and pro-environmental behaviour in migration, youth, and health contexts. As an African scholar living in the diaspora, the author is familiar with the challenges faced by members of the African diaspora through personal and professional interactions. In terms of assumptions, the author believed that the participants would have a wide range of experiences and challenges living in Australia due to their ethnicity and minority status and might find it challenging coping with such difficulties.

8.3.5 Data Analysis

To make sense of respondents' migration experiences and pro-environmental behaviours, interview transcripts were transcribed and analysed using the interpretative phenomenological analysis (IPA) in order to gain a deeper understanding of their lived experiences and generate key themes. As a philosophical paradigm, IPA draws on Husserl's (1983) epoché or "bracketing" phenomenology: suspending judgment about the lived experience of a contemplated entity and setting aside questions about its very objective nature. The aim of bracketing or epoché is to achieve objectivity (Baillie, 1996). By bracketing the existence of a contemplated entity, there is a systematic phenomenological

activity aimed towards peeling away the symbolic meanings until only the entity or phenomenon itself, as meant and experienced, remains (Counted, 2018). By employing the IPA approach in informing the study design, the author was able to articulate the respondents' individual phenomenology (Pietkiewicz & Smith 2014) in relation to their migration experiences and pro-environmental behaviours. This conceptualisation was done using an interpretivist paradigm (Smith et al. 1999), which helped in gaining a deeper understanding of respondents' reflection of their own experiences. Interview transcripts were analysed individually in order to conceptualise the inter-relations and hierarchies of generated themes which inform respondents' lived experiences.

After a careful analysis of generated themes, a line-by-line scrutiny of interview transcripts was done in order to compare and merge themes and narratives based on their hierarchies. Glaser and Strauss (1967) refer to this process as the "constant comparison method" (pp.101-116), whereby the overarching themes are conceptualised based on respondents' narratives while poorly described themes are dropped. This procedure was repeated for every transcript and themes were joined with their relevant hierarchies. As an idiographic model to data analysis, the interpretative phenomenological approach to qualitative research, as used for this study, provided insights into the lived experiences of the respondents, as they reflected on their migration experiences and pro-environmental coping.

8.4 Results

Respondents reported having both positive and negative migration experiences in Australia. These migration experiences were, in part, related to their experiences of forced acculturation which was dealt with by drawing on coping strategies that embody proenvironmental attributes. Themes emerged as a result of analysis following IPA method which generated super-ordinate themes such as the migration experiences of the respondents and their pro-environmental coping domains. The sub-ordinate themes of

respondents' accounts include the different variations of their migration experience and domains of pro-environmental coping.

8.4.1 Migration experiences of Africans in Australia

The Australian Dream. On a positive note, most of the respondents saw Australia as a land of opportunity and their stories projected the ethos of the 'Australian Dream': believing that settling in Australia can lead to a better life because of the perceived freedom, security, and possibility of success it offers. There was a strong belief among the respondents that their life in Australia was better than it had been in Africa. Respondents believed that Australia provided them with opportunities for financial freedom and career development. When asked what came to mind when they thought of Australia, respondents used words such as "freedom of speech", "financial security", and "educational achievement." For example, one respondent noted that "When you work you can get your income and achieve whatever you want to achieve," while others made similar claims:

There is no limit to education as long as you are interested, and there is help if you are a citizen. Whereas where I come from, you have to pay from your own pocket, if you don't have money you don't have to go to school. You can achieve whatever you want to achieve here (in Australia). In Africa, if you miss or fail your primary school education that is the end of your studies. Whereas here if you fail they will find what you are good at and if you pursue that you will have a normal life [success] like anybody else.

In terms of work, they also have some policies against racism. You can be whatever you are worth according to your level of education. You can be manager, CEO; there is no restriction as long as you can prove that you can do it.

Respondents reported enjoying the freedom and opportunity that Australia gave them in terms of their career development, financial freedom, and education achievement; something to which they did not have access in their home countries.

Stereotypes, labelling, and implicit biases. Respondents also expressed mixed feelings about their experience in Australia as 'Africans'. Some cited "racism" as one of the negative migration experiences that they have encountered in Australia, pointing to urban

cities as spaces prone to this, compared to rural Australian communities. Their narratives reflect the burden of otherness, a feeling of being the odd one in the box, thus forcing them to assimilate and embrace the culture of the host community in order not to feel alienated. The problem here is not so much that of invisibility but rather the burden of visibility due to stares from strangers who are of different ethnicity and look different. One of the respondents reported that: "In some instances, when you walk around people will be staring at you, but I think, it is because of the culture and what you do [for a living]." This respondent also notes that some "think that Africa is just a country...and that we eat grass in Africa." They communicated about this issue as though it was affecting their wellbeing, sharing their concern about "not [being] accepted [in Australia]" and "isolation in the workplace." It is possible that respondents were not necessarily experiencing overt racism but may have been victims of implicit biases and labelling, in that some locals may have shown unconscious and reactionary prejudices toward them and their way of life due to their poor preconceived ideas about 'Africa.' The burden of otherness seems to overwhelm the respondents, some of whom wished that they were not in the margins of society. Respondents recounted:

When I migrated I didn't come straight to the city rather I migrated to the rural area which is in Alice Springs. Majority of people over there was indigenous Australians. So, there was no much difference in terms of race, except at work. The people whom I started to work with there had a great experience of multiculturalism. I didn't have any negative experience although when you walk around people will be staring at you....some will ask some funny questions... they will think that Africa is just a country....they will think that we eat grass... If I took a photo of where I lived in Alice Springs and publicise it in Africa people will not want to come...there are better things in Africa...is just that the media target bad places.

There was a day I was walking with my friend and a man saw us and said 'F*cking abos' - he thought that we were aboriginals and we don't have work...we just ignored him. I don't blame him...

Now so long as you have dark skin, there are ignorant people within the community that will group you all together. You hear the terms like "you Africans". Africa has become a country - it has always been for the ignorant. Before, it is where are you from...now you meet certain people that are not open-minded. They guess your country for you and then you hear comments

like "you are not like them." When you hear comments like that then you realise that there lies the problem. Because "you are not like them" meaning "them" is the problem, if you are not like "them" then you are not part of the problem.

There was a peak in police issues where they started grouping people and would stop African people on the streets. It doesn't matter which part of Africa that you are from - they will treat you the same. Whether you are light or dark, as long as you are African, you are troublemakers.

Tougher immigration and visa reforms. Another important area, and one which gives rise to panic and fear for the respondents is in regard to the increasingly unpredictable changes in immigration policies with changes to the 457 visa termination regulations and the new skilled-immigration points test system. One of the respondents mentioned how the increase in The Pearson Test of English Academic (PTE) cut off mark has affected him in terms of securing his permanent resident visa.

Now the big challenge I have is how to get permanent residency. How to write the English test and get a good score. They just increased the points from 65 to 75. I don't know how I am going to get the remaining points. This is the biggest challenge I have now.

Another respondent shared concern over how he has taken the English language test for the third time and yet not reached the minimum requirement in English proficiency required to apply for a permanent residence. Despite the challenge this poses to their right to remain in Australia, the majority of the respondents seem hopeful that somehow, they will secure their permanent residence visas. However, it seems that the respondents were being compelled to embrace the Australian language identity through the English language test scrutiny or cease to be part of the Australian story.

Cost of living. As expected, respondents complained about the high cost of living in Australia and how they are not able to meet the daily challenges they face, such as paying rent, transport fares, and buying enough groceries. This problem is partly because of their low-income earnings which, according to the respondents, does not cover their cost of living.

This country is extremely expensive, especially New South Wales. If I don't go to work in a day I am bankrupt. So, I have to go to work and try my best to get a job, even though I am still working on part-time basis and still don't have a permanent work.

Despite this challenge, most of the respondents seem comfortable with their life and are grateful for the opportunity Australia has offered them to grow professionally and financially. They also seem to be confident about their future in Australia while reinforcing their Australian Dream — pursuing their own idea of happiness either through their work life, financial stability, or education achievement.

Culture shock and Australian secularism. Some of the respondents expressed shock at discovering that Australia is a secular state and that much of the population are not affiliated to the local church community. This culture shock was mostly felt among those with a strong sense of religiosity, most of whom may have felt misled by the projection of Australia as a Christian country in the news media. One respondent noted that "a lot of people in this country [Australia] don't talk about God....they are not serious about the things of God." He went further to express how his efforts to share God's 'word' (evangelise) with people had not been productive due to the daily, expensive demands of being an Australian resident. The respondent now tries to acculturate to the Australian secular culture by being sensitive and respectful of the complex nature of religion in Australia, thus not evangelising as he used to. Another respondent mentioned that, "there are limitations to sharing the word of God here. Though there is freedom of speech but in terms of religion, you have to respect other religions." Nonetheless, the overall impression about Australia is positive despite the secular nature of Australia, although one respondent expressed her fear of "losing" her children to a secular society. She further notes,

We can foresee a challenge in our younger generation in terms of religion and the values we brought over here which we learnt back home. Our children are exposed to other religions...we cannot really instil the values of Christianity which we brought from Africa on our children. I foresee a challenge with our children because they now feel like they belong here. *Customs and food inspection.* Respondents emphasized the lack of access to African food items due to the Australian customs' rigid food inspection scheme. According to respondents, this has affected their choice of food and ability to relive their culture in Australia (i.e. produce translocality) through what they eat, thus forcing them to make do with available food items.

We have our particular food that we are accustomed to, which when we initially came it was nowhere to be found. But I am glad that efforts have been put in place. Now we receive our meal regularly, but we still do have other food items which we would like to have that are not allowed by the immigration. We only eat that when we travel home.

Despite this challenge, some of the respondents were hopeful that the custom and immigration officers will soon allow them to bring in their local food items. When one of the respondents was asked how she was able to deal with this challenge, she responds saying:

I improvised. Here they have what they call porridge meal, but I made it as a substitute for maize meal even though the taste is not that great. I also improvised the way we cook rice...it was more of substituting with what they have here....

Aside improvising by substituting the food items, the fact that their African food was not available also created an opportunity for entrepreneurship among the Zimbabwean-Australian community: most now grow their own crops and buy plots of lands for farming, making their African food items available to their community.

8.4.2 Forced acculturation and pro-environmental coping strategies

While respondents shared their migration experiences and seem to be directly (through English language tests, food regulation, etc) or indirectly (dealing with labels, embracing the Australian culture, etc) forced to acculturate, they were also able to deal with these experiences through expressing what looked like a pro-environmental coping based on the interactive acculturation model (Bourhis, Moise, Perrault, & Senecal, 1997). This coping strategy generally served as a response and a coping mechanism for dealing with their migration challenges and life experiences, especially when forced to acculturate in their pursuit of the 'Australian Dream.' Respondents' pro-environmental coping was correlated with their sense of place, such that they exhibited spatial tendencies that enabled them to strengthen their positive bond to and perception of Australia despite the direct and indirect pressures to acculturate. This shows how the idea of Australia as a place of attachment resonates among the respondents as a setting for negotiating identity, social belonging, and quality of life through the stimulation of pro-environmental coping strategies involving three important domains of place attitude: affect, behaviour, and cognition. Affect refers to feelings that the respondents experience as part of their everyday lives. Behaviour was developed and expressed as dependency on activities and resources in Australia, as the respondents interact with and influence their environment. Cognition was also used by the respondents as a pro-environmental coping domain and a mental activity used for processing information about the Australian environment, thus helping them to understand and predict the behaviour of others within that acculturation space. These domains were used by the respondents as pro-environmental coping strategies and responses to experiences of forced acculturation, as will be made clearer.

8.4.2.1 Place affect

Attachment. A consistent form of pro-environmental coping expressed by the respondents was their emotional bond to Australia. This behaviour was used by the respondents to wrestle their feeling of strangerhood and preoccupation with foreignness that distinguishes them from others. They shared their place affect, showing a strong attachment to Australia—an affective component of their pro-environmental coping strategy. This is seen in the kind of positive affective link established between the respondents and the Australian space, such that it represents Tuan's (1977) 'topophilia', which is the expression of love for a place through a deep attachment with the setting. The place affect coping developed by respondents appears to be responding to three main needs related to their experiences of forced acculturation: a) to satisfy their sense of overall well-being and quality of life during

the process of place change, b) to personalise and conceptualise place meanings, and c) to establish a deep emotional bond and attachment to Australia.

Firstly, respondents' need to satisfy their general sense of well-being and quality of life was directly correlated to their place affect as they wrestled with the experiences of forced acculturation. Developing an emotional bond to Australia meant, for most of the respondents, having a good life and enjoying their African music and food through community events despite their experiences of forced acculturation. This was associated with their emotional bond to Australia and gave them a sense of well-being, as recounted by Kwata, a 69 year old Ghanaian resident:

Personally...I like music. Most weekends we met up in houses...once in a while we have some fun. We used to entertain ourselves, even though we were not many we tried to make life work for us. On the social side, we ate our African food and played our African songs...and had a good time. This musical side has kept me going personally...and made me to like this place more.

Secondly, place affect was also associated with place meanings, so that respondents' lived experiences in and sentiments about Australia gave them personal cues and understanding about what Australia was to them in spite of the demands of acculturation. This experience was often filled with mixed and contrasting feelings of hope and despair, optimism and pessimism, courage and uncertainty, audacity and fear in their pursuit of the Australian Dream. Respondents conceptualised their understanding of Australia as "a land of opportunity", "a secular country", "a livable country", "unfriendly", "a place of uncertainty," among other positive and negative descriptors, thus serving as a motivation to interact with the dominant culture.

Thirdly, as a coping behaviour for respondents, place affect mostly involved attachment to the natural, cultural, and spiritual elements of Australia. Such elements include the Australian metropolitan infrastructure, egalitarian culture, phonology, healthcare system, and education system. This emotional bond was also seen in their attachment to places of worship: the aesthetics, design and special characteristics that facilitate place affect and the

process of socialisation, involving religious experiences, rituals, storytelling, and church visits (e.g. Mazumdar & Mazumdar, 2004). Two respondents, 33 and 69 year olds, recounted:

I think on top of the list is the health problem....here in Australia I only need to walk for 10 minutes and get to the closest GP. My wife had some health challenges some years ago...I know that if it hadn't been for the fact that we were here in Australia at that time she wouldn't have gotten the kind of attention she got.

Health is the main thing...although I think another is the education system. If you are here, you can easily go to university and that gives you the chance to build a better life for yourself. I like it here...you can do whatever you want to do...if it is education you want to have, you can study to whichever level you want and the government can support you.

Overall, there seems to be a general sense of attachment among the respondents. This attachment stems from their pursuit of a better life, in spite of the difficulties they were facing with acculturation. Attachment to Australia, for the respondents, meant having a better life. This is well-nuanced in their comments, reflecting their sense of satisfaction with Australia, and thus attachment to Australia meant an opportunity to improve their life prospects and achieve their dreams.

Social bonding. While the pro-environmental coping strategy of the respondents was correlated with physical and cognitive activities and cultural elements, the impact of social capital on their experiences of forced acculturation cannot be overemphasised. Place social bonding simply refers to interpersonal relationship experiences that occur in a place as a form of cognitive adaptation through the involvement of family, friends, and community (Ramkissoon, Weiler, & Smith, 2012). Despite the migration and acculturation challenges experienced by the respondents, they developed a strong social bond with other people at their workplace, church community, and even towards strangers as means of negotiating their social identity and quality of life.

Respondents' place social bonding was associated with their parental attachment makeup. For example, respondents who noted that they had a negative relationship experience with their parents ended up building relationships with attachment surrogates

outside their homes. One respondent, a 20 year old female, succinctly describes this experience,

I guess in a way...my parents...what they assumed was normal wasn't normal for me. I wasn't able to build that quality bond with my parents...I kept everything to myself, as they did, I did that too. You don't realise that when you are younger but as you grow older you realise that it is not normal. In my teen years and early twenties, I confided in myself...I stuck to my white friends...and then I met my community in the church and that was when I started confiding in people.

Respondents "loved being around people" and "like having friends" and turning to others within their immediate and broader environment (e.g. church community, school, etc) for emotional support and answers to challenges associated with their acculturation. One respondent mentioned that his wife helped him a lot, "she encouraged me...and told me to take it easy," as he struggled with his sense of belonging in Australia. To take seriously, he further shares some wisdom: "In this life, there are two main changes that can improve our sense of well-being: one is your married life at home and then the other one is the work that you are doing." According to him, these two factors were pivotal for facilitating a place social bonding experience in his own life, which he felt helped him in negotiating quality of life and dealing with experiences of forced acculturation in Australia.

8.4.2.2 Place Behaviour

Dependency. After a careful review and analysis of the interview scripts, one strong theme emerging from the lived experience of the respondents was that their work life in Australia was helping them achieve life balance through supporting their family and personal needs. Although the respondents did not clearly articulate how their work life plays a role in their personal life, their comments suggest that work-related place dependence (i.e. relying on work opportunities in Australia) helps them in negotiating quality of life, mostly due to the income and financial freedom it gives them.

Apart from school, I started looking for job. The only job I got was in construction. It wasn't funny. I came back and was down for a whole day and I

couldn't go to school. It was very difficult, but I said to myself the money is not bad. I was making about \$150 per day. I said to myself I could try it again...after which I got another job as a delivery personnel and this really helped me [to pay my bills].

I work alot...it keeps me busy. In terms of finance...it has helped me. This country is extremely expensive. If I don't go to work in a day I am bankrupt. I often call my company to create a shift for me so that I can pay my bills [and take care of my family].

Another respondent commented that his work life keeps him "busy", noting that "an idle man is the devil's workshop". The busyness was a way of escaping from the demands of acculturation. Aside these functions of work-related place dependence, respondents also noted the social and altruistic roles of such coping behaviour in their acculturation process, in that it "helps [them] to relate with people and help others [especially people with disability]", in a way that enables them to understand their humanity and adopt certain Australian cultural values through their relation with others. This was an eye-opener for one of the respondent as he *paused* in gratitude, shaking his head saying, "I am grateful to God for my life...many families are suffering. This life is a gift." Such reflection came as a result of how he found that money could not buy happiness for most Australian families struggling with a loved one with disability.

In addition to the work-related and altruistic roles of pro-environmental coping in the process of acculturation, other areas of life in which dependency on place plays a key role in the lives of the respondents is in the agriculture and education sectors. As a case in point, a respondent noted that "I now grow my own food and some others are buying land to make our local Zimbabwean foods." It also appears that almost all the respondents expressed how their education was central to their appreciation of the 'Australian Dream' and has rekindled the hope of a brighter future despite the difficult days. Respondents stated the following:

I have a small garden at my place for green vegetables because I couldn't access other vegetables in their stores. So I decided to grow my own vegetables in my house which is enough for me and my family. I eat a specific type of vegetable and I grow it at home.

I was coping very well...I remember saying to myself that no matter what, I must survive because my highest priority was studying. And the good thing about it was that I was living close to the school. My living conditions were not that great so I always stayed in school. In the morning by 8am I would leave the house and come back around 11. It was really helpful to some extent because it gave me time to study more, relate with people, and cope with my living conditions.

For others, dependence on their African communities was also important for their well-being and in dealing with the experience of forced acculturation. One respondent noted that the African music played during their community events was not only nostalgic but also a recipe for a "good life", saying that "the musical side and entertainment has kept me going personally....I go to [community] parties on weekends. And even at church...everyone knows I love dancing."

8.4.2.3 Place Cognition

Identity. Respondents expressed both fascination with and interest in the "Aussie" life, especially in regard to acquiring an Australian accent. This was, in part, conceptualised as a means of negotiating identity and counteracting strangerhood related to the acculturation process. One respondent who migrated with his parents to Australia at the age of 5 expressed how this kind of place identity served him well in building relationships with Australian locals and in achieving his Australian Dream. Slightly concerning was the fact that this respondent felt pity for newly arrived African migrants who had a "strong" accent, saying that their accent had a direct effect on how the locals treated them. This respondent seems to suggest that this was doing more harm than good when it comes to having a better life and opportunity in Australian landscape, giving him a sense of identity, privilege, and social belonging. As a 5-year-old migrant to Australia, the respondent noted how his Australian accent has helped him negotiate his identity:

I picked up [Australian] English quite easily because I came here when I was a kid and I kind of got the accent. In hindsight, I think that that really helped me a lot because here, when the locals listen to a foreigner, your English, I guess,

gives you an edge as to how they treat you. That is the experience that I am seeing now. My fellow African men that haven't spent a lot of time here that already have their English accent down before they came, when they speak people react like 'oh he is a foreigner, he didn't grow up here.' But when I speak the comments I get are like...'oh you got good English.' It is like my colour disappears. The slang helps. I don't do this deliberately but when I speak and say 'Cheers' and 'Good day mate' and 'How is it going', it is part of my vocabulary. That is the language we use in the country. These slang [expressions] help you because you are speaking the vocabulary of your country 'men.'

The respondent conceptualised his Australian accent as an essential place identity for navigating the intersection between the African identity and Aussie identity, which was on the contrasting borderlines of belonging, social inclusion, and strangerhood.

Another attribute of place identity which play a major role in the lives of the respondents is in their awareness of and engagement with the Australian cultural system in terms of their interaction with different elements of the Australian culture.

You have to appreciate the culture. You have to do that because that is the only way you can't stand out because once the locals see you doing things that they do then they start seeing you as one of them. Once you say you don't go to the beach...you don't do barbecue you will alienate yourself.

This sense of awareness led one respondent to observe that it is advisable to be

"more aware of the system [and culture]...because when you are not aware of something you

might fall into the holes that have been created by others." Another respondent emphasized

place identity, denoting an awareness of the Australian legal and justice system:

I know the [legal] system...I know what I need to do not to draw attention to myself...I just can't drink and drive and must follow the law and pay my taxes. And when you do that, you just become like one of them. When you don't do some of these things then you stand out...

These artefacts of place identity were important pro-environmental coping strategies among respondents as they wrestled with their own cultural identity and the need to acculturate, despite their knowledge of the self and Australian culture.

8.5 Discussion

Respondents narrated various migration experiences as people of African diaspora living in a host-country, showing several pro-environmental coping strategies used in negotiating their identity, quality of life, and social belonging. While most of the experiences were not necessarily uncommon, they reflected what it meant to be a migrant and the direct or indirect structures of forced acculturation in Australia. They symbolized the suffering and hope of thousands of migrants who seek a better life in host-countries due to economic and political problems in their home-countries or a desire for place change as skilled expats. Respondents expressed their cultural and socio-economic disadvantage in Australia, while also reinforcing an audacity of hope and showing a commitment to be part of the Australian Dream through their strong sense of place. This commitment to "belong" and forced acculturation created in them a multidimensional pro-environmental coping strategy in the form of place affect, place behaviour, and place cognition. These place coping attributes have helped the respondents in navigating a secular, successful multicultural society.

Place affect refers to the feelings that the respondents experience as part of their acculturation process, including both moods and emotions in their interaction with their environment and close others. This affective experience helped the respondents to function efficiently in negotiating their sense of belonging and in a way that increases that chances of acculturation in a new place. This coping domain led to pro-environmental coping behaviours (e.g. attachment, social bonding) that were appropriate to their perceptions of their lived experiences in Australia. As respondents interact with and influence their environment, they developed the ability to make these interactions proceed efficiently and effectively through behavioural commitment or social behaviour that essential for acculturation in the Australian society. Place behaviour was essential for protecting and enhancing the respondents' sense of self in Australia in relation to how they treat, accept, and cooperate with others. As respondents begin to interact with the Australian environment, expressing social affect and behaviour, they start to think and learn about their environment using cognition in every part of their social lives to deal with the challenges of acculturation, thus developing an Aussie

identity in the process. Place cognition is a mental activity of processing environmental information and using the data in establishing one's self anew in a migration context, such that the migrant understands and predicts the behaviour of the host community. Respondents were seen developing knowledge of the Australian culture as a way of dealing with the challenges of acculturation, with most of the them assimilating using language, cultural schemas, and attitudes that influence how others perceive them.

Perhaps the first key finding of this study is the correlation between respondents' proenvironmental coping and their strong sense of place. This corroborates findings from previous studies on sense of place and pro-environmental coping behaviour (e.g. Scannell & Gifford, 2016; Ramkissoon, Weiler & Smith, 2012; Devine-Wright & Howes, 2010; Hernández, Martín, Ruiz, & Hidalgo, 2010). Sense of place is a multidimensional concept that involves several place attributes such as attachment to place and dependency on place (Scannell & Gifford, 2010b). As seen in our study, these attributes of sense of place play important roles as coping strategies for dealing with forced acculturation and negotiating quality of life. Burley and colleagues (2007) affirm this correlation, noting that proenvironmental strategies are likely to be reinforced when individuals are positively attached to a place and have a strong sense of place. Secondly, another key and innovative finding is in the interactive acculturation process which captures how place events and migration experiences spotlight the interaction between the dominant Australian culture and African migration (Bourhis et al. 1997). The interactive acculturation process reflects the experiences of forced acculturation, focusing on what the Australian people think African migrants should do with respect to the maintenance of their cultural identity and the relationship to the Australian culture. This is seen in the direct and indirect structures put in place by regulatory bodies to ensure that acculturation is taking place within the African community. This demand to acculturate into the dominant Australian culture is tied to the sense of belonging of the respondents who now turn to pro-environmental coping strategies as interactive tool for their acculturation process.

Study findings may also contribute to the theory of social behaviour (e.g. Ramus & Killmer, 2007) since most of the respondents were acting in relation to their social world and symbolic culture in order to promote their sense of acculturation and quality of life. This was done by (a) developing or emulating the Australian identity (e.g. using Australian slang and having Aussie accents) and culture; (b) being involved in or depending on spatial activities, opportunities, and events (e.g. work, school, church meetings, community events, parties) that may draw them closer to Australia; (c) personalising what Australia means to them phenomenologically; and (d) forming relationships with individuals who strengthen their sense of attachment and belonging to Australia. These experiences form the foundation of the respondents' pro-environmental coping. This supports Ramus and Killmer's (2007) social behavioural theory, in that the respondents adopted these coping strategies with the intention of promoting their quality of life and sense of Australian identity through their prosocial involvement.

Furthermore, drawing on the theory of planned behaviour, one could also argue that respondents pro-environmental coping strategies were intentional, in that they knew how to respond to their forced acculturation. For example, in most cases the need for social belonging was related to developing place identity and depending on activities and opportunities that strengthen such a goal (Sparks & Shepherd, 1992; Taylor & Todd, 1995). In addition, respondents' pro-environmental coping strategies were employed due to their awareness of the results of such behaviour. They were also adopted due to respondents' ascription of responsibility to take on the task of place meaning-making which they have normalized in their own lives. This approach to pro-environmental coping corroborates previous reports on norm activation model (e.g. Sawitri et al. 2015; Stern et al. 1995; Schwartz, 1997).

As opposed to the values-beliefs-norms theory (e.g. Stern, 1999), the proenvironmental coping strategies of the respondents can also be conceptualised based on the social cognitive theory, which states that knowledge acquisition can be associated with the individual's observation of their social environment: interactions and experiences with

others (Bandura, 1999, 2000). This is because there is a reciprocal interaction between respondents' personal attributes and their overt behaviour in the Australian context. This was reflected in the way they were responding to their migration challenges, forced acculturation, and biographical histories, as seen among those who were seeking relationships outside of their family homes and with other surrogates. Hence, respondents self-directed actions and self-agency against internal and external life stressors led them to manage their own environmental and contextual challenges through adopting pro-environmental coping strategy in the form of the ABC model of affect, behaviour, and cognition in social psychology (Hogg & Vaughan, 2005).

This result might have implications for the relevance of attachment research to evaluating the opportunities for improving migrant quality of life since 'forced acculturation' may lurk behind the positive reports of place attachment which is conceptualised as an interactive pro-environmental coping tool for migrant's acculturation process. This perspective undermines the claim that attachment representations and behaviour play more than a minor role in affecting quality of life outcomes since participant's attachment styles were embodied due to the demand to acculturate into the dominant Australian culture. It is believed that this phenomenon may have also impacted the authenticity of the self-reports, and thus a possible study limitation.

The challenge for policy makers and host communities remains how best to create a healthy and positive environment for the African diaspora and other minority groups; one which promotes pro-environmental coping while also avoiding structures that reinforce forced acculturation. Although pro-environmental coping is largely as a result of personal attributes and external environmental factors, and depends on the individual (Robertson & Williams, 2010), it is important for policy makers and host communities to take up this challenge and help in curbing the negative effects of migration in order to promote the welfare and health of migrants. As a limitation, this study may not have done justice to the migration experiences of the respondents since the objective was to uncover their pro-environmental coping on such a theme would add a

valuable stock of knowledge to this study. Other study limitations include sample size (n=15), which is too small a number to be generalised; results may have been influenced by author's biases; the first set of potential respondents did not respond to their follow-up interview invitations. Despite these limitations, the author is confident in the outcome of the study since there is a very little literature on African diaspora pro-environmental coping and forced acculturation.

In conclusion, study findings position migration experiences and forced acculturation as correlates of pro-environmental coping among African residents in New South Wales, Australia. Results reveal that this group of individuals turn to pro-environmental coping domains in the form of affect, behaviour, and cognition as a means of coping with the reality of socio-cultural inequities and forced acculturation. The multidimensionality of proenvironmental coping must be taken into account to adequately understand the nature of the experiences of forced acculturation so as to effectively create ways to curb socio-cultural and migration-related inequities in a multicultural society like Australia.

8.6 References

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Chapter 9 The Multi-Dimensionality of Attachment-Related Religious Coping Strategy

This is the second qualitative chapter. It further explores the nature of the attachmentrelated religious coping strategy of the participants and how their attachment to God spirituality is conceptualised as a meaning-making process for dealing with their lived experiences as migrants. While chapters 4, 6, and 7 suggest that relational spirituality is related to quality of life based on quantitative outcomes, chapter 9 helps the reader to understand, through qualitative accounts, how relational spirituality has been used as a religious coping resource for negotiating identity, quality of life, and social belonging in the face of place change and rigid migration policies in Australia.

Chapter 9

The Multi-Dimensionality of Attachment-Related Religious Coping Strategy

9.1 Chapter summary and relevance to thesis

This chapter examines how aspects of relational spirituality involving attachment to God are related to quality of life and employed as a religious coping behaviour among African Christians in New South Wales, Australia. Study themes were drawn from qualitative follow-up interviews which showed positive and negative aspects of attachment-related religious coping, involving multiple domains including personal, social, and environmental attributes. Of interest were the correlations that respondents drew between their personal attachment biographies (e.g., separation experience, abandonment betrayal, etc), environmental stressors (e.g., migration challenges, socio-cultural issues, economic disadvantage), human-based coping, and religious coping behaviour. These results position attachment related religious coping as a social cognitive model which may arise from attachment relationship problems with important people in one's life, while serving the need for autonomy.

9.2 Introduction

To understand the religious attachment/quality of life link, one has to account for the role of religious coping behaviour in managing life stressors and existential experiences. In other words, religious-related attachment resources may provide meaning to hurting individuals in an otherwise stressful place or life event (e.g. Matthews & Marwit, 2006; Breland-Noble et al. 2015). This view of religious coping conceptualises how individuals could reframe their previously held assumptions about self, others, and the broader environment, to one that aligns with their religious and theological beliefs. Religious coping is

an important attribute seen among both religious and non-religious individuals and often experienced in the context of a perceived attachment relationship with God, or to some extent, based on the individual's spiritual awareness and beliefs (Pargament, 1997). This may require some degree of self-transcendence and the use of available religious resources to deal with stressful life situations.

According to Pargament, Smith, Koenig, and Perez (1998), religious adherents develop meaningful religious strategies for coping with life stressors, creating meaning and comfort while also enabling them to grow both spiritually and mentally in their faith and experience with the sacred. The effort to deal with life stressors in ways related to the sacred can be understood as religious coping, and such experience is more salient when the religious believer has a relational bond with the sacred (Pargament, 1997). The term "sacred" in the context of religious coping theory does not only refer to the traditional understanding of God, the divine or the supernatural but can also be conceptualised in terms of other aspects of life which involve divine experience and self-transcendence. The latter can assume different forms including "improvement of oneself, deepening relations with others, building [a] sense of unity with nature or attachment to and trust in the Divine Being" (Charzynska, 2015, p. 1631). As situational expressions of the individual's spirituality, religious coping strategies are formed during the individual's search for meaning in the context of life stressors (Pargament, 1997).

Psychology offers two main perspectives on religious coping: positive religious coping and negative religious coping (Pargament, 1997). The former is associated with improvements in psychological wellbeing and quality of life based on commitment to one's religion or perceived relationship with God. For example, studies (e.g. Cicirelli, 2004; Counted, 2016) show that perceiving God as 'caring' or 'loving' or as an 'ultimate attachment figure' is related to better health outcomes. The latter is related to declines in psychological wellbeing and quality of life because one's spiritual struggles and trouble maintaining a relationship with God. These negative spiritual experiences are likely to affect the individual's view of their broader environment, perceiving it as threatening (Pargament et al. 1998).

Studies (e.g. Pargament 1997; McConnell et al. 2006) suggest that negative religious coping strategies such as "perceiving God as punishing" are related to negative moods and "pessimistic assessments of the outcomes of adverse events" (Greenway et al. 2007, p. 326).

Religious coping strategies are not just about life stressors but also about relating to a place to which individual experiences and perceptions of the world are formed. Counted and Watts (2017), for example, describe a place as an important locus for the human experience — one which informs understanding of and relation to the sacred among dispersed populations, having its own health and cultural benefits or detriments. As such, place and migration experiences become important tapestries for understanding religious coping strategies in general.

Despite the rich theoretical insights into religious coping behaviour as discussed above, little research has been done into what constitutes the religious coping strategies of the African Christian diaspora. Given that coping strategies can vary, depending on several factors, findings from other population groups cannot be generalised for this sample.

The current study aims to gain a deeper understanding of religious coping strategies and their psychological and health-related impact by using semi-structured interviews with a sample of 15 male and female African Christians living in New South Wales, Australia. Discussing the religious coping strategies of the African Christian diaspora in a host community is deemed a relevant research scope due to the dearth of literature in this area. Hence, this study adopts a phenomenological qualitative methodology and an interpretivist paradigm to inform the study design and data analysis respectively (Smith, Jarman, & Osborn, 1999). It is hoped that this analytical approach will help in enriching the understanding and dynamics of religious coping strategies from the perspective and reflections of those who belong to the African Christian diaspora in New South Wales, Australia.

9.3 Method

9.3.1 Design

The goal of the study was to understand the religious coping strategies used by the African Christian diaspora for negotiating quality of life. As such, an interpretative phenomenological analysis (IPA) (Brocki & Wearden, 2006; Smith, Jarman, & Osborn, 1999) was employed to interpret the respondents' own description of their religious coping experiences in relation to the researcher's own understanding and reflexivity. As a philosophical paradigm, IPA draws on Husserl's (1983) epoché or "bracketing" phenomenology: suspending judgment about the lived experience of a contemplated entity and setting aside questions about its very objective nature. The aim of bracketing or epoche is to achieve objectivity (Baillie, 1996). By bracketing the existence of a contemplated entity, there is a systematic phenomenological activity aimed towards peeling away the symbolic meanings until only the entity or phenomenon itself, as meant and experienced, remains. In contrast, Benner (1985) has adopted Martin Heidegger's existentialist phenomenology, arguing that bracketing does not necessarily lead to objectivity since the human knower is a being-in-the-world that approaches a thing with 'foreknowledge' and not separated from the contemplated phenomena. Drawing on these two perspectives, Pembroke (2011) has argued that the IPA methodological process of bracketing should consider the presuppositions of the researcher while peeling away the objective nature of the contemplated phenomena.

A holistic approach to IPA would allow the phenomena to be examined and studied in its purity in relation to a contextual (cultural and linguistic) history, thus establishing its transcendental attitude and lived experience (Pembroke, 2011). The researcher adopts a holistic IPA approach which naively accepts the world as existing while engaging the entity with the attitude as one who is immersed in the world of the researcher. This methodological paradigm aims to approach a contemplated entity or phenomenon on its own terms, while also considering the values and perspectives of the author. This creates a research that is

both a "fusion of the perspectives of the researcher(s) and of the participants", given that "presuppositions cannot therefore be bracketed out; they constitute the condition of the possibility of meaning" (Pembroke 2011, p.158). This holistic approach to IPA produces a deep understanding of the contemplated phenomena or entity under investigation.

Given that the IPA methodological approach gives deeper meaning and insights into the human experience, it is appropriate for describing the complex religious coping strategies of African Christians in Australia who are confronted by a range of socio-cultural challenges in relation to the researcher's own reflexivity (e.g. Mapedzahama and Kwansah-Aidoo, 2017; Bansel et al. 2016). The proposed IPA analysis will offer insights into how these individuals, within a diaspora context, make sense of their daily experiences, negotiate their day-to-day quality of life, and cope with the challenges of a multicultural society.

In accordance with the IPA recommendations (see Brocki & Wearden, 2006), semistructured interviews (see Appendix G) were used to guide the data collection process. Interview sessions were consisted of open-ended questions and probes (see Appendix 1), which aimed at providing additional insights into the experiences of the respondents in the event that they might give short or direct responses. Open-ended questions also served as *warm-up* conversations designed to make the respondents feel at ease, especially in cases where they were responding to a sensitive question about their experience in Australia or their religious coping strategy.

9.3.2 Sample and Procedure

Respondents were African Christians in local Christian communities or churches in New South Wales, Australia. Selected respondents had participated in an earlier study with a sample of 261 African church goers in New South Wales and completed a self-report survey on their religious attachment representations (Sim & Loh, 2003) and health-related quality of life outcomes (WHOQOL Group, 1995). Their mean age was 36.9 + 11.7 years. On a scale of 1 to 6, participants (n=261) had an above average mean score (M=5.60, SD=0.46) on their religiosity, showing a strong level of religious attachment representation.

The health-related quality of life outcome for the total sample was also above average with a mean score of 3.94, on a scale of 1 to 5.

For the present study, purposeful sampling method (Patton, 1990) was used to identify and select African Christians, recruited from a quantitative sample (n=261), who could articulate their lived experiences in their host-communities in New South Wales, Australia. Respondents had completed the *World Health Organization Quality of Life-Bref Scale*, which was used to assess their health-related quality of life. Survey participants for the quantitative study demonstrated various levels of quality of life scores, which may be related to their religious coping strategies.

For this present study, a total of fifteen respondents (age range of 18 to 69 years old, 60% [n=9] female) were recruited. Among the fifteen respondents (n=15), five had a below average score of quality of life, the second round of five respondents had an average mean score of quality of life, and the remaining five respondents had an above average mean score of quality of life. All the respondents were contacted via telephone or email and invited to participate in follow-up interviews in order to elicit their positive or negative religious coping strategies. The interview sessions lasted between twenty-nine and seventy-nine minutes, and were conducted one-to-one by telephone (n=7), skype (n=2), or face-to-face (n=6). Respondents chose their preferred medium of communication and their interview sessions were planned accordingly. All interview sessions were recorded using a phone app and transcribed verbatim prior to data analysis.

9.3.3 Research Questions

- What are the lived and existential experiences of African Christians in New South Wales, Australia?
- 2. What religious coping strategies are helpful for coping with life stressors and negotiating identity and quality of life among African Christians?

 Table 2 Profile of respondents

Name (pseudony m)	Age	Ge nde r	Relations hip Status	Country of origin	Length of Stay	Educatio n	QoL Level	Durati on (Minut es)
Olilia	40	F	Married	Zimbabwe	10	Master's Degree	Above Average	40
Kwata	69	Μ	Married	Ghana	44	Bachelor's Degree	Above Average	35
Henry	30	М	Married	Nigeria	3	Master's Degree	Average	58
Thambe	22	F	Single	Zimbabwe	14	Bachelor's Degree	Above Average	39
Martin	32	М	Married	Ghana	26	Master's Degree	Above Average	79
Cosmas	38	М	Married	Zimbabwe	10	Master's Degree	Below Average	34
Anna	18	F	Single	Ghana	4	High School	Above average	45
Cika	42	F	Married	Zimbabwe	5	Bachelor's Degree	Average	38
Esther	20	F	Single	Zimbabwe	9	Master's Degree	Average	29
Mary	26	F	Single	Ghana	2	Bachelor's Degree	Average	46
Rebecca	N/A	F	Single	Ghana	20	High School	Below Average	56
Winner	42	М	Married	Zimbabwe	14	Bachelor's Degree	Below Average	34
Abeta	27	F	Married	Ghana	12	Master's Degree	Below Average	38
Ernest	30	М	Married	Zimbabwe	7	Master's Degree	Below Average	42
Monica	48	F	Divorced	Zimbabwe	11	Bachelor's Degree	Average	33

9.3.4 Background and potential bias on the part of the researcher

The author is an Australian-based African researcher on the borderline between psychology and theology. He is a member of the clergy with over ten years of ministry experience as an ordained minister. The author is also known for his scholarly works on the role of relational spirituality in migration and health contexts. As an African Christian scholar living in Australia, the author is familiar with the challenges faced by members of the African diaspora in Australia through personal and professional interactions.

In terms of preconception, the author believed that the respondents would have a wide range of positive and negative experiences living in Australia due to their ethnicity (Maliepaard & Kwansah-Aidoo, 2017). He expected that the respondents would deal with such experiences through their faith and personal relationship with God.

9.3.5 Data Analysis

By using the interpretative phenomenological analysis (IPA) approach, interview transcripts were transcribed and analyzed in order to generate an in-depth understanding and insight into the lived experiences and religious coping strategies of African Christians in Australia. The aim of data analysis in an IPA design approach is to articulate respondents' phenomenology while also offering an interpretivist perspective on their lived experience (Smith et al. 1999). Aside from identifying emerging themes from interview transcripts, Smith and colleagues recommend that researchers should analyse interview scripts, one at a time, in order to adequately conceptualise the inter-relations and hierarchies of themes informing respondents' lived experiences.

Coding and selection of the overarching themes were done via an in-depth, line-byline scrutiny of each interview script. Glaser and Strauss (1967, p.101-116) describe this process as the "constant comparison method," whereby interview transcripts are reviewed to ensure that the overarching study themes are well articulated while the poorly described themes are dropped. This procedure was repeated for every transcript, as themes of all transcripts were reviewed and joined with relevant theme hierarchies.

Since the IPA design approach aims at interpreting each individual's phenomenology, this idiographic model of analysis (Pietkiewicz & Smith 2014) help in understanding more about the lived experiences and religious coping strategies of this group of African Christians in Australia. As such, the study findings are presented based on emergent themes in the data. These themes will be explored and examined in this study using narratives of the respondents, while juxtaposing contrasting views where appropriate.

9.4 Results

Respondents noted a range of lived experiences and socio-cultural challenges that were, in part, dealt with by drawing on coping strategies that embody religious attributes.

9.4.1 Lived Experiences of African Christians in Australia

Respondents saw Australia as "a nice country" and "a liveable place" that receives "people with an open heart." Some noted that Australia was "safe" for them and their family and emphasised the freedom and security they had experienced living in Australia. From the response of one of the respondents it would appear that by "safe" they mean the "multicultural" nature of the country and that the financial security they experience here (through having a good paying job) is better than their experiences in their home countries. However, further inquiries suggest that respondents were mostly excited about their dreams of a better life in Australia and how their new abode could help them in achieving these dreams through the career and employment opportunities it offers them. The respondents saw Australia as a land of opportunity, prosperity, freedom, and as a place that fosters life continuity. They consider Australia as a place essential for their existence over an extended period time (i.e. life continuity), partly due to the Australian healthcare system which makes it easier for them to access the best medical attention when needed. Interestingly, this view was largely common among older respondents while younger ones did not appear to consider Australia as a place to stay long-term or spend their retirement. However, one of

the older respondents reasoned that "there are [more] opportunities for the younger migrant generations than the older ones due to the age differences and the migration policy that favours young people." Despite these perceptions, all the respondents seem to indicate their intention of going back to Africa someday to contribute to the development there, while also emphasising the health and financial benefits of living in Australia as shown above.

While respondents conceptualise Australia in positive terms, they also express mixed feelings about their experience as a minority group in Australia. Some cited cases of perceived racism and implicit biases in the form of stereotypes or labelling as among the negative experiences they have encountered in Australia, pointing to this particularly occurring in urban rather than rural communities. Their narratives reflect the burden of otherness: a feeling of being "the odd one in the box." The problem here is not so much that of invisibility but rather the burden of visibility due to stares from strangers who are of a different ethnicity and therefore look differently from them. One respondent stated, "Sometimes, when you walk around people stare at you but I think it is because of the culture here and what you do", adding that "some think that Africa is some country...and that we eat grass in Africa." When asked what she meant by this the respondent noted that many white Australians are not used to seeing people of colour in their country and often stare when they see one, making the individual feel as though he or she is intruding in their area with their "non-white" self. Issues such as these clearly affected the sense of well-being and self-esteem of the respondents and led to their "not feeling accepted" and having a sense of "isolation in the workplace." What the respondents experienced may not have been explicit racism but rather a reaction by the locals who have preconceived ideas about Africans and their way of life. Nonetheless, respondents recounted:

I didn't have any negative experience although when you walk around people will be staring at you....some will ask some 'funny' questions...they think that Africa is just a country....they think that we eat grass... If I take a photo of where I lived in Alice Springs and show it to people in Africa they will not want to come...there are better things in Africa. Now so long as you have dark skin, there are ignorant people within the community that would group you all together. You hear the term like "you Africans". Africa has become a country—it has always been for the ignorant.

Before, it was where are you from...now you meet certain people that are not open-minded [and] they guess your country for you and then you hear comments like "you are not like them." When you hear comments like that then you realise that that is where the problem lies: because "you are not like them" meaning 'them' is the problem. If you are not like 'them' then you are not part of the problem.

There was a peak in police issue where they started grouping people and would stop African people—it doesn't matter which part of Africa that you [come] from—they would treat you the same [by profiling you]. Whether you are light or dark, as long as you are African [have African features], you are troublemakers.

The respondents seemed to believe that the general stereotypical perception about them was some sort of identity politics coming from the interests of the Australian political class. Identity politics is the tendency by a particular group of people in which they form exclusive social and political alliances, largely shaped by aspects of their identity such as race, social background, or religion (Wiarda, 2016). Some fear that this identity politics has gone deep into the Australian fabric, such that an average white Australian lacks awareness of and interest in the diversity of the African community in Australia and of the African continent. According to the respondents, the identity politics of stereotyping that lumps all Africans together as one fails to take account of the diverse backgrounds of African migrants (skilled and unskilled) and what they contribute to the Australian society. The majority of the respondents assumed that such identity politics and stereotypes about Africa have led to changes in migration reforms, making it difficult to gain employment, access their local African food staple, and secure permanent residence status. Some respondents noted the following,

I had an experience some time ago when I applied for a job. I spoke on the phone with the manager about the job and they liked me. When I was invited to their office the next week to see the manager, they were surprised that I was black. They asked me if I was the one they had spoken with over the phone...I didn't get that job after that...

We have our particular food which we are accustomed to. So when we initially came it was nowhere to be found. But I am glad that an effort has been made. Now we receive our meal regularly, but we still do have other food items which we would like to have that are not allowed by immigration. We only eat that when we travel home to Zimbabwe.

As a migrant, my biggest challenge is how to get permanent residency. How to write the English test and get a good score. They just increased the points required from 65 to 75. I don't know how I am going to get [pass]. That is the biggest challenge I have now.

Respondents spoke of other challenges and experiences they were facing in Australia, blaming the poor understanding of and stereotypical prejudices toward the Australian-African community as part of the problem. Overall, they seemed to speak with one voice about the negative public perception of the African community in Australia, one which seems to affect their self-identity, self-confidence, perceived quality of life, and opinions about Australia (also see Mapedzahama & Kwansah-Aidoo, 2017).

9.4.2 Attachment separation, surrogates, and avoidance behaviour

Most of the respondents had a healthy close relationship with their primary caregivers (e.g. father, mother), close others (e.g. friends, romantic partner), and church community. However, few (n=5) had negative relationship experiences with important people in their lives, pointing to the demands and busyness of their pursuing the "Australian Dream" (believing that settling in Australia can lead to a better life because of the perceived freedom, security, and possibility of success it offers) as the root cause of their relationship breakdown with important people in their lives. This meant that the routines and demands of place change (having migrated) meant working long hours away from home or studying to secure a better future for the family. These demands affected the *chemistry* or relationship between parents and children, husband and wife, and family within the African community. For example, one respondent noted that he "never bonded with dad due to his work and study." A 22-year-old female respondent stated that her parents divorced due to the demands of life in Australia, which affected her relationship with her father who no longer lives in Australia.

Another female respondent, 40, felt that the demands her ex-husband and she placed upon themselves for a better life in Australia might have contributed towards their divorce. There were contrasting views as to what might have caused these emotional separations. One respondent, however, believes that they are likely to be as a result of other factors such as the culture and family upbringing. To take seriously, the respondent explained that...

relationship [with my parents] mirrors the typical African relationship. Like back in the days when dad was working and mum was the boss at home. Due to the nature of the relationship, and my dad being stubborn, I never developed that western type of relationship a lot of kids have with their dads. There was not a lot of bonding and there was no time to play at the park because daddy was always at work. At that time, I thought it was normal but as I got older I realised that it wasn't normal.

Another interesting observation from the interviews was to see the respondents turning to other sources for relationships. For example, they mentioned looking up to their older siblings, making friends with people within their own social class, participating in a church community, and seeking spiritual attachment and relationship with God. These channels of relationships seem to play some sort of compensatory roles, in that they were substitute mediums that filled the void of an absentee caregiver or family member. While some of the respondents compensated for an unavailable relationship by turning to attachment surrogates, others developed a self-coping strategy which was expressed through developing tendencies and traits that sometimes position them as "introverts", "independent", "not trusting of others," and "self-reliant." The latter group developed an avoidant attachment as a way of protecting themselves from emotional hurts and betrayals, as experienced from their primary caregivers and romantic partners. Ainsworth and colleagues (1979) referred to this as an insecure preoccupied attachment style that is both dismissive and fearful of others. These tendencies (i.e. forming compensatory attachment affiliation and avoidance attachment style) seem to be developed to cope with the experience of attachment separation from parents and partners. These tendencies may have negatively affected the respondents, leading to "lack of self-confidence", such that they sought to rely on other people for acceptance and rely on themselves against external

betrayal, providing them with some closure. The avoidance disposition and compensatory relationships also served as defensive mechanisms upon which to explore the broader environment, forge future relationships, and negotiate identity and quality of life in Australia.

Responses from the respondents suggest that their experience of avoidance self coping is basically reinforced by an underlying religious identity or compensatory relationship with a divine attachment figure (e.g. God). In other words, there was a correlation between respondents' avoidance coping strategy and their religious experience. Religion appears to play a role in their avoidance coping as most of them seem to replace their attachment figures, especially by substituting for an attachment affiliation with God. When asked how such affiliation may be related to their self-reliant avoidance tendency, some of the respondents recited how their faith in God has kept them strong, secure, courageous, and safe. They conceptualised God as some sort of attachment figure and companion who guides them, and one to whom they find a safe haven, completeness, and can confide and rely on as a secure base in their decision-making process. One of the respondents even noted that he "cannot make a decision without committing it to God." He offers encouragement to other respondents to "count it all joy in whatever you face [in Australia]", a biblical reflection drawn from the book of James 1: 2. This sense of confidence in their relationship with God seems to reassure respondents' self-confidence, in a way that reframed their negative experiences and attachment separation as "trials of faith." It appears that this avoidance coping strategy, though related to their religious life, makes the respondents content with their life while being independent of their human others.

9.4.3 Self-transcendence and religious coping

Next, it appears that respondents drew on their religious identity and theological beliefs as a way of responding and reframing their everyday life challenges and stressors. Respondents' theological beliefs and spiritual resources played a vital role in this meaningmaking process as it helped them overcome the limits of the individual self in order to attain self-transcendence. This religious coping experience was expressed in two distinct ways:

positive and negative. The former shows how the majority of the respondents (n=12) engage their Christian theological beliefs to reframe their lived experiences. This aspect of religious coping mainly involves cognitive and behavioural efforts aimed at seeking spiritual support and meaning. The latter simply shows how the respondents (n=3) expressed their conflict and doubt regarding issues of faith in dealing with their life challenges. Such negative spiritual coping made it difficult for them to draw strength from the relationship with God or their spiritual awareness. Both the positive and negative religious coping experiences manifested themselves among the respondents in various forms, as will be discussed next.

9.4.3.1 Positive religious coping

Personal domain. Respondents shared how their search for meaning and spiritual connection in their own personal life in their pursuit for a better life in Australia, helped them overcome their challenges in life. This was demonstrated through their personal and spiritual awareness, as they sought internal harmony and also with those around them. This aspect of their religious coping did not involve any external religious influence such as participating with a church community, though it may have been influenced by their spiritual awarenessa form of self-transcendence involving overcoming the limits of the individual self and seeing oneself as an integral part of the universe. The respondents reported that they took up the challenge that they "will survive in Australia no matter what happens." Despite the challenges experienced by the respondents, they found the need to speak positively about their future in Australia and refused to abandon their "Australian Dream", even if it meant improvising. When asked how their spirituality was helping them to deal with their lack of access to their staple food, one of the respondents noted that "because I was not getting what I was used to...when it came to the matter of food I still trusted in God because I have to be accustomed to what they have here." The respondent reasoned that her "trust in God" during her spiritual contemplation made her to be creative about her food choice by making use of what she found in the Australian food market. She substituted the porridge recipes she found in the stores and used them for her maize meal.

Some other respondents recounted the personal domain of positive religious coping and how their spiritual awareness helped them to cope with whatever challenges came their way.

I looked in the mirror and saw a child of God that has potential...I realised that I could do all things through Christ who strengthens me. That means I took my studies seriously and believed that I could do whatever I wanted to do.

I have the spirit...and know that whatever I face I must survive and count it all joy because God cannot give to me more than I can bear. When I got to this country I know that it was definitely not going to be all rosy. But one thing I know was that whatever I faced the bible says I should count it all joy because hopefully there is always a light at the end of the tunnel.

We have verses in the Bible that say in all things, give glory to God. So in all difficulties and challenges I still believe that there is God who can meet all my challenges.

Social domain. The personal dimension of religious coping seems to correlate with the social dimension as respondents tapped into the sinews of divine relationality. Contrary to the personal domain, most of the respondents shared another variation of religious coping, this time emphasizing the need for a meaningful relationship with God and engagement with their religious others. In this scenario, respondents conceptualised their God representation as a loving, protective father figure, one to whom they can turn when in danger and from whom they can explore the Australian space as 'newcomers'. This social domain was more salient among respondents because of the perceived presence of God in their lives as a loving and caring "Father", one upon whom to cast the burdens of life. This social domain was often activated through the medium of prayer, fasting, and searching the scriptures for answers.

I cannot make a decision without committing it to God in prayer...What myself and my wife do is every first day of the month we do prayer and fasting. We seek the face of God...and commit our plan to God to help us.

My relationship with God plays, at least, more than 90% role in my life. I cannot see myself making any concrete decision without committing it to God first in prayer. My relationship with God really helped me to survive in this country....getting to this country was very challenging.

We fellowship together in Church in Sydney. Every Sunday we drive about 98 to 120 km to the place of worship...we drive from the Central Coast to Sydney to commune with our God...this really helps me.

Once you have a relationship with God it affects every aspect of your life. Once I realised that I have an amazing and loving Saviour and accepted God I began to change and my attitude began to change....I started building positive relationships...

This reliance on religion for coping extended to treating others kindly, in response to the biblical injunction to "love your neighbour". This was mostly evident in the respondents' compassionate attitude towards the locals, the Australian community, and the place (Australia) which they had at first perceived negatively. When asked what made them adopt this positive attitude, most of them cited the religious teachings to "love others" and be the "light of the world" which helped them show empathy, love, and compassion towards those who had labelled them as "troublemakers."

Environmental domain. Another aspect of positive religious coping by the respondents was in terms of how they embraced their environment and achieved harmony and order in it. This was done through their active involvement with the local church community and meaningful relations with their religious others at places of worship. Contrary to the social domain, respondents seem to have dealt with their life challenges by strengthening their sense of spirituality through their place of worship - a sacred space which not only strengthens their faith but also forges their perception and attitudes toward their environment. This environmental aspect appears to be the function of previous domains of religious coping, in that respondents reinforced their personal and social religious commitments and awareness in a local church setting. They recount of this experience:

It wasn't very easy studying and working and finding a church that will deploy what you have to the service of God. But I thank God for helping me to locate a good place [church] where I can add one or two things to his house.

I am a big believer in things happening for a reason. I noticed a shift in the quality of my life [when I began to attend a local church]...not in terms of materialistic things but compared to when I was on my own and I was working

and hanging around with my friends. But there were still things missing....until I started going to church and started hanging around with people of my own kind...not just people in the church but people in my community.

All the respondents reported an association between a better quality of life with their environmental connection, particularly through their religious meetings and church involvement. This positions religious coping as an experience that involves physical involvement in a place of worship; an environmental setting that is both sacred and communal for the respondents' religious and cultural expressions.

9.4.3.2 Negative religious vs human-based coping

While the majority of the respondents (n=13) displayed positive religious coping in dealing with life challenges in Australia, there was a small minority (n=3) who had doubts about the role of their religious identity and theological beliefs in helping them deal with life stressors. Respondents within this category found it difficult to draw strength from spiritual resources or their religious others, as they often elevated their own weaknesses and limitations above religion often due to their feelings of doubt and guilt in their relationship with God.

At the *personal domain* level, respondents found it difficult to go beyond their material limitations, adopting a realist approach to resolving their life stressors. Although aware of their lack of ability for self-transcendence, the respondents still spoke of themselves, demonstrating courage and hope in their Australian dream in spite of their lack of faith in their personal abilities. Two of the respondents felt that problems they faced adapting to life in a new environment could be met through "self-motivation", "self-education", "self-evaluation", "pushing through the fear", and not feeling any need to resort to religion (In other words, they felt they were able to cope without it). One could reason that the respondents were pragmatic in their practical approach to problem-solving. When asked how they were able to achieve their goals they note "learning through social media" as a main resource for their human-based coping, in that the contents they read online reinforced their negative

religious coping and doubts about the salutary effects of religion in coping with life stressors. In other words, there was a connection between their human-based coping and their negative religious coping. The human-based coping served as a springboard for their spiritual discontent, interpersonal religious discontent, and reappraisal of God's powers.

In terms of the social domain of negative religious coping, respondents also gave contrasting views about the effectiveness of their relationship with God and discontentment with close others in resolving their immediate life challenges. In this instance, respondents expressed their feelings of abandonment and anger towards God, leaning towards their own human dignity and capacity for self-fulfilment. Interestingly, those that fell within this category had experiences of attachment separation with their caregivers or parents and as a result developed an avoidant attachment style in terms of their 'dismissive' relationship with God. A 22-year-old whose parents divorced when she was 8 years old stated: "I hardly trust anyone." In commenting on the complexity of negative religious coping, another respondent noted:

I know my spirituality is wavering, but I don't think it really does anything for anyone. I know my faith and relationship with God is not strong but I am [strong] if faith in him is the solution to my problems. I have to work this out. I am happy my elder brother is always there for me...but I don't trust people.

Other respondents noted that their friends are able to help them find employment and therefore they have no reason to turn to religion, or have God do that for them (even though it is possible that God may have sent their friend to them unknown to them). One of the respondent recounts, "I have this friend...she is so good at finding jobs for others. If you are looking for employment she helps you prepare your resume and apply for the job for you herself. She is good." When asked about the role God plays in their life, one respondent said, "He [God] will not come down to do the work for you." It appears that the respondents are aware that "faith without works is dead" (cf. James 2:14-26) and perhaps recognised that God cannot do for them what they can do for themselves. However, there seems to be a link

between their avoidant attachment tendencies and their humanistic coping behaviour, as those with attachment problems often were dismissive and reappraisal of God's powers.

9.5 Discussion

The finding of this study is similar to those of previous studies on avoidance coping behaviour (Ng, Shao, & Liu, 2016) and religious coping strategies (Charzynska, 2014; Hebert, Zdaniuk, Schulz, Scheier, 2009; Pargament, 1997). In particular, this study highlights the salient nature of attachment-related religious coping behaviour and how this it is manifested in migrants of African background. This perspective corresponds to the rest of the study as it shows how migrants' attachment separation with important people in their lives led to seeking attachment to God as they confronted a wide range of socio-cultural and migration challenges in a new country. These challenges led to the neglect of family responsibilities and deep meaningful relationships between parents and children within the African diaspora communities in Australia.

The first key finding of this study is the correlation between avoidance coping behaviour and attachment-related religious coping, in that respondents who were avoiding their human others were seeking new relationship experiences with God individually, or collectively, through their church community. The second key finding is that the respondents reporting evidence of negative religious coping behaviour in the form of showing spiritual discontent and reappraisal of God's powers in their lives (i.e. insecure attachment to God) had negative experiences of attachment separation and relationship problems with their close others. These two findings thus suggest attachment insecurity in human relationships as the motivation for developing attachment-related religious coping behaviour both in the positive and negative domains.

The above-mentioned findings are well-documented in attachment literature and discussed as the compensatory and correspondence models of individual differences in God attachment processes (e.g. Counted, 2016; Kirkpatrick & Shaver, 1990). The compensatory experience positions God as an attachment surrogate for believers who turn to him for

secure attachment, relying on him as a secure base and safe for their religious coping. In other words, the relationship with God serves as a coping mechanism or substitute for 'insensitive' attachment figures and attachment insecurity with close others. This relationship also helps in coping with life stressors, which involve a range of issues such as stereotypes, labelling, implicit bias, cost of living, tough immigration reforms, and migration-related family crises. The correspondence model shows how the attachment working models of individuals with negative relationship experiences with their primary caregivers are transferred to their future relationships. In other words, if an individual develops an insecure working model of attachment during the early years of life, they may likely exhibit a similar tendency in their relationship with God and close others (Counted, 2016a, 2016b). Respondents' attachment affiliation with God were used as a conservational force in their coping process to "a search for significance in times of stress" (Pargament, 1997, p.90). This religious coping process helped them to forge meaning, gain control of their situation, acquire comfort through maintaining spiritual connection, and explore the broader environment during life crisis. Nonetheless, this coping process was often challenged and threatened by the lingering effects of negative emotions and individual biographies in the face of place change and migration, thus leading to adopting other coping behavioural aspects that were both avoidant and humanistic in nature.

Furthermore, study findings show that respondents demonstrated two aspects of religious coping: positive and negative. Firstly, the positive religious coping showed how they used religious resources available to them to "understand and deal with life stressors in ways related to the sacred" (Charzynska, 2015, p.1631). Pargament (1997) conceptualised this aspect of religious coping based on Lazarus and Folkman's (1984) transactional model of stress, in that the respondents played an active role in making sense of and evaluating their life stressors and challenges by searching for significance through spiritual resources. This is done by adopting cognitive and behavioural strategies aimed at meaning-making and problem-solving. It is argued that such cognitive and behavioural skills involve reflecting on

the theological knowledge of God in the bible, seeing one's self above and beyond the limits of material experience, and committing to a local church community.

Respondents' positive religious coping strategies are manifested in variant domains: personal, social, and environmental. The personal domain emphasises the transcendence of self in relation to the broader environment, allowing the individual to be in tune with the self and more spiritually aware of their challenges. The personal domain emphasises respondents' spiritual awareness and the social domain shows to what extent they are they were in tune with others in their spiritual awareness. This aspect affects the way they treat their close others, in regard to their treating them with kindness and being non-judgmental. The environmental domain shows the degree to which the respondents are in tune with the environment or place as an important locus of their spiritual awareness. This may involve participation within a religious community in the environment and dealing with life stressors from the perspective of their involvement in a local church. This aspect of religious coping sheds light on how activities and events within a religious place of worship helps the individual in problem-solving and improving the quality of the environment. These positive domains are consistent with other studies on religious coping (e.g. Charzynska, 2015; Miller and Thoresen 2003; Pargament et al. 2011). Secondly, while most of the respondents generally showed positive religious coping, a few took a negative turn in their religious coping trajectory – partly due to their attachment insecurity. This negative religious coping was influenced by their insecure attachment tendencies which lead to their humanistic coping behaviour signalled through their dismissiveness of and discontentment with God's powers in dealing with life's issues. Charzynska (2015) refers to the negative religious coping as a cognitive effort in problem-solving that does not involve the use of religiousrelated resources. This is also defined by expression of spiritual discontent, interpersonal religious discontent, and reappraisal of God's powers (Hebert, Zdaniuk, Schulz, & Scheier, 2009). Only two domains (i.e. personal and social) were observed among respondents. The personal domain of negative religious coping, just as the positive aspect, emphasises how respondents are in tune with themselves as embodied entities through their humanistic

coping behaviour without assuming any self-transcendence power, unlike in the positive aspect. Respondents were self-motivated humanistic realists, often taking practical approaches to achieving their goals and dealing with their challenges while exhibiting spiritual discontent and reappraisals of God's powers. Much of this discontent and reappraisals were stirred by their insecure internal working models of attachment which were negative cognitive frameworks developed during their close relationship experiences. Similar emphasis was found in the social domain as the respondents appeared to be self-sufficient in relation to dealing with their life stressors, such that their avoidant attachment became important in dealing with their relationship problems and in developing self-reliant humanistic coping tendencies. This social aspect suggests some sort of antinomy of self-autonomy and transcendence, one which may have consequences for health outcomes, showing how respondents' knowledge acquisition in religious coping was associated with their context of interactions, experiences, and external influences (Charzynska, 2015; Hebert et al. 2009).

Overall, findings from the religious coping behaviour of the respondents seem to suggest a prevailing social cognitive theory (Bandura, 1999, 2000) and the role of attachment to God as a meaning-making religious coping behaviour (Pargament, 1997). In other words, respondents' understanding of their world and their religious coping behaviour seem to be directly correlated with their personal attachment attributes and biographies, external influences and social interactions involving their attachment figures. Such reciprocal interaction between one's personal attributes, environment, and behaviour is central to, and well-documented in, social cognitive theory.

Study findings have implications for how religious coping is theorized for African diaspora since they suggest that it is related to their attachment separation and life stressors in a host-community. As well as considering religious coping in relation to attachment and life stressors in Australia, a re-definition of religious coping may also need to take into account the meaning-making coping and perceived quality of life which are attained in the process of such relational transactions when seeking and maintaining attachment. This study corroborates previous findings which suggest that religious coping may be correlated

with better health outcomes (Charzynska, 2015; Pargament et al. 2011), and may be helpful only in a migrant and place context (Nakonz & Shik, 2008). Despite these relevant findings, some limitations were encountered during the course of this study, such as the lack of generalisation to other migrant groups due to the qualitative nature of the study, heavy dependency on the author's research skills, and the possibility that study findings may have been influenced by the author's personal biases and idiosyncrasies.

In conclusion, the present study shows the role of seeking and maintaining attachment to God as a multidimensional religious coping strategy for meaning-making within the African diaspora communities facing various life and family challenges in a new country. Study findings show that religious coping behaviours are developed, either positively or negatively, due to the salient nature of attachment insecurities within migrant communities as migrant parents neglect their responsibilities while wrestling to adjust to life in a new country and in the process neglecting the emotional attachment needs of their children. Along with the rising need to form meaningful and reliable attachment is the desire to seek and maintain attachment to God as a reliable surrogate attachment in African migrant youths (separated from their parents due to their unavailability and work demands in a new country) and migrant parents (geographically separated from their loved ones and home countries). This attachment void is filled through a personal relationship experience with a Divine entity who is perceived as an attachment figure, thus forming a relational spirituality and secure base from which the migrant copes with life's challenges. These meanings must be taken into consideration in order to articulate effective ways of reaching out and alleviating attachment-related migration stressors affecting this migrant group in a new abode.

9.6 References

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Chapter 10 Why and How Environmental and Religious Attachments Matter for Quality of Life

This chapter synthesizes all the findings from the overall study into one narrative, discussing the nature of the complex links between attachment to Australia, relational spirituality, and quality of life. Chapter 10 summarises the findings of the empirical chapters in relation to the aims of the overall study. Lastly, conclusion and implications were drawn in terms of how and why environmental and religious attachments matter for quality of life in Australia.

Chapter 10

Why and How Environmental and Religious Attachments Matter for Health Promotion

10.1 Introduction

The aim of this study has been to examine the relationships between place attachment (PA) involving migrants' attachment to Australia, relational spirituality (RS) in terms of attachment to God, and health-related quality of life (HQoL) outcomes. Indeed, there is much to digest in a three-year mixed methods study of the adult attachment experiences of Australian African diasporas and its impact on their quality of life. This chapter summarizes some key points with regards to the study aims.

10.1.1 The association between PA, RS, and HQoL

While drawing on the adult attachment theory, pro-environmental behaviour and religious coping theoretical frameworks, results from chapter 4 reveal that profiles of attachment experiences in terms of attachment anxiety, attachment avoidance, place attachment, and attachment to God were related to all domains of HQoL, except for the domain of social relationships which was not associated with attachment avoidance. The general QoL and psychological health domains also showed no correlation with attachment anxiety. Chapter 7 shows the results of the moderation analysis suggesting that both PA with regards to attachment to Australia and RS have an impact on the HQoL of the African diaspora, but individually rather than collectively since the effects of their PA are not contingent upon RS. Thus, both attachment experiences independently affect HQoL outcomes regardless of other factors. The mechanism for a possible interaction between PA

x RS (AG) was explained using the Circle of Place Spirituality (CoPS) model, where the secure base formed in a relationship with a particular object of attachment may influence exploration of the relational qualities of another object. The lack of interaction between both constructs was attributed to the contextual background of the migrants in a multicultural society and the attachment working models of PA and AG which operate independent of each other. This is likely to be the case since attachment to place may reflect a psychological state compared to attachment to God which can be developed as a trait-based psychological process. However, what is clear about the study result in chapter 7 is that African diasporas who are drawn to Australia and those attached to God were very much likely to have better QoL due to the positive functions of these relationships, operating from different motivational systems and working models. Perhaps the contrast between attachment to Australia and attachment to God as distinct dimensions of benefit might be useful for applied researchers who are interested in migration studies.

10.1.2 Demographic background factors related to differences in PA, RS, and QoL

Chapter 5 summarises demographic background factors serving as predictors of PA. Region of origin, length of stay, and educational background emerged as significant predictors of the sense of place experiences of African diasporas in Australia. In particular, African residents from Eastern Africa were more likely to develop the "aussie" place identity than those from Central Africa; and African migrants who have been residents of Australia for more than 5 years, and those who are less educated were more likely to develop attachment to, and dependence on, Australia compared to newly arrived and educated migrants, respectively. Results from chapter 6 suggest that educational achievement among African diasporas who are spiritually attached to God led to better quality of life. In chapter 7, length of stay and age differences were predictive of physical health, though age was negatively associated with physical health which suggests that younger participants had better outcomes of physical health than older adults. Chapter 7 also suggests a possible link between RS and length of stay.

10.1.3 The association between place experiences and QoL outcomes

Study findings in chapter 5 reveal the following. Levels of SOP and place attachment were positively associated with all outcomes of HQOL in terms of better environmental health, psychological health, physical health, social relationships, and general QOL among African residents in New South Wales, with place attachment and physical health having the strongest link. Second, place identity was positively related to environmental health, psychological health, and physical health but not statistically significant for social relationship state and general QOL. Study results support previous studies on the relationships between place experiences (i.e., place attachment, place identity, and place dependence) and outcomes of HQOL (Scannell & Gifford, 2016; Marcheschi et al., 2015; Rollero & De Piccoli, 2010). These findings suggest the relevance of place in health research and underscore its importance for negotiating HQOL.

10.1.4 The relationship between RS (AG) and QoL outcomes in relation to a moderator.

The hierarchical moderated regression analysis results from chapter 6 suggest that the educational achievement of spiritually attached individuals led to better quality of life, thus suggesting that state-based AG relational spirituality (felt feeling of security) showed a trend towards interacting with educational achievement's impact on outcomes of HQoL accounting for approximately 25% variance in general quality of life alone. A sense of spirituality may therefore have a potential to enhance quality of life despite one's educational background/achievement.

10.1.5 AG and the role of religious coping strategies

Findings from the religious coping behaviour of the respondents in chapter 9 seem to suggest a prevailing social cognitive theory, which showed how the respondents understood their world and religious coping behaviour. Both of these experiences were directly related to

their personal attributes/biographies (attachment separation), external influences, and social interactions. Furthermore, study themes drawn from the interview transcripts suggest patterns of positive and negative aspects of religious coping, involving multiple domains including personal, social, and environmental attributes, wherein the respondents rely on religious and human-based resources for meaning-making respectively.

10.1.6 Place and the role of pro-environmental coping strategies

Study findings from chapter 8 position migration experiences and forced acculturation as correlates of pro-environmental coping among African residents in New South Wales. These results reveal that this group of individuals turn to pro-environmental coping domains in the form of place affect, behaviour, and cognition as means of coping with the reality of their socio-cultural inequities and forced acculturation. This chapter shows how aspects of sense of place attitudes, explored in Chapters 3 and 5, may be conceptualised as proenvironmental coping behaviours for building resilience and negotiating quality of life and a sense of belonging. The findings complement previous perspectives on pro-environmental behaviour (Ramkissoon, Weiler, & Smith, 2010) and make attachment to place an important construct to consider when studying health outcomes in migrant populations. This is because the need to form attachment to a new country is important for migrants in order to mask a sense of belonging and identity. It is argued that migrants resort to proenvironmental coping strategies, due to their implicit experiences of forced acculturation, which they masquerade to the public for acceptance.

10.1.7. Understanding attachment and QoL: comparing attachment theory and needsbased theory of motivation

To further understand the study results, the predictions of attachment theories and needs-based ERG theory of motivation are compared. Attachment theory posits that attached individuals experience a sense of wellbeing and psychological adjustment due to the security achieved from the relationship with an object of attachment (Mikuliner & Shaver,

2007). When such an object becomes a target of proximity and a reliable relational object when exposed to life stressors, this can have a positive impact on quality of life, as the individual is reassured of their safety in the presence (visual or imaginary) of their attachment object. When such a relationship is maintained for over a period of time, this can make the individual to have confidence in the relationship. This confidence becomes a secure base from which the individual explores their broader environment and other relationships, as they forge identity and negotiate quality of life in the process. In this sense, such an attachment experience becomes both a transitional and transactional process, for achieving a sense of security and exchanging needs of attachment affiliation (Counted & Watts, 2019).

This attachment perspective also parallels the needs-based ERG theory of motivation developed by Alderfer (1969). Alderfer believed that individuals demonstrate goaldriven behaviours that satisfy three basic human needs such as existence (which corresponds to Maslow's physiological and safety needs), relatedness (addressing Maslow's social needs), and growth (which corresponds to Maslow's self-actualisation and esteem needs). These basic human needs can be achieved the same time or may operate one at a time through relationship experiences. In other words, attachment relationships with Divine entities and geographical places may help migrants achieve these three basic needs, thus leading to better QoL in the process. If a migrant's religious figure and country of residence could provide these needs, then this would definitely have a positive effect on their QoL. The need for existence can be achieved through the security an object of attachment affords. Proximity with an attachment object can have a meaningful effect in the individual's sense of relatedness, thus meeting their social needs. Achieving these two needs in an attachment relationship could be the basis for experiencing growth, as migrants master their new environment and experience self-actualisation and esteem in the process.

Both the attachment and needs-based ECG theories could help us understand how adult attachment experiences influence quality of life in African migrants. Hence, whether it is for meeting the needs for meaningful relationships or motivated by basic human needs,

attachment experiences help migrants achieve a sense of security, relatedness, existence, and growth through their proximity with geographical places and Divine entities.

10.2 Synthesis of Findings

10.2.1 Quantitative Findings

Study chapters have reported on the nature of African migrants' relationship with the Australian 'place' and a Divine entity in the person of God as symbolic 'objects' of attachment, having a significant impact on their collective growth, quality of life, and sense of identity during place change. Findings from these studies/chapters show that both peopleplace experiences in Australia and a relationship with God are related to health-related quality of life outcomes such as psychological health, physical health, environmental health, and social relationship quality among Australian African diasporas. However, these adult attachment patterns seem not to be directly related. Rather, they independently relate to QoL, rather than collectively (Counted, Possamai, McAuliffe, & Meade, 2018). The lack of interaction between both objects of attachment could be due to the participants' context such as their migration experiences, socio-cultural differences, settlement challenges, and the multicultural nature of the Australian society among others. The lack of interaction might also be indicative of the complex nature of attachment processes which operate independently inn relation to the interplay between place, religion, and health. Since Bowlby's parent-child attachment pattern has been adapted to other adult attachment patterns, including to place and to God, it may then mean that the study data only speak to the independence of a safe connection to these objects as a psychological state promoting a sense of felt security. Hence, it is possible that attachment to place and attachment to God, may not be connected by the same attachment behavioural system. According to Mikulincer and Shaver (2007), the attachment behavioural system, as an internal regulatory system, is activated by perceived threats to the individual's proximity with an object of attachment. At a conceptual level, a behavioural system comprises of six key aspects involving the biological function, activating triggers, functional behaviours, a specific set goal for achieving a task, cognitive processes,

and neural links connected to other behavioural systems (Mikulincer & Shaver, 2007). The lack of interaction between PA and RS might be representative of a lack of shared attachment behavioural framework when simultaneously engaging with place, and God, as objects of attachment.

10.2.2 Qualitative Findings

Qualitative analyses reveal a more complex phenomenon which help in gaining insight into the nature of the relationship between attachment to place (Australia), relational spirituality, and quality of life outcomes. First, after a series of follow-up interviews with purposefullyselected fifteen respondents from phase 1 (i.e. the quantitative study), it was found that the nature of the independent relationship between relational spirituality and quality of life was multidimensional. For instance, findings from the qualitative study in Chapter 9 reveal that RS is a coping strategy with health benefits having both positive and negative aspects, involving multiple domains: personal, social, and environmental. At the personal positive level, this involved how the respondents' relational spirituality was in the form of personal meaning-making which led them to overcome the challenges associated with migrating to Australia. This personal dimension was also seen in the negative aspect of religious coping in that some respondents was discontent with their relationship with God, thus adopting a realist, human-based approach to problem-solving. At the positive social level, respondents tapped into their sense of RS with the purpose of building a corrective relationship with God, thus emphasising the need for a meaningful relationship with God and engagement with their religious others. In contrast, at the negative social level, the respondents were seen giving contrasting views about the effectiveness of their relationship with God and discontentment with their close others. The environmental domain saw how the respondents turned to their sense of relational spirituality, but this time in relation to their local church community in Australia, in such a way that it enabled them to embrace their environment and achieve harmony and order in it. Interestingly, respondents' religious coping strategies were related to their negative relationship experiences with their parents, early caregivers, and the

dysfunctional family dynamics susceptible to migrant families (Counted, 2018b). These negative relationship experiences within the Australian African diaspora community led to most of the respondents having a strong sense of avoidant attachment, as they sought to self-alienation. However, the respondents were also seen forming a compensatory attachment in which they turned to God and developed their sense of relational spirituality to forge meaning, gain control of their situation, explore opportunities in Australia, and acquire comfort through their religious coping strategy. These findings show how relational spirituality, through the trajectory of religious coping, led to better health outcomes among Australian African diasporas.

As an independent predictor of health outcomes, attachment to Australia reflects the role of pro-environmental coping behaviour during times of place change and migration. Unfortunately, this pro-environmental coping strategy was in response to the pressure of forced acculturation coming from the Australian media and conservative population, demanding for the assimilation of African migrants into the Australian mainstream culture. This pressure to assimilate in order to be part of the Australian society compelled the respondents to develop pro-environmental coping strategies such as developing the Australian identity (e.g., speaking with the Aussie accent, etc.), adopting the Australian lifestyle (e.g., beach culture, barbecue parties, etc), and turning to resources that would enable them to be 'more' Australian (e.g. language classes, educational system, working experience, etc.). These pro-environmental coping strategies were also conceptualised in terms of the multidimensionality, involving the affect, behaviour, and cognitive domains of place attitudes. Respondents' place affect showed how they were, in most cases, attached to Australia, developing a place bond which sustained them through difficult times. Place behaviour was seen in the way the respondents depended on activities and resources in Australia as a way to building a sense of belonging. The cognitive aspect of their proenvironmental coping saw the respondents developing identities that are semblances of the Australian culture. These pro-environmental experiences sadly tell the story of the relationship between place attachment and quality of life among Australian African diasporas

in New South Wales. Unfortunately, the relationship between attachment to Australia and quality of life in the quantitative phase of this study did not necessarily paint a picture of what is really happening. This is because the study findings indicate that these pro-environmental coping strategies were developed in response to experiences of forced acculturation, stigmas attached to identifying as a migrant, and the need to develop a sense of belonging.

10.2.4 Summary

Collected data at the quantitative study were used to estimate the nature of the relationship between PA, RS, and QoL. Most notably is that adult attachment processes that involve attachment to Australia as a significant place, and attachment to God in terms of RS, are positively associated with HQoL. These findings support previous studies on PA and QoL (e.g., Scannell & Gifford, 2016, 2017; Marcheschi et al. 2015; Gattino, De Piccoli, Fassio, & Rollero, 2013), and the attachment-religion literature (e.g., Cicirelli, 2004; Granqvist & Kirkpatrick, 2016; Miner, Ghobary, Dowson, & Proctor, 2014) This means that these experiences play a significant role in the lives of Australian African diasporas, even in terms of educational achievement, and therefore should be supported/strengthened. However, there is no interaction effects between both experiences since these relational domains may have been explored from different motivational behavioural systems, and are of diverse psychological nature (e.g. emotion vs sensation; state vs trait; dissimilar behavioural systems, etc.). This corroborates literature in motivational systems theory which emphasizes the diverse, complex nature of behavioural systems (e.g., Jimenez, 2006; Lichtenberg, 1988, 1989). The qualitative inquiry helped in gaining a deeper understanding of the complexities of these relationships, suggesting that though attachment to Australia is positively associated with QoL, this relationship may have been a facade (deceptive outward appearance) to satiate the demands of assimilation from the Australian media and people. The analysis of the interview responses suggests the role of religious coping and proenvironmental coping strategies in regulating the challenges associated with place change and the perceived pressures to assimilate.

Therefore, understanding the role of adult attachment relationships, involving a geographical place and a Divine entity (God), entails grasping the organisational structure of the attachment construct and its predictive health benefits in relation to pro-environmental and religious coping strategies. Attachment relationships with these objects were shown, in the Australian African diaspora study, to be related to quality of life, development of identity, the capacity for emotional regulation, psychological adjustment, and the emergence of exploration curiosity, among other things. Addressing the socio-cultural inequities that may be prompting the urge to seek attachment with imaginary objects might be needed to meaningfully address the relational need within this migrant community. Moreover, specific patterns of adult attachment processes had their unique implications for the attachment theoretical framework and quality of life research. Even more important than such links, however, study of the role of individual differences in the attachment patterns reveal much about the developmental processes underlying both the negotiation of, and change in, quality of life (Granqvist & Kirkpatrick, 2016). These findings have broader implications both for attachment theory, quality of life research, and future research in social psychology and the psychology of religion.

10.3 Implications of study

10.3.1 How Adult Attachment Affects Quality of Life

Observation. Firstly, attached individuals experience the health benefits of attachment processes through observation. One mechanism through which attached individuals experience quality of life is through learning about their emotions and environment by observing their objects of attachment and the interactions with them (Parke, 1994). This perspective is well-documented in the correspondence model of attachment (e.g. Hall & Delaney, 2009; Beck & McDonald, 2004; Rowatt & Kirkpatrick, 2002; Granqvist, 1998; Granqvist & Hagekull, 1999; Kirkpatrick, 1999; Kirkpatrick & Shaver, 1990). This model shows how emotion contagion and social referencing behaviours among attached individuals

provide the basis for the observational learning structure in attachment processes. Studies supporting the correspondence model of attachment (e.g. Counted, 2016; Kirkpatrick & Shaver, 1990) suggest that individuals who observe negative attachment experiences with previous objects of attachment may expect similar negativity in their next relationship. However, positive attachment experiences observed in a previous relationship may also be modelled in a new relationship, regardless of who/what is standing in proxy as the object of attachment. These two experiences both have an impact in the way the attached individual experience their objects of attachment, thus negative relationship experiences may lead to poor quality of life while positive experiences may predict better outcomes of quality of life. This observational learning strategy in attachment processes corroborates literature on social referencing theory (Saarni et al. 1998; Ainsworth, 1992). Social referencing phenomenon is an observational process by which an attached individual determines how to respond to, process, or feel about new relationship experiences based on the information from previous relationship experiences. In other words, it is an aspect of interaction between an individual and their objects of attachment. For example, when a religiously attached individual is put into a stressful situation, referencing to a spiritual or religious information related to that relationship may determine the effective meaning, adjust their perception of the situation, or regulate their emotions in such that it helps in negotiating their quality of life. Similar experience can happen in people-place relationship where positive place memories may serve as social referencing phenomena, particularly as affective communication (Campos, 1983) and not as instrumental communication (Rogoff, Mistry, Radziszewska, & Germond, 1992). This social referencing phenomenon produces information about how the attached individual feels at that moment, rather than direct information about what to do (Ainsworth, 1992), thus improving the state of their subjective wellbeing at that time. Social referencing phenomenon in adults as affective communication implies that the attached individual receives sensory inputs from an object of attachment which either directly, or after a cognitive interpretative process, influences how the individual feels and, hence, indirectly what to do in a given stressful situation (Feinman, 1992).

Relational practices and behaviours. Secondly, specific relational practices and behaviors related to adult attachment are related to quality of life. Denham and colleagues (2003) found that positive emotional expressivity and emotional awareness during the early years of life are associated with emotional competence. This competence in emotion at infant lead to social competence during adulthood, according to Denham et al (2003). Social competence may be a predictor of adult attachment development in terms of seeking imaginary relationships with objects that assure an attachment advantage which/whom nurture and promote relational practices and behaviours. However, this competence in relational practices and behaviours are enhanced due to coaching, reactions, and encouragement in relation to emotions (Gottman et al. 1997; Eisenberg et al., 1998; Roberts and Strayer, 1987). This perspective is based on the theory of meta-emotion which "refers to an organized set of feelings and thoughts about one's own emotions and one's children's emotions" (Gottman et al. 1997, p.243). In relation to adult attachment, social competence is used to encompass both feelings and thoughts or metacognition associated with the socialisation of emotion in adults, hence focusing primarily on the socialization of attachment behaviour specifically. Therefore, the ways in which objects of attachment influence adults' quality of life in relation to their social competence should to be considered as part of how adult attachment processes affect quality of life.

While examining emotion-related practices, Gottman and colleagues (1997) propose that responsive objects of attachment display specific types of relational behaviours associated with emotion which affect quality of life. One of such behaviour is 'emotioncoaching' (Gottman et al. 1997), which involves the following: emotional awareness (being aware of the emotion of the individual); emotional intimacy (developing intimacy through the emotion of the attached individual); emotional labelling (helping the individual label their own emotions); emotional validation (empathising with the emotion of the individual); problemsolving coaching (being part of the meaning-making process of the individual). Apparently, these emotion-related practices may not be done physically but largely form part of the emotional attuned communication between adults and their objects of attachment, mainly at

an imaginary level. For example, a religiously attached individual can evaluate how God is aware of, or empathise with, their emotion, or builds intimacy with them through their emotion. This implicit aspect of communication can be achieved through meditation, prayer, devotional, reading the scripture, and in the context of a faith community, as shown in the literature review on relational spirituality (Counted, Possamai, & Meade, 2018).

The way a perceived object of attachment implicitly reacts to emotional stimulus also affects the quality of life of the attached individual. When a religiously attached individual feels abandoned by God, he or she may end up with negative emotions and spiritual struggles leading to negative religious coping (Pargament, 1999). This can also be the case when the individual feels displaced in a new country because of their negative migration experiences, thus leading to a poor sense of social belonging and quality of life. An example of a negative reaction in relation to 'place' as an object of attachment can be the anti-migrant climate of a place, or as in the case of this study the mentra of forced acculturation by the Australian media can also be an example of a negative reaction towards the emotions of migrants. In contrast, relational and recreational activities that encourage and help migrants to have control over their emotions and life stressors can help them adjust to their new life in Australia. The same applies in a relationship with God where encouragement through the Scripture and spiritual teaching by a religious leader may help the individual to have control over their emotions, thus helping them to rekindle their faith and enhance their quality of life amidst life stressors.

Emotional climate of attachment relationship. Thirdly, quality of life is affected by the emotional climate of a relationship, as reflected in the emotional quality of the attachment relationship, sensitivity of the object, and social competence of the attached individual. The emotional climate that the attached individual experience in relation to a geographical place or a divine entity has an impact on their overall emotional development and quality of life. The emotional climate of a geographical environment is reflected in the way people in that spatial setting relate to it (such as developing identity, forming attachment, and depending on the environmental activities and resources) and in the kind of positive or negative emotion

experienced by individuals living in such environment. The same is true when assessing the emotional climate of a believer-God relationship, which also reflects in the way the believer relates with God and the outcome of such experience in the life of the believer. This perspective corroborates report from Darling and Steinberg (1993) who argue that the emotional climate of a family system impacts on the wellbeing and attachment patterns of family members. Alternatively, when an individual's emotional climate is negative, they are at risk of developing adaptive reactions in the forms of 'protest' (signals of separation distress), 'despair' or 'deep mourning' (interpreting the separation experience as a loss of the object of attachment) or 'detachment' (showing positive attitudes toward alternative objects as a way of surviving in the environment) due to unexpected attachment disruptions (Bowlby, 1973; Counted, 2017; Kobak, Zajac & Madsen 2016). This kind of disruptive environment makes the individual to be less emotionally secure.

Attachment disruption can happen in people-place or believer-God relationship and can be symptomatic of a deeper need for attachment security and negative emotional climate. In relational spirituality, attachment disruption can happen when a relationship with a divine entity is 'attacked' either through slanderous remarks by others or limiting access to religious symbols that draw the individual closer to the religious figure (Counted, 2017). For example, mocking Prophet Muhammad is likely going to have an impact on the perceived relationship between a Muslim believer and the religious figure; the same way a Christian believer would be offended when a non-believer mocks Jesus of Nazareth. Such emotional climate can predispose the religious individual to the adaptive reactions mentioned above: protest, despair, and detachment. When the livelihood and daily lives of people are disrupted in a particular geographical location, their sense of attachment to that place is greatly affected. This kind of emotional climate places individuals living in such a place at risk of developing emotional problems and adaptive reactions, leading to psychopathological issues and poor quality of life outcomes. In contrast, living in a stable, responsive geographical environment or religious atmosphere will foster emotional security because of the certainty of emotional stability experienced in such context. Religious believers feel secure emotionally

when they know they are safe in their relationship with the Divine or religious figures, especially when there is not direct or indirect threat to their attachment bond.

Participants in our study may have experienced better outcomes of quality of life because of the emotional climate of their place and spiritual relationships. The emotional climate of an environment or relationship is a reflection of how attachment affects quality of life. According to Morris, Silk, Steinberg et al. (2007), there are four main dimensions of emotional environment that is likely to impact on wellbeing: the emotional stability of the environment; expectations of the environment; the extent to which positive emotions are expressed in that environment; and the degree to which negative emotions are expressed in the environment. These four dimensions determine the extent to which individuals experience quality of life during their adult attachment experiences in relation to a divine entity or to a geographic place.

10.3.2 Why Adult Attachment Experiences Matter for Quality of Life

Psychological adjustment. Empirical findings from study chapters show that adult attachment experiences are associated with quality of life. Adult attachment processes conceptualised in terms of two dimensions—attachment to Australia and attachment to God—can affect adjustment to life stressors in a migration context, with preliminary empirical evidence suggesting that higher sense of place can be related to better health-related quality of life outcomes among long-term and short-term African migrants in Australia (Counted, 2018a). Study results also show that the experience of relational spirituality in terms of attachment to God is associated with better health outcomes among educated participants (Counted, Possamai, Moustafa, & Meade, in review); even the literature review of studies in this area support the positive impact of having an extended relationship with an object of attachment on quality of life (Counted, Possamai, & Meade, 2018). Attachment to a significant physical or imaginary object can be useful in balancing and controlling conflicting migration needs, or life stressors, exacerbated by place change. This is because of the secure base advantage which the object assures in a relational context, as the attached

individual manages to control their fears and perceived threats during the exploration of their broader environment. The proximity with an object of attachment provides the secure base from which the individual makes such exploration, leading to a mastery and adjustment to their environmental conditions. Psychological adjustment is made possible due to emotion regulation, which will be discussed next (Krasuska, Lavda, Thompson, and Millings, 2018; Thompson, 1990).

Greater emotion regulation. Attachment experiences are often effective at regulating emotions, hence helping the securely attached individual to stay within their secure base and maintain a sense of tolerance in a way that helps them to manage their emotions both internally and externally. Attached individuals utilise internal processes such as attention shifting, cognitions, and physiological responses to manage their emotions and process attachment-related information, thus allowing them to make a particular object a target of their proximity-seeking behaviour. This attention shifting behaviour and physiological responses allow the attached individual to be attuned to their objects of attachment. Emotion regulation also involves external processes in relation to relational figures or objects (friends, loved ones, parents, divine entities, geographical places etc.) who/which help in the modulation of emotions. These attachment figures or objects play a role as targets of proximity-seeking behaviours and important emotion regulation platforms/actors for enhancing emotional security and maintaining attachment; both of which eventually promote quality of life. Brenner and Salovey (1997) have encouraged researchers to consider the specific processes involved in modulating emotional experiences. As shown in the qualitative studies (e.g., Counted, 2018b; Counted, in press), emotion regulation in adult attachment experiences involve specific processes or strategies for managing quality of life and emotions. For example, in the study examining the religious coping strategies of study respondents, it was found that religiously attached migrants facing socio-cultural challenges associated with their ethnicity, race, and immigration status, were developing a multi-dimensional coping strategy (involving personal, social, and environmental domains) which enabled them to manage their emotions through relying on religious resources.

Alternatively, a different kind of emotion regulation was seen in the relationship with place, where respondents were developing pro-environmental coping strategies, involving affect, behaviour, and cognition, to effectively manage their emotions and deal with the challenges associated with place change and forced acculturation. Overall, emotion regulation also connotes the capacity to respond in a socially appropriate way in relation to an object of attachment, thus developing the skills set to adapt to migration-related life stressors and negative personal experiences.

Engagement with pro-social behaviour. According to Mikulincer and Shaver (2013), attachment experiences can provide a conceptually rich framework for understanding prosocial behaviours. This was a common feature in the study chapters, as empirical evidence dealing with the two adult attachment experiences— to Australia as a significant place and to God as an attachment figure—showed a trend toward attachment differences in prosocial affects, behaviours, and cognitions. For example, preliminary studies in chapters 4, 5 7 and 8 show how attachment to Australia as a significant place affected the mental representations of others in terms of how the participants perceived, and what they expected, from others. One participant noted that he was now trying to make new friends and embrace the Australian culture due to his attachment to Australia (Counted, in review). Others noted how their relationship with God was making them to be socially active within the context of their local church community and working environment, thus making them to develop prosocial behaviours in order to be a part of their local church community and get more involved in the lives of others (Counted, 2018b). Preliminary findings in chapters 4, 5, 6, and 7 indicate a positive correlation between adult attachment experiences and social relationship quality. Having a relationship with objects of attachment can make one to have a positive assumption about others and their immediate environments as the relationship internally shape a corresponding effect, thus improving the social aspect of an individual's quality of life. This makes sense since the attached individual may be experiencing a positive relationship with the objects—experiences that become the springboard for their future relationship expectations and prosocial behaviour.

Positive sense of identity. One overarching finding from this study is that adult attachment experiences often have an impact on how the individual perceive their identity. Several studies have shown that people who have a secure attachment often have a positive self-identity or authenticity (e.g., Årseth, Kroger, Martinussen, & Marcia, 2009; Counted & Moustafa, 2017; Lapsley, Rice, & FitzGerald, 1990; Holmes, 2001; McElhaney & Allen, 2001). In relation to this study, the positive self-identity of the participants was experienced in two forms: 1) perception of the self in relation 'being' in the world and 2) perception of their identity in relation to their place as migrants in Australia. The former mostly expresses the experiences of those who were drawn to God as their attachment figure. They felt at ease with their life stressors and shaped their understanding of the world and how they saw themselves through their relationship with God, thus experiencing life and shaping their identity through this secure base (Counted, 2018b). More than likely, this set of participants were assured of their place in God and the assurance of hope in him, as they say themselves capable of managing the uncertainty of the future. However, the latter highlights how attachment to place can go a long way in helping the individual develop a sense of belonging through their expressions of place identity. The desire to develop attachment to Australia, whether through forced acculturation or individual motivation, was significant in helping the participants have a positive sense of their identity as 'African Australians'. These adult attachment experiences also helped to colour the lens through which the participants saw themselves in relation to Australia.

Public health promotion. The public health perspective on the empirical evidence linking adult attachment processes and quality of life needs to be considered. One of the commonly accepted function of attachment relationships with regards to quality of life and public health is state-based feelings of security and comfort. The proposition that attachment affiliation to a significant object fosters felt security has never been controversial. Emotional security is essential for public health promotion since the impact of insecure attachment trauma could last for a whole life span. Several studies have shown that emotional insecurity is related to depression, poor mental health, low self-esteem, high stress levels, and

psychological dysfunctions (e.g. Counted, Possamai, & Meade, 2018; Lee & Hankin, 2009; Mikulincer & Shaver, 2007; Simpson, Rholes, Campbell, Tran, & Wilson, 2003). Some of the pioneers of the adult attachment framework viewed the forging of felt security as the primary function of adult attachment experience and subsequent research evidence supports this claim (e.g., Sroufe 2005; Mikulincer & Shaver, 2007; Cicirelli, 2004; Kirkpatrick & Shaver, 1992; Hazan & Shaver, 1987). The feelings of felt security experienced by an attached individual is the function of attachment-related behaviours of support and caregiving provided by the object of attachment, which are not only central to the quality of life of the attached, but to healthy relationship connections which impacts the family, community, regional, and national life (Carnelley, Pietromonaco, & Jaffe, 1996; Collins & Feeney, 2000). The need for satisfying and secure relationships may be a public health issue, especially given the high rates of mental health issues among insecurely attached individuals and individuals who have no secure base or safe haven to turn to for security and meaningmaking. It is possible that the positive health outcomes among the study participants in this study may be linked to their psychological state-based feelings of security and connectedness which they experienced as they sought and maintained relationships with their objects of attachment. This sense of connection is important in their everyday life. Attachment is central to public health promotion and can be positioned as a health determinant, especially among migrant groups who may be seeking for reliable connections in their new abode in their quest for hope, assurance, and security. The importance of adult attachment to public health may also be related to the growing recognition of the role of attachment relationships to the lifespan trajectory of health outcomes (Cicirelli, 1991a, 1991b, 2004; Sroufe, 2005), and association with other social determinants of public health such as the social and physical environmental qualities (Bryant, Bryant, et al. 2012; Counted, Possamai et al., 2018; NSW Department of Health, 2010; Marcheschi, Laike, et al. 2015).

10.4 Concluding Remarks, Study Limitations, and Further Studies

This study has contributed to advancing our understanding of the relationship between attachment to Australia, relational spirituality, and quality of life outcomes. Part of the strength of this study is in the gap that is been addressed in terms of the relationships between PA, RS, and QoL in a migration context, in such that it illuminates the complex relationship between place and spiritual attachment in relation to QoL. Another strength of the study is in its mixed methods approach to understanding a psychological phenomenon; a research approach that has been recommended by researchers from the American Psychological Association (Davis, Cuthbert et al. 2016).

Some study limitations are worth mentioning. First is that the study data are selfreported, as participants might have displayed some social desirability biases, even though such method has been recommended by Brennan, Clark, and Shaver (1998) in their assessment of adult attachment measurement. Next is that the study uses a cross-sectional design, and which makes it difficult to make firm predictions about causality. Other limitations are the homogeneity of the sample group, the relatively small sample of the population it represents, and the focus in one Australian state. Combining Sub-Saharan Africans into one single homogenous group obscures the cultural diversity of this migrant group. Hence, future studies may investigate the links between attachment and QoL in different African migrant groups. In addition, most of the participants are not recent migrants so the attachment to Australia cannot be considered across time points. In addition, there are no comparison groups and survey is limited to its theoretical scope, thus without historical information (e.g. past attachment to home countries, current stressors, experiences, traumas, and objective measures of health). Nonetheless, future experimental studies are required to further strengthen the study findings. In addition, it was not possible to generalise the results of this study to the entire African migrant population since it is not representative of the whole diaspora. However, these are minor problems and despite these limitations, this is an original study that contributes to the growing literature on the understanding of attachment relationships in this specific group; an area of interest that warrants further attention.

There are many advances that need to be made on this research in order to fully comprehend the complex processes involved in the intersection of place, spirituality, and health. Firstly, more consensus on how to assess and conceptualise the quality of life of African migrants in relation to several contextual factors and the ways in which different measures of adult attachment are related to one another requires further investigation. Issues involving the measurement of adult attachment processes and outcomes of quality of life are numerous and are beyond the scope of this study. Further studies must be clear in discussing the aspects of attachment processes (e.g. psychological state vs. trait-based forms of attachment motivational systems) that are being assessed. Attempts to distinguish patterns of attachment to geographical places, attachment to religious figures, and to discern the affiliation to a particular object of attachment or disruption of such affiliation are all worthy goals that should be considered in further studies.

Secondly, further research exploring the relationships between adult attachment processes and health outcomes needs to be expanded to include a broader motivational system (Counted, 2018c). More research on adult attachment processes is needed in order to fully understand how affective bonds may take different forms, involving the ability to represent the emotionally attuned communication with an object of attachment on the basis of the individual's emotions, desires, beliefs, and intentions (Counted, 2018c, p.149). For example, empirical evidence provided by Krause (1990) and Ekman (1992) suggests that affective processes such as fear, sadness, happiness, annoyance, contempt, rage, among others, are significant emotions that predispose the individual to explore the possibility of attachment affiliation during a particular situational context, thus negotiating quality of life in the process. Ideally, a motivational systems approach to adult attachment processes helps researchers to see how sensation and emotion are primary motivational drivers of desires that activate attachment affiliation with a particular object (Jimenez, 2006; Lichtenberg, 1988, 1989). Understanding the functions of such motivational drivers are important in making sense of the patterns of intersection between adult attachment processes and quality of life outcomes.

Thirdly, further studies should also focus on investigating the impact of African diasporas' attachment processes on quality of life in relation to several socio-cultural and migration variables which may play a significant role as mediators. These variables may include access to healthcare services, language proficiency, religious affiliation, state of residence, length of residence, immigration status, among others. This study did not explore the mediating and moderating roles of these covariates and therefore future research should focus on understanding these roles. For example, empirical evidence by Simensen (2017) suggests that immigration status may be implicated in attachment to place and quality of life, thus having an impact on migrants' sense of national belonging, especially in countries where national membership or citizenship has much importance. Access to healthcare services may also be an important moderator to consider since it is possible that individuals may seek attachment affiliation with any available object of attachment when they are not able to have access to healthcare services and attend to their health needs. Studies done in developing countries in Africa (e.g., Beyers, 2014; Thomas, 1999; Salonen, 2018) show that people often turn to religion for healing and security due to poverty and lack of access to basic human needs and healthcare services. Understanding the role of healthcare services in Australia in relation to adult attachment processes and health outcomes is likely to be an exciting area of further studies.

In conclusion, the nature of the links between place, spirituality, and quality of life has been established in this study. As expected, the adult attachment experiences of Australian African diasporas in terms of their attachment to Australia and experiences of relational spirituality with regards to their attachment to God have both an impact on their quality of life. However, the impact of these relational processes is complex, often involving internal and external structures of coping, manoeuvres, and pro-social behaviours. It is argued that by continuing to examine these links and the potential mediators or moderators between place, spirituality, and quality of life, a greater understanding of the development of adult attachment behaviours and prosocial coping strategies that predict better quality of life will emerge. Attachment experiences, involving believer-God and people-place relationships,

form an important foundation for migrants' quality of life. These attachment experiences often become a model for the way they interact with locals and forge new identities in a host country, serving as the foundation for their social and emotional development in a new country. As shown in this study, migrants' attachment experiences help them learn positive ways of managing stressful feelings and situations associated with place change and migration. Therefore, psychologists working with African migrants need a more sophisticated understanding of their attachment processes and adaptability to place change in relation to their quality of life.

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Appendix A

Demographic & Background Information

1. How long have you lived in Australia?_____

- 2. What is your country of birth? _____
- 3. How old are you? _____
- 4. I identify my gender as... (Check only one)
 - Female
 - Male
 - Other
- 5. I am currently... (Check only one)
 - Married
 - Single
 - Divorced
 - Widowed
 - In a relationship

6. What is your highest level of education? (Check only one)

- Primary school
- High|Secondary school
- Undergraduate | Tertiary education
- Graduate school | Master's degree
- Doctoral degree

Thank you for taking the time to fill out the first section of the survey ****Now (please) proceed to the next pages to complete the survey***

Appendix B

Attachment to Australia (Sense of Place Scale)

Instructions: Each of the twelve statements on this page refers to how you experience Australia as the place where you currently live and perhaps consider to be your home. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

Disagre Strongl	-	Neutral/ Mixed feelings	Agree	Agree Strongly	
1	2	3	4	5	

- ____1. Everything about this place is a reflection of me. [PI]
- _____2. This place says very little about who I am. [PI]
- ____3. I feel that I can really be myself in this place. [PI]
- _____4. This place reflects the type of person I am. [PI]
- 5. I feel relaxed when I'm in Australia. [PA]
- ____6. I feel happiest when I'm in Australia. [PA]
- ____7. This place is my favorite place to be. [PA]
- _____8. I really miss Australia when I'm away for too long. [PA]
- 9. Australia is the best place for doing the things that I enjoy most. [PD]
- ____10. For doing the things that I enjoy most, no other place can compare to this place. [PD]

____11. Australia is not a good place to do the things I most like to do. [PD]

____12. As far as I am concerned, there are better places to be than in the Australia. [PD]

____13. I am uncertain and anxious about my future in Australia [Ins.PA]

____14. I often feel marginalised because I am a foreigner living in Australia [Ins.PA]

____15. I feel that people are not nice to me in Australia because I am a foreigner [Ins.PA]

____16. I do not feel safe in this place [Ins.PA]

Appendix C

Attachment to God Measure

Instructions: The following statements concern how you feel about your relationship with God. Respond to each statement by indicating how much you agree or disagree with it. Write the number in the space provided, using the following rating scale:

Disagree Strongly	Disagree	Disagree Slightly	Agree Slightly	Agree	Agree Strongly
1	2	3	4	5	6

- 1. I seek to be close to God. (PS)
- 2. My relationship with God gives me the courage to face new challenges. (SB)
- 3. When I am afraid or anxious, I know that God is there for me. (SH)
- 4. I feel the need to stay close to God. (PS)
- 5. It would distress me greatly if I lose my relationship with God. (RFS)
- _____6. When I face difficulties, I turn to God. (SH)
- _____7. My relationship with God provides me the confidence to explore things around me. (SB)
- 8. I do things that help me feel close to God. (PS)
- 9. I would feel upset if I sense that God is far from me. (RFS)
- _____ 10. Knowing that God is there for me helps me live my daily life. (SB)
- _____ 11. I feel safe whenever I feel close to God. (SH)
- _____12. I cannot bear to think of life without God. (RFS)
- 13. I feel most at ease when I have a close relationship with God. (PS)
- _____ 14. God is someone I cannot afford to lose. (RFS)
- _____ 15. I am willing to try or learn new things because I know God will support or help me. (SB)
- _____ 16. God is always available whenever I am in need. (SH)

Appendix D

Attitudes Toward God Scale

Instructions: On the following rating scale, indicate to what extent you currently do or feel the following about God (or whatever you call the sacred).

Not at all										Extremely
0	1	2	3	4	5	6	7	8	9	10

To what extent do you currently...

- 1. Trust God to protect and care for you (P)
- ____2. Feel angry at God (N)
- ____3. Feel that God has let you down (N)
- _____4. View God as unkind (N)
- ____5. View God as all-powerful and all-knowing (P)
- ____6. Feel loved by God (P)
- ____7. Feel supported by God (P)
- ____8. Feel nurtured or cared for by God (P)
- 9. Feel abandoned by God (N)

Appendix E

Experiences in Close Relationships Questionnaire

Instructions: Please read each of the following statements and rate the extent to which you believe each statement best describes your feelings about close relationships in general. Write the number in the spaces provided using the following rating scale (1, 2, 3, 4, or 5).

Strongly Disagree	Disagree	Somewhat disagree	Neither agree or disagree	Somewhat agree	Agree	Strongly Agree
1	2	3	4	5	6	7

- 1. It helps to turn to people in times of need. (AVD) ***
- _____2. I usually discuss my problems and concerns with others. (AVD) ***
- _____3. I talk things over with people. (AVD) ***
- _____4. I find it easy to depend on others. (AVD)***
- 5. I don't feel comfortable opening up to others. (AVD)
- _____6. I prefer not to show others how I feel deep down. (AVD)
- 7. I often worry that other people do not really care for me. (ANX)
- 8. I'm afraid that other people may abandon me. (ANX)
- 9. I worry that others won't care about me as much as I care about them.

(ANX

World Health Organisation Quality of Life-BREF

Instructions: This questionnaire asks how you feel about your quality of life, health, or other areas of your life. Please answer all the questions. If you are unsure about which response to give, please choose the one that appears the most appropriate. This can often be your first response. Please keep in mind your standards, hopes, pleasures and concerns, and circle the number on the scale that gives the best answer for you for each question. We ask that you think about your life in the last two weeks.

Not at all	A little	Moderately	Mostly	Completely
1	2	3	4	5

____1. How would you rate your quality of life? (QoL)

____2. How satisfied are you with your health? (QoL)

The following questions ask about **how much** you have experienced certain things in the last two weeks.

_____3. To what extent do you feel that physical pain prevents you from doing what you need to do? (PH)

____4. How much do you need any medical treatment to function in your daily life? (PH)

____5. How much do you enjoy life? (PsyH)

6. To what extent do you feel your life to be meaningful? (PsyH)

7. How well are you able to concentrate? (PsyH)

8. How safe do you feel in your daily life? (EH)

9. How healthy is your physical environment? (EH)

The following questions ask about how completely you experience or were able to do certain things in the last two weeks.

10. Do you have enough energy for your everyday life? (PH)

- ____11. Are you able to accept your bodily appearance? (PsyH)
- ____12. Have you enough money to meet your needs? (EH)
- 13. How available to you is the information that you need in your day-to-day life? (EH)
- _____14. To what extent do you have the opportunity for leisure activities? (EH)
- ____15. How well are you able to get around? (PH)
- _____16. How satisfied are you with your sleep? (PH)
- _____17. How satisfied are you with your ability to perform your daily living activities? (PH)
- _____18. How satisfied are you with your capacity for work? (PH)
- _____19. How satisfied are you with yourself? (PsyH)
- _____20. How satisfied are you with your personal relationships? (SRH)
- _____21. How satisfied are you with your sex life? (SRH)
- _____22. How satisfied are you with the support you get from your friends? (SRH)
- _____23. How satisfied are you with the conditions of your living place? (EH)
- _____24. How satisfied are you with your access to health services? (EH)
- 25. How satisfied are you with your mode of transportation? (EH)

The following question refers to **how often** you have felt or experienced certain things in the last two weeks.

_____26. How often do you have negative feelings, such as blue mood, despair, anxiety, depression? (PsyH)

Appendix G: Follow-up Interview Guide for the Qualitative Study

Tell me about yourself

Prompts:

- ✓ Past experiences
- ✓ Family background/history Relationship with parents
- ✓ Tell me about your experiences in close relationships
- ✓ Has been in Australia affected your relationship with your parent?
- ✓ How?

• **Tell me about your experience living in Australia as an African?** Prompts:

✓ Why?

- ✓ Past experiences
- ✓ Perceptions
- ✓ Did X affect that decision?
- ✓ How?
- Tell me about the difficulties you face as an African living in Australia? Prompts:
 - \checkmark How do you cope with these difficulties/what is your coping mechanism?
 - ✓ Why?
 - ✓ Past experiences
 - ✓ Did X affect that decision?
 - ✓ How?
- Does your relationship with God help you deal with the challenges you face in Australia?

Prompts:

- ✓ If Yes, how?
- ✓ If No, why?
- ✓ Give examples
- ✓ How?

Is there anything else you would like to tell me before we end the interview?
 Prompts:

- ✓ Positive or negative experiences
- ✓ Emotions or feelings



School of School Science and Psychology Western Sydney University Locked Bag 1797 Penrith NSW 2751 Australia

Participant Information Sheet

Project Title: Place Spirituality and Quality of Life in Australia

Project Summary: The primary goal of this research project is to introduce a psychology of African diaspora religions/spirituality as we examine how the attachment interaction between an individual, the divine, and a place can influence the religious life, contributing to improvements in mental wellbeing. This objective will help us to explore the expressions of spirituality as social realities in a place to which people are drawn, whilst examining the impact of these experiences of place spirituality as part of an integrative approach to understanding the quality of life of members of the African diaspora populations in Australia.

You are invited to participate in a research study being conducted by Victor Counted, PhD candidate at the School of Social Science and Psychology, under the Supervision of Professors Adam Possamai, Tanya Meade, and Dr Cameron McAuliffe at the School of Social Science and Psychology, Western Sydney University.

How is the study being paid for?

The study is being sponsored by the School of Social Science and Psychology, Western Sydney University Australia.

What will I be asked to do?

- Please answer each question as accurately as possible by ticking or filling in the correct answer in the spaces provided. There are no right or wrong responses. In any case where you do not feel comfortable about any question/statement please leave the response space blank
- If you have any comments or questions about any part of the survey, please feel free to write them on the back of this sheet.
- You will be asked to provide your telephone or email address if you are willing to participate in the second phase of the study, which will be conducted via follow-up interviews. Your contact information will be safely guarded and not accessible to anyone except the researcher. You don't need to write your real name or provide any contact information if this option makes you feel uncomfortable.
- An option has been provided on the survey questionnaire to enable you decide if you want to be contacted for a follow-up interview or not.
- Fill out the survey questionnaire and return it back to the researcher.

How much of my time will I need to give?

Filling out the survey will take you about 25 minutes to complete. If you are selected for a follow-up interview, the interview session might take about an hour.

What benefits will I, and / or the broader community, receive for participating?

Your answers will provide information that will help government agencies to better understand the experiences of the African diaspora as it relates to their place attachment, spirituality, and quality of life in Australia. Your insights to this research will also contribute to the research priority of promoting the Australian population wellbeing in general.

Participant Information Sheet and Consent Form [22.08.2016]

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Will the study involve any discomfort or risk for me? If so, what will you do to rectify it?

This research is considered a medium risk research. Chances are that you might experience some emotional discomfort while answering questions about their relationship with God, quality of life, and place experiences in Australia. However, if there is anything that makes you uncomfortable or that might inadvertently upset you you may stop completing the questionnaire or the interview. You may discuss this with your spiritual leader/priest/pastor. In any case, if you would like to also speak to a psychologist, the researcher can direct you to service-paid counselling session with a registered psychologist/counsellor attached to the School of Social Science and Psychology, Western Sydney University.

How do you intend to publish the results?

Please be assured that only the researchers will have access to the raw data you provide. You will not be identifiable when the research is published. Every measure will be taken to ensure that you remain anonymous through the use of pseudonyms and the removal of other identifiers.

The findings of the research will be published in 'Psychology of Religion and Spirituality', 'Journal of Phenomenological Psychology', 'Mental Health, Religion and Culture', and 'Archive for the Psychology of Religion'.

Can I withdraw from the study?

Participation is entirely voluntary and you are not obliged to be involved. If you do participate, you can withdraw at any time without giving a reason.

If you do choose to withdraw, any information that you have supplied will be withdrawn from being part of the research output.

Data storage

There are a number of government initiatives in place to centrally store research data and to make it available for further research. For more information, see http://www.ands.org.au/ and http://www.rdsi.uq.edu.au/about. Regardless of whether the information you supply or about you is stored centrally or not, it will be stored securely and it will be de-identified before it is made available to any other researcher.

What if I require further information?

Please contact Victor Counted should you wish to discuss the research further before deciding whether or not to participate.

Victor Counted Telephone: 0469 860 701 Email: V.Counted@westernsydney.edu.au

What if I have a complaint?

This study has been approved by the Western Sydney University Human Research Ethics Committee. The Approval number is [enter approval number once the project has been approved]

If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Research, Engagement, Development and Innovation office on Tel +61 2 4736 0229 Fax +61 2 4736 0905 or email humanethics@westernsydney.edu.au.

Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

If you agree to participate in this study, you may be asked to sign the Participant Consent Form.

Human Research Ethics Committee Office of Deputy Vice Chancellor and Vice President, Research and Development



Participant Consent Form

This is a project specific consent form. It restricts the use of the data collected to the named project by the named investigators.

Project Title: Place Spirituality and Quality of Life in Australia

I,_____

_____ [name of participant] consent to participate in

the research project titled [insert title].

I acknowledge that:

I have read the participant information sheet [or where appropriate, 'have had read to me'] and have been given the opportunity to discuss the information and my involvement in the project with the researcher.

The procedures required for the project and the time involved have been explained to me, and any questions I have about the project have been answered to my satisfaction.

I consent to participating in the research by filling out the survey, and, if asked to do so, participate in a follow-up interview via telephone, face-to-face or skype call.

I understand that my involvement is confidential and that the information gained during the study may be published but no information about me will be used in any way that reveals my identity.

I understand that I can withdraw from the study at any time, without affecting my relationship with the researcher now or in the future.

Signed:_____

Name:

Date:_____

Return Address:

C/O: Victor Counted School of Social Sciences & Psychology Western Sydney University Locked Bag 1797 Penrith NSW 2751 Australia

This study has been approved by the Western Sydney University Human Research Ethics Committee. The Approval number is: [enter approval number]

If you have any complaints or reservations about the ethical conduct of this research, you may contact the Ethics Committee through the Office of Research Services on Tel +61 2 4736 0229 Fax +61 2 4736 0905 or email humanethics@westernsydney.edu.au. Any issues you raise will be treated in confidence and investigated fully, and you will be informed of the outcome.

Participant Information Sheet and Consent Form [22.08.2016]

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Human Ethics - Progress Report Approval H11833 [REDI]

humanethics@westernsydney.edu.au

Fri 8/12/2017 9:01 AM

To:Adam Possamai < A.Possamai@westernsydney.edu.au>;

Cc:18568181@student.westernsydney.edu.au <18568181@student.westernsydney.edu.au>;

Dear Adam,

We wish to advise you that your Progress Report for H11833 titled: Place Spirituality and Quality of Life: A study of the African diaspora in Australia has been approved. This research proposal is approved until 01-OCT-19.

Please be reminded that Conditions of Approval remain unchanged. As part of this, a Progress Report is due annually based on your original approval date and a Final Report is due at the completion of data collection and analysis.

Please always quote the registration number and title as indicated above in the subject line in all correspondence related to this project. All correspondence should be sent to the email address humanethics@westernsydney.edu.au

The Human Research Ethics Committee wishes you all the best in this research.

This email has been sent to you as the first-named investigator OR principal supervisor for a student project. If this is a student project, the student has been copied in on this email. The first named investigator is asked to ensure that all co-investigators are aware of the content of the correspondence.

Regards

Human Ethics Officer

http://www.westernsydney.edu.au/research/research ethics and integrity/human ethics Email on behalf of the Western Sydney University Human Research Ethics Committee

RHESYSP

APPENDIX J

Additional publication from the data set (1): attachment and faith development

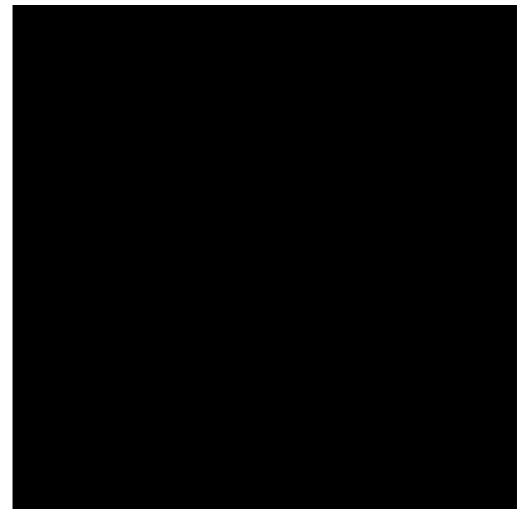
This article is not included as part of the chapters of the thesis because it did not explore any of the research questions. The article examines the links between adult attachment experiences and religious attachment, providing evidence on why migrants may be drawn to religion than others. It shows evidence for the assumption that insecure attachment in human relationships predicts faith development. Although this article complements results in Chapter 9, the scope does not include the extent to which the association between adult attachment and religious attachment help us to understand the quality of life of the participants.

JASR 31.1 (2018): 55-74 http://doi.org.10.1558/jasr.36551 JASR (print) ISSN 2047-704X JASR (online) ISSN 2047-7058

Global Insecure Attachment Predicts Indicators of Caregiving Faith Development among Australianbased African Pentecostals in New South Wales

Victor Counted

Western Sydney University



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Appendix K

Additional publication from the data set (2): insecure attachment and surrogate attachments

This second additional article examines the main effects of anxious and avoidant attachment styles in human relationships on attachment to Australia and attachment to God. This article is not included in the main thesis because it did not explore any of the research questions nor examine the extent to which the effects of anxious and avoidant attachment styles are related to quality of life based on attachment to Australia, and to God. While this article is relevant for understanding the direct effect of insecure attachment patterns on surrogate attachment developments, it does not contribute to the discussion on attachment and health-related quality of life.

Appendix K: Additional publication from the data set (2)

Effects of Anxious and Avoidant Attachment Styles in Close Relationships on Attachment to Australia and Attachment to God among Migrants of African background

> Victor Counted School of Social Sciences and Psychology Western Sydney University v.counted@westernsydney.edu.au

Abstract

A sample of African Christian residents in Australia (N=261; Age mean, 36.9) were studied in order to investigate the nature of the relationship between global attachment styles (i.e. avoidance and anxiety in experiences in human relationships) and surrogate attachments (measured by attachment to Australia as a place and attachment to God). Results reveal that (a) the main effects of insecure-avoidant attachment were positively associated with place attachment (PA), while (b) insecure-anxious attachment was inversely related to PA. Furthermore, the (c) main effects of insecure-avoidant attachment were also positively associated with attachment to God (AG), while insecure-anxious attachment was unrelated to AG. These relationships remained significant after controlling for covariates. In addition, results also reveal that (e) insecure-avoidant attachment was more strongly felt among respondents with a tertiary educational background, compared to those with a high school education or less. Several study implications are discussed in relation to study findings.

Effects of Anxious and Avoidant Attachment Styles in Close Relationships on Attachment to Australia and Attachment to God among Migrants of African background

Although some existing literature argues that religion (e.g., Kirkpatrick & Shaver, 1990; Kirkpatrick, 1999; Granqvist & Kirkpatrick, 2016) and place (e.g., Altman & Low, 1992; Fried, 2000; Lewicka, 2011; Scannell & Gifford, 2016, 2017) can serve as objects of attachment in adult attachment developments, little is known about how relationships with a divine entity and a geographic place are related to global attachment styles. Despite the growing literature in adult attachment theory, little (to no) studies exist on the attachment experiences of the African diasporas worldwide. Yet there are reasons to believe that adult attachment experiences in close relationships, and PA and AG, may be especially applicable to the African diaspora due to their geographic separation from their home-country and loved ones, and a range of socio-cultural inequities they face in their new abodes that may enact a longing for sustainable relationships. The present study seeks to identify these sustainable relationships in adult attachment literature (Grangvist & Kirkpatrick, 2016; Scannell & Gifford, 2014, 2016, 2017), thus making a connection between how global attachment styles (avoidant and anxious) relate to relationship developments with symbolic objects of attachment such as a 'place' and a' divine entity', and how these objects may afford the function of a safe haven and secure base among the Australian-based African diaspora.

The strange situation and global attachment styles

Patterns of attachment with attachment figures were described as the *Strange Situation*, a model developed by Ainsworth and colleagues (Ainsworth et al. 1978) to assess the individual differences associated with attachment styles. In the *Strange Situation* procedure, Ainsworth and colleagues first observed the "secure attachment" pattern which illustrates the confidence an infant has in the primary caregiver as an available and responsive safe haven to turn to in times of perceived danger and a secure base from which

to forge meaning and understanding of the environment during exploratory plays and drives (Sroufe, 2005). Secure attachment patterns in adults have been negatively associated with anxiety disorders, perception of stress, depression (Ellison et al. 2001, 2014; Steele & Steele, 2013), and positively associated with self-reliance, competence, and proactive coping strategies (Sroufe, 2005).

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Ainsworth et al. (1978) also argued that infants have varying degrees of confidence in the availability and responsiveness of their primary caregivers and those who lack confidence were labelled as having an "insecure attachment." This is illustrative of the lack of confidence in the caregiving quality of the primary caregiver due to the unhealthy attachment relationship with caregivers who have failed to be sensitive to the distress signals of the infants. Ainsworth et al. observed two aspects of the insecure attachment pattern (Ainsworth et al. 1978), describing the first type as the insecure-avoidant attachment. Infants within the avoidant category are likely to exhibit indifference and self-reliant behaviors toward their caregivers (Ainsworth et al. 1978). In contrast, the second type of such insecurity is the insecure-anxious/ambivalent attachment, which sees the infant becoming irritated and worried when separated from the caregiver, possibly remaining distressed until the caregiver's return (Ainsworth et al. 1978). Both the avoidant and anxious insecure attachment types act as opposite poles of the attachment-development spectrum in both infants and adults, with secure attachment keeping the variation in balance (Bretherton, 1992). Main and Solomon (1990) have also suggested another insecure pattern known as the disorganised attachment style, which is indicative of both anxious and avoidant tendencies. Insecure attachment patterns have been linked to emotional anxiety, mental problems, aggression, poor levels of quality of life, depression, several health problems, and problems in romantic relationships (e.g., Steele & Steele, 2013; Madigan et al. 2013; Fraley, 2002).

Adult attachment development and objects of attachment

Sroufe (2005) found that attachment patterns can change over time, with their primary goal being to have a sense of felt security as to the whereabouts of the attachment figure. Following this proposition, several studies have linked the attachment behavioural system in the early years of life to adult attachment developments (e.g., Fraley et al. 2011; Feldman & Downey, 1994; Cicirelli, 1991a, 1991b). For example, Bartholomew (1993) has found a link between the quality of romantic relationships in adults and childhood attachment patterns. Low and Alman (1992) put together a comprehensive body of work on how childhood memories and affective experience may be linked to attachment to place in later years (see also, Fried, 2000; Scannell & Gifford, 2014, 2016, 2017).

As an environmental psychology concept, 'place' has been conceptualised as an object of attachment in several studies, one which may be related to global attachment styles (Altman & Low, 2012; Lewicka, 2011; Morgan, 2010). People-place bonds have been extensively studied as an aspect of adult attachment experience in a specific geographic context; one that also overlaps with the tenets of interpersonal attachment, underlying the existence of an affective interaction in meaningful geographic locations. Studies show that adults maintain proximity to a particular geography through visualizing a place (Scannell & Gifford, 2017), purchasing a home in a particular location, displaying photos of the natural elements of a place (Ryan & Ogilvie, 2001), travelling regularly on vacation to a particular place (Kelly & Hosking, 2008). Billig (2006) and Fried (2000) also propose that refusing to leave an important place when it is under threat in war-like situations can be an example of proximity to place. In addition, geographic places can be seen as less dangerous, and to some, a haven of safety to turn during a migration experience and in forced displacement (e.g., Billig, 2006); as well as a secure base that promotes the exploration of the broader environment and relational settings (e.g., Feeney & Thrush, 2010). Several studies (e.g.,

Kohlbacher et al. 2015; Anton and Lawrence, 2014; Lager, van Hoven, & Meijering, 2012; Bailey et al. 2010; van der Graaf, 2009) have shown a correlation between migration and place attachment, arguing that migration factors such as place of origin and residence play vital roles in place change. These studies show that natives and migrants in a particular country may have different PA patterns. For example, PA is significantly lower with minority groups because areas where most migrants live are likely to have weaker social cohesion even though the drivers of attachment may still remain the same between the two groups.

Other studies have also explored global attachment patterns in childhood as the genesis of religious attachment (e.g., Kirkpatrick & Shaver, 1990; Kirkpatrick, 1998; Granqvist & Kirkpatrick, 2016). There are reasons to believe that religion plays a unique role, for some, as an object of attachment, in addition to 'place'. This has been demonstrated in studies looking at the believer-God relationships and how this aspect of attachment is central in the lives of people in particular geographic contexts and relevant for Christians and Muslims (Miner et al. 2014, 2017; Wei et al. 2012), older adults (e.g., Cicirelli, 2004; Kent, Bradshaw, Ucker, 2017), young people (e.g., Rowatt & Kirkpatrick, 2002; Counted, 2016a, 2016b), college women (Buser & Gibson, 2016), sick patients (e.g., Cassibba et al. 2015), and migrant groups (e.g., Wei et al. 2012). The notion of proximity to God is central in monotheistic religions (e.g. Christianity, Judaism, Islam), where there is an emphasis on having a personal relationship with God (Grangvist & Kirkpatrick, 2016). Proximity to God may be maintained through several religious activities that promote greater faith commitment and strengthen the representation of God as an attachment figure. Studies have shown that examples of such activities can be prayer, daily devotionals, involvement in religious services, fasting, reading sacred texts, and other acts of religious devotions (Ellison et al. 2014; Williams & Watts, 2014). During in-depth interviews with young Christian believers, Counted (2016b) recalls the fear they expressed at the idea of losing their relationship with God. This goes to show the depth of a believer-God relationship, such that separation with

God may become a major source of anxiety, one which may predispose the believer to attachment-related psychopathology (Counted, 2017).

Global attachment styles, place attachment, and attachment to God

The above-mentioned adult attachment processes are assumed to be the outcome of internal working models of attachment between individuals and primary caregivers, although with slightly different propositions (Counted, 2018, Counted, Possamai, McAuliffe, & Meade, 2018; Morgan, 2010). For example, in place attachment literature the internal working models of attachment is often discussed as childhood place memories, while attachment to God literature still argues for the role of the internal working model in faith development. Adult attachments also follow similar patterns of secure and insecure dynamics in the Strange Situation (Brennan et al. 1998), with secure adult attachment showing how the individual adult is confident in the perceived responsiveness and *felt* availability of the object of attachment. Insecure avoidant and anxious attachments in adults, just as in the case of infants, show lack of confidence in the attachment figure by shifting attention toward an object of attachment within the environment at the expense of maintaining proximity with the primary attachment figure. This perspective has been extensively studied as the compensatory processes of attachment (e.g. Kirkpatrick & Shaver, 1990; Granqvist & Kirkpatrick, 2004; Hall et al. 2009; Halama et al., 2013; Counted, 2016a; Proctor et al. 2009). Ultimately, a relationship with God, or a place, for example, can be experienced at the individual level as an attachment *transaction*, in which the person seeks proximity with such object of attachment to compensate for their loss of attachment, or unhealthy attachments (anxious and avoidant), elsewhere.

Along with the compensation model, Kirkpatrick and Shaver (1990) also presented the correspondence model in which the object functions as a security enhancing figure in relation to the internal working model that transmits the assessment of interactions in close

relationships (e.g., Hall et al. 2009; Beck & McDonald, 2004; Counted, 2016a). In other words, the individual transfers their previous attachment model onto their relationship with the new object, thus making the interaction between two objects of attachment possible. Counted and Watts (2017) propose an interaction model between individual's emotional distress, PA and AG in the light of biblical history and the Judeo-Christian faith, where the relationship with God among the children of Israelites and early Christians aroused the need to draw close to significant sacred places (e.g. such as Mount Sinai, Canaan, Jerusalem, and Galilee) in their pursuit of emotional stability. Kirkpatrick and Shaver (1990) examined the connection between human relationship experiences and AG among young adults. The results reveal that individuals who identified themselves as having insecure avoidant attachment (44.5%) were more likely to experience sudden AG compared to those with secure and insecure anxious attachments (9.4% and 8.2% respectively). Another study (e.g., Counted, 2016b, 2016a) with young people of African background also shows how anxiously attached individuals were compensating for their abusive and dysfunctional family relationships with parents and caretakers who were not available, thus turning to God as a surrogate attachment.

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Another approach to exploring the interaction with objects of attachment in relation to the individual context is to consider the motivational systems perspective to which attachment needs and exploration curiosity is central. This point of departure has been conceptualised in recent studies as the circle of place spirituality (e.g., Counted, 2018; Counted, Possamai, McAuliffe, & Meade, 2018; Lichtenberg, 2016; Lichtenberg et al. 2011; Morgan 2010), suggesting that individuals are likely to form attachment with a surrogate, and at the same time explore the possibility of a relationship with another potential object of attachment on motivational grounds, whether it is a divine entity, a geographic location, or a close other (see Figure 1). Figure 1 shows the circular movement pattern to which an attached individual explores a relationship with objects of attachment both independently

and collectively, depending on the nature of their global attachment styles: secure or insecure. The attachment and exploration motivational drives promote the possibility of an interaction with two or more objects of attachment, depending on the motivational system that is activated (Counted, 2018; Lichtenberg, 2016). In a situation where a physiological need is not met (or the individual becomes distressed, fearful, or insecurely attached with the attachment figure), the attachment-affiliation system is activated as the individual develops proximity to an available object of attachment or explores a new relationship to compensate for the negative experience with a previous object. Alternatively, in the event that the exploratory-assertive system is activated, the individual (even though not in distress) may move away from their healthy relationships to explore, play, and form a sense of efficiency and competence within a broader environment with another object. In other words, the exploration curiosity with a new object fulfills the relationship role in addition to, or instead of, the previous object of attachment and can also have a correspondence value (Counted, 2018; Counted, Possamai, McAuliffe, & Meade, 2018; Lichtenberg, 2016).

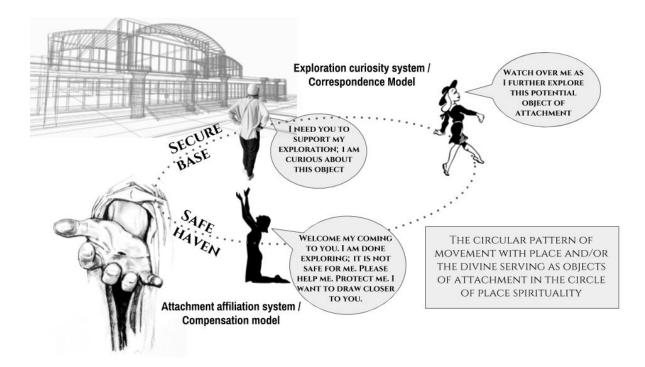


Figure 1. The circle of place spirituality

Adult attachment processes and socio-demographic factors

Furthermore, several studies suggest that adult attachment experiences could be related to a wide range of socio-demographic factors. For example, Heleniak (2009) and Anton and Lawrence (2014) found that regions of origin and place of birth account for adult attachments since a familiar environment may influence future expectations in social relationship contexts. Gender differences have also been suggested as predictor of attachment-related individual differences in adults (e.g. Ridge & Feeney, 1998; Khodarahimi, Hashim, Mohd-Zaharim, 2016; Bem, 1993) with studies suggesting that men are less emotional than women, thus less-willing to bond with others. Geary (1998) attributes this to the socialization of gender roles. Other studies have also suggested a link between level of education and adult attachment (e.g., Counted & Mostapha, 2017; Vogt, 1997; Jackman & Muha, 1984), arguing that individuals with higher education levels are predisposed to insecure-avoidant attachment since they become susceptible to critical thinking. Age differences may also play an important role in adult attachment processes, as supported by studies (e.g., Watson et al. 2016; Uchmanowicz et al. 2016) which reason that young people have poor emotional functioning and are less likely to form attachment than elderly people due to financial strain, mistrust of institutions (public or religious), and housing problems. In addition, Greenwood and Long (2010) have shown that relationship status is related to adult attachment development since individuals without partners are more likely to seek attachment than those who are in a relationship. Overall, it would appear that these socio-demographic factors may be related to attachment experiences.

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Research hypotheses

The present study seeks to identify the above-discussed surrogate relationships in adult attachment literature (Granqvist & Kirkpatrick, 2016; Scannell & Gifford, 2014, 2016, 2017), thus making a connection between how global attachment patterns relate to attachment development with objects of attachment such as a 'place' and a' divine entity', and how these objects may afford the function of a safe haven and secure base among the African diaspora. In examining the extent of this relationship, the following hypotheses are estimated. Firstly, it is hypothesized that global attachment (i.e., avoidant and anxious) styles will be positively related to attachment to Australia and attachment to God. In other words, participants may be turning to these objects of attachment to compensate for the negative effects of their insecure relationships with the important people in their lives in the compensation model, or to some extent, transfer the positive effects of their secure relationship experiences onto their new relationships in the correspondence model. Secondly, it is hypothesized that the effects of global attachment styles (avoidant and anxious) will be related to socio-demographic factors such as gender, age, education background, length of residence, country of origin, and relationship status.

Methods

Participants

Study hypotheses were tested using cross-sectional data on 261 African Christian residents in New South Wales, Australia. According to a recent report by the Australian Bureau of Statistics (2016), New South Wales hosts the second largest number (37, 735) of African population in Australia, after the state of Victoria. The sample in this study, recruited from various suburbs in New South Wales, consisted of an almost equal gender balance (female 54%, male (46%), aged between 16 and 70 years with the age-mean of about 37 years. Respondents were originally from regions of Sub-Saharan Africa: central (0.4%),

eastern (2.4%), western (58.4%), and southern (38.8%) Africa. 70% of the respondents had been residents of Australia for over 5 years, and 81% were university graduates. Majority of the respondents were married or in a relationship (62%), with 32% single, and the remaining 6% either widowed, divorced, or separated.

Procedure

Prior to data collection (Nov. 2016 to May 2017), the study was approved by the Human Research Ethics Committee of Western Sydney University, Australia. Cross-sectional data were then collected from African Christian residents in New South Wales using a snowball sampling technique: an approach recommended for studying migrant and hard-to-reach populations (Southern et al. 2008). This data collection technique is based on recruiting respondents from existing church community structures through the help of church leaders who recommended other church leaders and their church communities. Study respondents congregated for weekly church meetings and regularly organised religious events aimed at enhancing community cohesion and strengthening the spiritual lives of the community as a whole. The first author toured around New South Wales to participate in the church activities organised by these communities, and in the process, formed relationships with the communities and their respective leaders.

After visiting these communities on several occasions, the first author reached out to the leaders and briefed them about the study. On agreeing to participate, community leaders informed their members about the study and meetings were organised with prospective participants during their weekly church meetings. Upon arrival at these meetings, the first author was given a few minutes to address the community and explain the objectives of the study. The respondents were told that the study was looking at how their experiences in Australia and relationship with God and important people in their lives are related. With help from protocol officers (ushers) during the meetings, surveys were distributed among

members of the communities and over 450 volunteers collected copies of the questionnaires. It is possible that participants may have been influenced by their context since the questionnaires were completed at their respective churches. Nonetheless, only 261 respondents returned their completed questionnaires either immediately after the meetings, the following week, or by mail. Collected data were entered into SPSS and prepared for analyses.

Measures

Self-report data were collected via measures that included different sets of variables. The variables used for data analyses are the following:

Predictor Variables: global attachment styles

Two global attachment patterns (i.e., avoidant and anxious attachments) from the 9-item *Relationship Structures Questionnaire* (Fraley et al. 2011) were adapted for measuring relationship-specific attachment. The first 6 items tap avoidance with the first four items reverse coded (e.g., It helps to turn to people in times of need, I usually discuss my problems and concerns with others, I talk things over with people, I find it easy to depend on others, I don't feel comfortable opening up to others, and I prefer not to show others how I feel deep down). The last 3 items tap anxiety (e.g. I often worry that other people do not really care for me, I'm afraid that other people may abandon me, and I worry that others won't care about me as much as I care about them). Respondents were asked to score the measure with respect to important people in their lives (e.g., a mother, a father, a romantic partner, or a friend) (Fraley et al 2011). Scores of global avoidant attachment suggest the extent to which respondents are avoiding important people in their lives, while anxious attachment scores indicate that respondents are showing insecure anxiety and ambivalent tendencies in their relationships with important people in their lives. Items were rated on a

scale ranging from 1 (strongly disagree) to 6 (strongly agree), and the two scales demonstrated moderate Cronbach alpha levels: avoidant attachment (α =.77); anxious attachment (α =.88).

Outcome Variables: objects of attachment

Place attachment was assessed using four PA items adapted from Jorgensen and Stedman (2001). This variable measures respondents' emotional attachment to Australia, and includes statements such as: "I feel relaxed when I'm in Australia," "I feel happiest when I'm in Australia," "This place is my favourite place to be," and "I really miss Australia when I'm away for too long." Higher scores suggest strong attachment to Australia among respondents and the extent to which place is perceived as an object of attachment. Items were scored on a rating scale ranging from 1 (strongly disagree) to 5 (strongly agree). The measure of PA for this study demonstrates satisfactory alpha reliability (α = .81).

Attachment to God is the second aspect of relationship assessed among the respondents. Sixteen statements were taken from the *Attachment to God Measure*, designed and validated by Sim and Loh (2003), to gauge the extent to which respondents are drawn to God as a symbolic attachment figure. The 16 items tap on four state-based AG criteria in terms of felt feelings of security: proximity to God (e.g., I seek to be close to God), perception of God as a safe haven (e.g., When I am afraid or anxious, I know that God is there for me), and God as a secure base (e.g., My relationship with God gives me the courage to face new challenges), and the turn to God as a response to separation anxiety (e.g., I cannot bear to think of life without God). Items were rated on a 6-point scale with 1 indicating strongly disagree and 6 suggesting strongly agree. Higher scores indicate the strength of respondents' attachment to God. The scale maintained a very strong Cronbach alpha level: α .89.

Covariates: socio-demographic factors

Socio-demographic variables that are statistically significant or with a p-value <.10 were adjusted for in the regression models in order to help estimate the association between PA, AG, and global attachment styles. Age was included as one of the study covariates, even though it was coded as a continuous variable with a range of 16 to 71 years. Other covariates include: length of residence (1= Less than 5 years; 2 = More than 5 years), region of origin/birth (1=central Africa; 2=eastern Africa; 3=western Africa; 4=southern Africa), gender (1=male; 2=female), relationship status (1=single; 2=married; 3=divorced/widowed/separated), and education background (1=high school or less; 2=tertiary education).

Analytical Strategy

Data analyses were calculated using SPSS, version 24.0. Study variables show satisfactory levels of reliability (α =.70 and above), as shown in Table 1. Statistical analyses were done in three steps. First, (a) we calculated basic descriptive statistics for study variables (Table 1). Secondly, (b) bivariate correlations were estimated using the Pearson product-moment correlation coefficient to explore the extent of the relationship and the linear dependence between global attachment styles and surrogate objects of attachment. Thirdly, (c) multivariate analyses were calculated using hierarchical regression analyses to test and verify the main effects of global attachment styles on PA and AG. Study covariates (socio-demographic variables) with a p-value <.10 were controlled for in the models, with significance set at p<0.05. Study results are presented in Tables 1, 2, 3, and 4.

Results

Descriptive Analyses

A summary of descriptive statistics used in this study is presented in Table 1. Based on the mean scores, respondents seem to have less anxious attachment (M=2.95, SD=1.41) in their human relationships compared to the avoidant attachment style which seems to be moderately high and above the medium score with means of 4.46 (SD=1.20) on a 1 to 7 scale. Scores of PA are slightly above average with a mean of 3.61(SD=0.77) on a 1 to 5 scale, suggesting a moderate attachment to the Australian environment. AG scores were relatively high among respondents with means of 5.69 (SD=0.46) on a 1 - 6 scale. The age mean for the sample was 36.9 + 11.7.

Table 1: Descriptive Statistics for Predictor and Outcome Variables							
Variable descriptors	α	м	SD	Min	Max		
Insecure attachment styles							
Attachment avoidance	.77	4.461	1.196	1	7		
Attachment anxiety	.80	2.951	1.410	1	7		
Objects of Attachment							
Place attachment	.81	3.608	0.769	1	5		
Attachment to God	.89	5.691	0.455	3	6		

Bivariate Analyses

Results of the bivariate correlations between measures of global attachment styles, PA, and AG are presented in Table 2. Two notable, but expected, significant correlations are observed from the data. Firstly, the scale of global attachment anxiety was negatively related to global avoidant attachment (r = -0.17, p< .01) and PA (r = -0.25, p< .001). Secondly, global avoidant attachment was positively related to PA (r = 0.24, p< .001) and AG (r = 0.25, p< .001). These results suggest three patterns: (a) that lower scores of global anxious attachment in human relationship experiences are correlated with high scores of global avoidant attachment; (b) lower scores of global anxious attachment are related to PA; and,

(c) higher scores of global avoidant attachment in human relationships are related to higher scores of attachment to place (Australia) and AG among African Christian residents in New South Wales, Australia. These results are consistent with study hypotheses.

Variables	1		2		3		4	
	r	p	r	p	r	p	r	р
1. Attachment Anxiety	-	-	167**	.007	253***	.001	010	NS
2. Attachment Avoidance			_	-	.240***	.001	.247***	.001
3. Place Attachment					-	-	.074	NS
4. Attachment to God							-	-

Multivariate Analyses

Multivariate regression models were estimated, examining the relationship between global attachment styles (avoidance and anxiety), PA, and AG. For the insecure-anxious attachment style (with no adjustable significant covariates at p< .10), two hierarchical regression models are presented: (a) PA (centered) is entered at Step 1 (Model 1); (b) AG (centered) is added at Step 2 (Model 2). For the insecure-avoidant attachment style, three models are presented: (a) statistically significant covariates are entered at Step 1 (Model 1); (b) PA (centered) is added at Step 2 (Model 2); and (c) AG (centered) is entered at Step 3 (Model 3).

The main effects results in the multivariate analyses are in accordance with the first set of hypotheses, and consistent with results of the bivariate correlations in Table 2, revealing significant associations between global attachment styles and measures of PA and AG. Tables 3 and 4 present the multivariate regression models. As expected, global insecure-avoidant attachment emerged as a predictor of PA and AG rather than global insecure-avoidant attachment. The main effects of global insecure-avoidant attachment were positively associated with PA in all the models (β =.280, 95%CI: .26, .62, p< .001; β =.263, 95%CI: .23, .59, p< .001; β =.266, 95%CI: .24, .59, p< .001), but global insecure-anxious attachment was negatively related to PA (β = -.245, 95%CI: -.67, -.23, p< .001; β = -.246, 95%CI: -.67, -.23, p< .001; β = -.245, 95%CI: -.67, -.23, p< .001). These associations suggest that global insecure-avoidant attachment in human relationships is related to PA, even though this may not be the case for anxious attachment. Furthermore, the main effects of global insecure-avoidant attachment in human relationships were positively associated with AG (β =.185, 95%CI: .18, .77, p< .002; β =.180, 95%CI: .17, .77, p< .003), but anxious attachment was unrelated to AG. Insecure-avoidant attachment emerged as a significant predictor of both PA and AG, even when controlled for covariates (education level and region of origin).

The above results are partially consistent with our first study hypotheses, which estimated a positive association between the main effects of global attachment styles and measures of objects of attachment such as PA and AG. In addition, one socio-demographic background factor (educational level) bears a significant association with insecure-avoidant attachment in the models (β =.187, 95%CI: .07, .80, p< .021). This suggests the education background of respondents as an important factor accounting for their insecure-avoidant attachment pattern. The relationship remained the same in the adjusted models, respectively (β =.180, 95%CI: .26, .62, p< .001; β =.170, 95%CI: .15, .85, p< .005; β =.167, 95%CI: .14, .84, p< .006). These results suggest that having tertiary education background, compared to high school education, may impact the way African migrants relate to each other (Lewicka, 2010; Maliepaard, Lubbers, & Gijsberts, 2010; Vogt, 1997). To put it bluntly, this result means that educated African migrants are often considered as "snubs" due to their avoidant

	Model 1		Model 2			Model 3			
Variable	В	SE	β	В	SE	β	В	SE	β
	(unstand	В	(stand	(unsta	В	(standar	(unst	В	(standa
	ardized)		ardize	ndardi		dized)	andar		rdized)
			d)	zed)			dized)		
Education Level									
High School or									
less	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Tertiary	.434	.187	.147**	.533	.181	.180***	.502	.178	.170**
Education									
Region of Origin									
Central Africa	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref	Ref
Eastern Africa	.533	.589	.067	.365	.567	.046	.224	.559	.028
Western Africa	.219	.352	.091	.215	.338	.089	.161	.333	.067
Southern Africa	.642	.364	.260	.675	.350	.273	.555	.346	.225
Place				.436**	.092	.280	.410**	.090	.263
Attachment				*			*		
Attachment to							.477**	.151	.185
God							*		
R^2	.07			.15			.18		
F for change in R^2	4.72***			22.67***	*		10.01**	*	

Table 3 Hierarchical moderated regression analyses with global avoidant attachment as a
predictor of PA and AG (N = 261)

Note: PA and AG were centered at their means.

Adjusted for covariates with a p-value <.10.

Notes: $\uparrow P < .10$. *p < .05. **p < .01. ***p < .001. Ref: reference group.

Table 4 Hierarchical moderated regression analyses with global anxious attachment as a
predictor of PA and AG (N = 261)

		Model 1		Model 2			
Variable	В	SE B	β	В	SE B	β	
	(unstandardize		(standardiz	(unstandar		(standardiz	
	d)		ed)	dized)		ed)	
Place	450***	.111	245	451***	.111	246	
Attachment							
Attachment to				.026	.185	.008	
God							
R^2	.06	-	-	.06	-	-	
F for change in R ²	16.44***			0.02			

Note: PA and AG were centered at their means.

Adjusted for covariates with a p-value <.10.

Notes: \uparrow P<. 10. *p < .05. **p < .01. ***p < .001. No covariates with a p-value <.10 was found

Discussion

This study broadly draws insights from adult attachment theory and, using data from a sample of African Christian diaspora, examines the main effects of global attachment styles on PA and AG. Highlighted below are some noteworthy findings from the study results:

- Despite the confounding factors, insecure-avoidant attachment is positively associated with PA, while insecure-anxious attachment is inversely related to PA.
- Insecure-avoidant attachment is positively related to AG, but this was not the case for insecure-anxious attachment which was unrelated.
- Insecure-avoidant attachment is more common among respondents with a tertiary educational background than those with less education.
- Taken together, these findings provide evidence that suggests global insecure attachment patterns in human relationships as predictors of "religious" and "place" attachments.

There are several reasons why these findings are relevant for adult attachment theory. First, the results reveal that geographic places and divine entities can be important objects of attachment in people's lives, suggesting a relationship between global insecure attachment (avoidant and anxious) patterns and PA and AG developments. These findings underscore the theoretical importance of the attachment working model and its connection to religion (Rowatt & Kirkpatrick, 2002; Kirkpatrick, 2005) and place (Fried, 2000; Scannell & Gifford, 2016, 2017). In particular, results reveal that avoidantly attached individuals draw closer to place, and to God, as their surrogate attachments, while anxiously attached religious individuals are less likely to develop such propensity. It is also possible that people with secure attachments to place and God draw away from interpersonal interaction. This is consistent with previous findings on the relationship between avoidant attachment and

religious conversion (e.g., Kirkpatrick & Shaver, 1990; Kirkpatrick, 2005), and contrary to the findings in other studies suggesting adult attachment as a correlate of less self-directing coping styles (e.g., Hernandez, Salerno, & Bottoms, 2010). This also corroborates broader literature on attachment developments (e.g., Kirkpatrick, 1998; Granqvist & Kirkpatrick, 2016). For example, a study conducted by Ainsworth (1985) reveals that individuals with insecure attachment styles are likely to be suspicious of close relationships and may seek surrogate attachments. These studies show that objects of attachment serve as compensatory surrogates for individuals displaying attachment insecurity in their close relationships.

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The study results support the two conceptual apparatus in the literature review. On the one hand, they confirm both the compensation and correspondence models of attachment. In examining the emotional compensation model, one could theorise that respondents who were avoidantly attached in their close relationships and had insecure attachments may have sought compensatory attachment surrogates in objects (i.e. place and God) that were perceived to have better attachment advantage than the people in their life (Kirkpatrick & Shaver, 1992). Compensatory processes show the extent to which an individual is willing to develop attachment to another object on account of the negative emotional experiences with a previous object (Kirkpatrick, 2005). Hence, the association between global insecure-avoidant attachment and attachment with objects such as place and God may have played a compensatory relational role in their experiences with people around them. On the contrary, evidence for the correspondence model was also seen in the relationship between lower scores of insecure-anxious attachment and higher scores of PA. This correspondence relationship suggests that respondents developed their PA, even though they had lower levels of anxiety in their human relationships, suggesting that they were drawn to place as an object of attachment despite their lower levels of anxiety in their relationship with significant people in their lives.

Furthermore, study results also support the attachment-affiliation and exploratory-assertive motivational systems in the circle of place spirituality (Counted, 2018; Lichtenberg, 2016). The positive associations between insecure-avoidant attachment and PA and AG may have shown that in the event where the religious individual is avoidantly attached or insecure in human relationships, the attachment-affiliation system may be activated as the individual is motivated to seek attachment with an accessible and more-reliable object of attachment (e.g., a geographic place or God). In contrast, the results of the negative association between anxiety in human relationships and PA hint at what the exploratory-assertive activation may look like. Hence, when the motivational exploratory system is activated the individual is likely to explore another attachment surrogate — in this case, a place, serving as a surrogate attachment and an object of exploration even though there is no strong evidence of anxiety. These relationship dynamics have been further theorized elsewhere as the *circle of place spirituality* (e.g. Counted, 2018; Counted, Possamai, McAuliffe, & Meade, 2018; Counted & Watts, 2017).

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Lastly, educational background stood out as a significant factor for explaining the insecure-avoidant attachment of the respondents. This finding corroborates results from modernization theorists who problematize the education system in modern culture (e.g., Moghadam et al. 2016; Vogt, 1997; Jackman & Muha, 1984), and attachment studies (e.g. Bergin & Bergin, 2009; Geddes, 2006) which recognize the relationship between educational achievement and attachment styles. Studies in the modernization thesis suggest that educated individuals are more likely to exhibit self-reliant and people-avoiding behaviours due to their exposure to critical thinking and a "hostile" academic environment that predispose them to self-alienating avoidant tendencies such as liberal worldviews, independent learning, among others. Counted and Moustafa (2017) found that feelings of insecure-avoidant attachment were associated with self-alienation, such that the avoidant

behaviour of educated African migrants may signal their inauthenticity and "disconnect" with themselves, as well as with those around them.

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A key limitation is that study data are self-reported, as participants might have displayed some social desirability biases, even though such method has been recommended by Brennan, Clark, and Shaver (1998) in their assessment of adult attachment measurement. Nonetheless, future experimental studies are required to further strengthen the study findings. In addition, it was not possible to generalise the results of this study to the entire African migrant population in diaspora since it is not representative of the whole diaspora. However, these are minor problems and despite these limitations, this is an original study that contributes to the growing literature on the understanding of attachment relationships in this specific group; an area of interest that warrants further attention.

Based on the above-mentioned findings, it is reasoned that attachment processes still remain an important phenomena for the African diaspora since it is related to their experiences of migration, forced displacement, identity, and health promotion. For example, individuals within the study population who might have fled or left their home-countries due to violence, human rights violation, or poverty, and losing their significant figures in the process, might be in need of forming attachment with a surrogate figure/object in order to help them in the process of place change challenges (e.g. stereotypes, racism), healing, and recovery. These individuals might be forging their identity around a surrogate to whom or which they perceive as a safe haven and secure base, modelling their life values after the object, thus leading to health promotion.

In summary, this study underscores the uniqueness of adult attachment theory as a multidisciplinary framework bearing broader knowledge on the understanding of African diaspora attachment processes with objects of attachment that play compensatory roles in their lives. This study suggests that insecure attachments, in this case avoidant and anxious patterns, predict relationship developments with objects of attachment such as a geography

place (country of residence) and divine entity (God). It is hoped that future studies can continue to stitch the linkages in the study findings in terms of the intersection of religion and place and relationship experiences, thus highlighting how relationships with objects of attachment can be adequately interpreted in the context of adult attachment theory.

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