

The Moderating Roles of Self-Reflection and Self-Insight in the Relationship Between
Religious Coping Methods and the Resilience of Australian Protestant Ministers

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Abstract

The frequency, and the personal and vicarious nature of stressors faced by ministry workers have been identified as contributing factors to burn-out in ministry. This thesis aimed to extend the Systematic Self-Reflection Model of Resilience Strengthening, exploring the roles of self-reflection and self-insight in refining the use of religious coping methods, to strengthen well-being and resilience within a ministry population. To test hypotheses, 277 Australian Protestant ministry workers completed an online survey. The mean age of participants was 46.7 years and 19.9% of the sample was female. The survey assessed well-being and perceived resilience as outcome variables, with stressor frequency, self-reflection, self-insight, and six religious coping methods as predictor variables. Hierarchical regression analyses found that self-reflection and self-insight were positively related to aligned religious coping methods and that self-insight was positively related to both well-being and perceived resilience. Aligned religious coping methods were generally found to be related to well-being, but not to resilience. Together, findings emphasise the importance of self-insight. For ministry workers seeking to strengthen resilience, this study supports activity that builds self-insight to refine use of coping methods aligned to religious values.

Declaration of Originality

The works found within this thesis are original and have not been submitted for publication, written by another person, nor submitted for a higher degree to any other university or institution. The empirical research contained within this thesis was approved by the Human Research Ethics Committee at Macquarie University (reference number: HREC 5201832154244. See Appendix).

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The Moderating Roles of Self-Reflection and Self-Insight in the Relationship Between Religious Coping Methods and the Resilience of Australian Protestant Ministers

Those in Christian ministry support untold numbers of people and communities as they deal with the whole spectrum of life's joys and sorrows. The complexity of heavy task and emotional workloads associated with ministry roles, and both the personal and vicarious nature of stressors faced by ministry workers have been identified as contributing factors to burnout in ministry (Bickerton, Miner, Dowson, & Griffin, 2014; Forney, 2010; Lee, 2010; Jackson-Jordan, 2013). Ministry burnout is not uncommon (Cotton et al., 2003; Miner, Dowson, & Sterland, 2010). One Australian cross-sectional study reported that 23% of Protestant church leaders were experiencing burnout, with a further 56% classified as potential candidates for burnout (Kaldor & Bullpit, 2001). Moreover, data from the US indicates that 50% of Christian ministry workers leave full-time ministry within the first five years (Meek et al., 2003). The growing number of books, conferences and other resources addressing effective coping methods for sustainable ministry highlights a need for systematic and scientific exploration of positive psychological functioning in ministry, operationalised here as well-being and resilience.

Yet, few studies have sought to understand the psychological factors that promote well-being and resilience specifically within this population, which includes clergy, chaplains, and others employed by religious organisations. The extant quantitative research suggests the importance of occupationally-specific coping resources and strategies in predicting well-being (Bickerton, Miner, Dowson, & Griffin, 2015; Pargament, Tarakeshwar, Ellison, & Wulff, 2001). The extant qualitative research into ministry resilience emphasises a need for intentional action and deliberate self-reflection to support the development of healthy and sustainable ministry practices (Burns, Chapman, & Guthrie, 2013; Mckenna,

Boyd, & Yost, 2007; Meek et al., 2003). This thesis aimed to extend current work on coping and resilience by suggesting that the application of coping methods that align with their religious framework will be associated with greater resilience and well-being in ministry workers. Moreover, defining self-reflection as consideration of thoughts, feelings and behaviours (Grant, Franklin, & Langford, 2002; Trapnell & Campbell, 1999) and self-insight as self-awareness and self-understanding with regard to thoughts, feelings and behaviours (Grant et al., 2002; Trapnell & Campbell, 1999), it is proposed that both self-reflection and self-insight are important to refining the use of coping methods and enhancing the benefit derived from their use. As such, using the Systematic Self-Reflection Model of Resilience Strengthening (Crane, Searle, Kangas, & Nwiran, 2019), this study sought to investigate the roles of self-reflection, self-insight and religious coping methods in the resilience and well-being of Australian Protestant ministry workers.

The Research Context: Stressors in Ministry

Multiple stressors arise for ministry workers with relation to their diverse workload. The multi-faceted nature of their work means that ministers might be required to move from preparing a sermon, to counselling a grieving mother, to planning a welcoming event, to running a church council meeting all in one day. Typically, ministry workers are engaged to work six days a week and these days often extend into evenings to enable ministry members to attend events outside of standard working hours. Throughout, ministry workers are on-call to provide immediate support in the midst of all the adversities that those in their care encounter, including illness and death, relational and marriage breakdown, and addictions and other mental health and community issues (Meek et al., 2003). Frequently, financial resources are limited, leading to understaffing and inefficient organisational processes (Lee, 2010). Kuhne and Donaldson (1995) describe the roles of the minister as interpersonal (i.e.,

figurehead, leader, liaison), informational (i.e., monitor, disseminator, spokesperson), decisional (i.e., entrepreneur, disturbance handler, resource allocator, negotiator), and professional (i.e., mentor, care-giver, preacher). Authors have characterised ministry work as “taxing, fast-paced and unrelenting” (Kuhne & Donaldson, 1995, p.147).

The relational and emotional workload of ministry workers is also demanding. As with counsellors, social workers and psychologists, those in pastoral ministry work face the need to cope with their own stressors in life, as well as cope with the effects of supporting others encountering difficulty. However, for ministers, the members of their ministries (be they congregation members, participants in community programs, or students or aged recipients of chaplaincy support) are viewed as more than clients, employees or volunteers. Instead, they are spiritual family members whom the ministers believe God has called them to serve and love. Moreover, because a ministry worker is called to have exemplary relationships, interpersonal conflict is frequently a stressor in ministry life (Bickerton et al., 2014). Such conflict can arise within teams of ministers, often as a consequence of work overload or due to ambiguities in the nature of the work (Bickerton et al., 2014). Frequently, tension also arises with ministry members who have conflicting expectations of the minister and the ministry they oversee (Bickerton et al., 2014; Meek et al., 2003). Exacerbating these relational demands, many in ministry lack the social support of family or long-term friends if they have moved geographically to take on a ministry roles (Lee, 2010; Meek et al., 2003).

Perhaps even more demanding for ministry workers, over and above those in helping professions, is the interconnectedness of their personal, spiritual and family lives with the lives of those they lead or “work” with. Although secular work can also spill over into private time, the distinction of work/life balance is unclear for ministers as their work is an expression of their personal, spiritual and occupational identity. A work/ life balance that

might exist for those not in ministry can become diffused whereby the minister, their spouse and their children become roles-models for the whole ministry community. Ministry is often conducted within a family context: as families attend church together; as children and parents from different families attend age-specific programs together; as meals between families are shared. Frequently, as a minister cares for an individual in their ministry, their own families are included in providing extended social support to that individual's whole family. The blurring of responsibilities between work and private life can mean that ministers have difficulty distinguishing when they, and their families, are on- and off-duty (Burns et al., 2013). As boundaries become blurred, patterns of intrusion (e.g., criticism of a minister made to their spouse; complaint made to the minister about their child's behaviour) and interruption (e.g., ministry member "dropping in" to the minister's house unannounced; last-minute call to provide the church key for an evening meeting) become stressors (Forney, 2010; Lee, 2010). Furthermore, as they seek to cope with these stressors, much of a minister's local social support will come from those who participate in their ministry, requiring an awareness of the need to balance both self-care and confidentiality. Beyond this, in most Australian Protestant denominations, ministry workers are largely, if not entirely, financially provided for by those within their care. Where interpersonal conflict or tension leads to members leaving the ministry community, this also affects its financial viability. Hence, while ministry workers are spiritual leaders, they and their families carry the burden of the expectations they have for themselves as well as the felt-need to respond to the expectations others have of them.

Finally, as ministry workers counsel those in their care, be they members of the ministry or the wider community, compassion fatigue and the effects of vicarious trauma can become significant stressors (Forney, 2010; Meek et al., 2003). Ministry work frequently involves counselling in situations such as supporting mourners, counselling those with

marriage difficulties and providing care for those with mental health issues. At times, it can also involve first-response care, for example, for those in domestic violence situations, families or school communities of suicide victims, and local communities affected by natural disaster. Ministry workers might thus be expected to suffer from secondary traumatic stress, characterised as exposure to trauma through contact with another's direct experience of it, much like health professionals or human services professionals (Manning-Jones, de Terte, & Stephens, 2017).

Theoretical Background

Defining Resilience

Authors of recent reviews are like-minded in their call for a definition whereby, rather than a stable trait, resilience is a dynamic and modifiable process involving the interaction between an individual and a stressor that leads to positive psychological outcomes (Chimortz et al., 2018; Kalisch et al., 2017; Seery & Quinton, 2016). Kalisch et al. (2017, p. 786) define resilience as: "the maintenance or quick recovery of mental health during and after exposure to significant stresses". This definition reflects those of earlier authors particularly exploring resilience in children, including Masten and Rutter. Masten (2001, p. 228) defines resilience as "a class of phenomena characterized by good outcomes in spite of serious threats to adaptation or development". Rutter's (2006, p. 26) definition is similar: "Resilience is a concept that suggests that some individuals have a relatively good psychological outcome despite suffering risk experiences that would be expected to bring about serious sequelae".

Inherent in these definitions are three key elements. First, resilience is an outcome in the presence of adversity or risk. That is, despite exposure to adversity or stress, the outcome is one of positive mental health. Resilience can thus only be observed in the context of a

stressor event (Chimortz et al., 2018; Masten, Best, & Garmezy, 1991). Second, resilience is not a trait or ability. Certainly, there are many factors that contribute to the demonstration of resilience, such as personality, beliefs, and both internal and external resources, but these do not, in and of themselves, define resilience (Bonanno & Diminich, 2013; Rutter, 2007). The presence of these factors are considered to be part of an individual's 'capacity for resilience' in that they modify the relationship between stressor and psychological outcome and predict resilience (Crane, Searle, et al., 2019). Third, resilience is a process. Resilience involves active change and the dynamic adaptation of an individual to a stressor (Rutter, 2007). This takes time as the trajectory of adaptation is realised (Bonanno, Romero, & Klein, 2015). In sum, resilience is ideally measured and modelled in the context of stressor events and involves the measurement of psychological outcomes (e.g., well-being) before and after the experience of these stressor events. As this study was cross-sectional rather than longitudinal in nature, outcome measures of resilience used were perceived resilience, and well-being. Although well-being is not a direct measure of resilient outcomes, when measured in the presence of adversity and stressor events, it provides an indirect indication of the positive mental health associated with resilience.

The Development of Resilience as a Learning Process

Having defined resilience, it can be seen that resilience is developed through the process of lifelong learning. Crane, Searle, et al. (2019) proposed that the development of resilience is a learning process that is acquired via encounters with moderate life stressors and scaffolded in nuanced, adaptive, self-reflective practices that facilitate learning. The application of coping allows the development and refinement of a set of coping methods that are appropriate given personal characteristics and circumstantial context. Similar to stress-related growth, the processes involved in confronting stressful experiences may promote

broadened perspectives, and the development of new coping skills that are related to positive adaptation, growth, and resilience (Park & Fenster, 2004). The developmental model proposed by DiCorcia and Tronick (2011) in their Everyday Stress Resilience Hypothesis expands this concept beyond just the adult experience. Treating resilience as a developmental process of regulating everyday life stressors, they suggest that resilience is not just learned as an adult, it is learned from birth. Resilience is an iterative process whereby stress is resolved and each instance of stress builds both children's and adults' capacity for resilience. The authors propose that as children grow, adult carers' involvement in supporting the child's regulatory capacities can help or hinder development of capacity for resilience. In this way, stressor encounters may be accompanied by adaptations that serve to facilitate resilience in the future. Having noted this, engagement with stressors can lead to the reinforcement of both helpful and unhelpful forms of coping unless scaffolded in a process that enables critical self-reflection on the utility of coping practices (Crane, Searle, et al., 2019).

Adversity can lead to resilience

Some support for the proposal that resilience is learned comes from work suggesting that cumulative stressors and even traumatic life events can increase the likelihood of resilient outcomes. For example, Seery, Holman and Silver (2010) found that participants in a health and retirement survey who had experienced some lifetime adversity also had better mental health (less distress, less functional impairment, less post traumatic stress and higher life satisfaction) than both those with high and those with no lifetime adversity. Further, those participants with a moderate experience of lifetime adversity (2-4 adverse stressor events) were least affected by current adverse events. Taking their work into the laboratory, Seery, Leo, Lupien, Kondrak and Almonte (2013) found a relationship between exposure to cumulative lifetime adversity and coping-related outcomes, suggesting that in the course of

time, individuals are ‘toughened’ by experiences of hardship. Dooley, Slavich, Moreno, and Bower (2016) found that patients with breast cancer with a moderate lifetime exposure to acute stress reported the highest levels of positive affect, higher than that of those with low or high lifetime acute stress. Hence, although those who experience adversity and hardship may be at more risk for negative mental health outcomes in general, a moderate exposure to adversity is expected to provide opportunity for people to potentially develop a coping repertoire that strengthens a capacity for resilience into the future. Those with no experience of adversity have not had cause or opportunity to learn nuanced methods of coping, and those with extended experience may become overwhelmed and be unable to respond effectively.

Adversity can lead to growth, particularly in a religious context

A related body of work suggests that many people can perceive growth through their struggles or the adversities they face (Tedeschi & Calhoun, 1996). Acknowledging that not all people have this experience, many report not just coping, but growing and indeed thriving as a result of the adversity (Park, 1998). The terms ‘stress-related growth’, ‘posttraumatic growth’, ‘positive adaptation’, and ‘adversarial growth’ are characterised by positive change as a consequence of coping with adversity (Linley & Joseph, 2004). Of particular interest with regard to ministry workers, one of the determinants of stress-related growth is religiousness (Park, 1998; Park, Cohen & Murch, 1996). In their 2004 meta-analysis, Linley and Joseph (2004) identify religion and religious coping as two of eight variables associated with adversarial growth. In a longitudinal study of college students, Park and Fenster (2004) found that religiousness was related to stress-related growth through multiple coping pathways. Tedeschi and Calhoun (1996) also identify spiritual change as one of five positive growth areas in their Posttraumatic Growth Inventory. Hence, it might be anticipated that

stressors evident in ministry may, for some, be associated with spiritual growth and positive mental health outcomes.

Systematic Self-Reflection Model of Resilience Strengthening: A Framework for Understanding the Development of Resilience via Stressor Exposure

The Systematic Self-Reflection (SSR) model of resilience strengthening (Crane, Searle, et al., 2019) adopts a developmental and contextual framework for strengthening resilience. It proposes that in the course of exposure to moderate psychological stress, individuals can develop a greater capacity for psychological resilience via stressor experiences if they also engage in a multi-faceted self-reflective process that leads to the development of self-insight. As such, the SSR model sets out a process whereby, in the face of moderate stress, as an individual systematically self-reflects on the situation at hand and their own response, they develop a deeper insight into their available resources (e.g., social support), the strategies used to cope and regulate emotion, the effectiveness of these strategies in context, and how their beliefs effect resilient functioning.

The SSR model of resilience strengthening proposes five self-reflective practices that are drawn from work focused on self-reflective practices applied in educational and clinical psychology settings (e.g., Bain, Mills, Ballantyne, & Packer, 2002; Bennett-Levy, Thwaites, Haarhoff, & Perry, 2015). It highlights the use of systematic self-reflection on both current and past success and failure for the broadening of behavioural options and improving performance outcomes (Ellis, Carette, Anseel, & Lievens, 2014). As such, the five conscious, self-reflective practices are situation- or development-focused (Crane, Searle, et al., 2019). Situation-focused self-reflective practices include: *self-awareness* of one's emotional, physical, cognitive, and behavioural response to an event; *trigger identification* enabling an individual to link a stressor event with their initial response; and *stressor reappraisal*

involving a reconsideration of one's initial response and consideration of what can be learned from the stressor. Awareness of values and value-based goals throughout the processes of self-awareness and trigger identification provides introspective feedback about ideal behaviours. Development-focused self-reflective practices include: *evaluation* of aspects of one's response to stress as to whether they were effective in living out or achieving values or values-based goals; and *future-focus* which looks forward to consider methods or resources to ensure alignment between values and behaviour.

As the self-reflective process unfolds, the individual's application of coping and emotion regulatory methods are refined over time to be more closely aligned to personal values and goals. The proposed process is iterative and dynamic, such that the self-insight gained from experiences of stressors and coping application allows an individual to adjust their use of, adapt, and seek out new coping methods to respond to their current situation, thus increasing capacity for future resilience. The model does not seek to describe all factors that increase the likelihood of resilience, rather it suggests that self-reflection on, and self-insight into, religious coping methods may lead to a more sophisticated and flexible religious coping repertoire that facilitates resilient outcomes (Crane, Searle, et al., 2019). Of relevance to the present study, it is proposed that self-reflection and self-insight may be related to coping methods that are aligned to the values inherent in the religious framework of ministry.

The Potential Application of Systematic Self-Reflection in Ministry

Self-reflection is a critical element in the SSR model of resilience strengthening (Crane, Searle, et al. 2019). In an application of the model, Crane, Boga, et al. (2019) developed a resilience training program that focused on the training of self-reflective skills. This was a longitudinal, group-randomised controlled trial whereby army cadet platoons were placed in a self-reflection or a cognitive-behavioural skills training condition. Resilience

training using guided self-reflection was more effective than the extant cognitive-behavioural training. There were non-significant baseline differences between the two groups, however, at a three-month follow-up, cadets in the self-reflection intervention group demonstrated improvements in mental health outcomes, with fewer symptoms of anxiety and depression compared to those in the cognitive-behavioural skill training condition.

Using self-reflection to develop self-insight on stressors and the effect of religious coping methods is anticipated to play a role in achieving resilient and well-being outcomes in ministry workers. Increasingly, ministry workers are learning to reflect on their ministry practice, as the ability to self-reflect has more commonly become an accepted goal of theological education (Wong et al., 2009). In most instances, reflection will be taught using principles from educational and professional development theory. For example, Wong et al. (2009) drew on work by Schön (1983) to teach reflective practice, bringing together theoretical and practical knowledge by teaching both reflection on ministry and reflection in the midst of ministry. The authors describe their efforts at encouraging theological students to focus on the application of theoretical or theological knowledge to specific situations demanding a practical solution. Hence, most training in ministry reflection is designed to improve the practice of ministry rather than for the purposes of refining religious coping or building resilience. Nevertheless, although this teaching may only apply to more recent theology graduates, given that self-reflection on behaviour and religious values is an element of the roles most ministry workers play, it might be that ministry workers are experienced reflectors and may spontaneously generalise this ability for the purposes of resilience.

The Relationships Between Self-Reflection, Self-Insight, and Rumination

The act of self-reflection, as described by synonyms such as self-awareness, self-focused attention and self-analysis, has variously been identified as beneficial for human

development, whether that be in psychology (e.g., Dimaggio & Lysaker, 2015; Morin, 2011), education (e.g., Mezirow, 2000; Ryan, 2015), professional development (e.g., Mann, Gordon, & MacLeod, 2009), sociology (e.g., Archer, 2010) or moral judgement (e.g., Haidt, 2001; Paxton, Ungar, & Greene, 2012). Consideration and reflection on the ‘self’ is elemental to both psychology and religion, however in science the “adaptive nature of reflection is still controversial” (Takano & Tanno, 2009, p. 261). Trapnell and Campbell (1999) posited that non-ruminative self-reflection builds self-knowledge, which can either help or hinder mental health depending on the nature of the self-knowledge. Trapnell and Campbell’s (1999) foundational paper provided a structure for subsequent research into self-reflection, self-insight, and rumination.

Trapnell and Campbell (1999) defined self-reflection as curiosity-motivated self-attentiveness. Grant et al. (2002), looking to study self-reflection for the purposes of coaching and clinical self-regulation, defined it as the inspection and evaluation of one’s thoughts, feelings and behaviour. However, subsequent research with different (self-) reflection scales indicates a lack of consistency in the directional correlations of self-reflection to mental health outcomes. For example, using Trapnell and Campbell’s (1999) Reflection scale, Joireman, Parrott and Hammersla (2002) found self-reflection to be positively associated with perspective-taking and empathic concern, and Takano and Tanno (2009) found it to be negatively associated with depression. Whereas Grant and colleagues’ (2002) self-reflection scale has been associated with negative affect, depression and anxiety (Silvia & Philips, 2011) but it was not associated with well-being either positively or negatively (Lyke, 2009). Both Trapnell and Campbell (1999) and Grant et al. (2002) acknowledge a confounding effect of rumination - defined as “neurotic self-attentiveness” (Trapnell & Campbell, 2002),

“dysfunctional self-absorption” (Grant et al., 2002) or brooding (Treyner, Gonzalez, & Nolen-Hoeksema, 2003) - on self-reflection.

Unsurprisingly, the literature is quite clear that rumination is not adaptive for positive mental health and well-being. Rumination has been shown to have negative associations with the well-being outcomes of perspective-taking and empathy (Joireman et al., 2002) and satisfaction with life (Harrington & Loffredo, 2011), and distinct positive associations with distress, depression and anxiety (Harrington & Loffredo, 2011; Joireman et al., 2002). Rumination not only operates independently on mental health outcomes but has also been shown to regulate the relationship between self-reflection and mental health. Takano and Tanno (2009) found that while self-reflection significantly predicted rumination, the inverse was not the case. Further, self-reflection was associated with lower depression while rumination was associated with higher depression, such that the total effects of both self-reflection and rumination cancelled each other out. The authors conclude that self-reflection is adaptive but only in the absence of rumination. Researching happiness, Elliott & Coker (2008) mirrored these results, finding that self-reflection has the ability to increase or decrease happiness when mediated by rumination. Hence, rumination suppresses the positive effect of self-reflection on mental health. Conversely, self-reflection is related to well-being and positive mental health when rumination is controlled.

The literature indicates that self-reflection is distinct from self-insight (DaSalveira, DeSouza, & Gomes, 2015; Lyke, 2009). As with self-reflection, differences exist in the definition of self-insight. Trapnell and Campbell (1999) refer to self-knowledge as clarification of the self that is associated with greater accuracy, articulation and autonomy. Grant et al. (2002) define self-insight as “the clarity of understanding of thoughts, feelings and behaviours” (p. 821). A wealth of research exists linking self-insight (as measured by

Grant et al's [2002] Insight sub-scale) to positive mental health outcomes, particularly well-being. In Harrington and Loffredo's (2011) study, self-insight was the most robust positive predictor of well-being, being the only scale to significantly predict all six of Ryff's (1989) psychological well-being dimensions, as well as satisfaction with life. Harrington, Loffredo and Perz (2014) similarly found that self-insight was significantly positively correlated with psychological well-being, and that self-insight and mindfulness were positively correlated, such that self-insight was found to be a mediator for the relationship between mindfulness and well-being. Silvia and Philips (2011) found that greater self-insight led to better psychological function, higher positive affect and self-esteem and that it predicted lower depression, anxiety, and negative affect. Fewer studies have explored the relationship between self-insight and resilience, however, Cowden and Meyer-Weitz's (2016) work with competitive tennis players found that self-insight predicted resilience. As such, given the developmental and process-orientation of resilience, it might be expected that self-insight will be positively related to both well-being and resilience. It is less clear that self-reflection will have a direct effect on resilience, however, rumination (or brooding) must be controlled for.

How Religion and Spirituality Support Well-Being and Resilience

The relationship between 'calling' and well-being

Given the range of stressors that can affect ministry workers, it is not unusual that half leave their roles within five years (Meek et al., 2003). For most however, the drive to become a Christian ministry worker is that it is a calling (Meek et al., 2003; Miner, Bickerton, Dowson, & Sterling, 2015). That is, for these people, ministry is fulfilling and socially useful work that they believe in (Wrzesniewski, McCauley, Rozin, & Schwartz, 1997). Alternatively, Dik and Duffy (2009) express the components of a calling as having an

external summons, meaning or purpose, and prosocial motivation. Regardless of the type of work, research consistently finds that those who view their work as a calling have higher well-being than those who view their work as a job or career (Duffy & Dik, 2013; Wrzesniewski et al., 1997). For ministry workers, their roles have deep significance, and their conviction and belief is that this work is meaningful, suggesting that higher well-being might be expected of those in these roles.

The relationships between religion, spirituality and mental health

As noted by Kopacz, Crean, Park and Hoff (2018), the terms ‘religion’ and ‘spirituality’ overlap conceptually, and as such, there is inconsistent use of these terms in the scientific literature. Religion includes organised beliefs and practices related to the sacred, with religiosity including the public and private practices associated with an organised faith tradition (Cotton et al., 2006; Kopacz et al., 2018). Spirituality may or may not be related to religion but is connected by way of a personal and internal search for meaning and significance in relation to the sacred (Kopacz et al., 2018).

Associations have also been identified between specific religious and spiritual variables and positive mental and physical health outcomes (Pargament, Koenig, & Perez, 2000). For example, stronger religious belief has been associated with greater levels of optimism for heart surgery patients (Contrada et al., 2004) and for patients with HIV/AIDS (Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006). Further, for clergy, greater spiritual resources (defined as divine calling, attachment to God, and collaborative problem-solving with God) were shown to be antecedents of well-being (Bickerton et al., 2015). Even more distinct in the literature is the protective nature of religion and spirituality against negative health outcomes, such as depression and anxiety (Cotton et al., 2006). In their longitudinal study of depression and complex grief, Hebert, Dang, and Schultz (2007) found that

involvement in religious activity (e.g., attendance at religious services, prayer) predicted lower levels of depression. Greening and Stoppelbein (2002) found that for adolescents, the level of commitment to core Christian beliefs was inversely related to perceived suicide risk. Given that religion has been identified as a protective factor and a potentially important resource for mental health, the relationship between religion, spirituality, and coping has increasingly become the subject of much research (Pargament et al., 2003).

The relationships between religion, spirituality and coping

Religion and spirituality serve a variety of purposes, both in day-to-day living and when coping with significant adversity. Particularly in times of high stress and crisis, religion and spirituality are frequently mentioned as methods for coping (Pargament et al., 2000). As such, Pargament and Cummings (2010) have proposed that religiousness is a significant factor for resilience. Using the term 'religion' to subsume both religion and spirituality, Pargament and colleagues (2000; 2005; 2010) identify five functions to describe how an individual engages in religion to understand and cope with stressors. These basic functions include the provision of: meaning, understanding, and interpretation; control beyond the self or own resources; connection with and comfort from a spiritual force; intimacy and social identity; and life transformation in finding new sources of significance. As such, these functions form the basis of an understanding of the complex ways religion is expressed and is involved in coping. These five functions also form the basis of Pargament and colleagues' (2000) typology of 21 religious coping methods and the resultant measure of religious coping (RCOPE). Among studies that have drawn on this work, religious coping was more strongly associated with positive mental health for ministry workers than for lay leaders, and for lay leaders than for church members (Pargament et al., 2001). Religious coping has also been found to be more helpful for both Protestants and Evangelicals than for

Catholics (Alferi, Culver, Carver, Arena, & Antoni, 1999; Tix & Frazier, 1998). Hence, for Protestant ministry workers, religious coping may play a significant roles in facilitating resilience and well-being despite the stressors of ministry life.

Religious Coping Methods and Resilient Outcomes

Research exploring the application of religious coping has most frequently focused on the effects of positive and/or negative religious coping (e.g., Kopacz et al., 2018; Pargament et al., 2001; Park et al., 2017; Van Tongeren et al. 2018). When first defining positive and negative religious coping, Pargament, Smith, Koenig, and Perez (1998) proposed they might be used as a broad, rather than deep, approach to the study of patterns of religious coping. The pattern of positive religious coping is defined by a secure relationship with God and a sense of spiritual connectedness with others (Pargament et al., 1998, Pargament et al., 2005). By contrast, negative religious coping is defined by an insecure relationship with God and tension with others (Pargament et al., 1998, Pargament et al., 2005). A meta-analysis of 49 studies by Ano and Vasconcelles (2005) found that positive religious coping is moderately positively related to positive outcomes (e.g., life satisfaction, positive affect, well-being) and negatively related to negative outcomes (e.g., depression, anxiety, distress). Conversely, they found negative religious coping to be related to negative outcomes and positively related to negative outcomes. More recently, Kopacz et al. (2018) concluded that negative religious coping was a risk factor for suicide however they suggest that positive religious coping might be more strongly related to positive life outcomes. In their cross-sectional study of veterans, Park et al. (2017) found that for those with higher combat exposure, negative religious coping was associated with increased posttraumatic stress, however, contrary to their hypothesis, positive religious coping was associated with both increased posttraumatic stress and positive traumatic growth. The authors of this study suggest that positive religious coping may have

been ineffective in alleviating post traumatic stress symptoms, or that those in greater distress tend to turn to religion and spirituality for relief. Given the cross-sectional nature of the study design, no determination of causality can be made. Although a broad pattern of relationships is becoming clearer in the literature, Park (1998), Pargament and Cummings (2010), and Park et al. (2017) acknowledge that the relationship between religious coping and mental health is complex.

Although classifying religious coping as either positive or negative has been helpful at the broad level, further research to unravel the complexity is warranted to explore the relationships of specific religious coping methods at depth, particularly with regard to well-being and resilient outcomes (Pargament et al., 1998). Some research of this nature has been conducted. For example, collaborative religious coping, (i.e., working together with God to solve problems) has been associated with positive physical and mental health outcomes (Pargament et al., 1998), whereas passive religious deferral (i.e., waiting for God to take control) has been associated with depression and anxiety (Bickel et al., 1998). For a review, see Ano & Vasconcelles, 2005). Relevant here is the study by Pargament et al., (2001) of ministry workers, lay leaders, and church members. The authors identified that the salience of a religious framework to the individual's social roles and identity was associated with their use of religious coping methods such that clergy reported higher levels of positive religious coping and that both positive and negative religious coping were more strongly related to well-being than for non-clergy. As positive religious coping appears to be most helpful for those who are more religious (Pargament et al. 2001) and for Protestants (Tix & Frazer, 1998), a deep dive into specific religious coping methods used by ministry workers is expected to provide more clarity as to their relationship to resilient outcomes for this population.

Given the high usage of positive religious coping methods by clergy (Pargament, 2001), determining which forms of religious coping are effective (and ineffective) for ministry workers is expected to support efforts to strengthen their resilience. Pargament and colleagues (2003) applied a process/integration criterion to establish grounds for efficacy, suggesting that it can be determined by the degree of integration among a person's beliefs, emotions, behaviours, values, social system, and the demands raised by specific stressors. That is, in the ministry context, coping might be judged to be effective when the selection of religious coping methods, as displayed by their behaviours, are aligned to and consistent with the values and beliefs of the minister's religious framework. As their religious framework defines and provides meaning to all areas of their life, and given their roles involve not just living out the doctrine and values of their religious framework themselves but also teaching them to others, the congruence between ministry workers' use of religious coping methods and their religious framework are expected to be important to their work and to their well-being. A study by Sagiv and Schwartz (2000) suggests that people are more likely to experience positive well-being when there is congruity between their environment and their values, such that they are able to express these values and beliefs by action. From a Protestant Christian framework, the concept of positive growth or maturation through a period of suffering is aligned with biblical teaching, so long as the methods used to cope through that period of suffering are appropriate for a Christian (Pargament & Cummings, 2010; Pargament et al. 2001).

Specific religious coping methods that are aligned to a Protestant Christian religious framework are expected to be similar to those represented in the definition of positive religious coping. That is, they will emphasise a secure relationship with God and positive spiritual relationships with others (Pargament et al., 1998). As such, spiritual support seeking,

characterised by trusting and looking to God for strength and comfort (Pargament et al. 2000), is expected to be aligned to a Protestant Christian religious framework as these behaviours are oriented toward a mature relationship with God. Seeking support from members and clergy, characterised by looking to others for strength, comfort, and prayer (Pargament et al. 2000) is also expected to be aligned to a Protestant Christian religious framework as they express both a dependency on God, as well as a recognition of biblical commands to continue in relationship with God and his people. Further, religious coping methods which recognise both God's sovereign control and the individual's responsibility for taking action are expected to be aligned. Hence, collaborative religious coping, characterised by seeking control through a partnership with God, and active religious deferral, characterised by doing what one can and then giving it over to God (Pargament et al. 2000), are both expected to be methods of religious coping aligned to a Protestant Christian framework. Conversely, self-directing religious coping, characterised by individual action taking without relying on God (Pargament et al. 2000), is not expected to be aligned, as God's sovereign control is not recognised. Passive religious deferral, characterised as inactivity and just expecting God to act (Pargament et al. 2000), is also not expected to be aligned to a Protestant Christian framework as individual responsibility is denied.

The Present Study

Using the SSR Model of Resilience Strengthening (Crane, Searle, et al., 2019), the present study aimed to explore the effects of self-reflection, self-insight and the application of religious coping methods on the psychological well-being and resilience of ministry workers. First, we seek to investigate the relationship between self-reflection and self-insight with religious coping methods used. We expect that, in this population, self-reflection and self-insight will be positively associated with religious coping methods that are aligned with a

Protestant religious framework. Second, we seek to explore the independent roles of self-insight on the well-being and resilience of ministry workers. Third, we explore the independent roles of different religious coping methods on these same outcomes. Specifically, we examine whether religious coping methods that are aligned, rather than misaligned, to ministers' religious frameworks are positively related to their perceived resilience and well-being. Finally, extending the SSR model of resilience strengthening, we seek to examine whether self-reflection and self-insight support the refinement of religious coping methods. Specifically, we expect that coping methods aligned to religious framework will be more strongly associated with perceived resilience and well-being in the context of high demands when self-reflection or self-insight is high. Conversely, it is anticipated that coping methods *misaligned* with a religious framework will be more strongly associated with lower perceived resilience and well-being in the context of high demands when self-reflection or self-insight is low. Based on previous scholarship, the following hypotheses are made:

H1: Positive correlations emerge between self-reflection, self-insight, and aligned religious coping methods, but negative correlations with misaligned religious coping methods.

H2: There are positive main-effects for self-insight on self-reported well-being and resilience.

H3: There are positive main-effects of religious coping methods that are aligned to religious framework (i.e., collaborative religious coping, active religious surrender, spiritual support seeking and member support seeking) on self-reported well-being and resilience.

H4: There are negative main-effects of religious coping methods that are *misaligned* to religious framework (i.e., passive religious deferral and self-directing religious coping) on self-reported well-being and resilience.

There is a three-way interaction between stressor frequency, each of the *aligned* religious coping resources, and self-reflection in the prediction of resilience and well-being outcomes when controlling for brooding. The nature of the three-way interaction is such that:

H5: Under high levels of stressor frequency, a positive relationship between *aligned* religious coping resources and the outcomes is stronger for higher levels of self-reflection and weaker for lower levels of self-reflection.

H6: Under lower levels of stressor frequency, there is no relationship between *aligned* religious coping resources and the outcomes irrespective of self-reflection.

There is a three-way interaction between stressor frequency, each of the *misaligned* religious coping resources, and self-reflection in the prediction of resilience and well-being outcomes when controlling for brooding. The nature of the three-way interaction is such that:

H7: Under high levels of stressor frequency, a negative relationship between *misaligned* religious coping resources and the outcomes is stronger for higher levels of self-reflection and weaker for lower levels of self-reflection.

H8: Under lower levels of stressor frequency, there is no relationship between *aligned* religious coping resources and the outcomes irrespective of self-reflection.

There is a three-way interaction between stressor frequency, each of the *aligned* religious coping resources, and self-insight in the prediction of resilience and well-being outcomes when controlling for brooding. The nature of the three-way interaction is such that:

H9: Under high levels of stressor frequency, a positive relationship between *aligned* religious coping resources and the outcomes is stronger for higher levels of self-insight and weaker for lower levels of self-reflection.

H10: Under lower levels of stressor frequency, there is no relationship between *aligned* religious coping resources and the outcomes irrespective of self-insight.

A three-way interaction is tentatively predicted between stressor frequency, each of the *misaligned* religious coping resources, and self-insight in the prediction of resilience and well-being outcomes when controlling for brooding. The nature of the three-way interaction is such that:

H11: Under high levels of stressor frequency, a negative relationship between *misaligned* religious coping methods and the outcomes is stronger for lower levels of self-insight and self-reflection, but the relationship will be attenuated for higher levels of self-insight and self-reflection.

H12: Under lower levels of stressor frequency, there is no relationship between *misaligned* religious coping resources and the outcomes irrespective of self-insight.

Method

This chapter describes the methods used to explore the research hypotheses. It covers participants involved, procedures engaged, sample size and power obtained, and measures for variables.

Participants

Participants were Australian Protestant ministry workers. A ‘ministry worker’ was defined in the survey as “someone who is employed by a Christian organisation to encourage and build up members of that ministry. This might be part-time or full-time, and is most

likely, but not always, in a local church, leading, teaching and caring for a congregation or group of people. Examples include Pastor, Minister, Chaplain...”. A total of 370 responses were received. Of these, one case was removed as consent was not given and four cases who did not identify as being Christian ministry workers were removed. A further 88 cases were removed as the survey was less than 50% partially completed. This pattern of missing data was principally due to dropout toward the second half of the survey, once these cases were removed missing data was negligible with 22 missing data points (.001%). Little’s MCAR test demonstrated that the missingness was random ($\chi^2 (12) = 13.964, p = .30$). Missing values were identified at the item-level and replaced with maximum likelihood estimation values using the expectation–maximization algorithm (Enders, 2001).

Hence, the final sample size for analysis was 277. The mean age of participants was 46.7 years ($SD=11.1$) with a range of 22-73 years. 19.9% of the sample were female. The mean length of time in a formal ministry capacity was 14.7 years ($SD=10.1$) with a range of 1-42 years. Data were collected on denomination, location, roles, education, days employed to work per week and average number of participants in ministry per week. These data are presented in Table 1.

Design

The design was a single, cross-sectional online survey. A total of 370 responses were received, responders having been invited to participate through formal and informal channels.

Table 1*Demographic descriptives for the study sample*

	N	%		N	%
Denomination			Education		
Anglican	171	63.1	High school	11	4.0
Baptist	13	4.8	Certificate/ Diploma	17	6.2
Pentecostal	5	1.8	Bachelor Degree	146	53.3
Presbyterian	36	13.3	Postgraduate Degree	100	36.5
Uniting	5	1.8	Missing	3	
Non-denominational	9	3.3	Theological Education		
Other	32	11.8	Informal only	15	5.5
Missing	6		Certificate/ Diploma	18	6.5
Location			Bachelor Degree	147	53.5
NSW/ ACT	186	71.8	Postgraduate Degree	95	34.5
VIC	32	12.4	Missing	2	
QLD	13	5.0	Days worked/ week		
SA	10	3.9	4 or less	37	13.5
WA	15	5.8	5	74	26.9
TAS	2	0.8	6	164	59.6
NT	1	0.4	Missing	2	
Missing	18		Average ministry size per week		
Roles			1-49	39	14.3
Senior Minister	122	44.9	50-124	83	30.4
Assisting Minister	84	30.9	125-199	49	17.9
Overseer e.g., Bishop	6	2.2	200-399	50	18.3
Chaplain	19	7.0	400-799	33	12.1
Manager/ Profession	11	4.0	800+	19	7.0
Other	30	11.0	Missing	4	
Missing	5				

Note. NSW/ ACT = New South Wales/ Australian Capital Territory; VIC = Victoria; QLD = Queensland; SA = South Australia; WA = Western Australia; TAS = Tasmania; NT = Northern Territory.

Procedure

The survey was self-administered online. Christian ministry workers were invited to participate in the survey via a number of channels. Formal channels included advertisements in church circulars and at a diocesan governance meeting, and emails or social media notifications from ministry support organisations to those across Australia in a variety of denominations. Informal channels included email requests to personal contacts, and ‘snowballing’ from these and from formal channels. The online survey was open to receive responses for a period of ten weeks. All survey data was collected online and in consenting to participate, respondents were made aware of the voluntary nature of their participation and their ability to withdraw at any point. No payments incentives were provided to participants.

Sample Size and Power

The a priori power analysis for linear multiple regression analysis indicated that a minimum sample size of approximately 300 was required for a model with 15 predictors, statistical power of 0.80, and a small effect size of 0.06, and at 0.05 probability. Hence, the final sample size of 277 was slightly below the minimum required due to a large number of cases with a high percentage of missing data.

Measures

Outcome variables.

Well-being. Well-being was assessed using the 14-item Scales of General Well-being (SGWB) (Longo, Coyne, & Joseph, 2018). The SGWB is a multidimensional tool that assesses fourteen distinct well-being constructs – happiness, vitality, calmness, optimism, involvement, self-awareness, self-acceptance, self-worth, competence, development, purpose, significance, congruence, and connection. It has been demonstrated to have good psychometric properties as single index of well-being (Longo et al., 2018). This measure was

included as a cross-sectional measure of mental health. Participants are asked to indicate how true each statement is regarding the experiences in their life overall, using a five-point scale (0= Not at all true, 4= Very true). Example items include: “I feel happy”, “I am highly effective at what I do” and “What I do in my life is worthwhile”. Internal reliability of the 14-item SGWB in this sample is acceptable at $\alpha = .89$.

Perceived resilience. The Brief Resilience Scale (BRS) (Smith et al., 2008), was used to assess perceived resilience. The BRS measures perceptions of one’s capacity to bounce back from hardship. As this scale is a self-report measure, it was included as a measure of perceived resilience only, recognising that an objective measure of resilience (before and after a stressor event) would not be possible in a cross-sectional study. The scale consists of six items (e.g., “I tend to bounce back quickly after hard times”). Participants were asked to indicate the extent to which the statements are reflective of their experiences in the previous three months on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). An acceptable internal reliability was demonstrated by the BRS in this sample ($\alpha = .87$).

Predictor variables.

Stressor frequency. An events history calendar (EHC) was used as a method of capturing frequency of stressor experiences. This technique has increasingly been used to collect complex and retrospective life-course data as it captures high quality, accurate data in a rapid and cost-effective manner (Morselli, Le Goff, & Gauthier, 2018; Sayles, Belli & Serranco, 2010). In resilience-related literature, Barber, McNeely, Olsen, Belli and Doty (2016) used an EHC to assess political violence stressors as part of an interview protocol. Morselli et al. (2018) found that EHC surveys can be self-administered as well as conducted by interview. The online EHC used in this study was developed from extant literature on

stressors typical of the ministry context and was reviewed by two external ministry workers, one a PhD in ministry engagement and the other a theological lecturer and PhD candidate. Participants were asked to indicate which events they had experienced in the course of the past two years from a list of 40. Of the list of events, 15 related to personal or family events (e.g., death of a friend, change of job/ ministry), 17 related to workload (e.g., working more than 8 hours/day, limited financial resources to fulfil roles), and 8 related to interpersonal conflict (e.g., tension with ministry team members, criticism from congregation members). Stressor frequency was calculated as the number of months any of the 40 events were experienced in the past two years, such that the possible range was 0 – 960.

Self-reflection and self-insight. Self-reflection and self-insight were assessed using the Self-Reflection & Insight Scale (SRIS) (Grant et al., 2002). This scale includes 20 items on two sub-scales related to participants' reflections over the past two weeks, measured on a six-point scale: 1(strongly disagree) to 6(strongly agree). The self-reflection sub-scale assesses "the inspection and evaluation of one's thoughts, feelings and behavior" (Grant et al., 2002, p.821) and consists of twelve items (e.g., "I frequently examine my feelings", "It is very important for me to evaluate the things that I do"). These twelve-items demonstrated satisfactory internal reliability in this sample ($\alpha=.93$). The insight sub-scale assesses "the clarity of understanding of one's thoughts feelings and behavior" (Grant et al., 2002, p. 821) and consists of eight items (e.g., "I am usually aware of my thoughts", "I usually have a very clear idea about why I've behaved in a certain way"). The eight-items demonstrated satisfactory internal reliability in this sample ($\alpha=.86$).

Brooding. Rumination is characterised by self-reflection and a repetitive and passive focus on negative emotions (Treynor et al., 2003). Treynor et al.(2003)'s Rumination and Reflection Scale provides a measure which distinguishes between adaptive reflective

pondering and maladaptive brooding. Hence, brooding was assessed using four of five items from the brooding sub-factor of the Rumination and Reflection Scale. Only four of the five sub-factor items were asked as one was inadvertently missed from the online survey. However, the integrity of the scale was not likely to have been impacted. Participants were asked to indicate how often in the past two weeks they thought or did the items when they feel stressed, sad or angry (e.g., “thought “Why do I have problems other people don’t have?””, “thought about a recent situation, wishing it had gone better”). Participants were required to respond on a four-point scale: 1 (almost never) to 4 (almost always). The four items demonstrated satisfactory internal reliability in this sample ($\alpha=.72$).

Religious coping. To examine the roles of religious coping methods in ministry workers, six sub-scales of the RCOPE were assessed (Pargament et al., 2000). Rather than investigate all 21 sub-scales, the authors suggest selecting the sub-scales of interest to shorten survey length (Pargament et al., 2000). The six sub-scales were chosen as being either aligned or misaligned to a Protestant Christian religious framework. Specifically, four methods of religious coping were selected as being aligned: collaborative religious coping (e.g., “Worked together with God as partners”), active religious surrender (e.g., “Did what I could and put the rest in God’s hands”), seeking spiritual support (e.g., “Looked to God for strength, support and guidance”), and seeking support from clergy or members (e.g., “Asked others to pray for me”). Two methods of religious coping were selected as being misaligned: passive religious deferral (e.g., “Didn’t do much, just expected God to solve my problems for me”), and self-directing religious coping (e.g., “Made decisions about what to do without God’s help”). Participants responded to items describing ways they cope with the stresses of ministry life by indicating how much they used each coping method in the past two weeks. Participants were required to respond to each sub-scale using a four-point scale: 1(Not at all)

to 3(A great deal). These items were added to create the sub-scale score. Internal reliability for the sub-scales collaborative religious coping ($\alpha=.73$), active religious surrender ($\alpha=.80$), self-directing religious coping ($\alpha=.75$) and spiritual support seeking ($\alpha=.79$) were acceptable. However, passive religious deferral ($\alpha=.61$) and member support seeking ($\alpha=.57$) demonstrated unsatisfactory internal reliability statistics in this sample.

Analysis Strategy

Data were analysed using SPSS v25.0. Hierarchical linear regressions were conducted within SPSS to examine the two outcome variables: well-being and resilience. All predictor variables were mean centred. In total, twelve regressions were run, one for each religious coping variable for each outcome variable. The same steps were used for each regression. Age, gender, length of time in ministry and brooding were initially included as covariates. Only length of time in ministry and brooding were significant predictors and so were included in Step 1. Step 2 included the direct effects of each predictor variable. Step 3 included the two-way interactions, and Step 4 included the predicted three-way interactions. In each case, identification of multivariate outliers were assessed using Mahalanobis Distance values and plots of standardised predicted values of the outcome variable. Results were examined with and without identified multivariate outliers, and where they made no difference to the outcomes of the analysis, outliers were retained in the data. Simple slopes analysis using Process v3.3 by Andrew F. Hayes was conducted for significant two-way interactions.

Results

Preliminary Analysis

Table 2 displays the Pearson correlations, means and standard deviations for the measures of the survey. The outcome variables well-being and resilience were positively correlated ($r = .46, p < .01$). Of the three reflection-related predictor variables, self-reflection was positively correlated with self-insight ($r = .20, p < .01$) and brooding ($r = 0.15, p < .01$). Self-insight was negatively correlated with brooding ($r = -.39, p < .01$). Self-reflection was positively correlated with well-being ($r = .13, p < .05$), indicating that an increase in self-reflection was related to an increase in well-being. Self-insight was positively correlated with both well-being ($r = .48, p < .01$) and resilience ($r = .39, p < .01$), indicating that an increase in self-insight was related to an increase in both well-being and resilience. Predictably, brooding was negatively correlated with well-being ($r = -.48, p < .01$) and resilience ($r = -.36, p < .01$).

With regard to the six religious coping predictor variables, the four coping methods considered to be aligned to a Protestant religious framework were correlated. Collaborative religious coping (i.e., working together with God to gain control) and seeking spiritual support (searching for comfort from God) were highly correlated ($r = .66, p < .01$). Both were positively correlated with the two other religious coping factors hypothesised to be aligned with a Protestant religious framework: active religious surrender (i.e., doing what one can and giving the rest to God) and member support seeking (i.e., searching for comfort from other ministers or ministry members). Both collaborative religious coping and spiritual support seeking were negatively correlated with self-directing religious coping (i.e., working on own to gain control without God's help), and neither were correlated with passive religious deferral (i.e., just waiting for God to take control). Passive religious deferral was not correlated with any other religious coping variable.

Table 2
Variable Descriptives and Pearson Correlation Matrix

	Mean (SD)	2	3	4	5	6	7	8	9	10	11	12
1. Wellbeing	3.85 (0.53)	.46**	-.11	.13*	.48**	-.48**	.48**	.18**	.33**	.12*	<-.01	-.35**
2. Resilience	3.43 (0.74)		-.03	-.09	.39**	-.36**	.25**	.09	.14*	.03	-.11	-.22**
3. Stressor frequency	105.06 (78.55)			.11	.06	.26**	<.01	-.08	.01	.10	-.03	-.01
4. Self-reflection	4.47 (0.86)				.20**	.15**	.21**	.11	.24**	.27**	-.08	-.12*
5. Self-insight	4.63 (0.69)					-.39**	.30**	.15*	.25**	.02	-.23**	-.35**
6. Brooding	1.59 (0.53)						.22**	.02	-.13*	.07	.04	.28**
7. Collaborative Religious Coping	5.47 (1.92)							.32**	.66**	.26**	-.01	-.42**
8. Active Religious Surrender	4.49 (2.18)								.30**	.06	.08	-.13*
9. Spiritual Support Seeking	6.31 (1.95)									.29**	-.05	-.43**
10. Member Support Seeking	3.14 (1.69)										.05	-.13*
11. Passive Religious Deferral	0.43 (0.88)											.11
12. Self-directing Religious Coping	1.78 (1.58)											

* $p < .05$. ** $p < .01$.

The religious coping variables were associated with the outcome variables in the directions anticipated by the proposed religious framework. Aligned methods, collaborative religious coping and seeking spiritual support were positively associated with well-being and resilience ($r = .48, p < .01$; $r = .25, p < .01$; $r = .33, p < .01$; $r = .14, p < .05$), indicating that increased coping by working together with God, and seeking God's help through struggles, are related to increased well-being and reported resilience. Conversely, increased use of the misaligned method self-directing religious coping, which does not involve God, was associated with lower well-being and resilience ($r = -.35, p < .01$; $r = -.22, p < .01$). Active religious surrender and member support seeking were both positively associated with just well-being ($r = .18, p < .01$; $r = .12, p < .05$), indicating that well-being was better for ministers who engaged in doing what could be done then handing it over to God, and seeking help and comfort from others. Passive religious deferral, or not doing anything and waiting for God to solve problems, was not associated with either well-being or resilience.

As hypothesised (H1), the religious coping variables were also correlated with the three reflection-related variables. Aligned strategies tended to be positively correlated with self-reflection and self-insight. Collaborative religious coping was positively correlated with self-reflection, self-insight, and brooding ($r = .21, p < 0.01$; $r = .30, p < 0.01$; $r = .22, p < 0.01$, respectively), indicating that increased collaboration with God for problem-solving is related to increased self-reflection, self-insight and brooding. Seeking spiritual support from God was positively correlated with self-reflection and self-insight ($r = .24, p < 0.01$; $r = .25, p < 0.01$, respectively), but negatively correlated with brooding ($r = -.13, p < 0.05$), indicating that increased trusting God for strength and support was related to more self-reflection and self-insight, but to less brooding. Active religious surrender was positively correlated with self-insight ($r = .15, p < .05$), such that more action followed by handing the problem over to God

was associated with more self-insight. Seeking support from other ministry members was positively related to self-reflection ($r = .27, p < .01$) suggesting that more support seeking from ministry members was related to more self-reflection. The opposite pattern tended to occur for misaligned coping methods. Self-directing religious coping was negatively associated with self-reflection and self-insight ($r = -.12, p < 0.05$; $r = -.35, p < 0.01$) and positively associated with brooding ($r = .28, p < .01$) and passive religious deferral was negatively associated with self-insight ($r = -.23, p < .01$).

Multiple Regression Analyses to Test SSR Model Hypotheses

Hierarchical multiple regressions were run to examine the relationship between stressor frequency, self-reflection, the six religious coping variables (collaborative religious coping, active religious surrender, seeking spiritual support, member support seeking, passive religious deferral, and self-directing religious coping) and the two outcome variables, resilience and well-being. As such, a total of twelve regressions were run, one for each religious coping variable for each outcome variable. The results of these analyses are presented below by each of the six religious coping variables.

Collaborative religious coping. Tables 3 and 4 present the results of the analyses of collaborative religious coping with well-being and resilience respectively. For the analysis on well-being, two multivariate outliers were removed and subsequently a three-way interaction between stressor frequency, self-insight, and collaborative religious coping become non-significant (from $t = 1.99, p < .05, \beta = .12$ to $t = 1.75, p < .08, \beta = .11$). Therefore, Model 3 including the two-way interactions was used, significantly improving on the main-effects model ($R^2_{\text{change}} = .041, F_{\text{change}}(261) = 3.799, p < .002$). Significant main-effects were found for brooding ($t = -5.86, p < .001, \beta = -.33$) and, as predicted, (H2) self-insight ($t = 2.55, p < .01, \beta = .16$) and (H3) collaborative religious coping ($t = 6.53, p < .001, \beta = .34$). These effects indicated

that brooding has a negative relationship with well-being, whereas higher self-insight and higher collaborative religious coping were both related to better well-being. This model also revealed a significant two-way interaction between self-insight and collaborative religious coping ($t = -3.05, p < .001, \beta = -.16$). This interaction is illustrated in Figure 1.

A simple slopes analysis was conducted which found that the relationship between well-being and collaborative religious coping was significant at all levels of self-insight, albeit weaker at high levels of self-insight ($b = .13, t = 6.17, p < .001, 95\% \text{ CI } [.09, .17]$; $b = .09, t = 6.40, p < .001, 95\% \text{ CI } [.06, .12]$; $b = .05, t = 2.88, p < .01, 95\% \text{ CI } [.02, .09]$). These results indicate that, at all levels of self-insight, there was a positive linear relationship between collaborative religious coping and well-being. However, consistent with prediction (H5), the relationship was strongest at high levels of insight and weakest at lower levels of insight. For low self-insight, the benefit of collaborative religious coping appeared to plateau at moderate levels of collaborative religious coping.

For the collaborative religious coping analysis predicting perceived resilience, no multivariate outliers were identified. As in the previous analysis, Model 3 including the two-way interactions significantly improved on the more parsimonious models ($R^2_{\text{change}} = .039, F_{\text{change}}(263) = 2.824, p < .017$), however, the predicted (H5, H7) three-way interactions did not emerge. A significant main-effect was again found for brooding ($t = -3.12, p < .001, \beta = -.20$). Significant main-effects were found for self-reflection ($t = -2.53, p < .01, \beta = .15$), (H2) self-insight ($t = 3.69, p < .001, \beta = .26$), and (H3) collaborative religious coping ($t = 2.61, p = .01, \beta = .16$). Brooding had a negative association with resilience, as did self-reflection. Higher self-insight and collaborative religious coping were both related to greater perceived resilience. A significant two-way interaction between self-reflection and collaborative religious coping also emerged ($t = -3.38, p < .001, \beta = -.19$). A simple slopes analysis revealed that the positive

relationship between resilience and collaborative religious coping was significant at low levels of self-reflection ($b = .13$, $t = 4.28$, $p < .001$, 95% CI [.07, .19]). This relationship remained significant, but weaker at moderate levels of self-reflection ($b = 0.06$, $t = 2.60$, $p < 0.01$, 95% CI [.01, .11]), and non-significant at higher levels of self-reflection. As illustrated in Figure 2, no relationship was evident between collaborative religious coping and perceived resilience at high levels of self-reflection. Thus, at low and moderate levels of self-reflection, increased engagement in collaborative religious coping was associated with higher self-reported resilience, particularly for low self-reflectors.

Table 3*Hierarchical regression analysis of collaborative religious coping on well-being*

	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.86	.02		136.98	3.86	.03		149.28	3.89	.03		147.59
Yrs worked	<.01	<.01	.05	.89	<.01	<.01	.03	.54	<.01	<.01	.03	.66
Brooding	-.44	.06	-.42	-7.54**	-.30	.06	-.28	-5.02**	-.35	.06	-.33	-5.86**
Stress Frq.					.00	.00	-.05	-1.00	<.01	<.01	-.05	-.97
Reflection					.04	.03	.07	1.29	.02	.03	.04	.77
Insight					.19	.04	.25	4.51**	.12	.05	.16	2.55*
CRC					.09	.01	.32	6.16**	.09	.01	.34	6.53**
SF*Ref									<.01	<.01	.10	1.87
Ref*CRC									-.03	.02	-.09	-1.88
SF*CRC									<.01	<.01	.04	.73
SF*Ins									<.01	<.01	.02	.37
Ins*CRC									-.06	.02	-.16	-3.05**

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Freq. = Stress frequency in past 24 months; CRC = Collaborative religious coping; SF*Ref = Interaction of stress frequency and reflection; Ref*CRC = Interaction of Reflection and Collaborative religious coping; SF*CRC = Interaction of Stress frequency and Collaborative religious coping; SF*Ins = Interaction of Stress frequency and Insight; Ins*CRC = Interaction of Insight and Collaborative religious coping.

* $p < .05$. ** $p < .01$.

Table 4*Hierarchical regression analysis of collaborative religious coping on resilience*

	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.43	.04		82.25	3.42	.04		82.41	3.45	.04		80.69
Yrs worked	<.01	<.01	.05	.81	<.01	<.01	.02	.34	<.01	<.01	.03	.51
Brooding	-.50	.08	-.35	-6.09**	-.28	.09	-.19	-3.02**	-.29	.09	-.20	-3.12**
Stress Frq.					<.01	<.01	.02	.40	<.01	<.01	.03	.58
Reflection					-.13	.05	-.15	-2.52**	-.13	.05	-.15	-2.53*
Insight					.31	.07	.29	4.68**	.28	.08	.26	3.69**
CRC					.06	.02	.14	2.45*	.06	.02	.16	2.61**
SF*Ref									<.01	<.01	.01	.15
Ref*CRC									-.08	.02	-.19	-3.38**
SF*CRC									<.01	<.01	-.03	-.57
SF*Ins									<.01	<.01	<.01	-.07
Ins*CRC									-.01	.03	-.01	-.21

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; CRC = Collaborative religious coping; SF*Ref = Interaction of stress frequency and reflection; Ref*CRC = Interaction of Reflection and Collaborative religious coping; SF*CRC = Interaction of Stress frequency and Collaborative religious coping; SF*Ins = Interaction of Stress frequency and Insight; Ins*CRC = Interaction of Insight and Collaborative religious coping.

* $p < .05$. ** $p < .01$.

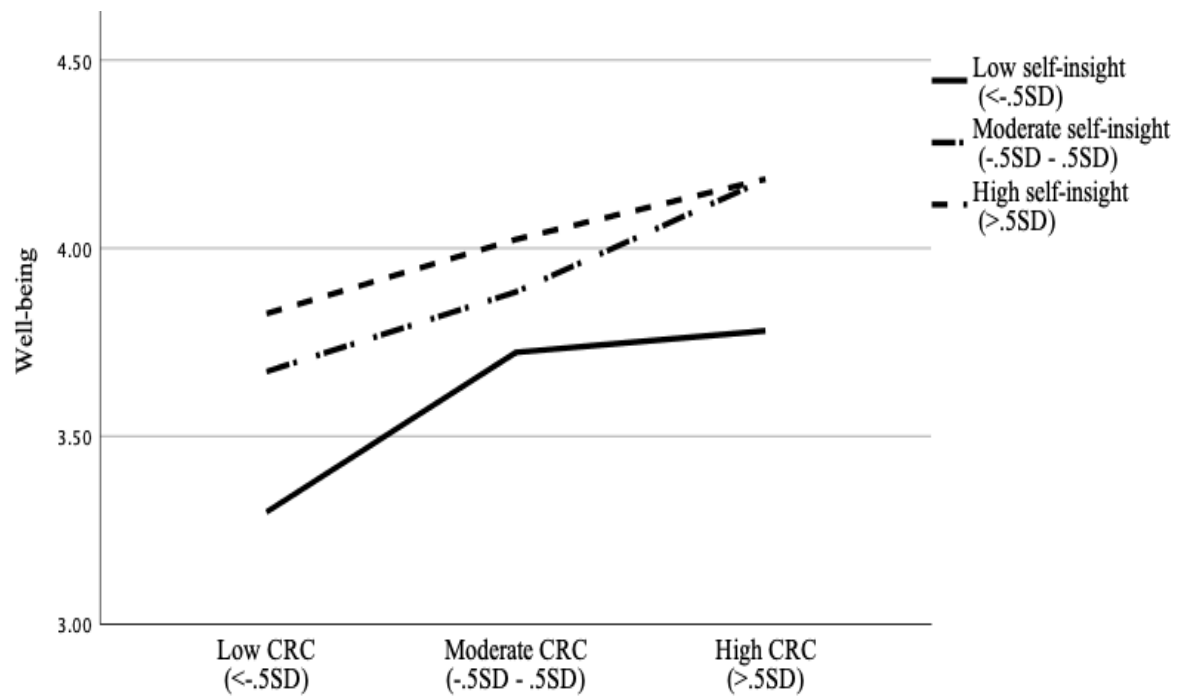


Fig. 1. Two-way interaction between self-insight and collaborative religious coping (CRC) in the prediction of well-being.

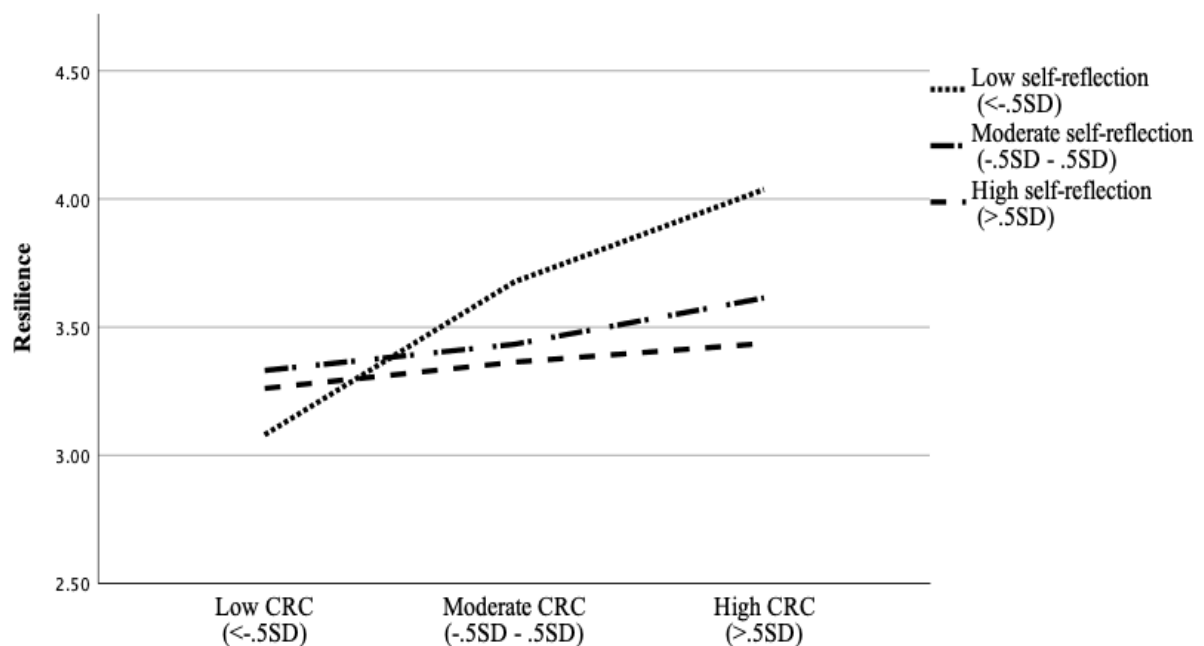


Fig. 2. Two-way interaction between self-reflection and collaborative religious coping (CRC) in the prediction of resilience.

Active religious surrender. Tables 5 and 6 present the results of the analyses for active religious surrender with well-being and resilience respectively. In each instance, any multivariate outliers did not make a significant change to results, so they were retained in the analysis. For well-being, the main-effects model was a significant improvement over covariates alone ($R^2_{\text{change}} = .136$, $F_{\text{change}}(268) = 14.30$, $p < .001$). Significant main-effects were found for brooding ($t = -6.21$, $p < .001$, $\beta = -.36$), self-reflection ($t = 2.52$, $p < .01$, $\beta = .13$) and, as predicted, (H2) self-insight ($t = 5.06$, $p < .001$, $\beta = .29$) and (H3) active religious surrender ($t = 2.67$, $p < .01$, $\beta = .13$). Again, brooding had a negative relationship to well-being, however, self-reflection, self-insight, and active religious surrender were associated with better well-being. There were no further significant effects.

For the active religious surrender regression on resilience, the main-effects model significantly improved prediction of resilience over the model including covariates alone ($R^2_{\text{change}} = .088$, $F_{\text{change}}(268) = 7.50$, $p < .001$). Significant main-effects were identified for brooding ($t = -3.37$, $p < .001$, $\beta = -.22$), self-reflection ($t = -2.09$, $p < .04$, $\beta = -.12$), and (H2) self-insight ($t = 4.99$, $p < .001$, $\beta = .31$) indicating that greater self-insight was related to greater resilience; however, more self-reflection and brooding were related to lower self-reported resilience. Contrary to predictions (H3), no significant effect was found for active religious surrender on resilience.

Table 5*Hierarchical regression analysis of active religious surrender on well-being*

	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.85	.03		136.58	3.86	.03		141.95
Yrs worked	<.01	<.01	.04	.80	<.01	<.01	.08	1.56
Brooding	-.50	.05	-.47	-8.66**	-.37	.06	-.36	-6.21**
Stress Frq.					<.01	<.01	-.04	-.71
Reflection					.08	.03	.13	2.52*
Insight					.22	.04	.29	5.06**
ARS					.03	.01	.13	2.67**

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; ARS =Active Religious Surrender.

* $p < .05$. ** $p < .01$.

Table 6*Hierarchical regression analysis of active religious surrender on resilience*

	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.43	.04		82.25	3.42	.04		81.56
Yrs worked	<.01	<.01	.05	.81	<.01	<.01	.04	.44
Brooding	-.50	.08	-.35	-6.09**	-.31	.09	-.22	-3.37**
Stress Frq.					<.01	<.01	.03	.46
Reflection					-.10	.50	-.12	-2.09*
Insight					.34	.07	.31	4.99**
ARS					.02	.02	.05	.34

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; ARS =Active Religious Surrender.

* $p < .05$. ** $p < .01$.

Table 7*Hierarchical regression analysis of spiritual support seeking on well-being*

	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.85	.03		136.58	3.86	.03		143.93
Yrs worked	<.01	<.01	.04	.80	<.01	<.01	.05	.90
Brooding	-.48	.06	-.47	-8.66**	-.34	.06	-.33	-5.82**
Stress Frq.					<.01	<.01	-.05	-1.00
Reflection					.06	.03	1.80	1.80
Insight					.21	.04	.28	4.94**
SSS					.05	.01	.19	3.77**

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; SSS = Spiritual support seeking.

* $p < .05$. ** $p < .01$.

Table 8*Hierarchical regression analysis of spiritual support seeking on resilience*

	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.43	.04		82.25	3.42	.04		81.71
Yrs worked	<.01	<.01	.05	.81	<.01	<.01	.03	.57
Brooding	-.50	.08	-.35	-6.09**	-.30	.09	-.21	-3.23**
Stress Frq.					<.01	<.01	.02	.37
Reflection					-.11	.50	-.13	-2.24*
Insight					.33	.07	.31	4.96**
SSS					.03	.02	.07	1.13

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Freq. = Stress frequency in past 24 months; SSS = Spiritual support seeking.

* $p < .05$. ** $p < .01$.

Spiritual support seeking. The results of the spiritual support seeking analyses predicting well-being and resilience are displayed in Tables 7 and 8 respectively. For both analyses, one multivariate outlier was retained. For the analysis of well-being, the main-effects model significantly improved on the model with covariates alone ($R^2_{change} = .152$, $F_{change}(268) = 16.387$, $p < .001$). Significant main-effects were found for brooding ($t = -5.82$, $p < .001$, $\beta = -.33$) and (H2) self-insight ($t = 4.94$, $p < .001$, $\beta = .28$) and (H3) spiritual support seeking ($t = 3.77$, $p < .001$, $\beta = .19$). These findings re-iterate the negative relationship between brooding and well-being and the positive relationship with self-insight.

For resilience, the main-effects model significantly improved the model with covariates alone ($R^2_{change} = .089$, $F_{change}(268) = 7.607$, $p < .001$). Significant main-effects were identified for brooding ($t = -3.23$, $p < .001$, $\beta = -.21$), self-reflection ($t = -2.24$, $p < .03$, $\beta = -.13$), and (H2) self-insight ($t = 4.99$, $p < .001$, $\beta = .31$). Again, greater self-insight was associated with better perceived resilience, but brooding and self-reflection were associated with poorer self-reported resilience.

Member support seeking. The models of support seeking from members in the prediction of well-being and resilience are presented in Tables 9 and 10 respectively. For well-being, no multivariate outliers were identified. The two-way interaction model (Model 3) significantly improved on the main-effects model ($R^2_{change} = .035$, $F_{change}(263) = 3.021$, $p < .01$). Significant main-effects were identified for brooding ($t = -6.34$, $p < .001$, $\beta = -.36$) and, as predicted, (H2) self-insight ($t = 5.57$, $p < .001$, $\beta = .32$) and (H3) member support seeking ($t = 2.39$, $p < .02$, $\beta = .13$). These effects indicate that brooding had a negative relationship to well-being, whereas higher self-insight and support seeking from members were both related to better reported well-being. Two two-way interactions emerged. First, an interaction

between self-insight and support seeking from members was identified ($t = -.19, p < .001, \beta = -.16$). A simple slopes analysis found that the relationship between support seeking from members and well-being was significant at low and moderate levels of self-insight ($b = .09, t = 4.03, p < .001, 95\% \text{ CI } [.05, .13]; b = 0.04, t = 2.37, p < .05, 95\% \text{ CI } [.01, .07]$), but was non-significant at higher levels of self-insight. This finding, illustrated at Figure 3, suggests that low to moderate self-insight is related with lower well-being, but that increased levels of support seeking from members appears to increase well-being. However, higher levels of self-insight is generally related to higher reported well-being and support seeking from members seems to become unrelated to greater well-being.

Second, a significant interaction between stressor frequency and self-reflection was identified ($t = 2.13, p < .03, \beta = .12$). A simple slopes analysis found that the relationship between well-being and stressor frequency was significant, albeit weak, at lower levels of self-reflection ($b < -.01, t = -2.25, p < .05, 95\% \text{ CI } [<-.01, <-.01]$); however, this relationship was non-significant at moderate and higher levels of self-reflection. As shown in Figure 4, this result suggests that lower self-reflection is associated with decreased well-being as stressor frequency increases in ministry; however, the negative effects of stressor frequency on well-being were not observed at higher levels of self-reflection.

For resilience, one multivariate outlier was identified, but it was retained in the analysis as it did not modify the results. The main-effects model significantly improved on the model with covariates alone ($R^2_{\text{change}} = .091, F_{\text{change}}(268) = 7.796, p < .001$). Significant main-effects were identified for brooding ($t = -3.30, p < .001, \beta = -.21$), self-reflection ($t = -2.33, p < .02, \beta = -.14$), and (H2) self-insight ($t = 5.27, p < .001, \beta = .33$). Again, for those in ministry, greater self-insight was associated with better perceived resilience, but brooding and self-reflection was associated with poorer self-reported resilience.

Table 9*Hierarchical regression analysis of member support seeking on well-being*

	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.85	.03		136.58	3.86	.03		141.97	3.86	.03		139.74
Yrs worked	<.01	<.01	.04	.80	<.01	<.01	.08	1.62	<.01	<.01	.08	1.6
Brooding	-.48	.06	-.47	-8.67**	-.36	.06	-.35	-5.97**	-.37	.06	-.36	-6.34**
Stress Frq.					<.01	<.01	-.06	-1.22	<.01	<.01	-.06	-1.07
Reflection					.07	.03	.10	1.96	.04	.04	.06	1.03
Insight					.24	.04	.32	5.66**	.25	.05	.32	5.56**
MSS					.04	.02	.13	2.52*	.04	.02	.13	2.39*
SF*Ref									<.01	<.01	.12	2.13*
Ref*MSS									<.01	.02	<.01	-.03
SF*MSS									<.01	<.01	-.01	-.23
SF*Ins									<.01	<.01	-.05	-.86
Ins*MSS									-.07	.02	-.16	-3.19**

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; MSS = Member support seeking; SF*Ref = Interaction of stress frequency and reflection; Ref*MSS = Interaction of Reflection and Member support seeking; SF*MSS = Interaction of Stress frequency and Member support seeking; SF*Ins = Interaction of Stress frequency and Insight; Ins*MSS = Interaction of Insight and Member support seeking.

* $p < .05$. ** $p < .01$.

Table 10*Hierarchical regression analysis of member support seeking on resilience*

	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.43	.04		82.25	3.42	.04		81.83
Yrs worked	<.01	<.01	.05	.81	<.01	<.01	.05	.83
Brooding	-.50	.08	-.35	-6.09**	-.30	.09	-.21	-3.30**
Stress Frq.					<.01	<.01	.01	.25
Reflection					-.12	.50	-.14	-2.33*
Insight					.35	.07	.33	5.27**
MSS					.03	.02	.08	1.40

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; MSS = Member support seeking.

* $p < .05$. ** $p < .01$.

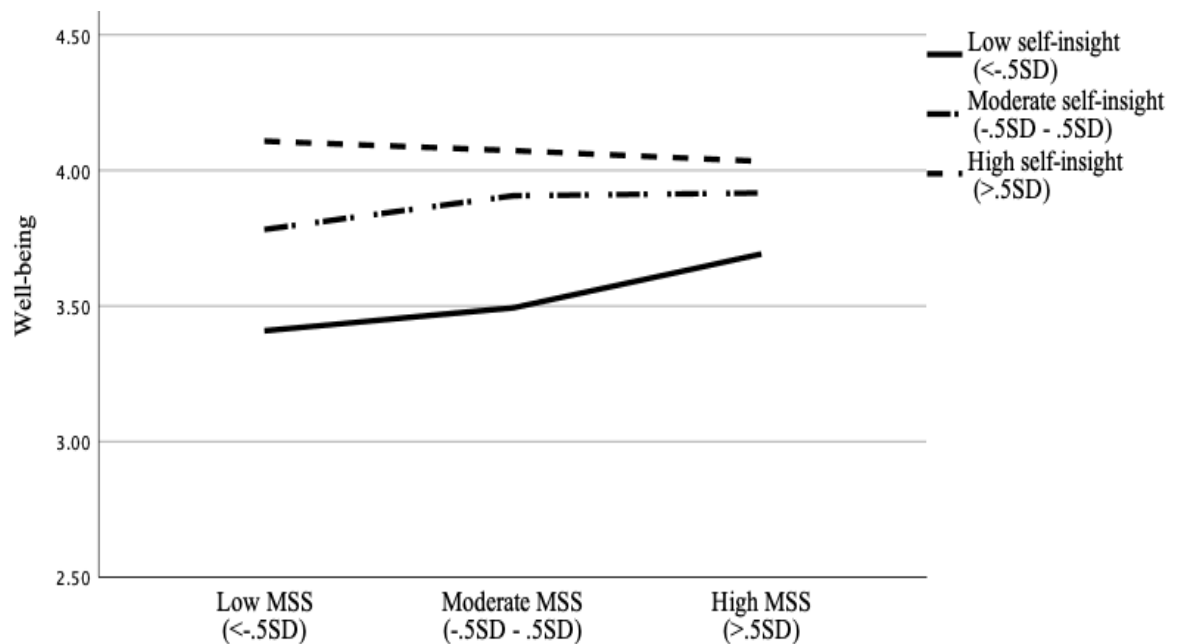


Fig. 3. Two-way interaction between self-insight and member support seeking (MSS) in the prediction of well-being.

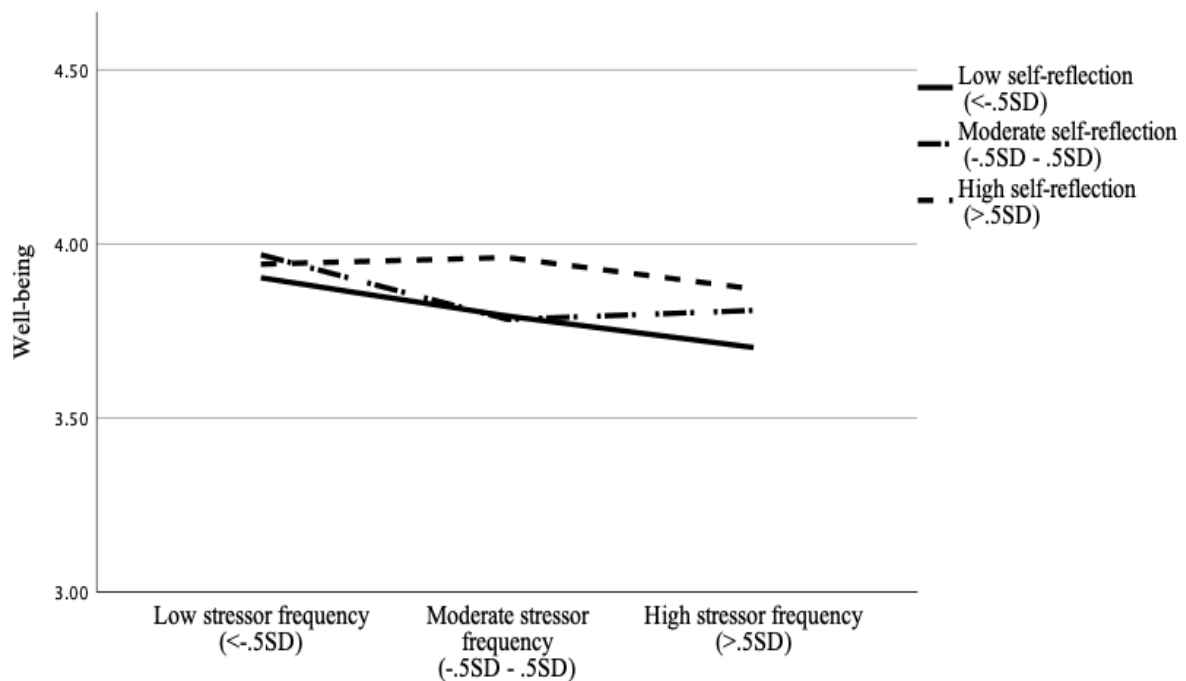


Fig. 4. Two-way interaction between stressor frequency and self-reflection in the prediction of well-being through member support seeking.

Passive religious deferral. Results of the analyses of passive religious deferral predicting well-being and resilience are displayed in Tables 11 and 12 respectively. For well-being, when three multivariate outliers were removed, a two-way interaction between self-insight and passive religious deferral became non-significant (from $t = -2.10, p < .04, \beta = .13$ to $t = -1.92, p < .06, \beta = -.12$). Thus, for this analysis, Model 2 significantly improved on the model with covariates alone ($R^2_{change} = .124, F_{change}(265) = 11.60, p < .001$). Significant main-effects were found for brooding ($t = -5.08, p < .001, \beta = -.31$), self-reflection ($t = 2.41, p < .02, \beta = .13$) and, as predicted, (H2) self-insight ($t = 5.53, p < .001, \beta = .33$). Again brooding had a negative relationship to well-being; however, greater self-reflection and self-insight were

associated with better well-being. Contrary to predictions (H4), there was no relationship between passive religious deferral and well-being ($t = 1.53$, $p = .13$, $\beta = .08$). Overall Model 3 did not significantly improve the main effects model however, a significant two-way interaction was observed between stressor frequency and self-reflection ($t = 2.21$, $p < .03$, $\beta = .13$). Consistent with prediction (H6), a simple slopes analysis found that the relationship between well-being and stressor frequency was significant, albeit weak, at low levels of self-reflection ($b < -.01$, $t = -2.42$, $p < .05$, 95% CI [$< -.01$, $< -.01$]). This relationship was non-significant at moderate and high levels of self-reflection. Figure 5 illustrates this interaction and suggests that low self-reflection is associated with decreased well-being as stressor frequency increases. No relationship was evident between stressor frequency and well-being at moderate or high levels of self-reflection.

No multivariate outliers were identified in the passive religious deferral analysis in the prediction of perceived resilience. Here again, Model 2 significantly improved on the model with covariates alone ($R^2_{change} = .086$, $F_{change}(268) = 7.36$, $p < .001$). Significant main-effects were identified for brooding ($t = -3.32$, $p < .001$, $\beta = -.21$), self-reflection ($t = -2.03$, $p < .04$, $\beta = -.12$), and (H2) self-insight ($t = 4.95$, $p < .001$, $\beta = .32$). As before, greater self-insight was related to higher perceived resilience, but brooding and self-reflection were related to poorer self-reported resilience.

Table 11*Hierarchical regression analysis of passive religious deferral on well-being*

	Step 1				Step 2				Step 3			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.86	.03		136.75	3.86	.03		139.78	3.85	.03		136.89
Yrs worked	<.01	<.01	.06	1.02	<.01	<.01	.08	1.51	<.01	<.01	.09	1.62
Brooding	-.42	.06	-.39	-6.90**	-.33	.06	-.31	-5.08**	-.35	.06	-.33	-5.43**
Stress Frq.					<.01	<.01	-.06	-1.02	<.01	<.01	-.06	-.98
Reflection					.08	.03	.13	2.41*	.07	.03	.11	1.98*
Insight					.25	.05	.33	5.53**	.28	.05	.38	5.73**
PRD					.05	.03	.08	1.53	.04	.04	.06	1.07
SF*Ref									<.01	<.01	.13	2.21*
Ref*PRD									.05	.04	.07	1.21
SF*PRD									<.01	<.01	-.04	-.07
SF*Ins									<.01	<.01	-.07	-1.20
Ins*PRD									-.07	.04	-.12	-1.92

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; PRD = Passive religious deferral; SF*Ref = Interaction of stress frequency and reflection; Ref*PRD = Interaction of Reflection and Passive religious deferral; SF*PRD = Interaction of Stress frequency and Passive religious deferral; SF*Ins = Interaction of Stress frequency and Insight; Ins*PRD = Interaction of Insight and Passive religious deferral.

* $p < .05$. ** $p < .01$.

Table 12*Hierarchical regression analysis of passive religious deferral on resilience*

	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.43	.04		82.25	3.42	.04		81.56
Yrs worked	<.01	<.01	.05	.81	<.01	<.01	.04	.44
Brooding	-.50	.08	-.35	-6.09**	-.31	.09	-.22	-3.37**
Stress Frq.					<.01	<.01	.02	.36
Reflection					-.10	.50	-.12	-2.03*
Insight					.34	.07	.32	4.95**
PRD					-.03	.05	-.05	-.64

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; PRD = Passive religious deferral.

* $p < .05$. ** $p < .01$.

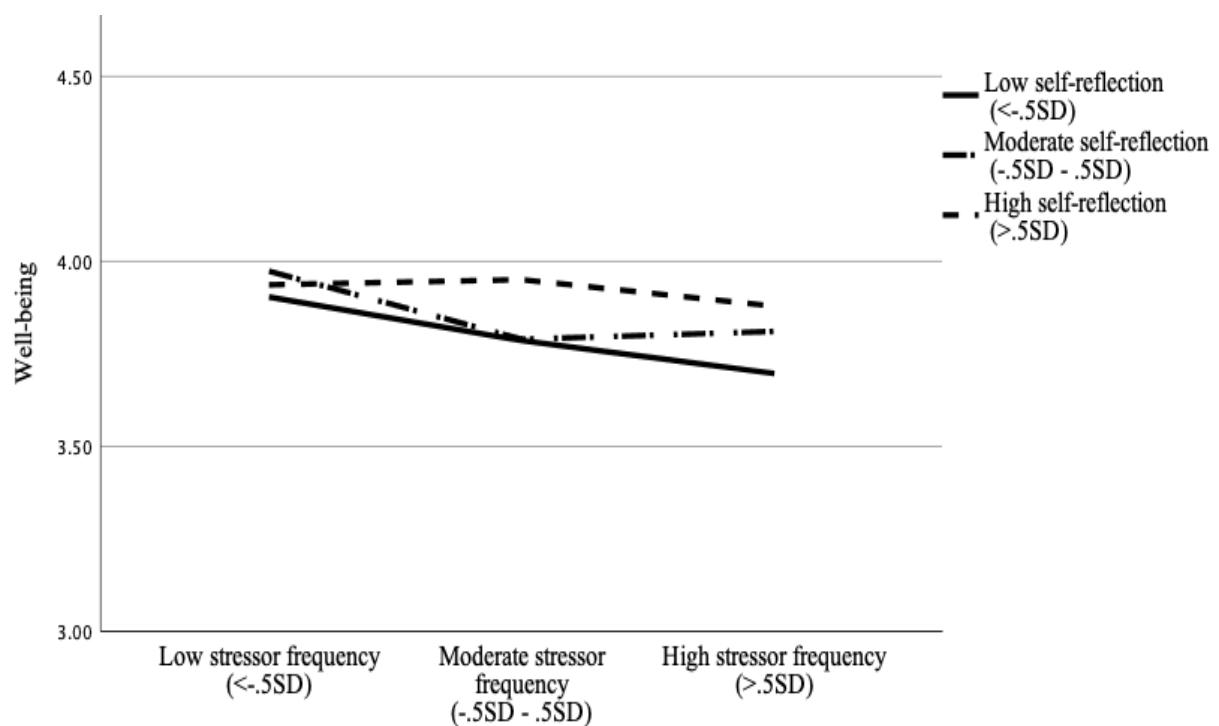


Fig. 5. Two-way interaction between stressor frequency and self-reflection in the prediction of well-being through passive religious deferral.

Self-directing religious coping. Results of the analyses of self-directing religious coping with well-being and resilience are displayed in Tables 13 and 14. No multivariate outliers were identified in either regression. For well-being, the main-effects model significantly improved on the model with covariates alone ($R^2_{change} = .134$, $F_{change} (268) = 14.08$, $p < .001$). Significant main-effects were identified for brooding ($t = -5.56$, $p < .001$, $\beta = -.33$), self-reflection ($t = 2.33$, $p < .02$, $\beta = .12$), self-insight ($t = 4.81$, $p < .001$, $\beta = .28$), and self-directing religious coping ($t = -2.53$, $p < .01$, $\beta = -.14$). Hence, although self-reflection and self-insight were associated with better reported well-being, both brooding and self-directing religious coping were associated with poorer well-being. As self-directing religious coping, characterised by problem-solving independently from God, was hypothesised to be misaligned to the religious framework of this sample, this finding supports H4.

For resilience, the Model 2 main-effects model also significantly improved on the model with covariates alone ($R^2_{change} = .088$, $F_{change} (268) = 7.55$, $p < .001$). As with other resilience regressions, significant main-effects were identified for brooding ($t = -3.12$, $p < .00$, $\beta = -.20$), self-reflection ($t = -2.15$, $p < .03$, $\beta = -.12$), and (H2) self-insight ($t = 4.82$, $p < .001$, $\beta = .31$). Again, greater self-insight was related to greater perceived resilience, but brooding and self-reflection were related to poorer self-reported resilience in this sample.

Table 13*Hierarchical regression analysis of self-directing religious coping on well-being*

	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.85	.03		136.58	3.86	.03		141.94
Yrs worked	<.01	<.01	.04	.80	<.01	<.01	.04	.78
Brooding	-.50	.06	-.47	-8.67**	-.35	.06	-.33	-5.56**
Stress Frq.					<.01	<.01	-.05	.36
Reflection					.08	.03	.12	2.33*
Insight					.21	.04	.28	4.81**
SDC					-.05	.02	-.14	-2.53*

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; SDC = Self-directed religious coping.

* $p < .05$. ** $p < .01$.

Table 14*Hierarchical regression analysis of self-directing religious coping on resilience*

	Step 1				Step 2			
	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>B</i>	<i>SE</i>	β	<i>t</i>
(Constant)	3.43	.04		82.25	3.42	.04		81.67
Yrs worked	<.01	<.01	.05	.81	<.01	<.01	.03	.46
Brooding	-.50	.08	-.35	-6.09**	-.29	.09	-.20	-3.12**
Stress Frq.					<.01	<.01	.02	.36
Reflection					-.11	.50	-.12	-2.15*
Insight					.33	.07	.31	4.82**
SDC					-.03	.03	-.06	-1.03

Note. Yrs worked = Number of years worked in formal ministry capacity; Stress Frq. = Stress frequency in past 24 months; SDC = Self-directed religious coping.

* $p < .05$. ** $p < .01$.

Discussion

Summary of Findings

Using the SSR Model of Strengthening Resilience (Crane, Searle, et al., 2019), this study sought to investigate the roles of self-reflection, self-insight and religious coping methods in the resilience and well-being of Australian Protestant ministry workers. This study was underpinned by four overarching aims. First, we sought to investigate the relationship between self-reflection and self-insight with religious coping methods. We expected that, in this population, self-reflection and self-insight would be positively associated with religious coping methods that are aligned with a Protestant religious framework. Second, we sought to explore the independent roles of self-insight on well-being and perceived resilience. It was anticipated that self-insight would be positively related to greater well-being and perceived resilience. Third, we sought to identify whether different approaches to religious coping were related differentially to the well-being and resilience of ministry workers. Specifically, we examined whether religious coping methods that are aligned, rather than misaligned, to the religious framework would be positively related to perceived resilience and well-being in ministry workers. Finally, extending the SSR model of resilience strengthening, we wished to determine whether self-reflection and self-insight support the refinement of religious coping methods. It was anticipated that coping methods aligned to a minister's religious framework would be more strongly associated with perceived resilience and well-being in the context of high demands when self-reflection or self-insight was high. Conversely, it was anticipated that coping methods misaligned with a religious framework would be more strongly associated with lower perceived resilience and well-being in the context of high demands when self-reflection or self-insight was low.

Self-reflection and self-insight are related to aligned religious coping methods.

With regard to the study's first aim, the patterns of correlation provided partial support for H1. It was expected that higher levels of self-reflection and self-insight would be positively related to increased use of aligned religious coping methods, and negatively related to use of misaligned methods. That is, it was expected that ministry workers who are more attentive to their thoughts, feelings and behaviours, and who have greater self-insight are more likely to use religious coping methods that are aligned with their religious framework. This was evident in the results, with collaborative religious coping and spiritual support seeking being positively correlated with self-reflection and self-insight. Active religious surrender was positively correlated with self-insight and member support seeking was positively correlated with self-reflection. It is suggested that ministry workers who are less self-reflective or less insightful would be more likely to use coping methods that are misaligned with their religious framework because the usefulness of coping methods and their congruence with values are reviewed and adapted with lower frequency. This was apparent in the results as self-directing religious coping was negatively correlated with both self-reflection and self-insight, and passive religious deferral was negatively related to self-insight. These results suggest that with self-reflection and self-insight comes consistency of thought and behaviour with religious values and framework.

Parenthetically, it is interesting to note the correlations of religious coping methods with brooding. The three coping methods that were correlated with both self-reflection and self-insight are also correlated with brooding. These three are collaborative religious coping, spiritual support seeking (both aligned methods) and self-directing religious coping (misaligned). Both aligned coping methods are positively correlated with self-reflection and self-insight, however collaborative religious coping is also positively correlated with

brooding, while spiritual support seeking is negatively correlated with brooding. Moreover, misaligned method self-directing religious coping is negatively correlated with self-reflection and self-insight but positively correlated with brooding. This finding may be suggestive of the importance of spiritual support seeking for ministry workers. The literature indicates a danger of self-reflection in that it can lead to rumination and persistent negative thoughts (Takano & Tanno, 2009; Treynor et al., 2003). However, Joireman and colleagues (2002) study of empathy in college graduates found that self-rumination was negatively correlated with perspective taking. Thus, it appears that expressed trust in God and consideration of God's perspective exercised in seeking spiritual support (e.g., through prayer or bible reading) is incompatible with brooding as it moves beyond self-attention.

Self-insight is related to well-being and perceived resilience. In relation to the second overarching aim, we anticipated a positive relationship between self-insight and self-reported well-being and resilience (H2). H2 was supported. Significant, positive relationships were identified between self-insight and both self-reported well-being and resilience, regardless of the religious coping method included in the analysis. The consistency of this finding suggests that self-insight has a strong and robust relationship with both well-being and resilience. In ministry, this finding supports the notion that those who are more insightful regarding their thoughts, feelings and behaviours, have a better sense of well-being and a stronger sense that they are able to deal with the stressors they encounter. The relationship between self-insight and well-being was expected given other research that reports similar findings (e.g., Harrington & Loffredo, 2011; Harrington et al., 2014; Silvia & Philips, 2011). However, the relationship between self-insight and resilience has not received as much attention in the literature. This finding that self-insight is positively related to resilience

supports the previous work of Cowden and Meyer-Weitz (2016) and broadens its generalisability from athletes to ministry workers.

Confirmation of H2 also supports an extension of the SSR model of strengthening resilience, following the premise that self-insight, as an outcome of self-reflection, strengthens resilience over time in the context of coping. That is, as ministry workers self-reflect on their stressor experiences and gain self-insight relating to their coping experiences, this self-insight may directly contribute to a greater capacity for resilience increasing the likelihood of resilient outcomes downstream. Self-insight is considered an outcome of self-reflection within the SSR model (Crane, Searle, et al., 2019); however, it is less clear where it is positioned in the model. Of the self-reflective practices outlined (Crane, Boga, et al., 2019; Crane, Searle et al., 2019), self-insight is perhaps most closely associated with ‘evaluation’, whereby initial coping and emotion regulatory responses to stressors are assessed for their effectiveness in achieving values and value-based goals. This then feeds the ‘Future focus’ process that promotes the identification of possible adaptations of coping methods that ensure greater alignment between values and behaviour. Thus, perhaps as ministry workers self-reflect on stressors in light of personal and ministry values and goals, they gain self-insight into how to respond to these stressors. The clarity and conclusions that are characteristic of self-insight provide understanding of the more and less effective coping strategies individuals can apply in the context of different stressors increasing capacity for resilience and the likelihood of resilient outcomes.

Self-reflection was not anticipated to relate directly to well-being or perceived resilience. Nevertheless, it is interesting to note that in all of the analyses examining resilience, self-reflection demonstrated a negative main-effect while self-insight demonstrated a positive main-effect. That is, even when controlling for brooding, self-

reflection measured in this way was consistently negatively related to resilience when self-insight was consistently positively related to resilience. Although the relationships between self-reflection and self-insight with resilience has received little empirical research attention, this finding is somewhat consistent with that of Cowden and Meyer-Weitz (2016). While their study did not control for rumination or brooding, these authors found that self-insight predicted resilience but self-reflection did not. Unpacking this finding is not straightforward, and it provides further evidence of the complexity of the relationships between self-reflection, self-insight and rumination (Takano & Tanno, 2009; Trapnell & Campbell, 1999). Given that data was self-reported, this finding might suggest that those who are more reflective and who spend time thinking through these matters might consider their resilience to be lesser than for those who do not spend time in reflection and have little basis on which to support their self-reported resilience. As the data were also collected cross-sectionally, this finding might also suggest that when in the midst of self-reflection, before self-insight is reached, resilience is not reported or felt. In the process of self-reflection and until conclusions are made, individuals may not consider themselves resilient. Alternatively, this finding might stem from the measurement approach taken in the study. The measurement of self-reflection used in this study focuses on a unitary construct and does not capture the nature of self-reflection, specifically if self-reflection is focused on coping and self-regulatory methods for resilience. Further, the measure of resilience is self-reported, and as such, perceived resilience may not be a true measure of objective resilience as measured by pre-/post-stressor assessment. Hence, further research is required to explain this result.

Further, a consistent but negative relationship was evident between brooding and both outcome variables. These findings are consistent with the self-awareness literature (e.g., Takano & Tanno, 2009; Trapnell & Campbell, 1999; Treynor et al., 2003) and emphasise the

importance of moving beyond persistent consideration of negative thoughts, feelings and behaviours, to reaching conclusions and gaining insight.

Religious coping methods are generally related to well-being but not to perceived resilience. The third overarching aim of the study was to identify whether religious coping methods that are aligned, rather than misaligned, to their religious framework are positively related to perceived resilience and well-being of ministry workers. It was anticipated that religious coping methods aligned to the ministers' religious framework (i.e., collaborative religious coping, active religious surrender, spiritual support seeking and member support seeking) would be positively associated with our outcome variables, whereas misaligned methods would be negatively related (H3/H4). H3 and H4 were partially supported by the findings.

Regarding well-being, all four religious coping methods identified as aligning to a Protestant Christian religious framework demonstrated a positive relationship with well-being (H3). Of the two religious coping methods identified as misaligned with a Protestant Christian religious framework, self-directing religious coping (characterised by problem-solving independently from God), was negatively associated with well-being (H4), but passive religious deferral demonstrated no relationship to well-being. These results are generally consistent with literature focused on specific religious coping methods. For example, Lowenthal, MacLeod, Goldblatt, Lubitsh, and Valentine (2000) found active religious surrender was associated with positive affect. Bickel et al. (1998) found passive religious coping was positively associated and collaborative religious coping was negatively associated with depression. Thus, we interpret these findings as demonstrating that encouraging integrated use of contextually-relevant coping methods that are aligned to their religious framework and values supports ministry workers' well-being.

Although related to well-being, the religious coping methods did not consistently demonstrate relationships to perceived resilience. Of the six, only collaborative religious coping was positively associated with resilience. That is, for ministry workers, working together with God to solve problems and to gain control over difficult situations was positively associated with a personal sense of resilience. The other five coping methods did not demonstrate a relationship with perceived resilience. Notably, the measure of resilience in this study was self-reported and cross-sectional rather than an objective pre-/post-stressor measure of psychological function, as recommended by Kalisch et al. (2017) and Bonanno et al. (2015). These authors assert that using an outcome- and process-oriented definition of resilience necessitates assessment of four elements: psychological functioning before adversity (baseline), adversity, psychological functioning after adversity (outcome), and predictors of resilient outcomes. Applied to the SSR model of resilience strengthening, time is required to enable the practice of reflection to result in a change in the use of coping methods which might impact resilience. However, the scope of this thesis did not permit a longitudinal design, which would be required to identify this. Hence, the cross-sectional design employed may not have allowed a sufficiently sensitive measurement of resilience. Moreover, no measurement was taken of resources for resilience, such as social support and finances, which contribute to resilient outcomes, and hence, it is difficult to come to a firm conclusion about the direct relationship between religious coping resources and resilience as an outcome.

Self-reflection and self-insight may support the refinement of religious coping methods to strengthen resilient outcomes. In terms of the roles self-reflection and self-insight play in facilitating the refinement of coping methods to the benefit of individuals' well-being and resilience, the anticipated three-way interactions between stressor frequency,

each of the religious coping resources, and self-reflection or self-insight in the prediction of perceived resilience and well-being (H5-H12) were not found. It appeared that stressor frequency was of little relevance in the context of coping and reflection in the prediction of resilience and well-being in this setting. This is unsurprising as the literature is inconclusive on this topic. For example, in a sample of individuals in a health and retirement survey, Morin, Galatzer-Levy, Maccallum and Bonanno (2017) found that experience of multiple major health stressors did not reduce rates of resilience, and that rates of depression were not different in response to single compared to multiple health stressors. Seery and colleagues' work has highlighted the association between number of adverse life events, such as assault, death or natural disaster, and negative well-being outcomes (eg., Seery et al., 2010; Seery et al., 2013), however they also emphasise the positive effect of moderate cumulative life stressors on well-being and resilience. The finding in this study might therefore stem from this study's measurement of stressor frequency which only assessed the past two years rather than lifetime cumulative stressors. Nevertheless, the measure of stressor frequency was required to include in the study models as it is intrinsic to the definition of resilience used.

Although the anticipated three-way interactions of H5-12 were not found, a series of two-way interactions emerged. The interaction between collaborative religious coping and self-insight in the prediction of well-being, suggests that self-insight plays a role in strengthening the relationship between collaborative religious coping and well-being, broadly supporting prediction (H9). Use of collaborative religious coping was related to an increase in well-being, particularly at higher levels of insight. However, at lower levels of insight, the positive relationship between collaborative religious coping and well-being plateaued at moderate levels of collaborative religious coping. Thus, somewhat consistent with prediction (H9) self-insight may increase the benefit derived from collaborative religious coping. There

was also an interaction between collaborative religious coping and self-reflection on resilience (H5). This interaction demonstrated that collaborative religious coping was more strongly related to resilience when self-reflection was low, but there was a weaker relationship between collaborative religious coping and resilience when self-reflection was moderate or high.

Together, these interactions highlight the complex relationship between self-reflection and self-insight, and suggest that when used with increasing engagement in collaborative religious coping, lower levels of self-reflection are preferable for perceived resilience and higher levels of self-insight are preferable for well-being. For ministry workers, particularly those who do not tend to self-reflect, putting plans into action with God and trusting that God will be present is related to a greater sense of being able to overcome difficulty and hardship. This might indicate that high self-reflectors think through and trust more in their personal resources to overcome hardship. Further, it might be indicative that moderate and high self-reflectors tend toward rumination (Takano & Tanno, 2009; Trapnell & Campbell, 1999) which lessens their sense of personal resilience. Alternatively, it might indicate that low self-reflectors are less likely to consider options hence, greater trust in God to resolve the situation when a way forward is not apparent supports a greater sense of resilience. The implication of these findings is that increasing collaboration with God, as well as increased self-insight will support positive mental health outcomes for ministers.

Another two-way interaction between member support seeking and self-insight suggests that self-insight supports the refinement of member support seeking on well-being. No relationship was evident between member support seeking and well-being at high levels of self-insight, but at moderate and low levels of self-insight, well-being was higher as member support seeking increased. As with collaborative religious coping, seeking support

from others through talking and praying together is very much part of a Protestant Christian religious framework. However, ministry workers may not engage in this as much as those they lead, either because they are unable to through social isolation, or because they chose not to for fear of exposure or vulnerability (Burns et al., 2013). This finding suggests that those who are higher on self-insight do not benefit as much with regards to well-being from engagement with others. However, for those who are lower in self-insight, gaining support from others appears to be associated with increased well-being.

The final two interactions indicate that when under low stress, well-being is at a similar level, regardless of the level of self-reflection. However, under high stress, those who engage in less self-reflection report lower well-being. A possible explanation might be that as those who self-reflect take time to consider their circumstances, responses and available resources, they are able to generate options and possible actions to address the stress. Hence, their well-being is not negatively affected. It is also possible that in the course of self-reflection, these people reappraise the stressor they face and come to see it as an opportunity for growth rather than an obstacle to overcome (Crane & Searle, 2016). On the contrary, those who are not self-reflective are less likely to consider their initial response to the stressor, or to derive a plan of action. Hence, they are likely to still feel their initial stress response which diminishes a sense of well-being, but are unable to restore this sense of well-being as they have no coping plan to move forward. That this interaction is evident in regressions on well-being through passive religious deferral and member support seeking is interesting: passive religious deferral as a coping method involves simply waiting for God to act, implying that little planning activity is involved. Further, support seeking from others is a coping method that involves gaining help from others who might be able to provide options to address a stressful situation when they have not been identified independently.

Theoretical and Applied Contributions

This thesis sought to explore some of the major implications of the SSR model, particularly in the context of ministry work, by determining whether: (a) self-reflection and self-insight were related to a greater use of aligned religious coping methods and (b) the effectiveness of coping strategies was improved when in the context of self-reflection and self-insight.

Contributions stemming from self-insight and self-reflection.

A consistent finding across all regressions in this study is the positive relationship of self-insight with both well-being and resilience. Although the relationship between self-insight and well-being was expected, the relationship between self-insight and resilience has not received as much attention in the literature, therefore this finding broadens the generalisability of previous work (Cowden & Meyer-Weitz, 2016). This finding also supports an extension of the SSR model of strengthening resilience to explicitly draw out the place of self-insight, particularly in the evaluation and future-focus self-reflective practices. Within ministry, this finding supports ongoing interpersonal coaching and supervision of ministry workers to assist increased self-understanding and positive well-being where these are lacking (Jackson-Jordan, 2013).

Findings related to self-reflection demonstrated a negative main-effect in models of predicted resilience. That is, self-reflection was consistently negatively related to resilience, providing further evidence of the complexity of the relationships between self-reflection, self-insight and rumination (Takano & Tanno, 2009; Trapnell & Campbell, 1999). As a component of a ministry resilience intervention, self-reflection should thus be used actively in order to gain self-insight and to develop nuanced coping methods for the future, however efforts to limit the opportunity for brooding is recommended. Benefits of reflection-based

training are expected to come with an emphasis on the importance of moving beyond persistent consideration of negative thoughts, feelings and behaviours, to reaching conclusions and gaining insight. Thus, incorporating action-oriented development planning as part of ministry workers' supervision and coaching arrangements may support their self-reflection to move past the temptation to brood or ruminate and to instead take action together with God.

A further finding to note, is that those who engage in less self-reflection report lower well-being in conditions of high stress frequency. Ministry workers, who are frequently under high levels of stress, are expected to benefit from developing self-reflection skills, be that individually or supported by others, such as coaching or supervision arrangements. Beyond the training they might currently receive at theological institutions on ministry practice, training specific to self-reflection and self-insight to gain greater sophistication in their use of coping methods is expected to strengthen resilience and build well-being.

Contributions stemming from religious coping methods.

This study sought to investigate the role of religious coping methods in resilience, using the SSR model of resilience strengthening. The pattern of correlation results suggests overall support for the notion that with self-reflection and self-insight come religious coping methods and behaviours that are aligned with the values inherent in ministers' religious framework. Specifically, the relationships of collaborative religious coping, spiritual support seeking, and member support seeking with self-reflection and self-insight are noteworthy.

The interaction between collaborative religious coping and self-insight in the prediction of well-being, suggests that self-insight plays a roles in strengthening the relationship between collaborative religious coping and well-being. Hence, self-insight may increase the benefit derived from collaborative religious coping. There was also an

interaction between collaborative religious coping and self-reflection on resilience, which demonstrated that collaborative religious coping was more strongly related to resilience when self-reflection was low, but there was a weaker relationship between collaborative religious coping and resilience when self-reflection was moderate or high. Hence, recognising the caveats regarding self-reflection and its links to brooding, collaborative religious coping is expected to be an effective religious coping method for ministers to use.

Spiritual support seeking is also expected to be an effective method of religious coping to use with self-reflective practices for the strengthening of resilience. It was the only method that negatively correlated to brooding and therefore may provide a useful method to avoid repetitive, negative self-focused attention. Within ministry, this is likely to be achieved by encouraging God-centred activities such as prayer or bible reading.

Seeking support from ministry members and other ministers has also been linked to stronger well-being in this study. Although the interaction uncovered here suggests that those who are higher on self-insight do not benefit as much as those who are lower in self-insight, gaining support from others appears to be associated with increased well-being. Consistent with Jackson-Jordan's (2013) recommendations, the implications for ministry workers, particularly those low in self-insight, are to recognise the need to connect with others, and to continue to develop self-insight as they minister to others.

Limitations and Suggestions for Future Directions

Several limitations of this study warrant discussion. First is the participant group with which the study was conducted which may reduce its level of generalisability. Thus, future research should consider replicating findings with other Christians who are not ministry workers, with those of other faiths and religious frameworks, and with those without

formal religious frameworks to test patterns of religious coping methods for those of faith and those of no fixed faith.

Second, the cross-sectional design of the study presents a limitation in the measurement of resilience, and also in the interpretation of relationships. The self-report measure provided information on perceived personal resilience; however, the study was unable to obtain an objective measure. As highlighted in reviews by Chimortz et al. (2018), Kalisch et al. (2017), and Seery and Quinton (2016), future studies would benefit from a longitudinal design enabling assessment of other markers of resilience, such as psychological function and physical markers. Such studies would enable measurement of resilience to be both subjective (e.g. self-report, perceived resilience) and objective (e.g. stress markers via hair or saliva samples, fMRI). Longitudinal studies will also provide opportunity to explore causality in the relationships identified here as well as the longer-term outcomes of self-reflective processes.

Third, the complexity of the relationship between self-reflection, self-insight and brooding was demonstrated in the results of this study. This highlights an issue of reflection measurement that is present in the literature. At present, there is no single self-report measure available that allows a delineation between adaptive self-reflective practices from maladaptive ones (i.e., brooding). A consequence of this is that findings regarding the relationships between self-reflection, self-insight and mental health outcomes that tend to be mixed (Trapnell & Campbell, 1999). Thus, an opportunity for future research exists in developing an effective self-report measure of adaptive self-reflection. Further, in this study, brooding was measured using four of the five items from the Reflection and Rumination Scales' brooding sub-scale (Treyner et al., 2003). The omission of one item may have had an impact on the results, however relationships of constructs with brooding were generally

found to be in the expected direction in the study. In future studies, all five items of the sub-scale should be included.

Furthermore, the assessment of self-reflection and self-insight in this study may not have fully captured all that is involved in systematic self-reflection as expressed in the SSR model of resilience strengthening. That is, the measures used assessed general engagement in self-reflection but did not specifically assess self-reflection on coping with adversity. Future research using this model of should consider assessing each of the five self-reflective practices and their relationship to resilient outcomes. Consideration should be given to a variety of methods in order to explore the nuanced relationship between adaptive self-reflective practices and positive coping approaches. These might include a self-report survey which could be used in cross-sectional or longitudinal study, or a diary study method which would capture longitudinal variation.

Fourth, this study included six religious coping methods to explore at depth. Selecting just six limits the breadth of thesis findings. Further, it is unknown how the results of these six relate to the other 15 methods detailed by Pargament and colleagues (2000). Research into other religious coping resources, particularly those that relate to finding meaning, is expected to deepen understanding of religious frameworks and how coping methods contribute to resilient outcomes. Moreover, future research might consider exploration of individuals' use of combinations of these religious coping methods. Beyond this, as religious coping is a subset of other identified coping methods, opportunity exists to investigate the interactions of these other coping methods in the SSR model of resilience strengthening.

Finally, use of the online EHC provided a novel way to assess stressors. This method captured frequency and variety of stressor over a two-year period. Unfortunately, it required

considerably more time from participants to complete the survey. Previous research has used the tool primarily within an interview setting rather than online (See for example Barber et al., 2016; Morselli et al., 2018; Sayles et al., 2010). Future research should continue to explore this method of data capture, particularly in longitudinal research when reporting time periods after T1 might be shorter. Moreover, longitudinal research methods may provide opportunity to complete an EHC interview, possibly resulting in more accurate data.

Conclusion

Protestant Christian ministry workers face a unique set of stressors in their roles that can put them at risk of burnout and secondary traumatic stress. Equally, religion has been positively associated with well-being and stress-related growth and negatively associated with depression and other negative mental health outcomes. This study sought to extend current theory by suggesting that ministry workers who use and reflect on coping methods that are aligned to their religious framework will report both higher resilience and well-being. The study findings are consistent with the self-reflection literature and emphasise the importance of not just reflecting on thoughts, feelings and behaviours, but working to reach conclusions and gaining self-insight. Moreover, religious coping methods that fit within the religious framework of Protestant Christian ministry workers were all positively associated with well-being and several interactions indicated the protective nature of aligned coping methods for those who do not tend to engage in self-reflection or have high levels of self-insight. For ministry workers seeking to strengthen resilient outcomes, this study supports activity that builds self-insight and increased use of religious coping that is aligned with religious values.

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Appendix: Ethics Approval

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07/09/2018

Dear Dr Monique Crane,

Reference No: 5201832154244

Title: 3215 Resilience and Reflection in Ministry Workers

Thank you for submitting the above application for ethical and scientific review. Macquarie University Human Research Ethics HREC Humanities & Social Sciences Committee considered your application.

I am pleased to advise that ethical and scientific approval has been granted for this project to be conducted by Dr Monique Crane and other personnel: Mrs Kirsten Bucknell.

Approval Date: 07/09/2018

This research meets the requirements set out in the *National Statement on Ethical Conduct in Human Research* (2007, updated July 2018) (the *National Statement*).

Standard Conditions of Approval:

1. Continuing compliance with the requirements of the *National Statement*, which is available at the following website:
<http://www.nhmrc.gov.au/book/national-statement-ethical-conduct-human-research>
2. This approval is valid for five (5) years, subject to the submission of annual reports. Please submit your reports on the anniversary of the approval for this protocol.
3. All adverse events, including events which might affect the continued ethical and scientific acceptability of the project, must be reported to the HREC within 72 hours.
4. Proposed changes to the protocol and associated documents must be submitted to the Committee for approval before implementation.

It is the responsibility of the Chief investigator to retain a copy of all documentation related to this project and to forward a copy of this approval letter to all personnel listed on the project.

Should you have any queries regarding your project, please contact the Ethics Secretariat on 9850 4194 or by email ethics.secretariat@mq.edu.au

The HREC Humanities & Social Sciences Committee Terms of Reference and Standard Operating Procedures are available from the Research Office website at: <https://www.mq.edu.au/research/ethics-integrity-and-policies/ethics/human-ethics>

The HREC Humanities & Social Sciences wishes you every success in your research.

Yours sincerely,

Dr Karolyn White
Chair, HREC Humanities & Social Science

This HREC is constituted and operates in accordance with the National Health and Medical Research Council's (NHMRC) *National Statement on Ethical Conduct in Human Research* (2007, updated July 2018) and the *CPMP/ICH Note for Guidance on Good Clinical Practice*