

## ABSTRACT

### Mental Health and the Relationship with God: An Attachment and Internal Working Model Perspective

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Religion and spirituality in the realm of mental health and coping have illustrated complex relationships and effects. The field has recognized a need to extend beyond religious affiliation and behaviors and investigate the cognitive frameworks that guide how and why individuals engage with their belief systems. The unique relationship to a divine figure is an important factor in coping schemas and includes the image or cognitive perception of God and attachment style to God. The present study investigated these two constructs with respect to religiosity and as predictors of depression, anxiety, stress, worry, and global distress levels using an online American sample. Findings show that religiosity was related to a more engaged image of God and a less avoidant attachment style but was unrelated to a judgmental image and anxious attachment to God. In terms of mental health, mixed findings were evident but highlight an anxious attachment to God as the most salient factor. Regression analyses demonstrate this as well, and an anxious attachment style significantly predicted depression, anxiety, worry, and global distress even when controlling for religiosity, age, gender, and social support. Implications for practitioners and clinical research are discussed.

Mental Health and the Relationship with God:  
An Attachment and Internal Working Model Perspective

by

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## CHAPTER ONE

### Introduction

#### *The Need*

Religion and spirituality have been studied with respect to health and mental health outcomes (cf. Masters & Hooker, 2013; Park & Slattery, 2013). The effects on psychopathology are generally positive; however, null and negative effects are still shown, and it has been hypothesized that this is due to the various dimensions of religion/spirituality and the ways in which one uses a belief system to cope (Koenig, 2012). As a source of social, cognitive, and emotional resources, religion is “a powerful coping behavior that people at all times and in all places have used to deal with suffering and adversity” (Koenig, King, & Carson, 2012, p.74). Religion can function in a variety of ways, as such coping strategies are positive or negative, solitary or collaborative, and conservational or transformational in nature (Pargament, Koenig, & Perez, 2000). Many common religious coping behaviors directly involve God (or some divine figure), whether as the one who receives an action (i.e. prayer, requests for guidance or strength), the one who grants forgiveness or mercy, or one with whom an individual works in partnership to solve a problem. As such, it would seem that regardless of an individual’s espoused beliefs, institutional religious participation, or identified religion/denomination, the role of religion within the appraisal and coping process would be dependent upon how the individual conceptualizes, perceives, and relates to God.

The God image and God attachment constructs have been developed as means to assess the relational aspects of religion and spirituality (Hall & Fujikawa, 2013). Bader

and Froese (2005) found that an individual's perception of God provides unique insight into how faith and beliefs are internalized. Their Image of God Scale, developed through the Baylor Religion Survey (BRS), offers a useful multidimensional approach to assess the perception of God's engagement in one's life and the world and God's anger and judgment of human behavior (Froese & Bader, 2010). Additionally, applying attachment theory to a divine figure, one can experience a secure relationship, avoidance of intimacy, or anxiety of attachment to God (Attachment to God Scale; Rowatt & Kirkpatrick, 2002). These constructs offer a perspective into one's perceived attachment to and internal working model of God (as the person defines God), both of which are significant if religious/spiritual beliefs are part of one's general orienting system and cognitive or emotional coping resources. Coping involves appraisals in which an individual interprets a stressor and evaluates coping options. Therefore, how one perceives and relates to God plays a role in his or her views of situations, religious coping behaviors, attributions and expectancies, which then affect the subsequent emotional experience.

Clinical psychology literature will benefit from these validated, dimensional constructs of God attachment and God image to investigate how the relationship with God is a unique aspect of religiosity. There is a need to apply these measures and assess their clinical importance, especially given that previous clinical applications of God image are limited by the use of numerous definitions and narrow conceptualizations of the construct. Furthermore, examining aspects of the relationship with God may allow for a clearer picture of religious coping and may explain some of the disparities that are seen in the use of certain coping behaviors to deal with depression, anxiety, and stress. Koenig and colleagues (2012) note that research must consider "what dynamics may have

led [people] to use religion in the way they are now” (p. 119); therefore, the clinical field would benefit from further analysis of God image and God attachment and how they relate to religiosity and psychopathology. There have been recent attempts at developing treatments for changing God image (Thomas, Moriarty, Davis, & Anderson, 2011; Rasar, Garzon, Volk, O’Hare, & Moriarty, 2013) and addressing one’s relationship with God in therapy (cf. Moriarty & Hoffman, 2007; Olson et al., 2016). Gaining a better understanding of the individual differences in the God-related variables, other religiosity constructs, and mental health domains will benefit clinical treatment as well.

Koenig and colleagues (2012) state that “belief in, relationship with, and attachment to God are the sources that initiate and guide the development of religious practices, commitments, experiences, and coping behaviors” (p. 308) within religious traditions. The present study will examine how attachment to God and image of God are unique aspects of religiosity that can be used to predict mental health above and beyond other religiosity constructs, psychosocial factors, and coping-related variables. Additionally, to further the usefulness of the God image and God attachment constructs, the present study will also examine how dimensions of the two constructs relate to other aspects of religiosity. As God image is proposed to be independent of religious affiliation, the study will utilize a general community sample.

### *Religion and Spirituality*

#### *Definitions*

In the diverse American society, religion remains an influential component of people’s lives. A large-scale Gallup poll found that in 2013, 78% of their American

sample found religion to be “fairly important” or “very important” in their lives (Gallup, 2015). Furthermore, the same organization found that in 2011, 92% of the sample responded that they believe in God (Newport, 2011). To understand the importance and functions of religion and spirituality in individuals’ lives, it is necessary to define the constructs. Pargament (1997) defines religion as a search for significance in ways relating to the sacred. He states that this allows for a more psychological approach, dealing with “building, changing, and holding on to the things people care about in ways that are tied to the sacred” (Pargament, 1997, p. 32), thus including actions that are both traditional expressions of faith and evolving expressions of spirituality. *Sacred* has been described as not only referring to concepts of God, but also including terms like transcendence, boundlessness, ultimacy (Pargament & Mahoney, 2005), interconnectedness, and the experience of spiritual emotions (Pargament, Lomax, McGee, & Fang, 2014). Koenig (2012) furthers this definition by highlighting the multidimensionality of religion, noting that it includes “beliefs, behaviors, rituals, and ceremonies that may be held or practiced in private or public settings...developed over time within a community” (pp. 2-3). Researchers acknowledge how spirituality and religion have diverged and converged in religious research. Historically, spirituality was distinguished from religion, especially during the latter 20<sup>th</sup> century. While definitions vary, spirituality has been conceptualized as beginning before and existing beyond organized religion because it can include the search for and path to belief, while “religion” may refer to belief in terms of prescribed doctrine and organized or institutional behaviors and rituals (Koenig, McCullough, & Larson, 2001).

While American religious life has showed an increased interest in “spirituality,” researchers are beginning to question its *utility* as a separate construct (Koenig, 2012; Zinnbauer et al., 1996). In one study, Zinnbauer and colleagues (1996) found that 74% of their sample endorsed being both “spiritual and religious.” Furthermore, the 19% of the sample who identified as “spiritual but not religious” were still likely to participate in organized, group behaviors related to their beliefs. In a sample of licensed psychologists, Vieten and colleagues (2016) found that 37% identified as “both spiritual and religious.” Therefore, having strict definitional distinctions may not be qualitatively useful as a classification purpose, nor may they reflect the beliefs or behaviors of individuals, as religion and spirituality “are neither totally independent nor opposed to each other” (Pargament, Mahoney, Exline, Jones, & Shafranske, 2013b, p. 17). Researchers have noted the issues that arise when dichotomizing religion and spirituality, where the former is seen as more negative and institutional and the latter as purely individual, and conclude that such a division is not helpful or accurate (Pargament et al., 2013b; McMinn, Hathaway, Woods, & Snow, 2009). For example, religious involvement has been shown to benefit health and well-being at the individual level, and it cannot be viewed simply as institutional ritual behaviors. Additionally, spirituality can be expressed within relationships, communities, organizations, and cultures, and it cannot be viewed as a solely individual pursuit (Pargament et al., 2013b). Based on suggested guidelines offered by Pargament and colleagues (2013b) for researchers using religion and spirituality constructs, the present study will use both terms inclusively. Such use is recommended for research referring to the full range of “beliefs, practices, experiences, or relationships that are embedded within both nontraditional, secular contexts and

established institutional contexts designed to facilitate the sacred search” (Pargament et al., 2013b, p. 17).

### *Measurement Domains*

As religion is a multidimensional construct regarding the search for significance in ways relating to the sacred, religiosity has been measured in a variety of ways. Hill and Edwards (2013) review several measures, considering those that are substantive, which focus on individuals’ religious beliefs, behaviors and individual traits, and those that are functional, which assess how religious activities and characteristics function in individuals’ lives. Measuring general “religiosity” has proved difficult because of how it is defined. Religiosity has been conceptualized in terms of aspects such as denomination identification, but as Froese and Bader (2007) note, knowing the group to which someone belongs may not necessarily predict religious beliefs or behaviors. As such, measures have been extended to include aspects such as spiritual well-being (Paloutzian & Ellison, 1982), religious commitment (Worthington et al., 2003), and the importance and strength of faith to the individual (Plante & Boccaccini, 1997). Additionally, assessing religious attitudes and interpretation of beliefs can reveal how non-religious people approach belief and how beliefs reflect functioning, given that “whether people are religiously involved is less central to their well-being than their underlying attitudes and orientations” (Dezutter, Soenens, & Hutsebaut, 2006, p. 816). Lastly, Park and Paloutzian (2013) suggest that assessing the *specifics* of belief and their meaning to the individual may “powerfully affect general health and well-being” (p. 653).

Additionally, social and relational dimensions to belief are commonly found across religious contexts (Oman, 2013). Masters and Hooker (2013) note that religious

service attendance is an appropriate predictor of health outcomes, but it can be difficult to interpret. For example, one characteristic of participation may be the perceived social support from faith leaders and congregants (Fiala, Bjorck, & Gorsuch, 2002). This relational aspect also applies to the object of belief, namely the transcendent figure with whom one interacts. This idea of “relational spirituality” has been described by Hall (2004) in terms of implicit relational representations that arise from relational experiences, which include conceptual and affective components. Constructs such as one’s concept of God and attachment to God have been developed to assess the emotional and experiential understanding of God, cognitive beliefs of God’s attributes, and interactional dynamics between an individual and a divine figure (Hill & Edwards, 2013). These concepts have significantly added to religiosity measures, as they highlight the individual’s experience and internalization of beliefs rather than attempting to predict outcomes based on group affiliation. Furthermore, knowing how one relates to and views God may be more clinically relevant, as they can provide insight as to how or why an individual uses particular aspects of religiosity to cope and deal with difficulties.

### *Religion and Mental Health*

#### *Significance*

The diverse ways in which religious belief is experienced cognitively and emotionally and expressed in daily life have an effect on mental health. Despite the views of psychologists like Freud or Ellis, research overall tends to show generally positive associations between religiosity and mental health (Ellison & Levin, 1998; Park & Slattery, 2013; Payne, Bergin, Bielema, & Jenkins, 1991). Given the significance of

beliefs and cognitions in conceptualizing psychopathology, an individual's religiosity and spirituality appear to play an important role in mental health and psychological functioning. For example, many disorders (e.g., major depressive disorder, generalized anxiety disorder, panic disorder) are related to maladaptive cognitions, evaluations, and attributions.

### *Depression and Suicide*

Religion and spirituality have been researched within the resilience and mood disorder literature. One meta-analysis of 42 independent samples found that religious involvement was associated with lower mortality (McCullough, Hoyt, Larson, Koenig, & Thoresen, 2000). Additionally, a meta-analysis of 147 studies found a modest inverse relationship between religious involvement and depressive symptoms (Smith, McCullough, & Poll, 2003). The average correlation between religion/spirituality and depression also tends to be stronger in stressed versus non-stressed populations (Koenig, 2012). However, other reviews have found inconsistencies (cf. Park & Slattery, 2013; Southwick, Vythilingham, & Charney, 2005). For example, a review of 444 studies examining religion/spirituality and depression found that 61% of the studies reported significant inverse relationships, but 6% of the studies reported significant positive associations (Koenig, 2012).

Additionally, religion and depression have been considered together in terms of religious strain (Exline, Yali, & Sanderson, 2000), conceptualized as alienation from God, disagreements with religious institutions, conflicts with family or friends over religious issues, and religious fear, guilt, and hopelessness. The researchers found that such religious strain was a major indicator of psychological distress, regardless of



religiosity levels or degree of comfort found in religion (Exline et al., 2000). In samples of college students and individuals seeking psychotherapy treatment, religious strain significantly predicted depression and suicidality after controlling for religiosity and religious comfort. Despite such associations, the authors do note a clinically important finding that religious strain was positively associated with greater interest in addressing religious issues in treatment (Exline et al., 2000).

Associated with depression is the finding that religion/spirituality generally predict more negative attitudes toward suicidality and lower suicide rates across several age cohorts and multiple religions (Koenig et al., 2001). When investigating religion and spirituality in youth who have attempted suicide, Bullock and colleagues (2012) note that protective aspects of religion/spirituality related to suicide often involve specific dynamics such as religious social support. Additionally, in a U.S. veteran sample, spiritual distress was associated with increased odds of having suicide risk factors (Kopacz, Hoffmire, Morley, & Vance, 2015). In a sample of depressed adults, Baetz and Bowen (2011) found that scores on the Beck Suicidal Ideation Scale were positively correlated with perceived stress and negative religion/spirituality (conceptualized as feeling God's abandonment or punishment and being angry at or questioning God) and negatively correlated with positive religion/spirituality. They propose a complex relationship in that negative religious/spiritual expressions may result from or contribute to low and unstable mood (Baetz & Bowen, 2011). A qualitative study examined the role of religion in those who have attempted suicide (Akotia, Knizek, Kinyanda, & Hjelmeland, 2014) and found that their subsequent reactions and emotional states varied depending on beliefs. For example, some who viewed suicide as a sin acted to restore

their relationship with God, while others felt embittered that their religion had become a burden and source of worry (Akotia et al., 2014).

### *Anxiety and Stress*

The relationship between religion/spirituality and anxiety is not as clear as what has been found in the depression literature. For example, one review of 69 studies found that 51% of the studies reported significant inverse relationships between religious/spiritual variables and anxiety symptoms, while 35% found no association, and 14% found significant positive relationships (Koenig et al., 2001). Another review found that of 299 studies, only 49% reported inverse relationships between religion/spiritual variables and anxiety, while 11% reported positive correlations (Koenig, 2012).

Additionally, Linley and Joseph's (2004) review found several aspects of religiousness (e.g., positive religious coping, intrinsic religiousness, religious participation, existential openness) to exhibit positive associations with stress-related growth. As with depression, Park and Slattery (2013) state that "different dimensions of religion and spirituality may correlate differently with different dimensions of anxiety" (p. 542). Koenig (2012) similarly notes that the relationship is likely complex and specific to the way in which one uses religion/spirituality to deal with difficult experiences. For example, religion can be used to cope with anxiety, but specific interpretations of beliefs and perspectives of God may lead to different coping behaviors and outcomes.

### *Moderators*

A review by Park and Slattery (2013) illustrates that few studies have examined moderators of the relationships between religion/spirituality and mental health. For

example, the relationship between religious salience and depression was found to be stronger for women (Ellison, Finch, Ryan, & Salinas, 2009), as was the relationship between religious activity and psychopathology (Maselko & Buka, 2008). However, other reviews show that gender and ethnicity with regards to religion/spirituality and depression are inconsistent (Smith et al., 2003), while age and income are worth additional exploration as moderators (Park and Slattery, 2013). Denomination has been investigated as a moderator of the relationships between religion and mental health (Rosmarin, Pirutinsky, Pargament, & Krumrei, 2009; Park, Cohen, & Herb, 1990; Cohen & Hall, 2009). Findings have been inconsistent and are likely the result of doctrine-specific beliefs and aspects of the individual's culture and church (Park & Slattery, 2013). Furthermore, Park and Slattery (2013) hypothesize that the relationship between mental health and religiosity may depend on preexisting levels of religiosity/spirituality and the extent to which one's religious/spiritual needs are being met

Lastly, Smith and colleagues (2003) note that the relationships between religion/spirituality and depression are stronger at higher levels of stress. The researchers suggest that religiousness may buffer against the effects that stressful life events can have on depression, and when individuals perceive more stress, religion and spirituality are more salient factors with respect to depression. Cummings and Pargament (2010) explain that perceived stress is significant in the relationship between religion/spirituality and mental health that may help explain contradictory findings. For example, while research generally shows negative relationships between religion/spirituality and psychopathology, the "stress mobilization effect" illustrates how distress may trigger individuals to use their religious resources, which may yield positive correlations

between the two. Specifically, health-related stressors have been shown to be especially significant with respect to increases in religious coping behaviors (Cummings & Pargament, 2010). It has also been hypothesized that individuals may choose to access religious resources at higher levels of distress because they may have already depleted other social and personal coping resources.

### *Mechanisms*

Given the multifaceted nature of religion, researchers have proposed mechanisms through which religion/spirituality influence mental health (Park & Slattery, 2013; Koenig, 2012). First, most religions have doctrines or guidelines for how to live and treat others (Ellison & Levin, 1998; Koenig, 2012). Better mental health may result from rules that discourage problematic behavior, as individuals with such beliefs have been shown to have lower rates of substance abuse and comorbid depression (Smith et al., 2003), and more religious people may be protected against suicide as well (Huguelet, Mohr, & Borrás, 2009). Additionally, doctrines may encourage positive behavior in the form of forgiveness after interpersonal offenses. Among older adults, forgiveness mediated the relationships between religiosity and depressive symptoms (Lawler-Row, 2010).

Religion can also encourage prosocial behaviors and personal virtues such as altruism, honesty, gratefulness, patience, compassion, and dependability (Koenig, 2012; Koenig et al., 2012; Southwick et al., 2005), which may buffer against negative effects of stress. In a sample of people with severe mental illness, religion and spirituality were positively related to social inclusion, hope, and personal empowerment, and religiousness was also associated with greater psychological well-being and lower psychiatric symptoms (Corrigan, McCorkle, Schell, & Kidder, 2003). These may serve to enhance

social relationships, as religious social support has been found to be qualitatively different than secular social support (Krause, 2006), offering more diverse, satisfying, and interactive support for people who attend services regularly (Cohen, Yoon, & Johnstone, 2009). This social support enhancement could be a result of the religious context providing a social identity with “unique characteristics...inextricably linked to a religious belief system” (Ysseldyk, Matheson, & Anisman, 2010, p. 60) that is unmatched by other social groups. Cummings and Pargament (2010) additionally posit that support networks “that hold altruistic beliefs and values might be more willing to help ill members” (p. 39), although if a member’s illness interferes with public religious activities, such as hindering one’s involvement in a religious community, religious social support may not exhibit the same effect on mental health.

Lastly, Koenig (2012) notes that a predominant mechanism is that religion and spirituality provide resources that may increase positive emotions, reduce negative emotions, and reduce the chance that stress will result in mood or affective disorders. It has been hypothesized that religion may increase positive emotion by giving individuals the belief that they are connected to and valued by a divine presence, while negative emotions may be reduced by offering an eternal perspective to deal with anxiety or mortality (Cummings & Pargament, 2010). In one study of HIV-positive African American women, those who were more engaged in public and private religious activities reported lower levels of psychological distress, despite having more prevalent stressors (Prado et al., 2004). Such coping resources include cognitions, positive self-perceptions, an optimistic worldview, answers to existential questions, religious meditation and prayer, and beliefs that influence appraisal of negative events (Park & Slattery, 2013;

Pargament, 1997). These cognitions and actions may be dependent upon a positive relationship with God or another divine figure (Park & Slattery, 2013). For example, Schieman and colleagues (2013) describe that prayer functions via a relationship with God and a sense of engagement with a divine other, and the association between prayer and mental health depends on the perceived character of that divine figure. In Koenig's (2012) theoretical model of causal pathways to mental health, the model begins with not only belief in, but also attachment to God. Flannelly and colleagues (2010) further note that beliefs about God may offer a unique perspective compared to research that has typically concentrated on affiliation and religious involvement.

Religion also often serves to provide a sense of meaning or purpose (Park, 2010). Internalizing these beliefs and cognitions are important in promoting well-being and protecting against psychopathology (Park & Slattery, 2013). Additionally, most religions offer beliefs about the afterlife, and even after controlling for stress and social support, belief in life after death was found to be inversely related to symptoms of anxiety and depression in a national sample (Flannelly, Koenig, Ellison, Galek, & Krause, 2006).

In a review by Koenig et al. (2001), the majority of studies found significant relationships between religiosity and better mental health. However, there are still numerous studies that find no effect or even the inverse relationship. Such disparities are not surprising given the various ways in which religiosity/spirituality is defined and measured, the different effects of moderators, and the many factors and pathways that exist within the relationship between religiosity and mental health. Research focusing on specific features of belief and unique aspects of how someone holds and uses these beliefs may be more fruitful in understanding mental health outcomes.

## *Coping Theory and Religion*

### *Coping Theory*

Of the ways religion and spirituality affect mental health, an important factor is how people turn to religion when dealing with stressful life events or difficulties. In their theory, Lazarus and Folkman (1984) define coping as “constantly changing cognitive and behavioral efforts to manage specific external and internal demands that are appraised as taxing or exceeding the resources of the person” (p. 141). This theory emphasizes the importance of both the cognitive appraisal process and subsequent coping behaviors (e.g., emotion-focused, problem-focused, meaning-focused; Park & Folkman, 1997). Primary appraisal is the process of categorizing an encounter or stressor and its significance to one’s well-being, which may be perceived by the individual as positive, dangerous, or irrelevant. Next, the secondary appraisal process involves the evaluation of resources and options for coping, in light of the benefits and consequences of certain coping methods, the availability of resources to the individual and his or her perceived goals, limitations, and self-efficacy to cope. After these appraisal stages, coping behaviors occur as the individual acts to manage the demands of the stressor, resulting in a reappraisal of the situation and ensuing emotional experience (Lazarus & Folkman, 1984).

Schemas are important to an individual’s conceptualization of stressful situations, ability to cope, and practical and emotional outcomes. Coping schemas are “organized knowledge about what coping strategies are effective in different situations” (Peacock, Wong, & Reker, 1993, p. 69), which includes factors such as self-efficacy, previous learning, and most relevant to the current study, the perception of available resources and relationships. More deeply, coping and psychological distress are understood not only

through coping actions, but also perceptions that include how an individual appraises situations as stressful, views resources as available and effective, holds expectancies of results, makes attributions of the stressor's cause, and views oneself as effective in executing the behavior (Lazarus, 1991). Folkman and Lazarus (1988) emphasize that these schema components subsequently influence the emotions elicited from stressful situations and contribute to enduring emotional patterns and mental health.

Specifically, religion/spirituality are components of one's "orienting framework or superordinate schema that determines how a situation will be appraised, which resources will be activated, and which coping methods will be implemented" when faced with a stressor (Gall, Kristjansson, Charbonneau, & Florack, 2009, p. 174). For example, one's personal belief about and relationship with God can factor significantly into the appraisal process, as one considers if a problem is attributable to God (e.g., blessing or punishment), if religious resources are viewed as available and potentially effective, and if God is perceived as actively engaged in the world and responsive to the individual's needs. Such appraisals are important to understanding religious coping behaviors and the role of religiosity in an individual's life. Furthermore, understanding religion/spirituality in terms of a schema can apply to people of diverse beliefs, as Schreiber and Edward (2015) state that one's worldview is the foundation of thoughts and behaviors, whether it is "religiously, spiritually, existentially, or naturalistically based" (p. 618).

### *Functions of Religion in Coping*

Pargament and colleagues (2013) note that religiosity is a "complex process consisting of cognitive, behavioral, emotional, interpersonal, and physiological dimensions" (p. 562) within this internal working model. Therefore, religion can



function in a variety of ways with respect to what action is taken, who is receiving the action, and the intention of the behavior (Gall & Guirguis-Younger, 2013). As such, religious coping can be adaptive or maladaptive (Pargament, Smith, Koenig, & Perez, 1998) and have positive or negative effects (Bjorck & Thurman, 2007). The role of religion within coping theory is widespread, as Koenig and colleagues (2012) note that “every major world religion has beliefs, behaviors, and rituals for dealing with trauma, stress, and suffering” (p. 91).

Understanding how an individual utilizes religious resources when coping requires a deeper examination of how beliefs function for that person. Cummings and Pargament (2010) define religious coping as occurring when a stressor is related to a sacred goal or when people utilize a coping method they view as sacred when faced with a stressor. They highlight the importance of examining religious coping more deeply, stating that it is “not enough to know that someone prays multiple times a day or attends religious services every week or considers him or herself to be highly religious” (Cummings & Pargament, 2010, p. 31) because the content of and purpose behind such actions can vary among people engaging in the same behavior or within the same person. A deeper look at religion’s function is important in preventing assumptions by researchers and mental health professionals alike.

Pargament and colleagues (2000) in their development of the most widely used religious coping inventory (RCOPE) note five major functions of religion that serve as the theoretical basis for the measure. First, religion plays a role in an individual’s search for meaning, offering a framework for understanding and interpreting stressful events or uncertainty. Cummings and Pargament (2010) claim that “one of faith’s most appealing

characteristics” (p. 29) relates to gaining this type of understanding. Specific coping behaviors include reappraisal, either positively by reframing a stressor as a possibly beneficial event or negatively appraising the stressor to be an act of the devil or God’s punishment. Second, religion plays a role in achieving a sense of mastery or control. Such behaviors include problem solving with God, giving complete control to God, or passively expecting God to control the situation. Third, religion allows an individual to gain comfort and closeness to God. This type of coping includes seeking spiritual support from God, experiencing a stronger connection with God, and asking God for forgiveness. In a similar sense, Pargament and colleagues’ (2000) fourth function of religion in coping is allowing the individual to gain intimacy with others and closeness to God. In this way, an individual may seek support from clergy or other church members, provide spiritual support to others, or negatively, an individual may express discontent or confusion with clergy or members in a stressful situation. Lastly, religion has a transformational purpose, in which people may look to religion for direction or purpose in life or for help in shifting from anger and hurt to feelings of peace (Pargament et al., 2000). As evidenced by these multiple functions, it is clear that that contrary to historical belief (e.g., Freud), religion does not simply serve as a defense against anxiety, cannot be reduced to denial or passivity in the face of a stressor, nor can it be “explained away” by other coping mechanisms (Pargament, Falb, Ano, & Wachholtz, 2013a).

### *Religious Coping and Mental Health*

Religious coping behaviors are important to clinical psychology because they uniquely predict health and well-being above and beyond the effects of general coping (Masters & Hooker, 2013; Pargament, 1997; Park & Slattery, 2013). Furthermore,

religious-based social support has been found to promote adjustment beyond the effects of general social support (Pargament & Brant, 1998). Religious coping has been extensively studied with respect to a number of mental health and functioning factors. Reviews by Pargament (1997) and Park and Slattery (2013) include studies with positive outcomes such as post-traumatic growth (Prati & Pietrantonio, 2009), positive and negative affect (Belavich & Pargament, 2002), emotional well-being and meaning-making (Cummings & Pargament, 2010), and treatment outcomes for substance abuse (Koenig et al., 2001) and schizophrenia (Moss, Fleck, & Stratowski, 2006). In addition, religious/spiritual coping has been shown to be utilized to a high extent by those in mental health treatment. For example, in an outpatient community sample of individuals with psychiatric diagnoses, 80% reported the use of religious coping strategies (Tepper, Rogers, Coleman, & Malony, 2001).

Though religious coping has evidenced numerous associations to mental health outcomes, Pargament (2010) notes that there is “no single belief, practice, or experience that holds the key to effective religious coping” (p. 14). Major religious coping scales conceptualize the construct in terms of either 17 behaviors/factors (RCOPE; Pargament et al., 2000) or in terms of positive and negative behaviors (Brief RCOPE; Pargament, Feuille, & Burdzy, 2011). Unlike its positive counterpart, negative religious coping has been equated with spiritual struggle and with higher levels of depression, hostility, and anger, as well as worse physical well-being and health in samples of individuals with life-threatening injuries (Cummings & Pargament, 2010). As compared to positive religious coping, Cummings and Pargament (2010) state that negative coping is “at least as potent of a predictor of undesirable outcomes as its positive counterpart is to beneficial

outcomes” (p. 43). In practice, clinicians are becoming more aware of this distinction. For example, in a group cognitive-behavioral therapy protocol that utilizes spiritual components for clients with severe mental illnesses, group members are asked to examine their religious/spiritual beliefs and practices, current and past religious coping strategies, and the positive and negative consequences that result from certain strategies (Subica & Yamada, 2017).

However, Pargament and colleagues (2013) note that some studies report non-significant, contradictory, or complex findings. They explain that this could be due to differences in the samples, the stressors experienced, the measures used, or the fact that some coping behaviors may not be exclusively positive or negative. In terms of sampling, religion is cited more frequently than other coping resources for specific groups of individuals, including the elderly and ethnic minorities (McRae & Costa, 1986; Neighbors, Jackson, Bowman, & Gurin, 1983). Other moderators that have been investigated include the availability of religious resources for an individual, the importance and strength of faith to the person, and specific affiliation (Pargament et al., 2013a). Gall and colleagues (2009) describe how more religious individuals gained more benefit from religious coping than those less religious, noting that for the latter group, religious coping appeared relatively superficial, temporary, or as an act of desperation rather than a direct coping effort. In this way, the field is moving towards investigating the dynamics of coping behaviors, relationships, and cognitions (Harrison, Koenig, Hays, Eme-Akwari, & Pargament, 2001). Investigating overall religious coping as a construct may not give a complete picture to the individual’s behaviors. Pargament and colleagues

(2013) note that religious behaviors, religious orientation, and attachment to God all differentially relate to religious coping strategies utilized.

In their review of the contributions of religiousness and spirituality to health, Hill and Pargament (2003) designate “perceived closeness to God” as a promising area of research. Several religious coping behaviors involve an interaction with God (e.g., prayer to a divine figure, asking God for forgiveness, seeking a connection with a higher power, looking to God for strength). Additionally, Hill and Pargament (2003) note that regardless of the belief system or how the transcendent is defined, “to the religious or spiritual mind, the connection with God is of ultimate value” (p. 67). Religious behaviors involve ways of feeling, thinking, acting, and relating (Pargament, 1997), and the nature of one’s relationship with God (including the emotional connection to, cognitive working model of, and attachment to God) provides unique insight into the choice and effectiveness of coping mechanisms.

### *Image of God*

#### *Definition*

Recent literature has emphasized how spirituality and religion are experienced, expressed, and understood relationally (Pargament et al., 2014). The God image construct has emerged to describe how an individual internalizes beliefs and uses religion to cope. Moriarty and Hoffman (2007) note that the construct has been muddled by attempts to differentiate between concepts like God image, God concept, God representation, and God schema. However, recent theories utilize a multidimensional approach to an individual’s model of both cognitive understanding and relational,

affective experience of God (Grimes, 2007), and terms of the construct may be used interchangeably. Greeley (1996) describes cognitive and relational components in his definition, with God image being a metaphorical narrative of God's relationship with the world and the self as part of that world. Hall and Fujikawa (2013) further this by claiming that God image not only contains implicit and explicit layers of how information is processed, but also biological, cognitive, emotional, motivational, behavioral, and relational dimensions. This multidimensional approach advanced the construct to be more clinically useful and informative. While early psychoanalytic theories viewed God image as a primarily pathological defense, Rizzuto (1979) first described an individual's private representation of God as involving multiple psychological processes and having potentially positive or negative effects on psychological functioning.

#### *A Needed Construct*

In their research with God image scale development, Bader and Froese (2005) describe the need for religious research to focus on God image. First, from a typology perspective, *belief* is likely to be more informative than religious affiliation. The authors describe the American Christian landscape as consisting of ever-changing denominations with individuals who are poorly informed or unsure about their exact affiliation and its tenets (Bader & Froese, 2005). Affiliation alone fails to consider *how* religious faith is internalized, how it affects the individual, and the meaningfulness of religious actions to the individual. Bader & Froese (2005) state that "in creating a concise indicator of differences in religious belief, an individual's perception of God appears ideal" (p. 6). In the fundamental sense, God is the object of religious and spiritual commitment, and

research needs to focus on the importance of God's character to those interacting with God. Belief in the divine is a core component of most religions, and a god-figure is commonly referred to in religious actions, such as being the one to whom someone prays, asks forgiveness, or asks for blessings. Stark (2001) notes that different conceptions of God may inspire markedly different types of human action. For example, Kunkel and colleagues (1999) posit that God image may serve different social needs, such as a benevolent God being a model for forgiveness and tolerance while an authoritative God may serve to regulate negative behavior and in-group cooperation. Additionally, those with anthropomorphic God may internalize beliefs differently than those who view a universal Spirit (Morewedge & Clear, 2008). In their analysis of the Image of God Scale, Bader and Froese (2005) found that individuals' conceptions of the divine were an important part of their personal worldview and decision-making, regardless of group identity. While two individuals may hear the same sermon in the same setting, one cannot conclude that they hold similar personal beliefs or have developed similar images of God. Clearly, the relationship with God offers insight into a unique aspect of individuals' cognitions and schemas, and "insight into God image is therefore a prerequisite for a full understanding of someone's relationship with God" (Schaap-Jonker, Eurelings-Bontekoe, Verhagen, & Zock, 2002; p. 55).

### *Development*

In terms of God image development, several theories are understood in light of cognitive internal working models and attachment theory (Davis, 2009; Hall & Fujikawa, 2013). God image develops through implicit, emotional, and incidental learning through interactions with human and divine attachment figures alike (Davis, 2009). God fits the

definition of an attachment figure as individuals display proximity-seeking behavior toward God, especially during stress (Bradshaw, Ellison, & Marcum, 2010), functioning as a secure base and haven of safety to which individuals turn in times of distress and threat (Kirkpatrick and Shaver, 1990, 1992). Overall, findings illustrate a complex God image development that is influenced by multiple factors such as theological knowledge, attachment style to caregivers, and personal narrative (Hall & Fujikawa, 2013). Koenig and colleagues (2012) further explain that one's relationship with God usually refers to an individual's present experience, but it can be influenced by other factors such as peer and family relationships, education, and life experiences (religious or non-religious). Overall, attachment dynamics and internal working models support the notion that God image may correspond to aspects of the self and influence cognitive appraisals and coping behaviors (Hall & Fujikawa, 2013). As a component of the coping system, mental representations of God are likely to influence mental health and outcomes.

### *Findings*

*God image and psychological variables.* The significance of God image as a construct is bolstered by the fact that it “exists across religious, cultural, academic, and theoretical boundaries” (Moriarty & Hoffman, 2007, p. 5), and research has investigated the relationship between one's relational experience with God and a number of psychological variables. Due to methodological differences, most findings focus on specific *images* of God. For example, Johnson and colleagues (2013) investigated authoritarian and benevolent God images because such concepts are commonly to most faith traditions. They found that among a diverse Christian sample, benevolent images of



God were negatively correlated with aggression ratings and were positively related to volunteering frequency and willingness to help out-groups. However, authoritarian God images were positively correlated with aggression and uncorrelated with both volunteering frequency and willingness to help out-groups (Johnson et al., 2013).

Furthermore, in their research with Catholic high school students, Benson and Spilka (1973) found a positive relationship between self-esteem and loving God images, while rejecting God images were negatively related to self-esteem. A positive personal relationship with God has also been found to be related to higher self-esteem in a sample of LGBTQ young adults (Rosenkrantz, Rotosky, Riggle, & Cook, 2016). In a largely secular sample of adolescents (58% claiming no religious affiliation), personal God images were found to be significantly related to self-worth (Francis, Gibson, & Robbins, 2001). Specifically, images of a loving and forgiving God were positively correlated with ratings of self-worth, while images of God as cruel and punishing evidenced a negative relationship with self-worth. In terms of other psychological variables, loving God image positively predicted sense of purpose and meaning (Stroope, Draper, & Whitehead, 2013) even after controlling for other religious variables. In another study of women with breast cancer, positive image of God was positively related to optimism and hope before receiving a diagnosis and at 6 months post-surgery (Gall et al., 2009).

*God image and clinical variables.* Specific God images have been found to be related to clinical constructs with mixed results. Negative God images (i.e. punitive, alienating) generally have been shown to be related to symptoms of depression and anxiety (Braam, Mooi, Jonker, Tilburg, & Deeg, 2008; Exline et al., 2000; Greenway, Milne, & Clarke, 2003; McConnell, Pargament, Ellison, & Flannelly, 2006; Schaap-

Jonker et al., 2002; Sifton, Flannelly, Galek, & Ellison, 2014). Alternatively, images of God that are more loving, supportive, and benevolent have been found to be negatively correlated with such symptoms (Sifton et al., 2014; Pargament, Kennell, Hathaway, & Grevengoed, 1988; Phillips, Pargament, Lynn, & Crossley, 2004), although one study found negative images to be unrelated to distress (Bradshaw et al., 2010). Furthermore, when focusing on specific psychopathology symptom scales, a loving/close God image was negatively related to paranoid ideation, obsessive-compulsive traits, phobic anxiety, and somatization (Bradshaw, Ellison, & Flannelly, 2008; Flannelly, Galek, Ellison, & Koenig, 2010). In the study by Bradshaw and colleagues (2008), a remote God image was positively correlated to these factors. On the other hand, Flannelly and colleagues (2010) found a judging image of God to be positively related only to overall symptom severity but not individual symptom scales, and an approving/forgiving image of God negatively related only to social anxiety and overall symptom severity, with a “creating/judging” image of God showing no relationship to the symptoms. The authors propose that different images of God may relate more to symptomatology via their relationship to security and protection, which may have been present only for the loving/close God images (Flannelly et al., 2010).

### *Measurement Limitations*

Given the mixed results of images of God on aspects of mental health, the clinical significance of God image seems to be limited by differences in measurement. God image scales may not apply similarly to individuals of varying religiosity, and cultural differences may encourage the use of different images, such as the finding that Western Europeans distance themselves from traditional/personal images of God in favor of more

abstract images (Schaap-Jonker, Eurelings-Bontekoe, Zock, & Jonker, 2008). Also, individuals have been shown to differ in how they focus on God's actions versus God's character (Van der Lans, 2001). Schaap-Jonker and colleagues (2008) express that measures often do not include affective/relational aspects of God's character, despite God image being initially conceptualized from an object-relations approach (Rizzuto, 1979).

Limitations also exist due to a lack of consensus in defining the construct, as terms such as *God image*, *God concept*, or *God representation* are used without clear discriminations between them (Gibson, 2007). While researchers may claim that one construct may relate to cognitive representations and another exclusively relates to the emotional experience of God, it does not appear that most measures consistently isolate these separate facets. Furthermore, much of the previous research has focused on specific God "images" as individual items rather than a scale or measure of traits. For example, studies focus on the view of God as judgmental, approving, loving, or alienating (Grimes, 2007), it is difficult to compare results across studies, as they may not assess the same constructs or measure them in a similar manner. Therefore, Gibson (2007) encourages the measurement of schema-based mental representations that are useful to social and cognitive psychology, stating that "accurate measurement requires a still more sophisticated description of how God is represented in the mind" (p. 230). He also recommends the use of more than one dimension to give a more complete view of the cognitive, emotional, and relational aspects of God's character (Gibson, 2007).

### *Image of God Scale*

Bader and Froese (2005) advanced the field of God image measurement with their multidimensional approach in the Image of God Scale (IGS). While previous research

has focused on outcomes such as how God images relate to religious behaviors (Roof & Roof, 1984; Schaefer & Gorsuch, 1992) and coping style (Maynard, Gorsuch, & Bjorck, 2001), Bader and Froese (2005) wished to examine aspects of God's character that would relate practically to an understanding of human action, namely the individual's worldview and response to life's choices. Furthermore, the researchers wished to focus on dimensions of God's character that would vary widely in the general population (Bader, Mencken, & Froese, 2007). Using Baylor Religion Survey (BRS), their scale is based on two dimensions that they hypothesize form the conceptual basis of religious attitudes and behaviors (Froese & Bader, 2007). The first is the extent to which God interacts with the world and is active in an individual's life. This engagement dimension ranges from perceiving God as directly involved in the world and one's personal affairs to a distant, impersonal God. The second dimension measures the extent to which God judges human behavior and is quick to anger, ranging from perceiving God as overwhelmingly forgiving and nurturing to strict and wrathful.

*Dimensional approach.* From these two dimensions of God's character, four categories of God image emerge (Froese & Bader, 2010). Wave II of the BRS found that 28.2% of their nationally representative sample viewed God as both engaged in the world and judgmental, which defines the *authoritative* God image. Such individuals are just as likely to view God as loving as those with other types of God image; however, they also believe that God is willing and able to punish individuals, and they may believe that good and bad aspects of life (including human suffering) are due to God's agency. Individuals who believe in an engaged, non-judgmental God comprised 22.3% of the normative sample, which the researchers called a *benevolent* God image (Froese & Bader, 2010).

Such individuals believe that God is engaged in the world, functioning as a positive force and is less willing to condemn individuals, thus tending to believe that God is available to answer prayers regardless of one's transgressions. Third, 20.9% of the sample viewed God as highly judgmental but not highly engaged in the world (Froese & Bader, 2010). For these individuals with a *critical* God image, God's justice exists for the afterlife rather than the present world. The researchers found this type to be held most often by ethnic minorities, the poor, and the exploited (Froese & Bader, 2010). Lastly, Wave II of the BRS found that approximately 23.9% of the sample had a *distant* God image, viewing God as neither judgmental nor highly engaged with the world. In this sense, individuals view God as a cosmic force that set the laws of nature in motion but not acting upon the world or caring about human activities. Such individuals may still believe in the transcendent, likely describing God in terms of *nature* and *creation*. In this way, the conceptualization of God image clearly can apply regardless of faith tradition. Lastly, while Froese and Bader (2010) also note that 4.8% of the national sample were self-reported atheists, who were not included in the typology. The researchers believed that this subgroup was important because of how this type of belief shapes their worldview.

*Religious correlates.* This conceptualization of God image has been found to be related to a number of religious variables. In a national random sample, Bader and Froese (2005) found that after controlling for denomination, God image was a significant predictor of biblical literalism and church attendance. Additionally, after controlling for denomination, biblical literalism, and church attendance, image of God was found to be a significant predictor of attitudes toward abortion and sexual morality. In a later study, Froese and Bader (2007) found across all models that belief in a judgmental God was the

most consistent predictor of religious conservatism and exclusivity; however, it was unrelated to church attendance, sharing faith with others, and frequency of religious behaviors. God's level of engagement, however, was significantly related with these three latter religious behaviors. The findings led the authors to state that "religions may most successfully motivate individuals through what it can offer them in terms of spiritual intimacy, rather than through demands backed by threats of punishment" (Froese & Bader, 2007, p. 479). Schieman and colleagues (2013) similarly note the counterproductive nature of negative God images, noting that "belief in a punishing or distant divine entity may strengthen feelings of the randomness and cruelty of life or the sense of personal powerlessness when problems do arise" (p. 468).

*Clinical need.* Relationships among God image and clinically significant variables have been previously illustrated; however, such findings were limited by the use of different measures and specific *images* of God. Froese and Bader's (2010) multidimensional approach has not yet been widely applied to clinical outcomes, despite its clear usefulness as a way to further investigate religious coping. One study examined this conceptualization of God image qualitatively, exploring women's responses to questions regarding the impact of their breast cancer diagnosis on their image of God, beliefs, and behaviors (Schreiber & Edward, 2015). Various themes emerged, namely those who scored high on the engagement dimension of God image experienced a deepened sense of belief and trust in God, which translated into stronger relationships with themselves, others, and the world. These women discussed their faith in terms of trusting God's purpose and plan. On the other hand, those with a low engaged God image primarily focused on themselves and their own personal growth, which did not

translate into deeper relationships with others. These individuals largely discussed their faith in terms of God being involved but as a distant *backup* (Schreiber & Edward, 2015). In the nursing field, these researchers highlight the importance of studying God image in this way for future studies and practice. Those aiming to identify effective interventions and tailor the content and approach of treatment should take into account the “internal disposition or worldview of participants” (Schreiber & Edward, 2015, p. 620).

Another study investigated the relationship between God image and specific coping mechanisms, psychological distress, and psychological well-being for female breast cancer survivors (Schreiber, 2011). The results indicated that believing God as highly engaged was related to higher psychological well-being, lower fears of cancer recurrence, and lower self-reported depression, anxiety, and stress symptoms. However, higher scores on the judgmental dimension were not related to any of those outcome variables. The researcher also found that view of God was related to how one used religion to cope, namely how one interacted with God (Schreiber, 2011). The findings related to judgmental image of God are different than what has been previously studied with negative types of God image (Braam et al., 2008; Exline et al., 2000; Greenway et al., 2003; McConnell et al., 2006; Schaap-Jonker et al., 2002; Siltan et al., 2014), indicating that the IGS conceptualization may be different than those previously used.

### *Attachment to God*

#### *God as Attachment Figure*

When understanding how an individual’s internal working model of God functions in coping, one must examine not only cognitive and behavioral components,

but also emotional and relational aspects (Gibson, 2007; Grimes, 2007; Greely, 1996; Hall & Fujikawa, 2013). Therefore, the attachment to God construct appears useful in giving a more complete picture of one's interaction with God, in terms of God's availability and responsiveness to the individual's needs. Building upon Bowlby's (1969) theory of parent-child attachment, the notion of having a secure attachment to a divine figure has been used to understand views of God (Bradshaw et al., 2010; Kirkpatrick & Shaver, 1990, 1992). Bradshaw and colleagues (2010) note that many religious traditions conceive of God as a parental attachment figure, and this figure's perceived availability and responsiveness to the individual are part of the fundamental dynamics of religious belief and behavior. The nature of God also makes for a different type of attachment figure, in that God may be seen as absolute and infallible, while human attachment figures may not.

In terms of developing an attachment to God, Kirkpatrick and Shaver (1990) describe two hypotheses, namely that God may correspond to one's internal working models of attachment figures or that God may compensate or substitute for an individual's lack of secure attachment relationships. Research has supported both of these hypotheses (Kirkpatrick & Shaver, 1990); therefore, they can be viewed as two pathways and modes of being religious (Hiebler-Ragger, Falthansl-Scheinecker, Birnhuber, Fink, & Unterrainer, 2016). Kimball and colleagues (2013) suggested another hypothesis, marked by a reparative and corrective function. They state that an individual who has suffered attachment adversities in the past may experience security from a perceived relationship with God, which in turn may repair other relationships by allowing the individual to experience a new way of relating and being in a relationship.



### *Attachment and Coping*

In terms of coping, Cassibba and colleagues (2014) note that an individual's resources include attachment-related internal working models. Bowlby (1969) theorized that when an attachment system is activated, individuals seek to maintain proximity to the attachment figure, who serves as a secure base and safe haven, giving the individual a sense of security. Even through adulthood, stressors can be triggers for the system's activation (Cassibba et al., 2014). Furthermore, adult attachment research demonstrates that differences in internal working models are related to differences in coping strategies and support seeking (Granqvist, 2005; Mikulincer & Shaver, 2007). Specifically within the field of religious coping, "cognitive and representational aspects could determine the appraisal and coping strategies an individual activates" (Cassibba et al., 2014, p. 254). In one clinical example of the role attachment to God in coping with psychopathology, Jones (2014) describes a case study of a client with schizophrenia. He notes that the client's "enduring belief in the transcendent...served as [her] primary attachment, one which has both sustained her through years of chronic severe abuse, and allowed her to have the courage to extend herself...to me in our work together" (Jones, 2014, p. 311).

It has been hypothesized that one of the main mechanisms by which God image functions and develops is through the attachment component of one's relationship with God (Davis, 2009; Hall & Fujikawa, 2013; Stroope et al., 2013). Perceived intimacy with God can increase one's sense of meaning and promote positive and collaborative coping (Stroope et al., 2013). In a sample of university students, Hiebler-Ragger and colleagues (2016) note that secure attachment to God was related to less fluctuations in subjects' spiritual belief systems and greater religious well-being. Furthermore, this

attachment relationship allows God to serve as a “generalized other” with which individuals can reflect upon their actions, pray, or meditate (Athens, 1994). Lastly, in terms of the direction of effects, Grimes (2007) hypothesizes that while a depressed mood may affect how one relates to God, attachment is a more fundamental and underlying quality that plays a role in the coping process and one’s subsequent emotional experience.

### *Correlates*

Attachment to God has been found to relate to other attachment variables and religious constructs. First, anxiety of attachment to God and avoidance of intimacy with God have both been found to be negatively correlated with religious and existential facets of spiritual well-being in undergraduate and graduate students (Beck & McDonald, 2004). The researchers noted that the anxious dimension offered more clear findings with respect to adult attachment and outcomes. Anxious attachment to God was positively related with dismissing, fearful, and preoccupied adult attachment, and it was negatively correlated with secure attachment styles. Avoidant attachment to God was found in this sample to be related only to fearful and secure adult attachment styles (Beck & McDonald, 2004). The researchers posit that the avoidance dimension may relate to God uniquely compared to other relationships, as subjects’ avoidant attachments to God did not converge with adult attachment avoidance ratings. Specifically, avoidance with respect to God was conceptualized to include “discomfort with depending on upon God and with emotional displays of affection toward God” (Beck & McDonald, 2004, p. 101). Furthermore, insecure attachment to God predicted poorer spiritual well-being over and above insecure adult attachment. Other studies have also demonstrated that anxious and avoidant attachment to God each relate positively to both attachment anxiety and

avoidance in romantic (Fergus & Rowatt, 2014) and parental relationships (Zahl & Gibson, 2012).

In terms of religious variables, avoidant and anxious attachments to God have been shown to be inversely related to religious commitment and Christian orthodoxy (Zahl & Gibson, 2012). This same study found attachment to and image of God to be related, with avoidant attachment being negatively correlated with positive God image, while anxious attachment was found to be positively correlated with critical God image and negatively correlated with positive God image (Zahl & Gibson, 2012). Similarly, Bradshaw and colleagues (2010) found that attachment to God made a unique contribution to distress level when simultaneously investigating God image, stressful life events, and religious behaviors. Image of God and attachment to God are inherently interconnected, as it has been highlighted that “the key contingency may not simply be *whether* one feels close to God, but rather *the type* of God to which one feels close” (Schieman et al., 2013, p. 463).

Attachment styles have also been related to the types of religious coping behaviors an individual uses. Research examining the grief process found a secure God attachment style to be inversely related to depression and grief and positively related to sense of meaning and positive religious coping (Kelley & Chan, 2012). Such individuals likely utilize coping resources that draw on their relationship with God because God is viewed as responsive and available. Cooper and colleagues (2009) found similar results, as God attachment styles were related to different religious coping strategies.

In their investigation of adult attachment, religious and existential well-being, and psychopathology, Hiebler-Ragger and colleagues (2016) explain their complex findings

in terms of coping strategies and attachment to God. First, in a student sample, anxious adult attachment was associated with higher levels of mood pathology, namely the somatization, depression, anxiety, and global severity index scores on the Brief Symptom Inventory-18. They explain these associations in terms of attachment-related coping strategies that include impaired emotion regulation and amplified distress. Notably, avoidant adult attachment was not related to any of the distress variables, and the researchers propose that avoidant attachment may increase psychopathology but individuals with such avoidance may have been less likely to acknowledge symptoms and seek help. Additionally, religious/spiritual well-being was related to more secure adult attachment and lower levels of mood pathology. The researchers note support for both the correspondence and compensation pathways of attachment to God. First, religious/spiritual well-being may relate to mood because a relationship with God may offer the same psychological advantages that secure adult attachment relationships provide, supporting the correspondence hypothesis. Secondly, existential well-being, conceptualized to include facets such as forgiveness, sense of meaning, and hope, related to mood symptoms independent of adult attachment style, indicating that this sense of spirituality may compensate for the negative effects of insecure attachment on mental health (Hiebler-Ragger et al., 2016).

God attachment has also been found to be significantly related to a number of psychological constructs. Secure attachment to God (defined by low avoidance) was related negatively to psychological distress, with anxious attachment to God demonstrating the inverse relationship (Bradshaw et al., 2010). Anxious attachment to God has also been shown to relate to anxiety, negative affect, obsessive-compulsive

symptoms, and scrupulosity (Fergus & Rowatt, 2014; Rowatt & Kirkpatrick, 2002). When specifically examining mood symptoms, Knabb and Pelletier (2014) observed that anxious attachment to God was positively related to perceived stress, worry, social interaction anxiety, and perceived depression and anxiety. However, avoidant attachment was unrelated to each of the dependent variables, which the researchers posit may be likely due to avoidant attachment individuals showing independence and invulnerability and likely not endorsing distress (Knabb & Pelletier, 2014). Lastly, in terms of affect and personality, Rowatt and Kirkpatrick (2002) demonstrated that anxious attachment to God accounted for unique variance in positive affect, negative affect, and neuroticism above and beyond other religious variables, while avoidant attachment to God was a significant predictor of agreeableness. Overall, while there appear to be relationships between dimensions of God attachment and religious and psychosocial variables, much of the research has utilized different scales and has focused largely on Christian samples.

### *Clinical Significance*

Investigating the relationship with God is increasingly important to clinical work, as practitioners are becoming more cognizant of the roles that religiosity/spirituality serve in conceptualizing mental illness and clients' coping schemas. Thus, resources can function in a variety of ways, both positive and negative, and understanding how individuals view and relate to God can provide valuable information to practitioners. Cummings and colleagues (2014) highlight that therapists should "attend to religion and spirituality because it may provide powerful resources for clients and create substantial difficulties," (p. 117) while also noting that "clients generally view discussing religion and spirituality in therapy as appropriate and prefer to do so" (p. 117). Such integration

of religion and spirituality into mental health treatment can occur via specific types of treatment that have particular spiritually-oriented goals, such as pastoral counseling, chaplaincy services, or spiritually-oriented psychotherapy (Sperry, 2016). While, spiritual and religious themes incorporate naturally to mindfulness, imagery, and relaxation techniques, Subica and Yamada (2017) discuss how spirituality can integrate into existing interventions. For example, their *Spiritual Strategies for Psychosocial Recovery* protocol is a cognitive-behavioral group for individuals with schizophrenia spectrum disorders (Subica & Yamada, 2017). In the *spiritual social skills training* module, social skills exercises and spirituality are integrated, as group members practice “appropriately discussing spiritual beliefs and practices with others to obtain support by learning to read social cues signifying conversational interest” (Subica & Yamada, 2017, p. 5).

Addressing religious/spiritual themes is also significant in secular settings, as providers recognize clients’ cultural backgrounds. Cummings and Pargament (2010) emphasize that the “health professional must not dismiss religious coping as irrelevant to their work” (p. 46) because “like it or not, patients bring their own religious resources and struggles with them” (p. 46). Understanding beliefs and their effects on mental health and coping are relevant regardless of the beliefs of the practitioners. Cummings and colleagues (2014) found that therapist religion/spirituality and client-therapist similarity in religion/spirituality similarity had little effect on the therapeutic relationship or treatment outcomes. Spirituality may also be important in session when dealing with themes such as control, identity, meaning, and relationships (Cummings & Pargament, 2010). Exline and colleagues (2000) reiterate this notion, stating that religious/spiritual

belief systems are often anchors for “deeply held views about the world, life and death, and the meaning of existence, [and thus] dealing with problems in these areas could bring wide-ranging psychological gains” (p. 1492).

Experimental studies related to the relationship with God are largely preliminary and focus on individual and group treatments that attempt to change God image. Thomas and colleagues (2011) explored the effect of a manualized 8-week group treatment on altering God image for students at a Christian college. The pilot study reported significant increases in experiencing God as intimate, accepting, and supportive, and significant decreases in experiencing God as distant, harsh, and disapproving (Thomas et al., 2011). Rasar and colleagues (2013) used this same protocol with random assignment to a treatment group, a manualized Bible study, or a wait-list control. They noted no significant changes in God attachment, God image, or religious coping strategies for the treatment compared to the Bible study group (Rasar et al., 2013). The authors note the difficulty in attempting to change such complex and deeply rooted constructs as God image and attachment.

Another type of treatment aimed at changing God image is God Image Narrative Therapy (Olson et al., 2016). This targets an individual’s God image narrative identity, namely the internalized story of the self in perceived relationship to God. The treatment goals focus on a client’s spiritual narrative, life narrative, and integration of the two through facilitating new experiences and understandings. The researchers emphasize that coherent narratives are important to support emotion regulation. Individuals at two faith-based universities participated in either a 10-week manualized group treatment or a control condition in which participants completed pre- and post-test measures with no

intervention. Interestingly, when analyzing self-report measures (including the Attachment to God Inventory and an adjective checklist of positively and negatively valenced items relating to God), findings did not show differences between the intervention and control conditions. However, an analysis of post-test journal entries and debriefing interviews revealed that most participants in the God Image Narrative Therapy intervention reported experiencing psychological and spiritual growth (Olson et al., 2016). The researchers suggest that the study highlights a need for more nuanced and validated measures of God image and attachment, while demonstrating the importance of applying a relational spirituality framework to clinical issues. As with the study by Rasar and colleagues (2013), Olson and colleagues (2016) similarly emphasize a need for more understanding of the dynamics of an individual's relationship with God to inform the development of protocols aimed at addressing and changing God image and attachment to God.

In addition to treatments that address the relationship with God and God image, Moriarty and Hoffman's (2007) *God Image Handbook for Spiritual Counseling and Psychotherapy* provides case studies in which God image is addressed in therapy. The authors included examples from modalities such as time-limited dynamic therapy, existential-integrative, and rational emotive behavior therapy. Given that "beliefs about God's character are uniquely salient to mental health outcomes" (Stroope et al., 2013, p. 35), clinical practice would benefit from further understanding the dynamics between an individual's relationship with God and mental health domains within the context of religiosity and coping resources. This would aid treatment across diagnoses, especially those with cognitive and affective components. Additionally, in the treatment of serious



mental illness (such as schizophrenia spectrum disorders and bipolar disorder), the psychosocial recovery movement emphasizes the importance of spirituality (American Psychological Association, 2016), as one personal account of a woman with schizophrenia disclosed, “to ignore the spiritual side of illness is to ignore an important aspect of our experience” (Murphy, 2007, p. 659).

An abundance of research exists regarding religious coping, the types of religious/spiritual behaviors an individual may use in response to stressors, and how such behaviors are related to mental health. Recent research in this field has moved toward exploring individual differences, regardless of a person’s espoused belief system, and specifically investigating why an individual chooses certain religious/spiritual behaviors in response to particular stressors in the first place. In terms of coping theory, personal beliefs about the nature of God and one’s relationship with God are components of coping schemas that may play a role in cognitive appraisal processes and subsequent utilization of coping behaviors. Mental health outcomes will be better understood and interventions will be better applied through research that investigates how individual perceptions of God are related to psychological and religious constructs and how these perceptions can be used to predict mental health outcomes when controlling for psychosocial variables.

### *Aims and Hypotheses*

*Aim #1:* Investigate the association of subjects’ relationship with God with mental health outcomes.

1. The engagement dimension of God image will be negatively related to psychological distress outcomes.

2. The judgmental dimension of God image will be positively related to psychological distress outcomes.
3. The anxious dimension of God attachment will be positively related to psychological distress outcomes.
4. The avoidant dimension of God attachment will be positively related to psychological distress outcomes.

*Aim #2:* Investigate the association of subjects' relationship with God with general religiosity.

1. The engagement dimension of God image will be positively related to general religiosity.
2. The judgmental dimension of God image will be positively related to general religiosity.
3. The anxious dimension of God attachment will be negatively related to general religiosity.
4. The avoidant dimension of God attachment will be negatively related to general religiosity.

*Aim #3:* Describe the unique contribution of God image and God attachment in predicting mental health outcomes.

1. The engagement and judgmental dimensions of God image will each significantly predict mental health outcomes above and beyond other demographic, religiosity, and social support control variables

2. The anxious and avoidant dimensions of attachment to God will each significantly predict mental health outcomes above and beyond other demographic, religiosity, and social support control variables.

### *Data Analysis*

In order to test the proposed hypotheses, a number of statistical analyses were performed. In terms of initial exploratory analyses with respect to God image and attachment to God categories, Chi-square tests were used to determine if the sample percentages in each category are equal and to compare the percentages of each God image category to the national distribution of God images attained by Froese and Bader (2010). Related to the self-reported mental health of the subjects, independent samples *t*-tests were conducted to compare mean differences in all religiosity variables and psychological outcomes between subsamples of those subjects with and without a current mental health diagnosis.

Related to the first aim, bivariate correlations were performed to investigate significant associations between God image and attachment to God dimensions and general religiosity scores. To test hypotheses for the second aim of the study, correlation analysis tested the relationship between God image and attachment to God dimensions and mental health outcomes (depression, anxiety, stress subscales of the DASS-21; PSWQ-3 total scores; Global Severity Index of the BSI-53).

To test hypotheses related to the third aim, multiple linear regression analysis was utilized. First, the prediction model was tested for each mental health outcome, entering the four image of and attachment to God factors as predictors to determine which factors emerge as unique predictors after controlling for each of the other variables. Next,

multiple regression was utilized to test the prediction model for each mental health outcome, entering in the four God image and attachment facets with added controls (general religiosity scores, perceived social support, gender, and age). This tested hypotheses that each aspect of God image and attachment to God would significantly predict mental health scores over and above demographic, psychosocial, and religiosity factors. These control variables have been shown to be significant factors within the relationship between religion/spirituality and mental health, and accounting for them allows for more specific conclusions to be drawn regarding the relationship with God and mental health.

## CHAPTER TWO

### Method

#### *Participants and Recruitment*

Data was collected using Amazon's Mechanical Turk (MTurk) website. MTurk has been shown to be a reliable data collection tool for researchers (Mason & Suri, 2012), and it has been shown to yield more diverse samples than standard internet or American college student samples (Buhrmester, Kwang, & Gosling, 2011). The survey was only available to participants in the United States who are 18 years of age or older. Participants provided consent electronically before beginning the study, and there was no penalty for withdrawing from the study. They received \$1.00 in exchange for completing the 238-item survey, which is an amount consistent with studies of similar length (Buhrmester et al., 2011). All participants had an approval rating of at least 95% for previous Human Intelligence Tasks and had completed at least 1000 previous tasks on the website. The present study is part of a larger survey that included additional measures (Appendix A). A subset of these measures was analyzed as related to the study aims, which consisted of those included in the following Measures section.

To ensure that the majority of the sample could provide data relevant to the research questions, the first round of sampling prescreened individuals for belief in God. Participants who rated their belief in God as 2 or more on a 5-point scale (1= *God certainly does not exist*, and 5 = *God certainly does exist*) were directed to the survey, while those giving a rating of 1 were informed that they were not qualified at the current time. This prescreening method was adapted from a similar study using MTurk to

obtain a religious sample (Johnson, Okun, & Cohen, 2015). However, while the large majority of the sample were not atheists, a second round of sampling was utilized to add heterogeneity to the sample and include a portion of atheists. In this round, only individuals who responded 1 (*God certainly does not exist*) on the screening question were directed to the study. Using G\*Power version 3.1.9.2, a sample size of  $n = 184$  is needed to detect a medium effect with  $p < .01$ .

The participants in this study were 209 individuals (128 females, 81 males,  $M_{\text{age}} = 38$ , age range: 18-75 years). The sample was ethnically diverse (81% Caucasian, 10.5% Black or African American, 5% Asian, 2.5% Biracial/multiracial, 1% Hispanic or Latino). The participants were generally highly educated (1% some high school, 7% high school diploma, 41.5% some college, 35% bachelor's degree, 11.5% master's degree, 3% doctoral or other professional degree, 1% no response).

In terms of religious demographic data, the respondents represented a wide variety of religious/spiritual backgrounds and traditions (Table B.1), yet the largest group comprised those who did not ascribe to a particular religion (24%, no religion). Aside from specific religion category, the sample generally endorsed a high belief in God on the screening question. The largest group were those who answered five on the Likert scale (47% *God certainly does exist*), followed by a rating of four (16%), three (14%), and two (12%). Eleven percent of the sample endorsed no belief in God (*God certainly does not exist*).

In terms of mental health, a minority of the sample endorsed being currently involved in treatment (19% psychological medication, 12% therapy/counseling, 2% other). Larger proportions reported prior involvement in treatment (36%

therapy/counseling, 20% psychological medication, 2% other). Thirty-one percent of the sample reported a current mental health diagnosis, with the largest diagnostic categories being *depression or other depressive disorder* (27%) and *anxiety disorder, including general anxiety, social anxiety, panic, and phobias* (25%). Slightly more individuals endorsed a diagnosis at some point in their lifetime up to the time of the assessment (38%), with depressive and anxiety disorders being similarly most prevalent (30% and 29% respectively). Table C.1 displays the full list of current and lifetime prevalence of mental health diagnoses in the sample.

### *Procedures*

Following approval from the Baylor University Internal Review Board (IRB), the measures were entered online using Qualtrics software. Participants accessed the study via a unique link on the MTurk website. At the beginning of the survey, participants read an informed consent document, informing them that participation is voluntary and giving them the freedom to cease participation at any point during the study. All responses were anonymously collected with Qualtrics, and there was no identifying information linking a response to a particular individual.

### *Measures*

#### *Image of God Scale (IGS)*

The IGS is a 14-item measure of an individual's underlying perception of God's character (Froese & Bader, 2007; Froese & Bader, 2010). Although the word *God* is used, the scale is designed to assess an individual's understanding of the transcendent, not focusing on a particular religion or faith tradition. The measure contains two

dimensions: God's level of engagement and God's level of judgment. The engagement dimension (8 items) relates to the respondent's belief about God's interest and connection to in his or her life and the world (e.g., *Concerned with my personal well-being*).

Subscale scores range from 8 to 40, and high values suggest a greater perception of God's involvement in, concern for, and presence in the affairs and well-being of the world and oneself. The judgment dimension (6 items) relates to God's anger and God's critical or punishing view of creation (e.g., *Angered by my sins*). Subscale scores range from 6 to 30, and high values indicate a greater view of God as punishing, critical, wrathful, angered, and not loving. IGS item responses are based on a five-point Likert-type scale, ranging from 1 (*strongly disagree or not at all*) to 5 (*strongly agree or very well*).

Based on methods used by the scale developers (Froese & Bader, 2010), the sample can be categorized using a mean-split analysis, wherein subjects were deemed as "high" or "low" on the two subscales if their scores fell above or below the sample means respectively. The four image of God categories include: Authoritative (high engagement, high judgment), Benevolent (high engagement, low judgment), Critical (low engagement, high judgment), and Distant (low engagement, low judgment).

The IGS was developed as part of the Baylor Religion Survey, and among the Wave 2 community sample, both dimensions demonstrated good internal consistency (engagement  $\alpha = .88$ , judgment  $\alpha = .85$ ; Froese & Bader, 2010). There have been no studies examining stability (test-retest reliability).

#### *Attachment to God Scale (AGS).*

The AGS is a 9-item measure that assesses individual differences in attachment using God as the attachment figure (Rowatt & Kirkpatrick, 2002). The scale is based on



a two-factor model (attachment anxiety and attachment avoidance) that parallels adult romantic attachment (Brennan, Clark, & Shaver, 1998). The attachment anxiety scale contains three items (e.g., *God's reactions to me seem to be inconsistent*), and subscale scores range from 3 to 21. High values of anxious attachment to God is indicative of an attachment pattern where God is viewed as God as inconsistent, sometimes warm and responsive but sometimes not, and unreliable in showing care and love in a way that is understood by the individual. The attachment avoidance scale contains six items (e.g., *God seems impersonal to me*) scores range from 6 to 42. High values on this subscale refer to an attachment pattern where God is perceived as unresponsive to the person's needs and having an impersonal, cold relationship with the individual. AGS responses are based on a seven-point Likert scale, ranging from 1 (*not at all characteristic of me*) to 7 (*very characteristic of me*). The mean-split method utilized in the IGS can be applied to attachment scores using the two dimensions, where subjects can be categorized into attachment styles that are conceptualized from human relationship attachment theory, including secure (low anxiety, low avoidance), preoccupied (high anxiety, low avoidance), dismissing (low anxiety, high avoidance), and fearful (high anxiety, high avoidance).

Fergus and Rowatt (2014) found the Attachment to God Scale to have adequate internal consistency (attachment anxiety  $\alpha = .73$ , attachment avoidance  $\alpha = .91$ ). The two scales showed small to moderate correlations with adult attachment anxiety and avoidance ( $r$ s ranging from .12 to .29), and they have been shown to have significant correlations with God images and intrinsic religious orientation (Rowatt & Kirkpatrick, 2002).

### *General Religiousness Scale (GRS)*

The GRS is a four-item scale that assesses general religiosity (Rowatt, LaBouff, Johnson, Froese, & Tsang, 2009). The items include: (1) *How religious do you consider yourself to be?* (not at all religious, not too religious, somewhat religious, very religious); (2) *How often do you attend religious services?* (never, less than once a year, once or twice a year, several times a year, once a month, 2–3 times a month, about weekly, weekly, several times a week); (3) *How often do you read the Bible, Koran, Torah or other sacred book?* (never, less than once a year, once or twice a year, several times a year, once a month, 2–3 times a month, about weekly, weekly, several times a week); and (4) *About how often do you pray or meditate outside of religious services?* (never, only on certain occasions, once a week or less, a few times a week, once a day, several times a day). Given the different scales used for each item, the item responses are standardized and then summed to obtain a total score that reflects general religiosity. Responses on this measure have been shown to be internally consistent with Cronbach's alphas greater than .81 (Rowatt et al., 2009; Fergus & Rowatt, 2014).

### *Brief Religious Coping Inventory (Brief RCOPE)*

The Brief Religious Coping Inventory (Pargament et al., 1998) is a 14-item measure of religious coping methods with major life stressors. The scale is divided into positive and negative dimensions. Positive religious coping reflects a secure relationship with the transcendent, a sense of spiritual connectedness with others, and a benevolent worldview. Negative religious coping methods are indicative of spiritual tension and struggles within oneself, with others, and with the transcendent. The items are adapted from the larger-scale RCOPE and include items from each of the major functions of

religion based on Pargament's religious coping theory (Pargament et al., 2000).

Participants are instructed to think about any recent negative event and indicate the extent to which they did what each item says on a 4-point Likert scale ranging from 0 (*Not at all*) to 3 (*A great deal*). Mean scores are calculated from the items to obtain a mean level of the subject's use of positive and negative religious coping behaviors that the individual reported to have used in response to a recent stressor.

Across diverse samples including students, medical outpatients, and community samples, the Brief RCOPE was found to have good internal consistency, with median Cronbach's alphas of .92 for the positive subscale and .81 for the negative subscale (Pargament et al., 2011). The subscales also show good concurrent validity, with the positive subscale being consistently related to measures of spiritual well-being, coping behaviors, and religiousness, and the negative subscale is consistently related to indicators of poor functioning, including avoidant coping, anger, mood disorder, symptoms, and psychological distress (Pargament et al., 2011).

#### *Depression Anxiety Stress Scale (DASS-21)*

The Depression Anxiety Stress Scales (Lovibond & Lovibond, 1995) are a 42-item measure of symptoms of depression, anxiety, and stress experienced during the past week. The DASS-21 is a shortened version of the scale, consisting of three 7-item self-report scales taken from the DASS-42. Scores may be doubled for comparison with the full version. The scale is not intended to be diagnostic, but rather it was developed to maximize discrimination between the core symptoms of anxiety and depression. The DASS-21 is based on a dimensional rather than categorical conceptualization of psychopathology, and the scale assumes that depression, anxiety, and stress are

experienced to different degrees by clinical and non-pathological populations alike. Symptoms that frequently overlap, such as sleep, appetite, and sexual issues are not assessed by this measure, nor is suicidality included on the scale.

Items on the depression scale represent low mood, low self-esteem, and poor outlook for the future (e.g., *I felt I wasn't worth much as a person*). Items on the anxiety scale represent affective anxiety symptoms and physiological arousal (e.g., *I felt I was close to panic*), including being panicky, trembling, experiencing increased heart and respiration rate, and expressing worry about performance and loss of control. Items on the stress scale represent physiological and behavioral signs of experiencing stress (e.g., *I found it hard to wind down*), including hyperarousal, tension, irritability, nervousness, and restlessness. Responses are based upon a four-point Likert, ranging from 0 (*Did not apply to me at all*) to 3 (*Applied to me very much, or most of the time*), and each subscale score ranges from a possible 0 to 21 points with higher values representing greater endorsement of symptoms over the past week. While scores are not diagnostic, the DASS-21 manual (Lovibond & Lovibond, 1995) suggests cutoff values for each dimension corresponding to severity ratings (normal, mild, moderate, severe, extremely severe) for the full range of scores in the population. Therefore, a *mild* rating would correspond to a score that is likely above the population mean, not necessarily a mild level of the disorder.

This three factor structure has been replicated consistently (Lovibond & Lovibond, 1995; Crawford & Henry, 2003; Brown, Chorpita, Korotitsch, & Barlow, 1997; Antony, Bieling, Cox, Enns, & Swinson, 1998). In clinical and community samples, the DASS-21 demonstrated adequate internal consistency for the total score and

three scales (all  $\alpha > .87$ ), and it showed a cleaner factor structure, smaller interfactor correlations, and score equivalence with the full version (Antony et al., 1998).

Community-based studies have established norms for the DASS-21 and supported these reliability estimates (Henry & Crawford, 2005; Crawford, Cayley, Lovibond, Wilson, & Hartley, 2011). Although the measure is not a diagnostic tool, it has been shown to be useful as a routine clinical outcome measure (Ng et al., 2007). In terms of validity, the measure evidenced strong correlations with measures of similar constructs (Osman et al., 2012), including the Perceived Stress Scale ( $r = .73$ ), Beck Depression Inventory-II ( $r = .80$ ), the Beck Anxiety Inventory ( $r = .69$ ), and several subscales of the Mood and Anxiety Symptom Questionnaire ( $r$ 's from .50 to .73).

#### *Penn State Worry Questionnaire–3-Item Version (PSWQ-3)*

The PSWQ-3 is a 3-item adaptation of the Penn State Worry Questionnaire, which is considered to be a gold-standard instrument for worry (Berle, Starcevic, Moses, Hannan, Milicevic, & Sammut, 2011). The items were chosen from the 16-item version to capture the core of pathological worry as defined by DSM-IV generalized anxiety disorder criteria. The items assess intensity and frequency of worry and are rated on a 7-point Likert scale ranging from 1 (*never*) to 7 (*almost always*), and total scores on the PSWQ-3 range from 3 to 21. While the DASS-21 Anxiety subscale largely assesses affective and physiological symptoms of anxiety, this measure assesses the cognitive component of anxiety.

The measure demonstrated high internal consistency with Cronbach's alpha of .85 (Berle et al., 2011), and scores were also highly correlated with the full 16-item version with a Spearman's rho correlation of .89 (Kertz, Lee, & Bjorgvinsson, 2014). In terms of

convergent validity, scores on the PSWQ-3 were found to be correlated with the Anxiety ( $r = .44$ ), Depression ( $r = .57$ ), and Obsessive-compulsive ( $r = .48$ ) subscales of the Symptom Checklist 90-R (Berle et al., 2011), the Anxiety ( $r = .49$ ), Depression ( $r = .55$ ), and Stress ( $r = .43$ ) subscales of the DASS-21 (Kertz et al., 2014), and total scores on the Generalized Anxiety Disorder-7 Scale ( $r = .56$ ; Kertz et al., 2014).

### *Brief Symptom Inventory (BSI-53)*

The BSI is a 53-item self-report inventory that assesses nine clinically relevant symptom patterns (Derogatis & Melisaratos, 1983). The instrument is a brief version of the Symptom Checklist 90-R (SCL-90-R), and the two measures have been found to produce highly correlated results ( $r$ 's  $> .92$ ; Derogatis, 1983). The measure has been used in a wide variety of settings including psychiatric, medical, and community samples. The measure has been used clinically to screen for mental health issues and to track symptom changes during treatment. Items are rated on a 5-point Likert scale ranging from 0 (*not at all*) to 4 (*extremely*), and subjects were instructed to indicate how much they have experienced each symptom item in the past seven days including the current date.

The measure is composed of nine subscales, including Somatization (psychological distress arising from perception of bodily dysfunction), Obsessive-Compulsive (thoughts and actions that are experienced as unremitting/irresistible yet unwanted), Interpersonal Sensitivity (feelings of personal inadequacy and inferiority), Depression (symptoms of dysphoric affect and mood, loss of energy, and lack of interest in life activities), Anxiety (restlessness, nervousness, tension, and panic), Hostility (thoughts, feelings, or actions that relate to anger), Phobic Anxiety (persistent irrational

fear of specific places, objects, or situations), Paranoid Ideation (delusions or disordered thinking which can include thought projection, hostility, and suspiciousness), and Psychoticism (characteristics ranging from social alienation and schizoid lifestyle to floridly psychotic symptoms of schizophrenia). The measure was developed using normative samples that include adult psychiatric inpatients, adult psychiatric outpatients, adult nonpatients, and adolescent nonpatients, and the present study compared results to adult nonpatient norms.

The current study will primarily utilize the scale's Global Severity Index (GSI), which is a measure of the subject's overall level of symptomatology and is the "single best indicator of current distress levels" (Derogatis, 1983, p. 597) from the measure. Furthermore, previous studies have found both a weak factor structure (Kellett, Beail, Newman, & Hawes, 2003; Urban et al., 2014) and strong correlations between the subscales (Boulet & Boss, 1991; Hayes, 1997; Wieland, Wardenaar, Fontein, & Zitman, 2012). The GSI is calculated by taking the mean of all subscale scores summed together, and higher values on the GSI indicate greater current psychological distress and experience of symptoms. While the GSI is used as a single indicator of distress, the test developers note that a clinically significant score (elevated to the point of clinical concern) is one in which the *t*-score of the GSI is greater than or equal to 63 (Derogatis & Melisaratos, 1983). While the current study utilizes a community sample, *t*-scores will be obtained using the measure's adult nonpatient norms.

Using the GSI, the measure has been shown to have strong internal consistency ( $\alpha = .97$ ) and high test-retest reliability ( $r = .90$ ; Derogatis, 1993). The GSI has demonstrated convergent validity, with small to large correlations with all major clinical

scales on the Minnesota Multiphasic Personality Inventory ( $r$ 's ranging from .26 to .58; Boulet & Boss, 1991). Morlan and Tan (1998) found that the GSI was highly correlated with total scores on the Brief Psychiatric Rating Scale ( $r = .55$ ).

#### *Perceived Stress Scale (PSS)*

The PSS is a 10-item self-report instrument that is a measure of the degree to which situations in one's life are appraised as stressful (Cohen, Kamarck, & Mermelstein, 1983). The measure is based on coping theory and highlights the importance of appraisals rather than measuring stress in terms of the presence or intensity of stressful life events. Subjects are instructed to indicate how often they felt or thought a certain way within the last month, and items are rated on a five-point Likert, ranging from 0 (never) to 4 (very often) with a single total score obtained. The questions are general in nature and are related to how unpredictable, uncontrollable, and overloaded respondents find their lives. Additionally, as a measure of global perceived stress, it measures not only current personal stress, but also perception of stress deriving from events in the lives of friends and relatives and future expectations. Scores range from 0 to 40, and greater values suggest greater perception of stress over the past month.

The measure has demonstrated high internal consistency across diverse samples, including college students, psychiatric patients, and community samples ( $\alpha$ 's = .74-.91; Cohen et al., 1983; Lee, 2012). The PSS has also shown good test-retest reliability at intervals ranging from two days ( $r = .85$ ; Cohen et al., 1983) to two weeks ( $r = .77$ ; Lee, 2012). However, Cohen & Williamson (1988) note that due to stress appraisals being influenced by daily hassles, major events, and changes in coping resources, the measure's predictive validity is expected to decrease rapidly after four weeks. Additionally, scores



on the PSS were shown to be positively correlated with the number of life events experienced in the past year ( $r = .32$ ), health service utilization ( $r = .22$ ), and self-reported physical illness ( $r = .16$ ; Cohen & Williamson, 1988).

#### *Multidimensional Scale of Perceived Social Support (MSPSS)*

The MSPSS is a 12-item self-report instrument that assesses perceived social support from family, friends, and significant others (Zimet, Dahlem, Zimet, & Farley, 1988). Questions are rated on a seven-point Likert, with responses ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). The items address perceived adequacy of social support with such items as, *I can talk about my problems with my friends* and *I get the emotional help and support I need from my family*, and mean scores can be obtained from each of three factors relating to support source (family, friends, significant others). The current study utilized total scores from all items taken together. Possible scores range from 12 to 84, with higher values suggesting a greater level of perceived social support in one's life.

The measure has demonstrated high internal reliability and stability for the subscales and total score among samples of college students (all subscales and total  $\alpha$ 's  $> .85$ ; Zimet et al., 1988; Dahlem, Zimet, & Walker, 1991), samples of adolescents, pregnant women, and medical residents (all  $\alpha > .81$ ; Zimet, Powell, Farley, Werkman, & Berkoff, 1990), and in psychiatric outpatient samples (all  $\alpha > .88$ ; Cecil, Stanley, Carrion, & Swann, 1995). Alternatively, a review of MSPSS psychometric data strongly supported using the measure as a unidimensional instrument of general perceived social support (Osman, Lamis, Freedenthal, Gutierrez, & McNaughton-Cassil, 2014).

## CHAPTER THREE

### Results

#### *Descriptive Statistics*

Table C.2 shows descriptive statistics for all measures. For religious variables and mental health measures, sample responses comprised the full range of possible scores, except for DASS-Anxiety and Global Severity Index scores, on which participants' ranged from the minimum possible values to just under the measure's maximum. With respect to distribution patterns, outliers are evident on the upper extreme for Global Severity Index scores and each DASS-21 subscale, while the sample means on these symptom measures are generally in *normal* ranges. Such dispersion patterns are to be expected given the non-pathological nature of the sample and diverse age range, as opposed to having a more targeted clinical sample that could give more normally distributed symptom levels. Values on God attachment, God image, and worry scales appear normally distributed.

In terms of God image, the sample was grouped by their God image style on the two dimensions, placing the participants into categories based on a mean-split analysis for each dimension, a method recommended by the scale developers (Froese & Bader, 2010). Notably, the sample contained unequal percentages of individuals within each God image category,  $\chi^2(3) = 62.06, p < .01$ . Specifically, 18.7% endorsed perceiving God as authoritative (high engagement, high judgment), while 48.3% endorsed a benevolent image (high engagement, low judgment); 13.9% endorsed a critical image (low engagement, high judgment), and 19.1% endorsed a distant God image (low

engagement, low judgment). The sample category prevalence also significantly differed from that found in the scale's normative sample (Wave II of the BRS; Froese & Bader, 2010),  $\chi^2(3) = 36.82, p < .001$ .

Applying this analysis method to attachment to God, participants were categorized by attachment style using the two dimensions. The sample contained equal percentages of individuals within each attachment to God category,  $\chi^2(3) = 3.88, p = .28$ . Specifically, 27.3% endorsed a secure attachment to God (low anxiety, low avoidance), while 29.2% endorsed a preoccupied attachment (high anxiety, low avoidance); 20.6% endorsed a dismissing attachment (low anxiety, high avoidance), and 23.0% endorsed a fearful attachment to God (high anxiety, high avoidance).

On the GRS, a general religiosity score was obtained by summing the participants' standardized scores on each question. However, in terms of specific items, the median response for self-rated religiousness/spirituality was *somewhat*, and the median frequency of attendance at a church/place of worship was *less than once a year*. The median frequency of reading a sacred text was *once or twice a year*, and the median frequency of prayer/meditation outside of a religious service was *a few times a week*.

### *Diagnostic Patterns*

All variables were also analyzed to determine if individuals' responses were significantly different based on their endorsement of a current mental health diagnosis. In terms of religious variables, those with a diagnosis had a less engaged God image,  $t(207) = -2.08, p = .04$ , a more anxious attachment to God,  $t(207) = 2.17, p = .03$ , and more negative religious coping,  $t(207) = 2.38, p = .02$ , than those without a diagnosis.

The sample did not differ based on diagnosis for judgmental God image, avoidant attachment to God, positive religious coping, or general religiosity.

Outcome variable means were compared based on the presence of a current mental health diagnosis. As a group, those with a diagnosis had significantly higher mean scores than those without a diagnosis on all psychological outcomes and perceived stress, including DASS-Depression,  $t(207) = 6.48, p < .01$ , DASS-Anxiety,  $t(207) = 6.08, p < .001$ , DASS-Stress,  $t(207) = 7.02, p < .001$ , PSWQ-3,  $t(207) = 5.52, p < .001$ , GSI,  $t(207) = 7.03, p < .001$ , and PSS,  $t(207) = 3.94, p < .001$ . The sample's mean MSPSS scores did not differ based upon diagnosis.

#### *Correlation Analysis: God Relationship and Religiosity*

The first set of hypotheses predicted the correlation between aspects of the relationship with God and the participants' general religiosity composite score. Specifically, it was hypothesized that an engaged God image and a judgmental God image would be positively correlated with GRS scores, while both anxious and avoidant attachment to God would be negatively correlated with GRS scores. For the sample, there was a strong positive correlation between engaged image of God and general religiosity,  $r(207) = .69, p < .01$ , supporting the hypothesis. The hypothesis was also supported for avoidant attachment to God, as it was strongly negatively correlated to general religiosity,  $r(207) = -.72, p < .001$ . The hypothesis was not supported for the correlation between judgmental God image and general religiosity, as there was no observed association between the two constructs,  $r(207) = -.07, p = .33$ . Additionally, there was no association between anxious attachment to God and general religiosity, and the hypothesis was not supported,  $r(207) = .07, p = .32$ .

As an exploratory analysis, the relationships between the other religious constructs were analyzed (Table C.3). In terms of image of God, the engaged and judgmental dimensions exhibited a small negative correlation with each other. Alternatively, the two dimensions of attachment to God (anxious and avoidant) were independent of each other. Between the God relationship factors, anxious God attachment was unrelated to both dimensions of God image, whereas avoidant attachment to God exhibited a very strong negative correlation with engaged God image and a small positive correlation with judgmental God image.

Additionally, in terms of religious coping behaviors, positive religious coping exhibited a strong positive correlation to engaged God image and a strong negative correlation to avoidant attachment to God, while it was unrelated to judgmental God image and anxious God attachment. Negative religious coping exhibited different associations with these constructs, as it showed weak positive correlations to both judgmental God image and anxious attachment to God, while being unrelated to engaged God image and avoidant God attachment.

#### *Correlation Analysis: God Relationship and Mental Health*

The second set of hypotheses predicted the correlation between the God image and attachment to God constructs and mental health outcomes, and correlation analyses were used to test these relationships. The mental health outcomes in the current study include DASS-21 subscale scores for depression, anxiety (physiological and affective symptoms), and stress (physiological experience of stress), the total score on the PSWQ (measure of cognitive worry), and the global severity index on the BSI-53 (global psychological distress). It was hypothesized that the judgmental dimension of God image

would be positively related to all mental health outcomes. The hypothesis was only supported for DASS-Anxiety subscale scores, which exhibited a small positive correlation to judgmental image of God, and no significant correlations were observed with respect to the scores for depression, stress, worry, and global distress (Table C.4). Therefore, increases in one's view of God as judgmental was only related to increases in physiological and affective anxiety.

Next, it was hypothesized that the engagement dimension of God image would be negatively related to all mental health outcomes. The hypothesis was supported for all outcomes except PSWQ-3 scores, which exhibited no association with engaged God image. All other outcomes exhibited small negative correlations with engaged God image. Therefore, as viewing God as engaged in one's life and the world increased, levels of depression, anxiety, stress, and global distress decreased.

In terms of attachment to God, it was hypothesized that avoidant attachment scores would be positively correlated to all mental health outcomes. The hypothesis was partially supported. Avoidant attachment to God exhibited weak positive relationships to depression, stress, and global distress scores, and the construct was not significantly related to anxiety or worry. Increases in subjects' endorsement of attachment avoidance with God were associated with increases in depression, stress, and global distress scores.

Lastly, it was predicted that anxious attachment to God would be positively correlated to all mental health outcome scores. The hypothesis was supported for all outcome variables. Significant small correlations were observed, and increases in attachment anxiety were related to increases in depression, anxiety, stress, worry, and global distress.

### *Regression Analysis: God Relationship*

Two sets of multiple linear regression analyses were conducted to investigate the unique contribution of the God image and attachment to God constructs in predicting mental health outcomes. The first preliminary regression analyses were not related to study hypotheses but examined how engaged God image, judgmental God image, anxious attachment to God, and avoidant attachment to God predict outcomes with respect to each other. The multiple regression model with all four predictors significantly predicted individual differences in each of the outcomes: DASS-Depression (Table C.5), DASS-Anxiety (Table C.6), DASS-Stress (Table C.7), PSWQ-3 (Table C.8), and BSI-53 Global Severity Index (Table C.9). Therefore with respect to depression, anxiety, stress, worry, and global distress, the God relationship facets together predicted 6-11% of the variance in the outcomes.

In the full models, a similar trend was observed for most of the outcome measures (Tables C.5 – C.9). Namely, anxious attachment to God emerged as the only significant predictor that was uniquely related to DASS-Depression, DASS-Anxiety, DASS-Stress, and BSI-53 Global Severity Index, as increases in anxious attachment to God predicted increases in each of these outcomes after controlling for the other God-related variables in the model. Alternatively, for the PSWQ-3, both anxious attachment to God and avoidant attachment to God had significant positive regression weights, indicating that increases in these variables led to increases in level of worry after controlling for the other factors in the model.

Tolerance statistics highlight that collinearity was observed for engaged image of God and avoidant attachment to God in the models, (collinearity suspected if tolerance <

.30,  $VIF > 4$ ), and the two variables were highly inversely correlated with each other ( $r = -.81, p < .001$ ). Therefore, when considering God relationship facets with respect to each other, anxious attachment to God appeared to uniquely predict variance in outcomes, and judgmental image of God was not a significant predictor. However, conclusions regarding engaged God image and avoidant God attachment in the model must be interpreted with caution.

### *Regression Analysis: God Relationship and Added Controls*

To address the hypotheses in the third aim of the study, multiple regression analyses developed models for predicting each of the mental health outcomes with image of and attachment to God dimensions, gender, age, social support (MSPSS total score), and general religiosity scores (GRS composite) as predictors. Zero-order correlations for the association of these demographic and psychosocial control variables with outcomes and God relationship variables are found in Table C.10. As explained in the previous set of regression analyses, collinearity statistics suggest that the predictive value of engaged God image and avoidant God attachment in the models cannot be reliably interpreted.

The multiple regression model predicting DASS-Depression scores with all predictors taken together was significant, with the full model accounting for 28% of the variance in depression scores (Table C.11). In terms of God image and attachment factors, the hypothesis that each variable would significantly predict depression after controlling for demographics, social support, and religiosity was partially supported. Only anxious attachment to God had a significant positive regression weight, indicating that individuals with more anxious attachment to God were predicted to have higher depression scores after controlling for all other variables in the model. In terms of



control variables, age and social support emerged as significant predictors of DASS-Depression subscale scores, as lower age and less perceived social support were each predictive of higher depression values when controlling for all other variables. Furthermore, although general religiosity was uncorrelated with depression ( $r = -.03$ ,  $p = .66$ ), GRS scores had a significant positive regression weight in the model after controlling for all other variables, as greater religiosity predicted higher depression.

The multiple regression model predicting DASS-Anxiety scores with all predictor variables entered was significant, with the full model accounting for 20% of the variance in anxiety scores (Table C.12). In terms of God image and attachment factors, the hypothesis that each variable would significantly predict anxiety after controlling for demographic, social support, and religiosity was partially supported. Only anxious attachment to God emerged as a significant predictor after controlling for all other variables in the model, as higher attachment anxiety was predictive of higher endorsement of affective/physiological anxiety. Of the control variables, age and social support had significant negative regression weights, indicating that lower age and less perceived social support were predictive of greater anxiety when controlling for each of the other variables.

The multiple regression model predicting DASS-Stress scores with God relationship and control variables entered was significant, with the full model accounting for 25% of the variance in stress scores (Table C.13). In terms of God image and attachment, the hypothesis that each variable would significantly predict stress after controlling for demographic, social support, and religiosity was not supported. When controlling for each of the other variables, none of the God image or attachment to God

factors emerged as significant predictors. In terms of control variables, age and perceived social support were significant predictors. Thus, when controlling for all other variables, lower age and less perceived social support were each predictive of greater endorsed physiological and behavioral experience of stress. Similar to the depression regression model, GRS scores emerged as a significant predictor of stress despite the bivariate correlation being non-significant ( $r = -.01, p = .86$ ). Thus, higher general religiosity was predictive of increased stress when controlling for all other variables.

In terms of predicting PSWQ-3 scores, the multiple regression model with all variables entered was significant and predicted 15% of the variance in worry scores (Table C.14). The hypothesis that each God image and attachment to God dimension would significantly predict worry was partially supported. In terms of the God relationship facets, both avoidant attachment to God and anxious attachment to God emerged as significant predictors when controlling for each of the other variables. Subjects with higher scores on these two subscales were expected to have higher levels of cognitive anxiety and worry. However, collinearity statistics suggest that conclusions cannot be accurately drawn regarding avoidant attachment to God in the model (tolerance = .27, VIF = 3.66). Regarding control variables, age and social support were significant predictors of worry in the model. When controlling for all other factors, lower age and less perceived social support were predictive of increased worry. Furthermore, although gender was uncorrelated to PSWQ-3 scores ( $r = .09, p = .18$ ), gender emerged as a significant predictor in the model, with females having generally higher worry scores after controlling for all other variables.

Lastly, the multiple regression model predicting BSI-53 Global Severity Index scores with all God relationship variables and controls entered together was significant, as the full model accounted for 15% of the global distress scores (Table C.15). The hypothesis that each God image and attachment dimension would significantly predict global distress severity was partially supported. Of the God-related variables, only anxious attachment scores emerged as significant predictors when controlling for all other factors. Subjects with higher attachment anxiety and attachment avoidance were expected to have greater global distress. However, avoidant attachment to God likely cannot be considered a reliable predictor due to collinearity. In terms of the control variables, age and social support emerged as significant predictors of distress when controlling for all other factors in the model, as lower age and less overall perceived social support were predictive of higher GSI scores. Additionally, as with the PSWQ-3 regression model, gender significantly predicted global distress despite being uncorrelated to GSI ( $r = -.07, p = .30$ ), with females having higher global distress scores after controlling for all other variables.

## CHAPTER FOUR

### Discussion

The role of religion and spirituality in mental health and coping has been well established, and more recently, the field has recognized a need to extend beyond religious affiliation and coping behaviors and investigate the cognitive frameworks that guide how and why individuals engage with their belief systems. Given that most religious coping strategies involve some type of interaction with a God-figure, how one relates with and views God would influence the choice and effectiveness of such strategies. Coping theory emphasizes coping schemas that affect the appraisal of a situation, the activation of certain resources, the implementation of coping methods, and subsequent emotions and mental health. Schemas include perceptions of relationships and available resources, and perceptions of God are central in this respect. Focusing on how God is represented in the mind benefits clinicians treating clients from diverse backgrounds who may cope in different ways. The present study investigates how individuals relate to God, via an attachment relationship and a cognitive conceptualization of God's character, and how these factors predict mental health outcomes.

#### *God Cognitions and Religious Behaviors*

First, the study investigated the association between cognitive/affective and behavioral aspects of religion and spirituality. Image of and perceived attachment to God were explored with respect to a composite of self-reported religiosity/spirituality and the frequency of religious/spiritual behaviors. An engaged image of God was strongly

positively related to religiosity, supporting the hypothesis. Such a finding follows logically that individuals who perceive God as engaged in their lives and the world are likely to be engaged with God themselves through prayer, attending services, and reading religious texts. Viewing God's judgment, on the other hand, did not relate as predicted to religiosity. Thus, how individuals perceived God's actions as forgiving or wrathful was unrelated to how they self-identified as religious/spiritual and the frequency of prayer, attendance, or reading texts. These findings are consistent with Froese and Bader's (2007) work using the same God image measure, revealing that an engaged image of God was significantly related to more church attendance and other religious behaviors, while a judgmental God image was unrelated (Froese & Bader, 2007). The researchers propose that the sample may not have been motivated by threats of judgment, which may apply to the present sample as well. Findings for the judgmental image of God were surprising to the authors as well, who noted that "if God is judgmental and critical of humans, we might expect increased efforts to please him" (Froese & Bader, 2007, p. 475). Despite previous research, the present findings for judgmental God image seem surprising when interpreting the positive end of the dimension, namely that those who viewed a nonjudgmental, loving God were no more likely to attend church, read texts, or pray/meditate than those with opposite views. As such, it seems that individuals' tendency to engage with their belief system and tradition was more dependent on how much the object of their belief system (God) engages with them, rather than God's attitude within those interactions. While it follows that certain denominations and traditions typically endorse a more wrathful God with legalistic demands for proper behavior, Froese and Bader (2007) found their results after controlling for denomination,

but how individuals interpreted texts about God (Biblical literalism) was a significant factor in shaping a judgmental view of God.

Attachment style to God demonstrated mixed findings with respect to religiosity. A more avoidant attachment to God was strongly associated with less endorsed religiosity, supporting the study's prediction. This follows that having the perception of an unavailable, impersonal, disinterested God may lead individuals not to see a reason to participate in a religion that is not meeting their needs. Alternatively, an anxious attachment style, viewing God as inconsistently responsive to one's needs, was not associated with religiosity and religious behaviors, not supporting the study's hypothesis. This may be explained by the fact that those who see God as unreliable may be inconsistent themselves in how they participate in their religious/spiritual life; some may pray more or attend church more to restore proximity to the attachment figure, whereas others may disengage with their faith. On the other hand, Fergus and Rowatt (2014) state that attachment anxiety is "associated with a hyperactivation of the attachment system when faced with perceived threats...leading to insistent attempts to restore proximity to the attachment figure" (p. 235). Thus it would seem as though more religious behaviors would occur to restore the relationship with God; however, the current sample was largely nonclinical, and different results may have been found if the sample were answering items with regards to perceiving a threat. The present study's results are consistent with those found by Fergus and Rowatt (2014) using the same measures, namely that the anxiety dimension was unrelated to general religiosity but more avoidant attachment related to less religiosity. Additionally, the present findings are similar to a study that used different measures but the same constructs (Zahl & Gibson, 2012).

Specifically, using the Attachment to God Inventory and a religious commitment measure that included questions related to religiosity and frequency of prayer and church attendance, only avoidant attachment to God related to religiosity and in a negative direction. Thus, the study's findings suggest that in terms of attachment style to God, attachment avoidance is a more significant factor with regard to religious behaviors.

Further analyses were conducted to explore associations among one's relationship with God. In terms of God image, the sample exhibited different patterns than scale developers observed (Froese & Bader, 2007). In the current sample, those who believed God to be more engaged in the world also tended to perceive God as *less* critical of the world, which indicates a primarily *benevolent* God image type. Alternatively, Froese & Bader (2007) found the two dimensions to relate positively and to a stronger degree, comprising an *authoritative* God image type. The researchers also found that women were more likely to perceive God as both more engaged and less judgmental (Bader & Froese, 2007); however, in the current study, the *benevolent* God image pattern was endorsed by high percentages of men and women alike (43% and 52% respectively).

With respect to attachment to God, the anxious and avoidant dimensions were unrelated in the current study, which differs from what was found by the scale developers (Rowatt & Kirkpatrick, 2002). Previous studies using this measure found the two attachment styles to relate positively from a small to moderately strong degree in diverse samples (Rowatt & Kirkpatrick, 2002; Fergus & Rowatt, 2014; Bradshaw et al., 2010). Similarly, studies using a different attachment to God measure (Attachment to God Inventory, Beck & McDonald, 2004) found that anxious and avoidant dimensions were positively related, ranging from weak to moderately strong degrees (Beck & McDonald,

2004; Knabb & Pelletier, 2014). One such study using Beck and McDonald's (2004) measure with Christian young adults found the attachment to God dimensions to be unrelated as in the present study (Zahl & Gibson, 2012). Therefore, the way in which the two dimensions function together in the current sample appears different than most other studies using these constructs.

Furthermore, God image and attachment have been proposed to be different aspects of one's working model of God. In terms of intercorrelations, the present study found that the degree to which individuals perceived God's inconsistency (anxiety) was unrelated to how they viewed God as engaged in the world or judgmental of it. On the other hand, a more avoidant attachment style to God was related to perceiving a less engaged, more judgmental image of God. One interesting finding that appeared to affect later analyses was the strength of relationship between attachment avoidance and a disengaged God image; while this pattern of attachment style and cognitive perception logically makes sense, such a strong association calls into question whether the two dimensions are possibly measuring the same construct. As explained, this presented collinearity issues in regression analyses. Previous studies have not used these two measures together; however, prior investigations using a God attachment measure and adjectives to describe God image (loving, remote) found weak to moderate relationships among all attachment and image dimensions (Bradshaw et al., 2008; Bradshaw et al., 2010), but none were to the magnitude observed in the present study for engaged image and avoidant attachment style. Both of those studies utilized primarily Christian samples, so it is possible that the present patterns may be unique to the sample.



Lastly, although the present study extends beyond the utilization of religious coping behaviors to investigate coping-related cognitions, the relationships between cognitive/attachment-based coping schema factors and the use of religious coping behaviors were explored. In the current sample, God image and attachment styles related differentially to positive and negative types of religious coping. Namely, a more engaged view of God and a less avoidant attachment style were related to using more positive coping methods. Such results make sense as these coping methods involve collaborating and connecting with God and recognizing God's control. Neither perceiving God's judgment nor an anxious attachment style was related to the use of positive coping strategies, which follows with Froese and Bader's (2007) argument that individuals are less motivated by threats of judgment than by the opportunity for spiritual intimacy. Interestingly, opposite patterns were observed for negative religious coping behaviors, which were related to more perceived judgment and a more anxious attachment style. These negative coping behaviors relate to feeling punished by God and questioning or wondering about God's motives, which correspond to the judgmental image and the inconsistency perceived in an anxiously attached relationship. Such coping strategies represent more passive rather than active coping, which may explain the relationship with perceived judgment and attachment anxiety. Additionally, higher self-rated religiosity and frequency of religious behaviors were related to more positive but not negative coping strategies. This fits with the notion that positive religious coping *includes* participating in one's tradition and "is an expression of one's sense of spirituality" (Pargament et al., 1998, p. 712). On the other hand, negative religious coping use, which is typically indicative of spiritual struggle, appears more complex at the individual level

and was unrelated to the degree which one was religiously involved. However, it should be noted that the current sample reported fairly low levels of both positive and negative religious coping behaviors, so more conclusive results would likely be drawn from a sample with more variation.

### *Relationship with God and Mental Health*

A second goal of the study was to investigate the associations between mental health outcomes and God image and attachment. The outcomes chosen are especially relevant because stress and mood disorders are often conceptualized to involve maladaptive cognitions and are commonly treated with cognitive-behavioral approaches. Thus, as one's coping schema of God affects factors like attributions, expectancies, appraisals, and self-efficacy, all facets of God image and attachment to God were predicted to relate significantly to mental health outcomes. The predictions for God image were only partially supported, and the two dimensions exhibited different patterns of association. First, perceiving God as more judgmental and showing more anger was related to increases in self-reported anxiety (affective and physiological symptoms); however, this view of God did not relate to depression, worry, stress, or overall distress. Interpreting the other end of this dimension follows that viewing God as loving, compassionate, and forgiving was unrelated to symptoms except for anxiety. Next, viewing God as more engaged in the world and one's life was associated with fewer reported symptoms of depression, anxiety, and stress, and a lower overall severity of global symptoms. Therefore, those who perceived God as more distant and less interactive in the world were likely to report more of such symptoms. Bader and Froese (2007) argue that God's engagement and judgment form the basis of and matter most to

religious/spiritual attitudes and behaviors. While the significant associations for both dimensions were small, God's perceived level of involvement with the world and oneself was more closely related to mental health outcomes than the extent to which God behaves with judgment and anger.

The patterns observed with respect to the sample's image of God offer a new perspective to previous research. While the bulk of studies have focused on *images* of God, or positive and negative adjectives, the present study utilized a dimensional approach of how an individual perceives God's level of interaction and the extent to which God's actions toward people and the world are forgiving/merciful or judging/wrathful. Schreiber (2011) applied this scale to a sample of female breast cancer patients who were largely Protestant and found that the engagement dimension was more closely related to mental health outcomes, consistent with the present study. However, Schreiber's (2011) study differed in that high engagement was related only to DASS-21 stress levels, and not depression or anxiety, and high perceived judgment from God was unrelated to all outcomes. Differences could be due to the makeup of each sample in terms of religious background. Additionally, while other studies have conceptualized God imagery differently, these results are somewhat consistent with prior findings. Namely, a *remote* image of God, which may relate to low engagement, was related to increased depression and anxiety (Bradshaw et al., 2008) and increased psychological distress (Bradshaw et al., 2010) in Christian samples. Additionally, a *loving* view of God, which corresponds to low judgment/wrath, was found to be related to less depression and anxiety (Bradshaw et al., 2008) but was unrelated to psychological distress (Bradshaw et al., 2010). The current study was similar to Flannelly and

colleagues (2010), who used a different God image scale. The researchers found that viewing God as *approving/forgiving* (not judging) was not related to depression or global distress. Those who viewed God as *close/loving*, which possibly includes facets of both engagement and non-judgment, were likely to endorse lower depression, anxiety, and global distress (Flannelly et al., 2010). Thus, while ways of measuring God image in previous research have made comparisons difficult, it appears as though views of God's engagement with the world and one's life are generally more closely related to mood symptoms and distress than how one sees God's character as forgiving or judging.

The present study's results regarding God cognitions speak to the complexity of mental health while also raising questions. As one's schema includes a God that is interactive with the world and the individual, it makes sense that individuals would utilize spiritual beliefs when appraising stressful situations and spiritual resources to deal with problems. Flannelly and colleagues (2010) posit that "beliefs about God may have an ameliorating influence on psychiatric symptomology to the degree that they provide a sense of security" (p. 256), and an engaged God would likely provide more security. The extent to which an individual perceives God as judging/forgiving appears less straightforward within the coping schema. In the current study, it was predicted that a judging view of God would relate to worse mental health outcomes as previous studies have generally found negative images of God to exhibit that pattern (see review in Chapter 1). If the object of one's belief system is perceived to be more wrathful, critical, and punishing, it may depend on how the individual internalizes such characteristics and their intention. For example, one may view God's judgment as essential for correcting human error for the future benefit of the individual, whereas others may see it as

discouraging and then disengage with their religious resources. Additionally, with respect to Christianity, there is likely more interpretation and variation between denominations regarding how forgiving/judging God is as opposed to how involved God is within the world (Froese & Bader, 2007).

In the present study, individuals' attachment style with God related differentially to mental health outcomes. Predictions were entirely supported with respect to an anxious attachment style, as more attachment anxiety was related to worse degrees of each symptom domain. Thus, the perception of God as inconsistently responsive and being warm at times but cold and distant at other times was related to higher self-reported symptoms of depression, anxiety, worry, stress, and levels of global symptomatology. The avoidant attachment dimension offered less clear results, and predictions were only partially supported. Specifically, higher degrees of attachment avoidance were related to higher levels of reported depression, stress, and global distress. Thus, the two indicators of anxiety, one being primarily affective/physiological and the other primarily cognitive, were unrelated to viewing God as unavailable and disinterested. Overall, anxious attachment style appears to be distinct with respect to clinical outcomes in this study. While it showed no associations to God image or religiosity/religious behaviors, it was a significant factor with respect to worse mental health in all measures.

Though research is limited regarding styles of attachment to God and mental health outcomes, the present study yielded results that are generally consistent with prior studies. First, Bradshaw and colleagues (2010), using the same Attachment to God Scale, found that higher attachment avoidance and anxiety were related to greater endorsed psychological distress, with a stronger relationship for anxious attachment style.

Additionally, using Beck and McDonald's (2004) Attachment to God Inventory, Knabb and Pelletier (2014) found that attachment anxiety was associated with higher reported depression, anxiety, stress (DASS-21), and worry (PSWQ), which is consistent with the current study. Attachment avoidance, on the other hand, was unrelated to any of these outcomes, which is somewhat different than what was observed in the present sample. It should be noted that both of these studies used exclusively Christian samples.

Attachment anxiety has also been highlighted with respect to constructs similar to the study's outcomes. For example, anxious attachment to God has been associated with more negative affect, which can be conceptualized as a component of depression and anxiety, while avoidant attachment to God was unrelated (Fergus & Rowatt, 2014; Rowatt & Kirkpatrick, 2002).

Considering attachment to God as how individuals relate to the object of their belief system, findings highlight different trends for each dimension. An anxious style of attachment has been conceptualized to include confusion toward and perceived inconsistency from the attachment figure to meet one's needs. Findings that this style is related to worse mental health outcomes are plausible, in that people may not perceive their religious resources to be reliably beneficial and helpful in response to stressors. In attachment terms, God is not viewed as a secure base or safe haven, which may lead to increased depression, anxiety, and stress (Knabb & Pelletier, 2014), and individuals' low expectancies of their coping effectiveness may also contribute to worse mental health. An avoidant style of attachment to God relates to perceiving God as unavailable to meet one's needs. Knabb and Pelletier (2014) further state that with respect to God, such a relationship style involves not depending on God for closeness, having an impersonal

prayer life, and being uncomfortable expressing emotions to God. The present study adds to previous literature in that relationships between avoidant attachment style to God and some mental health outcomes were found, though to a lesser degree than what was demonstrated by anxious attachment. Researchers have given explanations for such mixed results when considering avoidant attachment. Knabb and Pelletier (2014) state that those with this attachment style withhold emotional expression to the attachment figure, and thus they may “struggle to acknowledge emotional difficulties and the salience of relationships” (p. 246) while also displaying “independence and invulnerability in order to buffer against relational disappointments and hurts” (p. 246). As such, others hypothesize that avoidant attachment does not show the same association with mental health as anxious attachment because individuals may not have openly acknowledged their mood symptoms to the same degree as others. Lastly, Beck and McDonald (2004) found that avoidant attachment to God was associated with human attachment relationships differently than anxious attachment to God, suggesting that the construct may exhibit different patterns with respect to God.

### *Unique Contributions of the God Relationship*

In addition to correlation analyses, the current study utilized multiple regression to investigate unique contributions of God relationship facets in predicting mental health outcomes when considered together and with control variables. Preliminary analyses showed the variance accounted for by God image and God attachment and their relative contributions to each of the outcomes. As a group, the four image and attachment dimensions comprised significant predictor models for all outcomes (depression, anxiety, worry, stress, and global distress). The most variance was accounted for in the

depression model, and the God relationship facets accounted for the lowest variance in worry scores. When considering how the factors measure up against each other, anxious attachment to God emerged as the only significant predictor in all outcome models except for worry, which also included avoidant attachment to God as a significant predictor. Thus, as observed in the correlation analyses, anxious attachment to God stands out in the God schema as uniquely predicting higher degrees of depression, anxiety, worry, stress, and global distress when controlling for all other facets. However, conclusions regarding the unique contribution of engaged God image or avoidant God attachment style in predicting outcomes cannot be accurately made in this sample.

Subsequent models tested hypotheses that each God relationship dimension would uniquely predict outcomes over and above religiosity, demographic variables, and social support. Age and gender have been highlighted as variables that sometimes play a role within mental health and religion but warrant further investigation (Park & Slattery, 2013; Ellison et al., 2009). Additionally, religious behaviors have been studied extensively with respect to mental health (Koenig, 2012), and subjects' religiosity was entered in the models to investigate the significance of God-related cognitions while controlling for behaviors. Lastly, social support is highly regarded within the realm of mental health, and given that many religious and coping behaviors involve community with others (Pargament, 1997), overall perceived social support was controlled for in regression models. The prediction models with God image, God attachment, and control variables taken together accounted for a significant portion of variance for all outcomes. Considering image of and attachment to God individually, the results were somewhat similar to the regression models without controls. Specifically, anxious attachment to



God was the only God relationship factor to significantly predict increases in depression, anxiety, worry, and global distress when controlling for all other variables. However, unlike in the previous regressions, after adding control variables, anxious attachment to God was no longer predictive of increases in stress. Similar to the previous set of regressions, increases in worry were predicted uniquely by both anxious and avoidant dimensions of God attachment. Thus, the study's hypotheses were partially supported in that after controlling for all other variables, anxious attachment to God uniquely predicted depression, anxiety, worry, and global distress, and avoidant attachment to God uniquely predicted worry. No God image facets uniquely predicted mental health outcomes.

Interesting trends emerged when considering the control variables in the models. Higher age uniquely predicted more favorable outcomes in all models, predicting lower scores for depression, anxiety, worry, stress, and global distress. Additionally, gender emerged as a unique factor in predicting worry, with female gender predicting higher scores. Next, although general religiosity (perceived religiousness/spirituality and frequency of religious behaviors) was unrelated to all outcomes in correlation analyses, the factor predicted increased depression, stress, and global distress when controlling for all other variables. Such findings raise questions—although there are mixed findings in previous literature, very few studies have shown positive relationships between religiosity and psychopathological outcomes (Koenig, 2012). Lastly, the strongest predictor of all outcomes was perceived social support, which uniquely predicted lower depression, anxiety, worry, stress, and global distress scores.

Regression analyses produced noteworthy findings with respect to prior research. Results from the present study were consistent with those found by Bradshaw and colleagues (2010), who tested prediction models of psychological distress, a construct relating to negative affect and components of anxious and depressed mood. In their full model, God images (loving and remote) did not emerge as unique predictors, while both anxious and avoidant attachment to God were predictive of greater distress (Bradshaw et al., 2010). The researchers state that styles of attachment are stronger and more consistent predictors of distress than perceptions of God's nature. The present study differs, as anxious attachment to God emerged as the most significant aspect of the God schema in predicting worse mental health outcomes rather than both attachment dimensions. While anxious attachment appears to be driving mental health outcomes in the current sample and in studies conducted by Bradshaw and colleagues (2010), Zahl and Gibson (2012) explored God image and attachment together and found that in a regression model, a positive God image significantly predicted satisfaction with life scores over a critical God image and both anxious and avoidant dimensions of attachment to God. Thus differences may be seen for other outcomes with regard to attachment and image taken together.

In terms of theory, attached individuals seek out an attachment figure in times of stress, and such figures generally serve as a secure base amidst uncertainty. God's perceived availability and responsiveness is "a fundamental dynamic underlying Christianity and other world's religions" (Bradshaw et al., 2010, p. 132), and such perceptions likely affect how individuals approach God and their religious resources. The links between anxious attachment style and worse mental health outcomes seem

consistent with the notion that approaching a relationship with “feelings of inconsistency and confusion” (Bradshaw et al., 2010, p. 132) would lead to unsuccessful coping with stress. As such, those who are depressed, anxious, or stressed and are unsure about how their belief system can help may not effectively deal with such symptoms. Additionally, though literature has supported both the correspondence and compensation hypotheses of attachment to God (whether one’s attachment style to God is similar to or makes up for other attachment bonds, respectively), Beck and McDonald (2004) emphasize that a trend was observed for anxious attachment to God corresponding to attachment anxiety in adulthood relationships. Therefore, it is possible that those endorsing this type of relationship with God may experience negative mental health outcomes because they approach other relationships in this way too, which prove to be maladaptive.

Furthermore, for some individuals religious coping strategies might be utilized only after other methods have been ineffective. Thus, those who have exhausted other resources and have religious resources that are inconsistently reliable might see an exacerbation of mood problems and distress.

Regression analyses with and without controls highlight the unique predictive ability of attachment anxiety over the other facets of God image and attachment. This differs from Bradshaw and colleagues’ (2010) finding that both dimensions of attachment to God are “independently associated with feelings of distress” (p. 143). With respect to coping theory, how God is represented in the mind may affect how stressful situations are appraised, one’s self-schema, expectancies, and attributions of events. As avoidantly attached individuals do not perceive interest or concern from God, it is possible that they rely on non-religious methods of coping and the effect of an avoidant God attachment

style may be less clear-cut. Also, Grimes (2007) found that anxiously attached individuals were more likely than those with avoidant attachments to God to report both emotional distress and emotional religious experiences, leading the researcher to postulate that “avoidant attached individuals may experience their relationship with God in a less dramatic, more private manner” (p. 22). As such, it may be difficult to compare attachment styles to God and emotional health.

With respect to one’s image of God, perceiving God as engaged is more closely tied to the individual’s sense of security and positive mental health than whether one perceives God as judgmental or forgiving. However, the relationship of an engaged God image to more favorable outcomes was not observed when controlling for other God schema facets. While this could be a byproduct of collinearity issues, the finding also speaks to differences between the *image* and *attachment* constructs. Few studies have examined the influences of both together, but it appears that the style of relationship may be more indicative of mental health than how one cognitively views the object of that relationship. In terms of coping schemas, an individual who is employing religious behaviors is interacting with God in some way, and the attachment perspective may be more salient to the individual’s coping process and its effectiveness than the mental image of God. The importance of God attachment with respect to mental health may also be explained by the notion that attachment styles incorporate an emotional/affective component that may not exist with respect to viewing God as engaged or judgmental.

On the other hand, rather than viewing the two aspects of the God relationship individually, the picture may be more complex than what was found in the present study. It is possible that attachment style and conceptualization of God interact, and certain

facets may be more relevant and salient to different individuals. Several examples highlight the complexity when the variables are considered together and along with one's self-schema. First, perhaps one sees God as highly involved in the world and others' lives but relates personally with an avoidant attachment. An individual may also have an image of a loving God but does not experience a reliable, consistent relationship, for reasons related to the individual's sense of self rather than view of God. Such interactions would likely complicate how mental health and coping are considered. Zahl and Gibson (2013) highlight this potential interactive nature, theorizing that the "manner in which individuals experience their relationship with God can shape their theological beliefs about God" (p. 227). Other factors of religiosity may also be important in shaping individuals' mental health. For example, God's perceived judgment and wrath may be fundamental aspects of their religion and is seen as having a purpose, and therefore such a God image may not be related to distress in the same way as someone who thinks about judgment differently. Additionally, the nature of someone's faith community or denomination may lead individuals to view God differently than they would otherwise, which Zahl and Gibson (2013) distinguish as *doctrinal* versus *experiential God images*. Namely, it is possible that some individuals may be basing their view of God on something more doctrinal than what is personally experienced, and links to mental health are made more complex.

### *The Sample*

When interpreting results in this study, one must consider the uniqueness of this sample. Participants were prescreened for some type of belief in God, although a second round of sampling targeted a small group of atheists, but the sample showed diversity. In

terms of religiosity, almost half of the sample endorsed that God *certainly does* exist, yet the largest group of self-identified religious affiliation were those indicating *no religion*. Furthermore, even those who indicated that God *certainly does not* exist demonstrated slight variation in responses to God image and attachment. Therefore, while the sample was not analyzed by denomination or religious tradition, clinicians and researchers relying on client demographic data or self-endorsed affiliation would likely overlook the ways in which beliefs function for that individual. The sample reinforces what has been previously found in large-scale American samples that belief and affiliation should be considered differently, as a large proportion of those unaffiliated do endorse some kind of belief in God that operates in their lives (Pew Research Forum, 2012). The current sample also mirrors findings by the Pew Research Forum (2012) in that there is a distinction between those endorsing *no religion* or *nothing in particular* versus those who self-describe as *atheist* or *agnostic*.

The sample also proved interesting when considering religiosity and religious behaviors. In terms of frequency of church attendance and reading religious texts, almost one-third of the sample reported *never* doing so. However, this sample appears unique in that just over half of the sample estimated that at age 12, they attended religious services *2-3 times a month* or more, with one-third attending *weekly* or more. Thus the sample is likely more familiar with religious resources than what is otherwise assumed by their current involvement. Furthermore, almost two-thirds of the sample rated themselves as *somewhat* or *very* religious or spiritual, and over one-quarter reported praying or meditating *several times a day*. Thus, just as this sample had a significant number of individuals not affiliating with a religion, they also appeared to engage in more

individualized practices like prayer and perceived themselves as religious/spiritual people.

Aside from belief and affiliation, the sample was surprisingly unique with respect to their relationship with God. The sample overall viewed God's engagement to a degree slightly less than the mean of the normative sample, and God's judgment was perceived to a level that mirrored the normative sample (Froese & Bader, 2007). Bader & Froese (2007) note that while Americans overall tend to perceive God as engaged, their perception of judgment varies much more. Interestingly, when considering the two dimensions together as God image categories, the sample contained unequal proportions and appeared different than the norm. This was especially notable in terms of those with a primarily *benevolent* God image, perceiving an engaged, nonjudgmental God relative to the sample mean. While 22% of the normative sample were categorized this way (Froese & Bader, 2007), 48% of the current sample exhibited this pattern. Such a pattern should be considered in light of the relatively high number of individuals indicating *no religion*, the low levels of institutional religious behaviors, and the high frequency of prayer/meditation. Individuals in the sample may view a more benevolent God because they conceptualize and engage with God on a more personal level without a religious doctrine that might otherwise present rules to follow and portray an image of a God who enacts judgment. Such individuals may regard God with qualities that are purposely positive to the individual and also not based in a specific tradition.

In terms of attachment styles to God, the sample overall endorsed slightly more avoidance and attachment anxiety than found by the scale developers (Rowatt & Kirkpatrick, 2002). Unlike God image, the percentages of individuals categorized in

each of the four attachment styles (secure, preoccupied, dismissing, fearful) did not differ. Interesting results emerged in terms of religious coping behaviors as well. The sample endorsed very low levels of negative religious coping behaviors in response to a stressor, with average levels ranging between *not at all* and *somewhat*, while positive religious coping behaviors were reported slightly more often. While religious coping use was low, such values mirror what the scale's normative samples have exhibited (Pargament, Feuille, & Burdzy, 2011). Furthermore, given that the current sample was not exclusively clinical and that participants were instructed to endorse behaviors utilized in response to a recent (past-month) stressor, it is possible that they simply were not coping for any reason as opposed to not religiously coping.

While the present study utilized an online community sample, extensive clinical applications can be made. Although the study did not specifically target those with mental health diagnoses, about one-third of the sample self-reported current and lifetime mental health diagnoses, which is greater than the statistic reported by the National Alliance on Mental Illness (NAMI) that approximately one-fifth of adults in America experience a mental illness (NAMI, 2017). Also, the current survey did not include an exhaustive list of all possible diagnoses. The sample was relatively engaged in psychological treatment, with approximately one-fifth of the sample reporting current and prior psychological medication use. Such use is relatively consistent with a large-scale national survey (2013 Medical Expenditure Panel Survey), reporting that 16.7% of American adults endorse use of one or more psychiatric medications (Moore & Mattison, 2017). Fewer participants endorsed current engagement in therapy/counseling, though about one-third of the sample received therapy/counseling at some point in the past.



When grouped, subjects with a current diagnosis scored significantly higher on all psychopathological measures (depression, anxiety, stress, worry, and global distress severity) than those without a diagnosis, and there were no differences for social support based on diagnosis. Religious variables were less clear based upon the presence of a diagnosis, as group differences were not found for frequency of religious behaviors, but as a group those with a diagnosis endorsed a less engaged image of God, a more anxious attachment to God, and more negative religious coping.

While the sample's responses on all outcome measures ranged from lowest to highest possible values, indicators of the previous week's depression, anxiety (affective/physiological symptoms), and stress symptoms averaged in the *normal-to-mild* severity range compared to the general population as reported in the DASS-21 manual (Lovibond & Lovibond, 1995). In terms of worry endorsed in the previous week, the sample mean was slightly below a clinically significant level, given that Kertz and colleagues (2014) found a score of 11 to be a reliable cutoff that maximized sensitivity and specificity for generalized anxiety disorder, although self-reported anxiety diagnoses were only reported in about one-fourth of the sample. In terms of overall symptoms, the indicator of global distress is a measure of the intensity and number of symptoms across nine categories. Overall the sample endorsed a relatively low degree of psychological distress, but 31.6% of the sample obtained *clinically significant* scale elevations, using nonpatient adult scale norms and a suggested cutoff of a GSI *t*-score greater than or equal to 63. Aside from symptom-related measures illustrating relatively low levels of psychopathology overall, the sample on average rated their perceived stress to a *low-moderate* degree, which is consistent with the normative sample mean (Cohen, Kamarck,

& Mermelstein, 1983). Perceived stress items were related to a sense of control, feeling overwhelmed, ability to cope, and appraising events as stressful, and while this is a different construct than psychological symptoms, the overall sample's perceived stress appears consistent with reported symptom levels. Lastly, the sample's perception of social support from significant others, family members, and friends was on average consistent with the mean values obtained in clinical and community samples (Dahlem et al., 1991; Osman et al., 2014). Thus, when considering the mental health profile of the sample, the group overall did not appear overly clinical, and those with a reported diagnosis exhibited worse outcomes on clinical measures and some differences in their relationship with God.

### *Clinical Significance*

The findings add to previous literature by investigating how individuals perceive God's character and view their relationship to God and applying these constructs to clinical outcomes. Results highlight the importance of an engaged view of God and more secure attachment styles being associated with more favorable mental health. Outcomes such as depression, affective/physiological symptoms of anxiety, physiological experience of stress, and overall severity of global psychopathology were more closely related to individuals' schemas of God, while associations and predictions for cognitive worry were less clear. Furthermore, religious behaviors were unrelated to mental health; however, the sample exhibited low levels of church attendance and reading texts, so *religiosity* in this study may be interpreted to more accurately reflect behaviors like prayer and meditation. Anxious attachment style to God stood out among the God relationship factors in predicting outcomes when all variables were controlled, which is

consistent with previous studies that highlight this factor over other attachment and image facets (Bradshaw et al., 2010; Knabb & Pelletier, 2014). Thus, within one's working model of God and how it functions in the coping process, there is a uniqueness to this style of attachment in predicting distress. Additionally, perceived social support was the strongest predictor when all other factors were controlled, which is consistent with previous literature regarding coping styles and behaviors (Lazarus & Folkman, 1984). While many believe that religious/spiritual involvement positively influences mental health by providing a context for social support, the findings highlight that cognitions about God are important in predicting distress aside from social support. In terms of mental health, the present findings give importance to how people individually conceptualize and relate to God over their utilization of religious/spiritual actions and self-identified affiliation.

## CHAPTER FIVE

### Conclusion

#### *Practical Implications*

The present study adds to previous literature in its use of God image and attachment together, specifically investigating how God is represented in the mind in relationship with the individual and as an object of a belief system. Clinically speaking, Moriarty and colleagues (2006) highlight that “oversimplifying how clients experience God can have strong, negative implications for treatment planning and the treatment process” (p. 49), and thus investigating perceptions of God in this way gives a more complete, albeit complex, indication of how beliefs function for the individual. It is important for clinicians to understand not only what coping mechanisms individuals use, but also what factors affect the choice of coping behaviors and how they view its effectiveness. As religious coping behaviors tend to involve interactions with an unseen being, image of and attachment to God constructs can give clinicians a picture of the nature of those internal interactions. Schreiber and Edward (2015), applying God image to the field of oncology nursing, highlight how understanding an individual’s worldview allows nurses to more appropriately “tailor the approach and content of supportive interventions suggested to each patient” (p. 620).

In the field, protocols are being developed that highlight God image and attachment through utilizing or attempting to change the constructs (Olson et al., 2016; Rasar et al., 2013; Thomas et al., 2011). However, discrepant findings stress the need to better understand an individual’s relationship with God. Additionally, the God

relationship has been emphasized in various modalities of psychotherapy (Moriarty & Hoffman, 2007) as religion/spirituality has been increasingly recognized as an important factor within the psychosocial recovery movement (APA, 2016). Thus, in the clinical sphere, the present findings not only offer a multifaceted way of conceptualizing the relationship with God, but they also suggest that the attachment style to God may be more salient and consistent in predicting mental health outcomes than one's God image when considered together. Specifically, those who experience a relationship with God marked by anxiety and perceived inconsistency are more likely to experience psychological distress than those with a secure attachment relationship. Attachment to God may be prominent because it captures an interactive dynamic that is relevant to individuals whose coping behaviors directly involve God, which may not be as emphasized in their reported view of God. Interestingly, when exclusively considering image of God, viewing God as engaged in the world and one's life was more closely tied to mental health than whether or not one perceived God as loving/forgiving versus judging/wrathful. Clinically speaking, this reinforces previous findings that individuals may be motivated by what religious/spiritual resources offer them in terms of community with God and others.

Findings also demonstrate that clinicians should take into account the client's relationship with God in addition to religious behaviors and self-described affiliation. As general religiosity was unrelated to all mental health outcomes in the present study, clinicians would be wise to extend their conceptualization of their clients' religiosity/spirituality beyond the behaviors in which they are involved. Though this seems logical that individuals can perform religious actions without being fully engaged

or internalizing any meaning, it is likely far more common for mental health professionals to ask clients how often they attend church than to ask them to describe their particular view of God. Similarly, with respect to affiliation, obtaining such information from clients is common and can be helpful, but the conclusions that can be drawn are limited. As seen in the present study, a substantial proportion of individuals reported no religious/spiritual affiliation and simultaneously provided a wide range of data regarding their relationship with God. Clinicians relying solely on demographic data would have missed important religious/spiritual information for these individuals entirely. Furthermore, the present study makes a case for understanding religiosity/spirituality at the individual level, which would safeguard against assumptions that could be inadvertently drawn by providers. For example, Rosenkrantz and colleagues (2016) researched a sample of LGBTQ young adults and concluded that knowing how they perceived God offered helpful, surprising insights into a faith that was for some a source of purpose and strength, although popular cultural beliefs would likely cause people to overlook religiosity/spirituality in the LGBTQ community.

These findings apply to those working with individuals who primarily present with mood symptoms (e.g., anxiety, depression, stress), which were investigated because of their inherent nature. Flannelly and colleagues (2010) note that outcomes are affected by beliefs “depending upon the extent to which they were influenced by cognitive input” (p. 256), and therefore, negative cognitions about God may function to worsen certain symptoms. For example, in Beck’s cognitive theory of depression, the negative cognitive triad incorporates negative schemas of the self, the world/environment, and the future, and beliefs about God are relevant to each of these (Beck, 2011). Further, Bradshaw and

colleagues (2008) use this notion to hypothesize why certain symptoms (e.g., somatization) were unrelated to beliefs about God; however, the present study's findings suggest that such beliefs are important to overall distress, which included factors aside from mood symptoms such as interpersonal sensitivity, psychoticism, somatization, and hostility.

Aside from diagnosis, providers should be mindful of clients' beliefs they relate to coping theory and the individual's coping process. Acknowledging religious/spiritual beliefs can apply to different aspects of coping, such as perceptions of available resources (Is God an available, consistent a source of help when I am in need? Are these resources salient for me?), use of coping strategy (Will I choose these resources when stressed? Is God engaged with me enough to reciprocate my actions?), appraisals and attributions (Do I see this stress/event as blessing or punishment? Is this situation due to God's working?), perceptions of the self (Can I successfully and collaboratively cope with God? Does this change how I view myself?), and expectancies for the future (Will my situation change? Is God in control of my future?). Such questions are some of many that illustrate how a client's relationship with God is significant to coping with distress and resulting mental health. The present findings also suggest that providers should consider both how clients know and perceive the object of their belief system and its character (God image) and how they perceive their relationship with that being (God attachment). While image of God can be developed through experience and learned information (e.g., doctrine), adding the attachment component to a client's perception of God allows practitioners to utilize a more complete, client-centered approach with respect to client religiosity and mental health.

### *Limitations*

When interpreting and applying the results of this study, certain limitations must be considered. First, while the sample was relatively diverse with respect to gender, education, and age, the large majority of the participants reported an ethnicity of *White*, which limits the generalizability of findings to other groups. While the sample was not limited to specific religious backgrounds, non-Judeo-Christian individuals are underrepresented. More diversity would be significant with respect to image of and attachment to God, as Eastern and Western traditions are often different in how God-figures are personified and represented, and comparisons could be made between religions. A larger sample size and more diversity, such as including a larger proportion of individuals with no belief in God, would allow more complex analyses to be performed and conclusions to be made. Additionally, the sample provided surprising and interesting results due to the number of religiously unaffiliated individuals. Although this was a general community sample, participants endorsed a higher prevalence of mental health diagnoses than the U.S. population; however, one must keep in mind that diagnoses and treatment were self-reported and not based on medical records. Lastly, in terms of the sample, while MTurk has been shown to produce diverse samples and reliable data in psychological research, in addition to the fact that participants received payment for participation, Johnson and colleagues (2015) recognize that MTurk samples may be “unique in some ways (e.g., may be more technologically adept) that might impact the results” (p. 236).

Other limitations apply to the methodology of the study. The current study utilizes a cross-sectional design, and though this type of design is used in the bulk of



research investigating mental health and religion/spirituality (Park & Slattery, 2013), it limits the conclusions that can be made. For example, while the current study's interpretations are plausible and can be compared to previous findings, it is possible that psychological distress or symptoms can affect how one views or relates to God. While Grimes (2007) hypothesizes that characteristics like attachment style are underlying and fundamental to an individual's relationship and are unlikely to be affected by temporary mood states, research needs to be conducted with longitudinal designs to test this assertion. Additionally, Grimes (2007) speculates that God images may change over the lifespan or may be based on one's context, so longitudinal designs could also shed light into the dynamic nature of the God relationship. Next, with respect to mental health outcome measures, it is possible that self-report measures may be biased, either by the individual's impression management or a lack of self-awareness. Furthermore, the outcome measures inquired about symptoms experienced *in the past week*, and thus conclusions can only be drawn about recent mental health, which for some individuals may not accurately describe their overall psychological condition. Lastly, while the present God image scale offers a dimensional perspective to aspects of God's character, Grimes (2007) emphasizes the limits of assessing such a subjective construct that may include implicit and explicit facets. Though few researchers have done so, qualitative methods may add an additional component to God image when subjects are not restricted to particular aspects and qualities.

Lastly, limitations exist with regards to statistical approach of the study. As previously mentioned, correlation and regression analyses do not allow for the determination of causality with respect to predictors and outcomes. Furthermore, with

respect to the statistical tests used in the present study, analyzing each of the outcomes required several statistical tests to be performed, and in null hypothesis significance testing, Type I error is inflated by multiple testing. A Bonferroni correction could adjust the criterion for significance for the 10 regression analyses, and with such a conservative correction ( $\alpha = .005$ ), the null hypothesis would only be rejected for anxious attachment to God uniquely predicting depression scores but no other God relationship facets would have reached significance for any other outcome.

Additionally, Park and Slattery (2013) propose a complex model of the relationship between religious/spiritual dimensions and mental health to include many more variables than the present study investigated. As such, more advanced statistical methods could be employed in the future to determine the mediating or moderating roles of the study's variables and to further explain more complex relationships. For example, given that engaged image of God was correlated to most mental health outcomes yet was not a significant predictor in any regression equations, more advanced modeling could account for this and other similar trends. However, mediation or moderation models would be best utilized in a larger, more diverse sample. Lastly, regression analyses in the present study were complicated due to collinearity observed with the engaged God image dimension and the avoidant attachment to God dimension, and conclusions about their predictive ability were limited. Further analysis is needed investigate these unique constructs in this sample.

### *Future Research*

The present findings offer encouraging perspectives for future research. First, while the study aimed to target individual perceptions of God, the methodology could be

applied to specific groups whose doctrines offer different perspectives of God, such as Eastern versus Western traditions differing in the role of a deity (or deities) in relation to humans. Additionally, future studies could target exclusively clinical samples. The role of internal working models of God within the coping process may appear different in a population that is actively coping with problems and whose attachment systems are activated.

Aside from features of the sample, other outcomes could be investigated with regard to the relationship with God. Previous research has highlighted the role of religion/spirituality with respect to suicide (see Chapter 1) and qualitative findings indicate that perceptions of God vary and are internalized differently by suicide attempters (Akotia et al., 2014). Also, methodology could utilize non-self-report indicators of distress and psychopathology, such as formal diagnoses. Aside from distress, research could apply this conceptualization of God image and attachment to positive mental health outcomes to add to current literature investigating well-being and religiosity. Lastly, while treatments are beginning to target perceptions of God, these measures of God attachment and image could be given with particular belief-focused protocols to test their clinical utility in practice. Next, future research could investigate these constructs of God within the bidirectional multidimensional framework of religion/spirituality and mental health, as demographic factors could be investigated as mediators and moderators (e.g., income) and a longitudinal design would give insight into psychosocial factors that may be affecting one's religious/spiritual views and behaviors. This multidimensional model of religion/spirituality within psychology could

also be explored more deeply in the future by using more complex statistical analyses and models that could reveal mediating or moderating relationships among variables.

As the present study focused on individual facets of religiosity and internal working models of God with respect to coping, the construct can be investigated more deeply. For example, as individuals are reporting they view God and their relationship, questions arise regarding the factors that led to those perceptions in the first place. Zahl and Gibson (2012) distinguish between a doctrinal and an experiential God image, and such an approach could be applied to the current IGS to determine how people are responding in terms of their own personal experiences or what they have been taught to believe as true. Additional questions could give insight into the how deeply rooted are one's perceptions of God. For example, differences may arise if people are in the process of exploring their faith identity, if they are relatively new to a faith tradition, or if they have converted from a different faith altogether. Such factors may address the dynamics of God image, its stability, and its relevance to the individual.

Lastly, the results provide a glimpse into the religion/spirituality of those unaffiliated with a tradition, which is an area of increasing interest in the field (Park & Slattery, 2013). The Pew Research Forum (2016) notes that those unaffiliated are increasing in number, and among young adults (age 18-29), there were just as many Protestant Christians as *nones*, a trend that declined with increasing age cohorts. As the present study explored the dynamics of religious/spiritual cognitions rather than simply investigating religious behaviors or affiliation, future research could specifically study the unaffiliated to gain more understanding of the role of beliefs to those who may not have a formal doctrine or tradition. Furthermore, of the *nones* in the present sample, only

one-third endorsed no belief in God, indicating that such individuals may be different from those with a particular religious tradition and from those who self-describe as atheist or agnostic (together endorsed by only 3 individuals in the sample).

As American religious demographics shift, religiosity and spirituality become increasingly complex characteristics to consider at the individual level. Religion and spirituality are common to most Americans and provide a wealth of social and coping resources that function in a variety of ways. Religious coping behaviors have a complex relationship with mental health, and on a deeper level, research shows that “people do not come to coping empty-handed” (Pargament et al., 2013a, p. 566). Rather, they draw upon a general orienting system that includes beliefs, feelings, and behaviors, which influence how they interpret and cope with stressful situations. Individuals’ view of God, as the object of their belief system and the one with whom they interact, is important to how they engage in coping and its effectiveness. The field has largely lacked clarity in attempting to study such relational spirituality, but applying an attachment and internal working model approach offers promising results. The present findings emphasize the importance of perceptions of God over a focus on religious behaviors in examining psychological distress. Through a dimensional conceptualization of God image, perceiving God as engaged in one’s life and the world emerged as more related to psychological distress and religious behaviors than whether one perceives God as loving/forgiving or judging/wrathful, which may function for individuals in a less-straightforward manner. When examining God as an attachment figure, both avoidant and anxious attachment styles relate to worse mental health outcomes, though anxiety was more consistently and strongly associated. Overall, an anxious attachment style to

God uniquely predicted aspects of psychological distress, though the picture remains complex when considering other significant factors like social support. The study's findings only partially supported the hypotheses, suggesting that there is still much to be investigated in this area, especially related to how God images and attachment styles are developed and interact to form a schema of God.

While religion and spirituality are multidimensional, dynamic systems of beliefs and behaviors, assessing the relationship with God provides mental health professionals insight into mental health that is otherwise missed by considering affiliation or behaviors alone. Conceptualizing this relationship via attachment to an image of God offers a useful addition to a traditionally loosely defined area of research. In terms of clinical practice, schemas of God are important for providers to consider in those with more cognitively-based disorders. Focusing on these aspects of an individual's religiosity may be more easily approached by clinicians who may be unfamiliar with the diverse range of traditions and practices. Overall, God image and God attachment are clinically significant factors within the complex religion/spirituality/mental health paradigm, and future applications of these constructs to mental health and well-being will benefit clinical research and enhance culturally competent practice in an increasingly diverse world.

## APPENDICES

## APPENDIX A

### Complete Survey Questions and Measures

#### *Qualifying Question*

1. Please rate your belief in God. (1 = God certainly does not exist; 5 = God certainly does exist)

#### *Demographic Questions*

1. What is your gender? (Male; Female)
2. What is your age?
3. What is your highest level of education attained?  
  
Some high school; High school diploma; Some college; Bachelor's degree;  
  
Master's degree; Doctoral or other professional degree
4. With what religious family do you most closely identify?

Adventist	Church of God	Pentecostal
African Methodist	Church of the Nazarene	Presbyterian
Anabaptist	Congregational	Quaker/Friends Reformed
Asian Folk Religion	Disciples of Christ	Church of America/Dutch
Assemblies of God	Episcopal/Anglican	Reformed
Baha'i	Hindu	Salvation Army
Baptist	Holiness	Seventh-day Adventist
Bible Church	Jehovah's Witnesses	Sikh
Brethren	Jewish	Unitarian Universalist
Buddhist	Latter-day Saints	United Church of Christ
Catholic/Roman Catholic	Lutheran	Non-denominational
Christian & Missionary Alliance	Mennonite	Christian
Christian Reformed	Methodist	No religion
Christian Science	Muslim	Other (please specify)
Church of Christ	Orthodox (Eastern, Russian, Greek)	Don't know



### *Religiosity Questions*

1. How personally religious/spiritual were you at age 12?

Not at all religious/spiritual; Not too religious/spiritual; Somewhat religious/spiritual; Very religious/spiritual; I don't recall

2. By your best estimate, how often did you attend religious services at age 12?

Never; Less than once a year; Once or twice a year; Several times a year; Once a month; 2-3 times a month; About weekly; Weekly; Several times a week

3. How would you describe your religious beliefs and interpretation? (1 = theologically very conservative; 7 = theologically very liberal)

### *Mental Health Questions*

1. Are you currently engaged in any of the following treatments for psychological/mental health issues? (Please check all that apply.)

Psychological medication; Therapy/counseling; Other \_\_\_\_\_

2. In the past, have you ever sought any of the following treatments for psychological/mental health issues? (Please check all that apply.)

Psychological medication; Therapy/counseling; Other \_\_\_\_\_

3. Do you currently have a diagnosis of any mental health issue? (Yes; No)

4. Which of the following categories best describes this diagnosis? (Please check any that apply.)

Depression or other depressive disorder

Anxiety disorder (including general anxiety, social anxiety, panic, phobias)

Bipolar disorder

Post-traumatic stress disorder

Substance use disorder

Schizophrenia

Obsessive-compulsive disorder

Attention-deficit/hyperactivity disorder

Personality disorder

Other \_\_\_\_\_

5. Have you ever been diagnosed with any mental health issue at any point in your lifetime? (Yes; No)

6. Which of the following categories best describes this diagnosis? (Please check any that apply.)

Depression or other depressive disorder

Anxiety disorder (including general anxiety, social anxiety, panic, phobias)

Bipolar disorder

Post-traumatic stress disorder

Substance use disorder

Schizophrenia

Obsessive-compulsive disorder

Attention-deficit/hyperactivity disorder

Personality disorder

Other \_\_\_\_\_

*General Religiousness Scale (Rowatt, LaBouff, Johnson, Froese, & Tsang, 2009)*

1. How religious or spiritual to you consider yourself to be?

Not at all; Not too religious/spiritual; Somewhat; Very

2. How often do you attend services at a church or other place of worship?

Never; Less than once a year; Once or twice a year; Several times a year; Once a month; 2 to 3 times a month; About weekly; Weekly; Several times a week

3. How often do you read the Bible, Koran, Torah, or other sacred book/text?

Never; Less than once a year; Once or twice a year; Several times a year; Once a month; 2 to 3 times a month; About weekly; Weekly; Several times a week

4. About how often do you pray or meditate outside of religious services?

Never; Only on certain occasions; Once a week or less; A few times a week; Once a day; Several times a day

*Image of God Scale (Froese & Bader, 2007; Froese & Bader, 2010)*

A. How well do you feel that each of the following words describe God? (1 = Very; 5 = Not at all)

1. Loving

2. Critical

3. Punishing

4. Severe

5. Wrathful

B. Even if you might not believe in God, based on your personal understanding, what do you think God is like? (1 = Strongly agree; 5 = Strongly disagree)

6. Angered by human sin

7. Angered by my sins

C. How well do you feel that each of the following words describe God? (1 = Very; 5 = Not at all)

8. Distant

9. Ever-present

D. Even if you might not believe in God, based on your personal understanding, what do you think God is like? (1 = Strongly agree; 5 = Strongly disagree)

10. Removed from worldly affairs

11. Removed from my personal affairs

12. Concerned with the well-being of the world

13. Concerned with my personal well-being

14. Directly involved in worldly affairs

15. Directly involved in my affairs

E. How would you describe God? (open-ended response)

*Attachment to God Scale (Rowatt & Kirkpatrick, 2002)*

Please rate the degree to which the following statements describe your experience.

(1 = Not at all characteristic of me; 7 = Very characteristic of me)

1. God seems impersonal to me.

2. God seems to have little or no interest in my personal problems.

3. God seems to have little or no interest in my personal affairs.

4. I have a warm relationship with God.

5. God knows when I need support.
6. I feel that God is generally responsive to me.
7. God sometimes seems responsive to my needs, but sometimes not.
8. God's reactions to me seem to be inconsistent.
9. God sometimes seems very warm to me and other times very cold to me.

*Brief Religious Coping Scale (Pargament et al., 1998)*

The following items deal with ways you coped with the negative event in your life. There are many ways to try to deal with problems. These items ask what you did to cope with this negative event. Obviously different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something about a particular way of coping. We want to know to what extent you did what each item says (how much or how frequently). Don't answer on the basis of what worked or not—just whether or not you did it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true for you as you can. Choose the answer that best applies to you. (0 = Not at all; 3 = A great deal).

1. Looked for a stronger connection with God.
2. Sought God's love and care.
3. Sought help from God in letting go of my anger.
4. Tried to put my plans into action together with God.
5. Tried to see how God might be trying to strengthen me in this situation.
6. Asked forgiveness for my sins.
7. Focused on religion to stop worrying about my problems.

8. Wondered whether God had abandoned me.
9. Felt punished by God for my lack of devotion.
10. Wondered what I did for God to punish me.
11. Questioned God's love for me.
12. Wondered whether my church had abandoned me.
13. Decided the devil made this happen.
14. Questioned the power of God.

*Religious Coping Inventory (Pargament et al., 2000)*

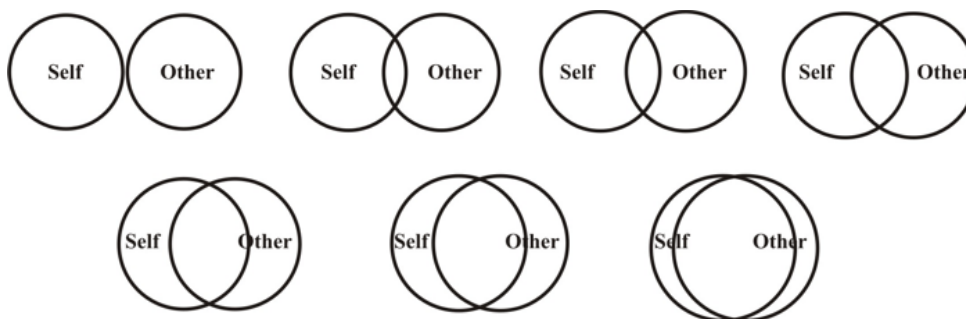
Selected subscales: Interpersonal religious discontent, Religious helping, and Seeking support from clergy/members)

The following items deal with ways you coped with the negative event in your life. There are many ways to try to deal with problems. These items ask what you did to cope with this negative event. Different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something about a particular way of coping. We want to know to what extent you did what each item says. How much or how frequently. Don't answer on the basis of what worked or not--just whether or not you did it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true for you as you can. Choose the answer that best applies to you. For these questions, "clergy" may refer to a leader of a religious/spiritual congregation or group, and "church" may refer to a place of worship and the individuals there. (0 = Not at all; 3 = A great deal).

1. Sought support from members of my congregation
2. Offered spiritual support to family or friends
3. Asked clergy to remember me in their prayers
4. Asked others to pray for me
5. Tried to give spiritual strength to others
6. Felt my church seemed to be rejecting or ignoring me
7. Wondered whether my church had abandoned me
8. Prayed for the well-being of others
9. Tried to provide others with spiritual comfort
10. Wondered whether my clergy was really there for me
11. Looked for love and concern from the members of my church
12. Looked for spiritual support from clergy
13. Disagreed with what the church wanted me to do or believe
14. Tried to comfort others through prayer
15. Felt dissatisfaction with the clergy
16. Sought a stronger spiritual connection with other people

*Inclusion of Other in Self Scale-God adaptation (Aron, Aron, & Smollan, 1992; Hodges, Sharp, Gibson, & Tipsord, 2013)*

Please select the picture that best describes your current relationship with God. For each answer choice, "God" refers to the "Other".



*Depression, Anxiety, and Stress Scale-21 (Lovibond & Lovibond, 1995)*

Please read each statement and choose the answer that indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement. (0 = Did not apply to me at all; 1 = Applied to me to some degree or some of the time; 2 = Applied to me a considerable degree, or a good part of time; 3 = Applied to me very much, or most of the time)

1. I found it hard to wind down
2. I was aware of dryness of my mouth
3. I couldn't seem to experience any positive feeling at all
4. I experienced breathing difficulty (e.g. excessively rapid breathing, breathlessness in the absence of physical exertion)
5. I found it difficult to work up the initiative to do things
6. I tended to overreact to situations
7. I experienced trembling (e.g. in the hands)
8. I felt that I was using a lot of nervous energy
9. I was worried about situations in which I might panic and make a fool of myself
10. I felt that I had nothing to look forward to
11. I found myself getting agitated
12. I found it difficult to relax



13. I felt down-hearted and blue
14. I was intolerant of anything that kept me from getting on with what I was doing
15. I felt I was close to panic
16. I was unable to become enthusiastic about anything
17. I felt I wasn't worth much as a person
18. I felt that I was rather touchy
19. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase, heart missing a beat)
20. I felt scared without any good reason
21. I felt that life was meaningless

*Penn State Worry Questionnaire-3-Item Version (Berle, Starcevic, Moses, Hannan, Milicevic, & Sammut, 2011)*

For each of the following statements, please indicate how often the statement is characteristic of you during the past week. (1 = Never; 7 = Almost always)

1. Many situations tend to make me worry
2. Once I start worrying, I cannot stop
3. I worry all the time

*Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985)*

Below are five statements with which you may agree or disagree. Using the 1-7 scale below, indicate your agreement with each item. (1 = Strongly disagree; 7 = Strongly agree)

1. In most ways, my life is close to my ideal
2. The conditions of my life are excellent
3. I am satisfied with my life
4. So far I have gotten the important things I want in life
5. If I could live my life over, I would change almost nothing

*Meaning in Life Questionnaire (Steger, Frazier, Oishi, & Kaler, 2006)*

Please take a moment to think about what makes your life and existence feel important and significant to you. Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions are that there are no right or wrong answers. Please answer according to the scale below. (1 = Absolutely untrue; 7 = Absolutely true)

1. I understand my life's meaning.
2. I am looking for something that makes my life feel meaningful.
3. I am always looking to find my life's purpose.
4. My life has a clear sense of purpose.
5. I have a good sense of what makes my life meaningful.
6. I have discovered a satisfying life purpose.
7. I am always searching for something that makes my life feel significant.
8. I am seeking a purpose or mission for my life.
9. My life has no clear purpose.
10. I am searching for meaning in my life.

*Brief Symptom Inventory-53 (Derogatis, 1983)*

Below is a list of problems people sometimes have. Please read each carefully, and mark the response that best describes how much that problem has distressed or bothered you during the past 7 days including today. (0 = Not at all; 4 = Extremely)

1. Nervousness or shakiness inside
2. Faintness or dizziness
3. The idea that someone else can control your thoughts
4. Feeling others are to blame for most of your troubles
5. Trouble remembering things
6. Feeling easily annoyed or irritated
7. Pains in heart or chest
8. Feeling afraid in open spaces
9. Thoughts of ending your life
10. Feeling that most people cannot be trusted
11. Thoughts of death or dying
12. Suddenly scared for no reason
13. Temper outbursts that you could not control
14. Feeling lonely even when you are with people
15. Feeling blocked in getting things done
16. Feeling lonely
17. Feeling blue
18. Feeling no interest in things
19. Feeling fearful

20. Your feelings being easily hurt
21. Feeling that people are unfriendly or dislike you
22. Feeling inferior to others
23. Nausea or upset stomach
24. Feeling that you are watched or talked about by others
25. Trouble falling asleep
26. Having to check and double-check what you do
27. Difficulty making decisions
28. Feeling afraid to travel on buses, subways or trains
29. Trouble getting your breath
30. Hot or cold spells
31. Having to avoid certain things, places or activities because they frighten you
32. Your mind going blank
33. Numbness or tingling in parts of your body
34. The idea that you should be punished for your sins
35. Feeling hopeless about the future
36. Trouble concentrating
37. Feeling weak in parts of your body
38. Feeling tense or keyed up
39. Feelings of guilt
40. Having urges to beat, injure or harm someone else
41. Having urges to break or smash things
42. Feeling very self-conscious with others

- 43. Feeling uneasy in crowds
- 44. Never feeling close to another person
- 45. Spells of terror or panic
- 46. Getting into frequent arguments
- 47. Feeling nervous when you are alone
- 48. Others not giving you proper credit for your achievements
- 49. Feeling so restless you couldn't sit still
- 50. Feelings of worthlessness
- 51. Feeling that people will take advantage of you if you let them
- 52. Poor appetite
- 53. The idea that something is wrong with your mind

*Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983)*

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, please answer how often you felt or thought a certain way. (0 = Never; 4 = Very often)

- 1. In the last month, how often have you been upset because of something that happened unexpectedly?
- 2. In the last month, how often have you felt that you were unable to control the important things in your life?
- 3. In the last month, how often have you felt nervous and "stressed"?
- 4. In the last month, how often have you felt confident about your ability to handle your personal problems?

5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your own life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

*Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet, & Farley, 1988)*

Please indicate the degree to which you agree or disagree with the following statements. (1 = Very strongly disagree; 7 = Very strongly agree)

1. There is a special person who is around when I am in need
2. There is a special person with whom I can share my joys and sorrows
3. My family really tries to help me
4. I get the emotional help and support I need from my family
5. I have a special person who is a real source of comfort to me
6. My friends really try to help me
7. I can count on my friends when things go wrong
8. I can talk about my problems with my family
9. I have friends with whom I can share my joys and sorrows

10. There is a special person in my life who cares about my feelings
11. My family is willing to help me make decisions
12. I can talk about my problems with my friends

*Big Five Inventory-Neuroticism subscale (John & Srivastava, 1999; Goldberg, 1993)*

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. I see myself as someone who... (1 = Disagree strongly; 5 = Agree strongly)

1. Is depressed, blue
2. Is relaxed, handles stress well
3. Worries a lot
4. Can be moody
5. Remains calm in tense situations
6. Gets nervous easily

*Ten Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003)*

Here are a number of personality traits that may or may not apply to you. For each statement, please indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other. (1 = Disagree strongly; 7 = Agree strongly)

1. Extraverted, enthusiastic
2. Critical, quarrelsome
3. Dependable, self-disciplined
4. Anxious, easily upset
5. Open to new experiences, complex
6. Reserved, quiet
7. Sympathetic, warm
8. Disorganized, careless
9. Calm, emotionally stable
10. Conventional, uncreative

*Balanced Inventory of Desirable Responding (Paulhus & Reid, 1991)*

Using the scale below, please indicate how much you agree with each statement.

(1 = Not true; 7 = Very true)

1. My first impressions of people usually turn out to be right
2. It would be hard for me to break any of my bad habits
3. I don't care to know what other people really think of me
4. I have not always been honest with myself
5. I always know why I like things
6. When my emotions are aroused, it biased my thinking
7. Once I've made up my mind, other people can seldom change my opinion
8. I am not a safe driver when I exceed the speed limit
9. I am fully in control of my own fate



10. It's hard for me to shut off a disturbing thought
11. I never regret my decisions
12. I sometimes lose out on things because I can't make up my mind soon enough
13. The reason I vote is because my vote can make a difference
14. My parents were not always fair when they punished me
15. I am a completely rational person
16. I rarely appreciate criticism
17. I am very confident of my judgments
18. I have sometimes doubted my ability as a lover
19. It's all right with me if some people happen to dislike me
20. I don't always know the reasons why I do the things I do
21. I sometimes tell lies if I have to
22. I never cover up my mistakes
23. There have been occasions when I have taken advantage of someone
24. I never swear
25. I sometimes try to get even rather than forgive and forget
26. I always obey laws, even if I'm unlikely to get caught
27. I have said something bad about a friend behind his or her back
28. When I hear people talking privately, I avoid listening
29. I have received too much change from a salesperson without telling him or her
30. I always declare everything at customs
31. When I was young I sometimes stole things
32. I have never dropped litter on the street

- 33. I sometimes drive faster than the speed limit
- 34. I have never read sexy books or magazines
- 35. I have done things that I don't tell other people about
- 36. I never take things that don't belong to me
- 37. I have taken sick-leave from work or school even though I wasn't really sick
- 38. I have never damaged a library book or store merchandise without reporting it
- 39. I have some pretty awful habits
- 40. I don't gossip about other people's business

## APPENDIX B

Table B.1

### Religious Affiliation Frequencies

Religious Affiliation	N (%)
Assemblies of God	1 (.5)
Baptist	26 (12.4)
Bible Church	2 (1.0)
Buddhist	6 (2.9)
Catholic/Roman Catholic	35 (16.7)
Christian & Missionary Alliance	4 (1.9)
Christian Reformed	2 (1.0)
Christian Science	2 (1.0)
Church of Christ	9 (1.0)
Church of God	3 (1.4)
Church of the Nazarene	1 (.5)
Congregational	2 (1.0)
Episcopal/Anglican	1 (.5)
Hindu	1 (.5)
Jehovah's Witnesses	1 (.5)
Jewish	2 (1.0)
Latter-day Saints	4 (1.9)
Lutheran	3 (1.4)
Mennonite	1 (.5)
Methodist	3 (1.4)
Muslim	4 (1.9)
Orthodox (Eastern, Russian, Greek)	2 (1.0)
Pentecostal	3 (1.4)
Presbyterian	6 (2.9)
Unitarian Universalist	1 (.5)
Non-denominational Christian	18 (8.6)
No religion	50 (23.9)
Other (please specify)	
Agnostic	1 (.5)
Atheist	2 (1.0)
Pagan	1 (.5)
Pantheistic deism	1 (.5)
Scientology	1 (.5)
Wiccan	2 (1.0)
Don't know	4 (1.9)
Total	209 (100%)

Table B.1 displays the frequencies of reported religious affiliations. Response options were modeled after the Baylor Religion Survey. Options receiving no responses in the current sample include: Adventist, African Methodist, Anabaptist, Asian Folk Religion, Baha'i, Brethren, Disciples of Christ, Holiness, Quaker/Friends Reformed Church of America/Dutch Reformed, Salvation Army, Seventh-day Adventist, Sikh, and United Church of Christ.

## APPENDIX C

Table C.1

### Prevalence of Self-Reported Current and Lifetime Diagnoses

Diagnosis	Current <i>n</i> (%)	Lifetime <i>n</i> (%)
All diagnoses	65 (31.1)	80 (38.3)
Depression/other depressive disorder	57 (27.3)	62 (27.7)
Anxiety disorder <sup>b</sup>	55 (26.3)	61 (29.2)
Bipolar disorder	8 (3.8)	7 (3.3)
PTSD	10 (4.8)	10 (4.8)
Substance use disorder	4 (1.9)	6 (2.9)
Schizophrenia	0 (0)	0 (0)
OCD	7 (3.3)	9 (4.3)
ADHD	5 (2.4)	5 (2.4)
Personality disorder	5 (2.4)	7 (3.3)
Other <sup>c</sup>	3 (1.4)	--

Respondents were asked to select all that apply.

PTSD = posttraumatic stress disorder; OCD = obsessive-compulsive disorder; ADHD = attention-deficit/hyperactivity disorder

<sup>a</sup> "Lifetime diagnosis" was endorsed if respondents received a diagnosis at any point in their lifetime

<sup>b</sup> Includes general anxiety, social anxiety, panic, phobias

<sup>c</sup> Responses include: "child of alcoholic," "postpartum depression," and "PMDD"

Table C.2

## Descriptive Statistics

Measure	Mean (SD)	Range	Cronbach's alpha
IGS			
Engaged	26.63 (6.50)	8-40	.89
Judgmental	16.56 (6.50)	6-30	.94
AGS			
Anxious	9.60 (4.72)	3-21	.78
Avoidant	20.70 (12.04)	6-42	.96
Brief RCOPE			
Negative	.51 (.67)	0-3	.89
Positive	1.32 (1.02)	0-3	.94
GRS composite	0 (3.46)	-4.94-6.11	.89
DASS-21			
Depression	4.36 (5.53)	0-21	.95
Anxiety	3.38 (4.71)	0-19	.91
Stress	4.97 (5.01)	0-21	.91
Total	12.72 (14.11)	0-61	.96
PSWQ-3	10.11 (5.02)	3-21	.94
BSI-53			
Global Severity Index	.66 (.79)	0-3.51	.98
PSS	15.69 (8.57)	0-40	.91
MSPSS	5.34 (1.41)	1-7	.96

IGS = Image of God Scale; AGS = Attachment to God Scale; Brief RCOPE = Brief Religious Coping Inventory; GRS = General Religiousness Scale; DASS-21 = Depression Anxiety Stress Scale; PSWQ-3 = Penn State Worry Questionnaire; BSI-53 = Brief Symptom Inventory; PSS = Perceived Stress Scale; MSPSS = Multidimensional Scale of Perceived Social Support

Table C.3

## Correlations Among God Relationship and Religious Variables

Measure	1	2	3	4	5	6	7
1. IGS-Judgmental	--						
2. IGS-Engaged	-.18***	--					
3. AGS-Avoidant	.22***	-.81***	--				
4. AGS-Anxious	.13	-.08	-.02	--			
5. GRS	-.07	.69***	-.72***	.07	--		
6. PRC	-.05	.67***	-.70***	.05	.75***	--	
7. NRC	.21***	-.12	.12	.34***	.09	.29***	--

IGS = Image of God Scale; AGS = Attachment to God Scale; GRS = General Religiousness Scale; PRC = Positive Religious Coping; NRC = Negative Religious Coping

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.4

## Correlations Among God Relationship Variables and Mental Health Outcomes

Scale	DASS-D	DASS-A	DASS-S	PSWQ-3	GSI
IGS- Judgmental	.06	.14*	.13	.02	.14
IGS-Engaged	-.19**	-.15*	-.17*	-.05	-.16*
AGS-Avoidant	.20**	.13	.19**	.12	.16*
AGS-Anxious	.25***	.23**	.19**	.17*	.22**

IGS = Image of God Scale; AGS = Attachment to God Scale; DASS = Depression Anxiety Stress Scale (D = Depression subscale, A = Anxiety subscale; S = Stress subscale); PSWQ-3 = Penn State Worry Questionnaire; GSI = Global Severity Index of Brief Symptom Inventory-53

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$



Table C.5

Summary of Multiple Regression Analyses Showing DASS-Depression Scores Predicted by God Relationship Factors (N = 209)

Predictor	B (SE)	Standardized $\beta$	$t$	Tolerance	VIF
IGS-Judgmental	-.02 (.06)	-.02	-.35	.93	1.07
IGS-Engaged	-.02 (.07)	-.03	-.28	.33	3.01
AGS-Avoidant	.08 (.05)	.18	1.56	.33	3.06
AGS-Anxious	.30 (.08)	.26	3.77***	.96	1.05
$R^2$	.11				
$F$	5.97***				

IGS = Image of God Scale; AGS = Attachment to God Scale; DASS-Depression = Depression Anxiety Stress Scale, Depression subscale

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.6

Summary of Multiple Regression Analyses Showing DASS-Anxiety Scores Predicted by  
God Relationship Factors (N = 209)

Predictor	B (SE)	Standardized $\beta$	$t$	Tolerance	VIF
IGS- Judgmental	.06 (.05)	.09	1.24	.93	1.07
IGS-Engaged	-.04 (.06)	-.07	-.60	.33	3.01
AGS-Avoidant	.02 (.05)	.06	.52	.33	3.06
AGS-Anxious	.21 (.07)	.21	3.12**	.96	1.05
$R^2$	.08				
$F$	4.45**				

IGS = Image of God Scale; AGS = Attachment to God Scale; DASS-Anxiety = Depression Anxiety  
Stress Scale, Anxiety subscale

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.7

Summary of Multiple Regression Analyses Showing DASS-Stress Scores Predicted by  
God Relationship Factors (N = 209)

Predictor	B (SE)	Standardized $\beta$	$t$	Tolerance	VIF
IGS- Judgmental	.05 (.05)	.07	.94	.93	1.07
IGS-Engaged	.005 (.06)	.01	.08	.33	3.01
AGS-Avoidant	.08 (.05)	.18	1.56	.33	3.06
AGS-Anxious	.19 (.07)	.18	2.67**	.96	1.05
$R^2$	.08				
$F$	4.17**				

IGS = Image of God Scale; AGS = Attachment to God Scale; DASS-Stress = Depression Anxiety Stress Scale, Stress subscale

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.8

Summary of Multiple Regression Analyses Showing PSWQ-3 Scores Predicted by God Relationship Factors (N = 209)

Predictor	B (SE)	Standardized $\beta$	$t$	Tolerance	VIF
IGS-Judgmental	-.03 (.06)	-.03	-.46	.93	1.07
IGS-Engaged	.11 (.07)	.20	1.73	.33	3.01
AGS-Avoidant	.12 (.05)	.30	2.48*	.33	3.06
AGS-Anxious	.20 (.08)	.19	2.75**	.96	1.05
$R^2$	.06				
$F$	3.09*				

IGS = Image of God Scale; AGS = Attachment to God Scale; PSWQ-3 = Penn State Worry Questionnaire

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.9

Summary of Multiple Regression Analyses Showing BSI-53 GSI Scores Predicted by  
God Relationship Factors (N = 209)

Predictor	B (SE)	Standardized $\beta$	$t$	Tolerance	VIF
IGS- Judgmental	.01 (.01)	.07	1.06	.93	1.07
IGS-Engaged	-.003 (.01)	-.03	-.26	.33	3.01
AGS-Avoidant	.01 (.01)	.12	1.04	.33	3.06
AGS-Anxious	.04 (.01)	.21	3.10**	.96	1.05
$R^2$	.08				
$F$	4.54**				

IGS = Image of God Scale; AGS = Attachment to God Scale; BSI-53 GSI = Global Severity Index of the  
Brief Symptom Inventory

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.10

Correlations Between Controls, God Relationship Factors, and Mental Health Outcomes

Scale	Gender	Age	MSPSS	GRS	PSS
IGS-Judgmental	.10	-.21**	.01	-.07	.13
IGS-Engaged	.15*	.18*	.16*	.69***	-.13
AGS-Avoidant	-.19**	-.18**	-.19**	-.72***	.15*
AGS-Anxious	-.06	-.12	-.10	.07	.25***
DASS-Depression	-.08	-.15*	-.42***	-.03	.75***
DASS-Anxiety	-.06	-.24***	-.28***	-.01	.61***
DASS-Stress	-.05	-.16*	-.39***	-.01	.74***
PSWQ-3	.09	-.12	-.24***	-.003	.74***
BSI-53 GSI	-.07	-.16*	-.37***	.02	.71***

IGS = Image of God Scale; AGS = Attachment to God Scale; DASS = Depression Anxiety Stress Scale-21; PSWQ-3 = Penn State Worry Questionnaire; BSI-53 GSI= Global Severity Index of Brief Symptom Inventory; Gender (1 = Male, 2 = Female); MSPSS = Multidimensional Scale of Perceived Social Support; GRS = General Religiousness Scale; PSS = Perceived Stress Scale

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.11

Summary of Multiple Regression Analyses Showing DASS-Depression Scores Predicted by God Relationship Factors and Controls (N = 209)

Predictor	B (SE)	Standardized $\beta$	<i>t</i>	Tolerance	VIF
IGS-Judgmental	-.03 (.05)	-.03	-.54	.89	1.13
IGS-Engaged	-.05 (.06)	-.09	-.83	.30	3.30
AGS-Avoidant	.08 (.05)	.18	1.57	.27	3.66
AGS-Anxious	.21 (.01)	.18	2.89**	.92	1.09
Gender	.78 (.07)	.07	1.10	.91	1.10
Age	-.07 (.71)	-.17	-2.60*	.89	1.12
MSPSS	-.13 (.03)	-.40	-6.31***	.88	1.14
GRS	.31 (.02)	.19	2.10*	.43	2.32
<i>R</i> <sup>2</sup>	.28				
<i>F</i>	9.76***				

IGS = Image of God Scale; AGS = Attachment to God Scale; DASS-Depression = Depression Anxiety Stress Scale, Depression subscale; Gender (1 = Male, 2 = Female); MSPSS = Multidimensional Scale of Perceived Social Support; GRS = General Religiousness Scale

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001

Table C.12

Summary of Multiple Regression Analyses Showing DASS-Anxiety Scores Predicted by God Relationship Factors and Controls (N = 209)

Predictor	B (SE)	Standardized $\beta$	<i>t</i>	Tolerance	VIF
IGS-Judgmental	.04 (.05)	.06	.89	.89	1.13
IGS-Engaged	-.05 (.06)	-.10	-.89	.30	3.30
AGS-Avoidant	.02 (.05)	.05	.39	.27	3.66
AGS-Anxious	.15 (.07)	.15	2.27*	.92	1.09
Gender	.56 (.64)	.06	.90	.91	1.10
Age	-.09 (.03)	-.24	-3.60***	.89	1.12
MSPSS	-.08 (.02)	-.30	-4.38***	.88	1.14
GRS	.18 (.13)	.13	1.38	.43	2.32
$R^2$	.20				
$F$	6.31***				

IGS = Image of God Scale; AGS = Attachment to God Scale; DASS-Anxiety = Depression Anxiety Stress Scale, Anxiety subscale; Gender (1 = Male, 2 = Female); MSPSS = Multidimensional Scale of Perceived Social Support; GRS = General Religiousness Scale

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$



Table C.13

Summary of Multiple Regression Analyses Showing DASS-Stress Scores Predicted by  
God Relationship Factors and Controls (N = 209)

Predictor	B (SE)	Standardized $\beta$	$t$	Tolerance	VIF
IGS- Judgmental	.04 (.05)	.06	.84	.89	1.13
IGS-Engaged	-.03 (.06)	-.05	-.46	.30	3.30
AGS-Avoidant	.08 (.05)	.19	1.65	.27	3.66
AGS-Anxious	.12 (.07)	.11	1.72	.92	1.09
Gender	.98 (.66)	.10	1.48	.91	1.10
Age	-.07 (.03)	-.17	-2.55**	.89	1.12
MSPSS	-.12 (.02)	-.40	-6.03***	.88	1.14
GRS	.29 (.14)	.20	2.13*	.43	2.32
$R^2$	.25				
$F$	8.18***				

IGS = Image of God Scale; AGS = Attachment to God Scale; DASS-Stress = Depression Anxiety Stress Scale, Stress subscale; Gender (1 = Male, 2 = Female); MSPSS = Multidimensional Scale of Perceived Social Support; GRS = General Religiousness Scale

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.14

Summary of Multiple Regression Analyses Showing PSWQ-3 Scores Predicted by God Relationship Factors and Controls (N = 209)

Predictor	B (SE)	Standardized $\beta$	$t$	Tolerance	VIF
IGS-Judgmental	-.03 (.05)	-.04	-.53	.89	1.13
IGS-Engaged	.10 (.06)	.18	1.56	.30	3.30
AGS-Avoidant	.13 (.05)	.31	2.47*	.27	3.66
AGS-Anxious	.16 (.07)	.15	2.19**	.92	1.09
Gender	2.02 (.70)	.20	2.88**	.91	1.10
Age	-.06 (.03)	-.15	-2.23**	.89	1.12
MSPSS	-.08 (.02)	-.27	-3.86***	.88	1.14
GRS	.14 (.14)	.10	.98	.43	2.32
$R^2$	.15				
$F$	4.54***				

IGS = Image of God Scale; AGS = Attachment to God Scale; PSWQ-3 = Penn State Worry Questionnaire; Gender (1 = Male, 2 = Female); MSPSS = Multidimensional Scale of Perceived Social Support; GRS = General Religiousness Scale

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

Table C.15

Summary of Multiple Regression Analyses Showing BSI-53 GSI Scores Predicted by  
God Relationship Factors and Controls (N = 209)

Predictor	B (SE)	Standardized $\beta$	<i>t</i>	Tolerance	VIF
IGS- Judgmental	.01 (.01)	.06	.87	.89	1.13
IGS-Engaged	-.01 (.01)	-.10	-.90	.30	3.30
AGS-Avoidant	.01 (.01)	.15	1.23	.27	3.66
AGS-Anxious	.02 (.11)	.14	2.17*	.92	1.09
Gender	.10 (.11)	.06	.93	.91	1.10
Age	-.01 (.004)	-.16	-2.45**	.89	1.12
MSPSS	-.02 (.003)	-.36	-5.49***	.88	1.14
GRS	.05 (.02)	.23	2.41**	.43	2.32
<i>R</i> <sup>2</sup>	.24				
<i>F</i>	7.76***				

IGS = Image of God Scale; AGS = Attachment to God Scale; BSI-53 GSI = Global Severity Index of the Brief Symptom Inventory-53; Gender (1 = Male, 2 = Female); MSPSS = Multidimensional Scale of Perceived Social Support; GRS = General Religiousness Scale

\**p* < .05, \*\**p* < .01, \*\*\**p* < .001

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