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Attachment to God and psychological well-being: Shame, guilt, and self-compassion as mediators

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ATTACHMENT TO GOD AND PSYCHOLOGICAL WELL-BEING: SHAME, GUILT, AND SELF-COMPASSION AS MEDIATORS

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ABSTRACT

Varghese Mary E. Ph.D., Purdue University, May 2015. Attachment to God and Psychological Well-being: Shame, Guilt, and Self-compassion as Mediators. Major Professor: Mary Carole Pistole

In this study, I used attachment theory to examine individual differences in people's relationships with God or their Higher Power and the influence of these relationships on shame, guilt, self-compassion, and overall psychological well-being. H1 was that shame, guilt, and self-compassion fully mediate the relatedness of anxious attachment to God and psychological well-being. H2 was that shame, guilt, and self-compassion fully mediate the relatedness of avoidant attachment to God and psychological well-being. Young adults (*N* = 163*)* of diverse religious backgrounds from a large Midwestern university completed demographic questions and four scales: (a) The Attachment to God Inventory (AGI; Beck & McDonald, 2004); (b) Test of Self-Conscious Affect-3 (TOSCA-3; Tangney & Dearing, 2003); (c) The Self-Compassion Scale (SCS; Neff, 2003a); and (d) The Scales of Psychological Well-being (SPWB; Ryff, 1989). To examine the two overarching hypotheses, I conducted two mediation analyses, one for anxious attachment and one for avoidant attachment, using a nonparametric bootstrapping procedure (Preacher & Hayes, 2008). Both H1 and H2 were partially supported in that the overall mediation was partial. That is, shame, guilt, and

self-compassion accounted for some, but not all, of the relatedness between anxious (H1) and avoidant (H2) attachment to God and psychological well-being. Results indicate that shame, guilt, and self-compassion are some of the pathways through which attachment to God influences psychological well-being. I discuss limitations of the study as well as the implications for research and practice.

CHAPTER 1. INTRODUCTION

In this chapter, I introduce my study. I am most interested in better understanding people's religious and spiritual relationships and how these relationships are related to their psychological well-being. The broad context of my study is the intersection of counseling psychology and religion and spirituality. Typically, religion refers to organized and institutional traditions and usually includes a shared set of beliefs and practices. Spirituality typically refers to a personal process of finding meaning and purpose in life. In this study, I am interested in examining the person's relationship with God or other deity. This relationship is an important aspect of both religion and spirituality, as is elaborated below. Therefore, I use the terms religion and spirituality interchangeably, and I use God to refer to any supernatural deity that believers may have a personal relationship with. Specifically, I examine the relatedness of the person's relationship with God and psychological well-being. This intimate, personal relationship with God also likely influences self-concept, especially during times of personal failure or wrongdoing. Therefore, I think that self-conscious emotions, such as shame and guilt, and self-compassion, a self-forgiveness emotional regulation strategy, may influence a believer's psychological well-being. Because therapists focus on these variables as an aspect of therapy and because these variables are implicit in spirituality and religion (Thomas & Parker, 2004), I examine a mediation model depicting the path from the

relationship with God to psychological well-being. More specifically, I am interested in the extent to which shame, guilt, and self-compassion mediate the attachment to God-psychological well-being path. I will examine these ideas using a college student sample.

The Current Study

Counseling psychology and religion are both designed to assist individuals with achieving similar goals, including the development of purpose and meaning in life, and recognizing one's full potential. Nonetheless, for much of their history, psychology and religion have been at odds, with the psychological study of religion and spirituality consistently restricted to the fringe of academic psychology (Nelson, 2009). For example, Freud (1927) once described religion as an outcome of neurosis. The neglect of religion and spirituality in academic psychology presented a persistent disconnect from the zeitgeist; that is, many lay persons considered religion and spirituality, like psychology, to be orienting forces in the human experience (Reuder, 1999). In the past few decades, however, the scientific study of religion and spirituality has dramatically increased due to cultural and scientific developments (Zinnbauer & Pargament, 2005). For instance, empirical research has recently documented a positive relationship between religious involvement and mental and physical health outcomes, with these findings now appearing in several major medical, psychiatric, psychological, and behavioral medicine journals (Baumesiter, 2002; Koenig, McCullough, & Larson, 2001; Miller & Thoreson, 2003). As importantly, religion and spirituality have intersected with mainstream psychology in a number of areas, including refugee and immigrant health, geriatric care, trauma and loss, coping and recovery, severe mental illnesses, clinical treatment, and psychotherapy (Bishop, 2008; Boehnlein, 2006; Sullivan, 1993). This increasing intersection of

psychology and religion is consistent with the American Psychological Association (1992) recognizing religion and spirituality as critical diversity dimensions and with the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorder*, 4th edition (DSM-IV; 1994) including Religious or Spiritual Problem as a diagnosable condition of clinical focus.

Religion and spirituality are two related, although distinct, phenomena. Broadly defined, religion refers to an institutional, dogmatic, and fixed ideological context that includes a social identity and a shared set of practices and beliefs (Hill et al., 2000), for example, membership in an organized religious institution. Spirituality refers to the personal, subjective search for the sacred and the process through which people integrate the sacred into their lives and is often expressed through religion, although it can be expressed in a private context as well (Pargament, 1997). Both spirituality and religion often incorporate relational aspects, specifically, a relationship between a believer and God or other deity.

In this study, I use attachment theory (Bowlby, 1969) to conceptualize the relationship between believer and God. Pioneered by Bowlby (1969), attachment theory describes the complex behavioral, cognitive, and affective system underlying the emotionally important relationship between an individual and an attachment figure. Initially applied to the infant-caregiver (e.g., infant-mother, infant-father) relationship, attachment refers to the person having an emotional bond with a specific caregiver and to the person tending to maintain proximity to the caregiver, with proximity resulting in a sense of felt security. Bowlby (1988) also posits individual differences in attachment. More specifically, people construct internal working models (IWMs) that represent actual

interactions with early caregivers and provide the foundation for individuals' attitudes and expectations towards themselves and other emotionally important caregivers (e.g., romantic partners, God) throughout life. The IWMs, which are reflected in attachment styles, also involve the person's typical attachment-related behavior, which is influenced by the way the person manages attachment-related affect (Mikulincer & Shaver, 2008). Research has supported Bowlby's (1969) theory as applied to adult romantic partners, best friend peers, counseling, supervision, and spiritual relationships (see Mikulincer & Shaver, 2008 for an integrative review of adult attachment research).

In expanding attachment research to the individual's relationship with the divine, Kirkpatrick and Shaver (1992) point out that a perceived relationship and emotional bond with God, or other higher power, is central to many religious beliefs and that God can function as an attachment figure. Building on previous adult attachment models (Mikulincer & Shaver, 2008), Beck and McDonald (2004) argued that individual differences in attachment to God vary along two dimensions: attachment anxiety and attachment avoidance. Anxious attachment is characterized by preoccupation with worry about the relationship and God's accessibility when needed. Avoidant attachment is characterized by discomfort with sharing personal and difficult experiences with God, and a reluctance to depend on God. A believer that has low attachment anxiety and avoidance would have a secure attachment to God that is characterized by comfort with relying on and trusting in God. Research further supports that individual differences in attachment to God has implications for behavior and functioning. For instance, although early research centered on explaining the development of the attachment relationship to God (e.g. Granqvist, 1998; Kirkpatrick, 1997; Kirkpatrick & Shaver, 1992), more

recently, researchers have examined attachment to God and psychosocial outcomes. Consistent with attachment theory and research indicating that secure attachment facilitates more effective outcomes across multiple domains (e.g., social functioning, emotional development; Bowlby, 1988; Mikulincer & Shaver, 2008), findings indicate that a secure attachment to God is positively related to positive mental health outcomes. For example, secure attachment to God was linked to lower depression and higher use of positive coping strategies following a death loss (Homan & Boyatzis, 2010). In contrast, insecure attachment (i.e., anxious or avoidant attachment; see Chapter 2) to God was linked to problematic outcomes such as increased negative affect and higher perceived stress (Reiner, Anderson, Hall, & Hall, 2010). More specifically, anxious attachment to God was positively correlated with neuroticism, and negative affect and negatively correlated with positive affect (Rowatt & Kirkpatrick, 2002). Similarly, avoidant attachment to God was negatively correlated with agreeableness (Rowatt & Kirkpatrick, 2002), which in turn is linked negatively to psychological health (Neff, Rude, & Kirkpatrick, 2007). Although different factors likely contribute to psychological well-being for different people, for those for whom relational spirituality is important, the relationship with the divine (i.e., attachment to God or other deity) could function as a strength or as a vulnerability in relation to psychological well-being. More specifically, it is reasonable to expect that anxious and avoidant (i.e., insecure) attachment to God would be negatively related to psychological well-being.

Yet, a gap in the literature exists in terms of examining the mechanisms that underlie the relatedness of the attachment to God and psychological well-being. Previous research suggests that differences in self-concept and emotional regulation may explain

the relationship between attachment styles and psychological functioning (Mikulincer & Florian, 2000). The view of self is, theoretically, influenced by the attachment relationship, including the attachment to God, with the securely attached having positive views of the self, the anxiously attached having a negative view of the self, and with the avoidantly attached having a defensively positive view of the self (Mikulincer & Shaver, 2008). In addition, the characteristic emotional regulation strategy (e.g., hyperactivating or deactivating) associated with anxious and avoidant attachment, respectively, is relevant to the attachment to God and behavior in that relationship. For instance, the anxiously attached feel more positively about the self when they perceive God or other caregivers as responding in a sensitive way to attachment proximity seeking behavior. On the other hand, emotional responses of shame and guilt may not be regulated solely by the attachment system, which is more concerned with maintaining proximity to God; instead, these emotions that make the person very self-conscious may be better regulated by the self-compassion regulation strategy, particularly in the attachment to God and in relation to psychological functioning.

I posit that shame, guilt, and self-compassion may function as mechanisms mediating the relatedness of attachment to God and psychological well-being. As an emotional response to a failure or personal transgression, shame is characterized by negative self-evaluation and negative feelings about the self (Tracy & Robbins, 2004). Shame can also become a distressing part of an individual's religious and spiritual experience. To explain, most religious societies function according to ascribed moral codes and guidelines. To maintain spiritual health, people need to adhere to these codes. Violating these codes is believed to lead to negative spiritual consequences (e.g., in

Christianity, falling from a state of grace after committing a sin) and can, accordingly, elicit shame reactions that have consequences for the believer's relationship with God. For example, a transgressor experiencing shame might perceive the self as being a bad person, which might result in the person withdrawing from God and experiencing continued or heightened distress. Accordingly, shame has been described as a broken relationship with God (Thomas & Parker, 2004) and is associated with a sense of alienation from God (Murray, Ciarrocchi, & Murray-Swank, 2007). As a religious example, the biblical account of Adam and Eve is viewed as one of the earliest accounts of shame (Thomas & Parker, 2004). After eating from the forbidden tree, Adam and Eve become ashamed of their nakedness and hide from God. This account is consistent with shame experiences of feeling exposed and vulnerable, focusing on the self, and exhibiting avoidance behaviors in relation to a damaged relationship. Additionally, with higher likelihood of shame, individuals are at higher risk for mental illness (Tangney & Dearing, 2003; Tracy & Robbins, 2004).

In contrast, as a more adaptive emotional response to a failure or personal transgression, guilt is characterized by the negative evaluation of a specific behavior and usually provokes problem-solving action (Frijda, Kuipers, & Terschure, 1989; Tracy & Robins, 2004). In a spiritual context, a guilty emotional response to a moral transgression might motivate the person to take reparative action (e.g., in the Catholic tradition going to confession, asking God for forgiveness) that would relieve the distress associated with the guilt feelings. Accordingly, guilt has been described as arising from acknowledgment of a broken commandment, versus a broken relationship with God (Thomas & Parker, 2004). Additionally, although often affectively unpleasant, guilt can be adaptive and it

has been positively associated with prosocial behaviors (Kim, Thibodeau, & Jorgensen, 2011) and positive psychological functioning (Orth, Robins, & Soto, 2010).

Finally, self-compassion is an emotionally positive way of relating to oneself in response to pain or failure and involves having a balanced and accepting awareness of negative emotions and experiences (Neff, 2003a). In a spiritual context, a person who experiences God as compassionate and forgiving might be more likely to be compassionate and forgiving toward the self and thus use self-compassion to regulate distress following a moral transgression. Accordingly, self-compassion is positively associated with positive mental health (Neff & Mcgehee, 2010).

Thus, it seems reasonable to expect that shame, guilt, and self-compassion would be related to psychological well-being. Further, because individual differences are associated with differing emotional reactions (i.e., responding with shame, guilt, or self-compassion) to personal failures or wrongdoings, there is reason to expect that these three would mediate the attachment to God and psychological well-being relatedness. Nonetheless, no published research to date has reported relatedness between attachment to God, shame, guilt, self-compassion, and psychological well-being; yet, all these concepts are significant predictors of positive mental health and psychological well-being.

Importance of the Study

The psychological study of religion and spirituality is highly relevant today. Surveys indicate that 88% of the U.S population believes in God or a higher power, with 71% of people being absolutely certain in this belief and 21% being fairly certain (The Pew Forum on Religion and Public Life, 2007). Further, 82% of people view religion as being somewhat to very important in life, and 80% of people report praying at least

weekly, with 58% praying at least once a day. Religious and spiritual beliefs can also function as protective buffers against stressful and negative life events. For example, religious beliefs have been linked to positive mental health and lower incidences of depression (Derosiers & Miller, 2007; Koenig et al., 2001; Wright, Frost, & Wisecarver, 1993).

In regard to psychological treatment, spiritually-oriented therapies that specifically incorporate spiritual relationships and perceptions of God can be effective for enacting therapeutic change. For example, research suggests that spiritual and religious therapies have been more effective than controls for treating alcoholism, eating disorders, depression, anxiety, and schizophrenia (Hodge, 2011; Hook, Worthington, Davis, Jennings, & Gartner, 2010; Mason, Deane, Kelley & Crowe, 2009; Richards, Owens, & Stein, 1993). Research also suggests that failing to incorporate clients' religious beliefs and values can reduce the effectiveness of therapy and increase premature termination in religious clients (Propst, 1980; Rosenbaum, Friedlander, & Kaplan, 1956). Additionally, Goodman and Manierre (2008) found that, over the course of a spiritually-oriented psychotherapy, patients with Borderline Personality Disorder reconstructed punishing representations of God to form images of a more benevolent, forgiving, and accepting God, which coincided with the restructuring of a more balanced, accepting, and positive self-concept. Furthermore, positively changing images of God was positively associated with decreased psychological symptomatology in outpatient clients (Cheston, Piedmont, Eanes, & Lavin, 2003).

Religion and spirituality may, then, constitute potentially powerful sources of therapeutic intervention. Thus, it is important for counseling psychologists, both

practitioners and researchers, to better understand the link between religion and spirituality and mental health. Although there is increasing support for incorporating client's perceptions of God into therapy (e.g. Hodge, 2011; Hook et al., 2010), few scholars have examined the relatedness of individuals' relationship with God and psychological well-being or the mechanisms that influence the association. Cheston et al. (2003) suggested that examining the client's image of God can offer important insights into the client's image of self, parents, and others, with these insights then being used for therapeutic benefit. For example, if a client holds a negative image of God, a therapist can coach the client to explore personal and spiritual experiences and possible maladaptive cognitive schemas that contribute to the negative image, thereby allowing for change. Accordingly, counseling psychologists and clients would benefit from understanding specific and complex relational aspects of spirituality, particularly, the relationship between believer and God. Results from my study will extend the psychological literature on spirituality and religion, specifically attachment to God or other deity, by examining attachment to God, shame, guilt, self-compassion, and psychological well-being. Results from my study may help clinicians understand how people's relationship with their higher being can be used as a strength and point of intervention in therapy to enhance psychological well-being. The results may also lead to further research. Counseling psychologists can integrate these concepts into their conceptualizations and coach clients to examine their spiritual relationships in relation to their self-concept and psychological well-being. They can then tailor interventions to help clients develop more adaptive emotional regulation strategies that center on reducing internalized shame and cultivating self-compassion.

Statement of Purpose

The purpose of this study is to better understand how people's attachment to God or other deity is related to psychological well-being. To date, no study has examined attachment to God, shame, guilt, self-compassion, and psychological well-being together, though counselors and clients frequently explore these domains in psychotherapy (Cheston et al., 2003; Gilbert, 2010). I use attachment theory (Bowlby, 1969) to conceptualize individual differences in attachment to God. Because attachment styles are relatively unconscious, stable, and difficult to alter directly (Bowlby, 1969), it is crucial for counseling psychologists to understand the more accessible, mediating mechanisms in order to deliver interventions to foster therapeutic exploration and change. Therefore, I examine how anxious and avoidant attachment to God is related to psychological well-being as mediated by shame, guilt, and self-compassion. I expect that low anxiety and avoidance in the attachment to God will be related to lower shame, higher guilt, higher self-compassion, and higher psychological well-being. I expect the mediation model to explain the most variance, but I will also examine a partial mediation model, in which the attachment to God-psychological well-being link may explain more variance than the mediation model.

Relevance to Counseling Psychology

As a professional psychology specialty, counseling psychology focuses on facilitating personal and interpersonal functioning across the life span in emotional, social, vocational, educational, health-related, developmental, family, and organizational areas (Nutt & Stanton, 2008). In this section, I address how my study is related to the field.

First, my study is pertinent to many of the overarching themes of counseling psychology (Gelso & Fretz, 2001). For instance, in accordance with the field's focus on intact personalities, I use a college young adult student sample, a population which has historically been a focus of counseling psychologists and considered a reasonably normal personality population (Gelso & Fretz, 1992). However, because today's college students can also exhibit strong pathology (Much & Swanson, 2010), the college student population can also serve as a good representative of the general population. In addition, in examining how an individual's attachment relationship with the divine is related to well-being, I am gathering evidence on how the spiritual relationship may be a strength and internal resource well-being. This aspect of my study is consistent with the field's emphasis on people's assets and strengths. Counseling psychologists working with spiritual clients could use results from this study to assist clients with drawing from their spiritual strengths when facing adversity or emotional difficulties (e.g., using prayer to increase felt security with God as a secure base). Counseling psychologists could also assist spiritual clients to revise harsh beliefs or develop more spiritual strength to aid psychological functioning. Moreover, by understanding how individual differences in spiritual relationships and responses to personal failures influence well-being, counseling psychologists can use my results to better understand how their clients uniquely perceive and function within their environment, thereby fitting with the field's attention to person-environment interactions.

Second, historically, counseling psychology has focused on special groups, and the field continues to lead professional psychology in incorporating multicultural and diversity concerns into training, science, and practice (Vera & Speight, 2003). The APA

(2003) guidelines on multicultural education, training, research, practice and organizational change call for psychologists to understand individuals' worldviews as multicultural beings and understand the unique intersection of diversity dimensions (e.g. racial/ethnic group, religion/spiritual orientation). In the past 25 years, global immigration has increased rapidly in the U.S., thereby contributing to a greater need to understand the intersections of diverse cultures and beliefs (Sue, Bingham, Porché-Burke, & Vasquez, 1999). Subsequently, religion and spirituality are in a more visible and relevant position in psychological assessment and treatment (.Lovinger, 1984; Pargament & Lomax, 2013; Richards & Bergin, 1997; Shafranske, 1996). Examining spiritual variables that influence psychological well-being is consistent with counseling psychology's focus on multicultural awareness and diversity. Counseling psychologists strive to recognize the values, attitudes, practices, and life philosophies that construct their clients' worldviews, and religion and spirituality are often defining components of people's perception of the world and their place in it (Fukuyama, Siahpoush, & Sevig, 2005). Because attachment develops from early relationship experiences, the attachment to God relationship does not necessarily differ by religious group and instead is specific to a believer's unique spiritual life. Thus, when conceptualizing religious and spiritual clients from a multicultural perspective, counseling psychologists need to consider and understand an individual's relationship with God. Additionally, counseling psychologists can use results from my study to collaborate with religious community leaders to reach diverse, underserved communities (e.g., South Asian immigrants; Tiwari & Wang, 2008) who might turn to religious and spiritual communities, rather than the mental health community, for assistance with life problems and mental health issues.

Third, my study can provide results that will be useful to counseling psychologists' remedial, preventative, and educative-developmental roles (Gelso & Fretz, 2001). Research suggests a secure attachment to God can play a buffering role in response to stressful life events (Homan & Boyatzis, 2010), and my study further examines the relatedness of attachment to God and psychological well-being. Therefore, my results may enhance counseling psychologists' ability to engage in remedial services that help clients who are experiencing spiritual struggles (e.g., conflict in the relationship with God because of shame) that impair their overall psychological well-being. Further, in preventative and educative-developmental interventions, counseling psychologists can use my results to assist clients in developing and drawing from their spiritual strengths as resources to promote positive adjustment in times of stress and increase psychological well-being. These interventions might include coordinating with college student organizations or community religious leaders to deliver outreach or workshop programming focusing on enhancing existing spiritual strengths to prevent psychological problems (e.g., an outreach presentation for first-year undergraduate religious groups on incorporating spirituality into academic life to promote positive college adjustment).

Fourth, the American Psychological Association calls for psychologists to use evidence-based practice (EBPP), that is, integrate the best available research with clinical expertise and the client's characteristics, culture, and preference (American Psychological Association, 2006). Consistent with the EBPP focus, counseling psychologists are trained to work as scientist-practitioners who integrate theory, research, and practice (Gelso & Fretz, 2001; Hayes & Berens, 2003). My results can assist counseling psychologists in applying EBPP when working with spiritual and religious

clients because my study and its results expand the knowledge base as to how a secure relationship with God might be related to psychological well-being. Using theory and my results, counseling psychologists can design interventions that decrease shame and guilt and increase self-compassion in a spiritual relational context, thereby promoting psychological well-being. Results from this study could also have implications for training future counseling psychologists in conceptualizing and incorporating clients' spirituality in therapy in order to practice in an evidenced-based, culturally sensitive manner.

Fifth, counseling psychologists emphasize a life span developmental approach (Gelso & Fretz, 2001). Young adulthood is a particularly important developmental stage to examine my research questions, because research suggests religion and spirituality is salient to a majority of U.S. college students (Harvard University Institute of Politics, 2008). More specifically, in a 2008 study, 7 in 10 students agreed religion was important or very important in their life (Harvard University Institute of Politics, 2008). Arnett (2000) argues that many U.S. college students are in the emerging adulthood period, a life stage distinct from adolescence and adulthood. During this transition period, individuals have departed from the dependency that marks adolescence but do not yet have to take on the long-term responsibilities of adulthood (Arnett, 2000). College students face many developmental tasks during this period, including becoming more autonomous by accepting responsibility and making independent decisions (Carter & McGoldrick, 2005), establishing a stable identity that might be an integration of multiple identities and viewpoints (Chickering and Reisser, 1993), and renegotiating the relationships with parents to account for increasing autonomy (Arnett, 2000). Students

also transition away from relying on knowledge based in authority and absolutism and begin to grow in self-knowledge as they are exposed to new perspectives and viewpoints and they determine an independent worldview (Parks, 2000). Thus, this period of ambiguity presents an opportunity for independent exploration (Arnett, 2000). Additionally, young adulthood appears to be a critical period in individuals' spiritual development. For instance, U.S. college students in general tend to experience spiritual growth during college (Bryant, 2006) and may experience more anxiety in their relationship with God than older adults (Beck & McDonald, 2004). Further, research suggests spiritual growth in college is related to positive academic outcomes, including scholastic performance, psychological well-being, leadership development, and satisfaction with college (Astin, Astin, & Lindholm, 2011). Thus, my results can inform counseling psychologists who are working with college students, address students' spiritual relationships and psychological well-being. Finally, because attachment is universal, results from my study will support attachment theory and thus may be generalizable to the broader population of believers who have a personal relationship with their Higher Power. Because attachment to God describes a specific type of relationship with a deity, I do not expect my results to be generalizable to individuals who do not believe in a Higher Power or who do not have a relationship with a Higher Power. For these individuals, attachment needs would likely be met by other attachment figures

CHAPTER 2. LITERATURE REVIEW

In this chapter, I will review the research relevant to this study on attachment to God and psychological well-being as mediated by shame, guilt, and self-compassion. I begin with attachment theory, which includes attachment to God. Then, I review shame, guilt, and self-compassion, prior to developing the rationale for the study and the hypotheses. Note that in this study I use the terms, religion and spirituality, broadly and interchangeably to describe faith-based beliefs, practices, and traditions.

Attachment Theory

In this section, I review attachment theory, including a historical overview and a review of individual differences in attachment. Next I focus specifically on reviewing relevant attachment to God theory and research, including individual differences and related psychological outcomes. Although different researchers use different terms to describe attachment styles based on their measurement model, research indicates that two continuous and orthogonal dimensions (i.e., anxiety and avoidance) underlie the various attachment measurement models and that there is meaning confluence in the various terms (Brennan, Clark, & Shaver, 1988). Therefore, I focus on anxious, avoidant, and secure attachment and translate the meaning from different authors' terms and model.

Historical Overview

Bowlby (1969) introduced attachment theory as an alternative to the drive-centered theories of infant development that dominated the first half of the 20th century. These psychoanalytic theories presumed that the infant-mother bond developed primarily as a result of positive experiences associated with feeding (Kobak & Madsen, 2008) and that children's emotional problems stemmed from internal conflicts between aggressive and libidinal drives rather than external factors, such as the infant-mother relationship (Bretherton, 1985). The prevailing view, then, was that physical well-being was the only important factor in infant development and that infant-mother relations were important only to fulfill the infant's feeding needs. This belief led to the common practice in institutional and hospital settings of separating young children from their mothers and restricting parental visitation (Kobak & Madsen, 2008). Bowlby was critical of these theories and practices and the lack of attention to the infant-mother relationship. Thus, in the 1940s, he began conducting studies of maternal deprivation, and his results suggested that severe disruptions in the early mother-child relationship were often precursors to subsequent maladjustment and psychopathology (Cassidy, 2008).

Drawing on developments in ethnology, cognitive science, control systems theory, evolutionary biology, and developmental psychology (Bowlby, 1969), Bowlby proposed that biological mechanisms, rooted in the natural selection process, were responsible for an infant's attachment to a mother. The mother, usually considered the primary caregiver, was viewed as "stronger and wiser" (Bowlby, 1973, p. 203) and provided soothing, guidance, and safety when needed. Bowlby (1969) further described attachment as an affectional bond between any person and a caregiver (i.e., an emotionally important other

who provides comfort, protection, and guidance when necessary). An attachment bond is unique from other social relationships, is specific to only a few people across the life span, and results in the person having a sense of felt security. Bowlby believed that innate behaviors were organized in an attachment behavioral system and fulfilled the primary purpose of increasing the infant's proximity to the attachment figure. From an evolutionary perspective, attachment provides protection and increases survival advantages, thereby promoting inclusive fitness. Therefore, in contrast to drive theories about the infant-mother bond, Bowlby proposed that attachment was an organic behavioral system, a byproduct of evolutionary adaptation, and that the infant-caregiver relationship was of crucial importance to healthy development (Bowlby, 1969).

The attachment system is further characterized by behavioral and affective components of the person (Bowlby, 1969): (a) seeking to maintain proximity with the caregiver; (b) experiencing distress, known as separation anxiety, when encountering involuntary, unwanted, or unexpected separation from the caregiver; (c) seeking a safe haven or comfort and soothing when threatened or distressed; and (d) seeking a secure base to provide an anchor and guidance, as needed, for exploration (e.g., exploring a new setting, meeting new people). In terms of functioning, the attachment system is activated when the person experiences stress (e.g., illness, pain), a threat of unwanted separation from the caregiver, or a threat in the environment that arouses feelings of fear, anxiety, or isolation (Bowlby, 1969). During this heightened distress and attachment system activation, exploration is deactivated and the person seeks proximity to the caregiver (e.g., by calling the caregiver on the phone). Once proximity is restored, the person again feels a sense of security, and the attachment system is deactivated. At that point, the

exploratory system can be re-activated, thereby allowing the person to resume exploring the environment (Bowlby, 1969). Further, the person can expect more effective exploratory outcomes (e.g., learning, skill development, social competence) when the attachment system functions more optimally and when the safe haven and secure base functions are more effectively fulfilled.

Individual Differences in Attachment

In childhood, based on caregiver accessibility and responsiveness and infant characteristics such as temperament, individuals develop internal representations of interactions with the caregiver. These representations are organized as cognitive-affective schemas about the self and the caregiver. These internal schemas, known as internal working models (IWMs, Bowlby, 1969, 1988), regulate attachment behavior and function as a template or prototype for how individuals will behave and react in future attachment relationships (Bowlby, 1988). The IWMs, which manifest as attachment styles, reflect beliefs about the self's worthiness of love or care, beliefs about the caregiver's accessibility and responsiveness, and attachment-related affect regulation strategies (Bowlby, 1969,1988). Because attachment styles are integrated as personality by late adolescence and because they tend to function automatically without being consciously examined (Bowlby, 1988; Mikulincer & Shaver, 2008), attachment styles tend to be relatively stable from infancy into adulthood (Bowlby, 1969), with the attachment to the primary caregiver often transferring to a romantic partner during adolescence (Bowlby, 1988; Hazan & Zeifman, 1994). Nonetheless, a person's attachment style can change as a result of new experiences, including environmental changes, such as parents' divorce (Hamilton, 2000). In addition, research suggests that the different attachment styles, with

similar patterns, are found across cultures (e.g. African, Japanese, Israeli) and settings (e.g., communal childrearing communities, polymatric families) (Ainsworth, 1967; Grossmann, Grossmann, Spangler, Suess, & Unzner, 1985; Marvin, VanDevender, Iwanaga, LeVine, & LeVine, 1977; Miyake, Chen, & Campos, 1985; Sagi et al., 1985; van Ijzendoorn and Kroonenberg, 1988). Further, the person has a hierarchy of attachment relationships with caregivers (e.g., with mother, father, romantic partner, God) and the style can be different with different caregivers (i.e., the style of attachment to mother can be different from the attachment to father; Howes & Spieker, 2008). Most importantly, the attachment style influences the person's developmental trajectory and personality (Bowlby, 1969).

In the 1980s, attachment researchers, exploring how the defining characteristics of attachment (i.e., maintaining proximity, reactions to unwanted separation, relying on the caregiver for comfort during times of stress) were also present in adult committed romantic relationships, extended child development attachment research to adult relationships (Weiss, 1982). In a seminal study, Hazan and Shaver (1987) provided empirical support for conceptualizing romantic love as an attachment process and for adult attachment styles being consistent with childhood styles. Over several years, adult attachment researchers developed 3- or 4- category-like attachment style models, based on self-report (Bartholomew & Horowitz, 1991; Collins & Read, 1994) or interviews (Main & Goldwyn, 1984). More recently, there is growing empirical support that two continuous and orthogonal dimensions, anxiety and avoidance, underlie attachment models (Brennan et al., 1998; Fraley & Waller, 1998; Mikulincer & Shaver, 2008). These two orthogonal dimensions also correspond with distinct profiles for regulating and

expressing attachment-related emotions. To explain, individuals who are high in anxiety tend to hyperactivate the attachment system and maximize emotions (e.g., anger) during attachment-related scenarios (e.g., separation). In contrast, individuals who are high in avoidance, tend to deactivate the attachment system and suppress or minimize emotions during attachment-related scenarios. For example, when faced with an attachment-related threat such as separation, the anxiously attached might react with exaggerated anger or panic while the avoidantly attached might react with indifference or distraction. However, research supports that the deactivating regulation strategies of the avoidantly attached are primarily defensive and superficial and that individuals continue to experience distress on a physiological level (Dozier & Kobak, 1992)

Across studies, research has found theory-consistent attachment style differences in expectations of self and others, attachment related goals, strategies for achieving these goals, and emotional regulation strategies (Collins & Read, 1994; Mikulincer & Shaver, 2008). There is also support for this model across ages (e.g.., childhood, adulthood), attachment caregivers (e.g., mother, father, romantic partners, God), and domains (e.g., romantic relationships, counseling, spiritual life; Mikulincer & Shaver, 2008). Therefore, I describe the two insecure (i.e., anxious and avoidant) and the secure style in more depth, noting that the three styles are normative (vs. pathological) behavior and that secure attachment seems to be most optimal for developmental outcomes.

Anxious attachment. Attachment anxiety refers to the person worrying about and expecting that the attachment figure will not be proximal, accessible, and responsive during times of need (Bowlby, 1988). With anxious attachment, the person views the self as unlovable and helpless and views the caregiver as unreliable and inconsistently

accessible (Bowlby, 1988; Brennan et al., 1998; Mikulincer & Shaver, 2008). These caregiver views are congruent with infant and mother observations indicating that caregivers of anxiously attached infants were inconsistent in their responsiveness (Ainsworth et al., 1978; Bowlby, 1969; Fraley & Waller, 1998). In keeping with the orthogonality of attachment, the anxiously attached, who are continuously anxious about the caregiver's accessibility, manage attachment-related anxiety with a hyperactivated affect management strategy in which the attachment system is constantly activated to some extent. This hyperactivation is reflected in the person being clingy, hypervigilant to the caregiver's presence, and continuously seeking the caregiver's proximity, even in the absence of threat (Mikulincer & Shaver, 2007). Because of this hypervigilance and because of having difficulty with being soothed (Mikulincer & Shaver, 2007), the anxiously attached restrict their exploratory behavior and as a result have less opportunities for learning and mastering their environment. Thus, they often do not gain the same level of confidence and mastery as the securely attached who can explore their environment with more ease. Not surprisingly then, adults with anxious attachment perceive caregivers as a source of self-worth, desire extreme intimacy with limited independence, and demonstrate heightened emotional displays of distress and anger to elicit support (Bowlby, 1969; Mikulincer & Shaver, 2007). In sum, the anxiously attached are hyper-alert to potential attachment cues and often prefer to rely on the caregiver rather than relying on the self.

Avoidant attachment. Attachment avoidance refers to the person dismissing the importance of attachment and relying on the self rather than the caregiver (Bowlby, 1988). With avoidant attachment, the person typically views the self as loveable and competent

but views the caregiver as rejecting and untrustworthy (Mikulincer & Shaver, 2007). These views are congruent with infant and mother observations indicating that caregivers of avoidantly attached infants were rejecting or neglectful (Ainsworth et al., 1978; Bowlby, 1969). Orthogonal to the anxious dimension, the avoidantly attached manage attachment-related affect with a deactivated affect management strategy, which includes suppressing attachment information and having a reduced awareness of threats (Mikulincer & Shaver, 2007). Although the attachment system is kept deactivated, this defensive maneuver can fail, for example, in circumstances in which the avoidantly attached are experiencing cognitive overload (Mikulincer & Shaver, 2007). Nonetheless, the avoidantly attached often explore the environment with relative independence and confidence. Adults with avoidant attachments desire independence, maintain emotional distance from partners, and minimize or deny emotional distress (Mikulincer & Shaver, 2007).

Secure attachment. Secure attachment refers to the person feeling confident in approaching the caregiver when distressed or needing guidance (Bowbly, 1988). When securely attached, individuals are low in both attachment anxiety and avoidance. With secure attachment, the person views the self and the caregiver as loveable. These views of the caregiver are congruent with infant and mother observations indicating that caregivers of securely attached infants were consistent and responsive (Ainsworth et al., 1978). The securely attached manage attachment-related anxiety by approaching the caregiver and seeking safe haven and secure base functions, thereby obtaining comfort and security (Bowbly, 1988; Cassidy, 1994; Mikulincer & Shaver, 2007). By being able to rely on their caregivers as a secure base, the securely attached comfortably explore the

environment and develop flexible emotion regulation strategies, as well as a sense of competency and mastery (Bowlby, 1969). The securely attached can balance self- and other-reliance in relationships (Mikulincer & Shaver, 2007) and demonstrate the ability to regulate negative affect constructively, that is, by differentiating thoughts and emotions (Skowron & Dendy, 2004). Finally, as proposed by Bowlby (1988), research suggests that secure attachment is linked to more effective adjustment in several domains, including romantic, parental, and counseling relationships; cognitive and emotional functioning; and social functioning (Mikulincer & Shaver, 2003; Weinfield, Sroufe, Egelance, & Carlson, 2008).

Attachment to God

In the early 1990s, attachment researchers extended attachment theory to the person's relationship with God or other supernatural deity (Kirkpatrick, 1992). Several world religions, in particular monotheistic religions such as Christianity, center on the belief in a personal God and the personal relationship with that God. Kirkpatrick (1992) proposed that many believers have an attachment bond with God, who functions psychologically as an attachment-related caregiver. These believers strive to maintain proximity to God in various ways. For example, the person spends time in churches, temples, or other sacred places of worship and engages in conversational, non-distress-related prayer (Kirkpatrick, 1999). In addition, people maintain psychological or symbolic proximity by wearing sacred or religiously oriented jewelry, such as a crucifix, or by displaying religious pictures at work or home. Believers also turn to God as a safe haven during times of distress, especially when faced with threats or loss (Bjork & Cohen, 1993). When distress activates the attachment system, believers may use personal prayer

as a strategy for regulating affect, re-establishing proximity to God, and feeling a sense of security (Granqvist, 2005). In addition, as an omnipresent, omniscient, and omnipotent presence, God can function as an ideal secure base for guidance and anchoring exploration (Granqvist & Kirkpatrick, 2008). Further, apostasy (i.e., deconversion) or the inability to experience a previously felt closeness with God may be viewed as attachment-related separation from God (Granqvist & Kirkpatrick, 2008). Consistent with this thinking, symptoms akin to separation anxiety have been observed following the deconversion process (Wright, 1987).

Currently, researchers have developed two models to explain the development of the believer-God attachment relationship; both models are general (vs. religion-specific), though they address only individuals who have a relationship with their Higher Power. First, in the compensation hypothesis, Kirkpatrick (1992; Kirkpatrick & Shaver, 1990) proposes that God serves as an attachment figure for individuals who lack secure attachment relationships in other domains. Thus, individuals who have insecure primary attachments might turn to God as an ideal divine attachment figure. As the surrogate attachment figure, God can meet the individual's safe haven and secure base needs, thereby functioning to regulate attachment-related distress and provide the guidance for exploratory behavior (Davis, Moriarty, & Mauch, 2012). Thus, theoretically, the compensation hypothesis applies only to individuals with insecure attachment styles (i.e., anxious or avoidant) across domains and not to those with secure attachments. Consistent with the compensation model, research found a positive link between high parental insensitivity in childhood, high adult insecure romantic attachment, and sudden and intense religious conversions in adulthood (Granqvist & Kirkpatrick, 2004;

Kirkpatrick, 1997). Researchers have interpreted these findings to mean that individuals who had a history of insecure attachment in childhood and who lack secure attachments in adulthood are likely to compensate for their insecure attachments by seeking God as an attachment figure through the process of religious conversion.

Second, in the correspondence model, Granqvist (1998) proposes that early attachment IWMs are used as a template in the development of the relationship with God. Thus, individuals with secure attachments to early caregivers develop a secure attachment relationship with God, and individuals with an anxious or avoidant attachment to caregivers develop an anxious or avoidant attachment to God. Consistent with the correspondence hypothesis, believers' reports of loving parents (Granqvist, Ivarsson, Broberg, & Hagekull, 2007) and believers' secure romantic attachments (Kirkpatrick & Shaver, 1992) were positively associated with the perception of a loving and close God. In contrast, reports of rejecting or role-reversing parents were positively associated with the perception of a distant God (Granqvist et al., 2007). Researchers have interpreted these findings to mean that attachment styles are consistent across domains (e.g., parent, romantic partner, God), due to the stability of IWM's formed from interactions with early caregivers.

Recently, research has also provided evidence that both the compensation and correspondence models are simultaneously active in the development of the attachment to God (Granqvist & Hagekull, 2000; McDonald, Beck, Allison, & Norsworthy, 2005). For example, Granzvist and Hagekull (2000) found that although positive correlations existed between adult romantic partner attachment styles and the equivalent God attachment styles (i.e., a correspondence effect), insecure romantic partner attachments were

positively related to a higher importance of the personal relationship with God and higher involvement in religious practices (i.e., a compensatory effect). Therefore, researchers (e.g., Beck & McDonald, 2004; McDonald, Beck, Allison, & Norsworthy, 2005) have recently argued for a combined compensation-correspondence model in which individuals with insecure attachments to existing attachment figures (e.g., parents, romantic partners) may be more likely to compensate for their insecurity through seeking and prioritizing a relationship with God (i.e. compensation). Nonetheless, once in the relationship with God, these individuals will likely begin exhibiting the same attachment patterns that exist in their other attachment relationships (i.e., correspondence).

Individual differences in attachment to God. Theoretically, attachment to God is similar to attachment with other emotionally important caregivers (Bowlby, 1988). Attachment to God findings across studies using interview (e.g., Proctor et al., 2009) and self-report (e.g., Kirkpatrick & Shaver, 1992) measures, support Bowlby's (1988) theory and is consistent with other (e.g., romantic) attachment research (Mikulincer & Shaver, 2007). In an initial study using a 3-category model, Kirkpatrick and Shaver (1992) found secure attachment to God was most prevalent, with percentages of secure = 70.1 %, followed by anxious = 22.7% and avoidant = 7.1%. For romantic attachment, secure is most prevalent, with percentages of secure = 56%, anxious = 19%, and avoidant = 25% (Hazan & Shaver, 1987). In addition, findings for secure attachment were consistent with theory and similar to findings from romantic attachment studies. Individuals reporting secure attachment to God also reported perceiving the self as worthy of God's love and valuing and appreciating the self (Proctor et al., 2009); maintaining a positive concept of God, that is, seeing God as loving, available, protecting, and responsive (Kirkpatrick &

Shaver, 1992; Proctor et al., 2009); being comfortable relying on God (Rowatt & Kirkpatrick, 2002); and having mostly positive relational experiences with God (Proctor et al., 2009). Further, secure attachment to God was associated with effective cognitive processing, specifically, being able to cognitively integrate and make meaning of positive and negative experiences in the relationship with God (Kelley, 2012; Kirkpatrick & Shaver, 1992; Proctor et al., 2009; Rowatt & Kirkpatrick, 2002).

In terms of anxious attachment, persons reporting high anxiety in the attachment to God also reported fluctuating perceptions of their self-worth and worthiness of God's love, that is, perceiving the self negatively when experiencing God as withdrawing and then perceiving the self positively when experiencing God as present (Proctor et al., 2009). In terms of perceptions of God, the anxiously attached report perceiving God negatively as controlling and punishing (Rowatt & Kirkpatrick, 2003). Consistent with the anxious attachment pattern of pervasively worrying about the caregiver's availability, anxious attachment to God was positively related to perceiving God as fluctuating in accessibility, that is, present sometimes but capable of withdrawing at any time (Proctor et al., 2009) and moderate to excessive preoccupation and worry about the relationship with God (Rowatt & Kirkpatrick, 2003). Further, regarding proximity-seeking, anxious attachment to God was positively related to higher engagement in petitionary prayer, a form of help-seeking behavior (Byrd & Boe, 2001). Regarding emotional functioning, anxious attachment to God was negatively related to effective emotional processing and positive affect (Byrd & Boe, 2001) and was positively related to negative affect (Rowatt & Kirkpatrick, 2002) and jealousy over God's seeming to prefer relationships with others (Beck & McDonald, 2004). In terms of personality traits, anxious attachment to God was

positively correlated with neuroticism, that is, having a low tolerance for stress and reacting with high anxiety and general emotional instability (Rowatt & Kirkpatrick, 2002).

In terms of avoidant attachment, individuals reporting high avoidance in the attachment to God also reported viewing God negatively (Proctor et al., 2004) but perceiving the self as competent (Beck & McDonald, 2004; Proctor et al., 2009; Rowatt & Kirkpatrick, 2002). In comparison with the securely and anxiously attached, the avoidantly attached to God view God as less loving, more controlling, unresponsive, and uninterested (Proctor et al., 2009; Rowatt & Kirkpatrick, 2002). Consistent with the avoidant pattern of dismissing or downplaying attachment relationships (Mikulincer & Shaver, 2007), the avoidantly attached to God avoid reliance on God while focusing instead on self-sufficiency. Further, high avoidance in the attachment to God was negatively related to the frequency of relational experiences with God, such as conversational or meditative prayer and prayer when under stress (Byrd & Boe, 2001). All these findings suggest low levels of proximity seeking in the attachment to God. Regarding personality, avoidant attachment to God was negatively related to agreeableness, which includes traits consistent with a warm, considerate, and trusting personality (Rowatt & Kirkpatrick, 2002).

Attachment to God and psychological outcomes. Consistent with theory (Bowlby, 1988) and other (e.g., romantic) attachment research (Mikulincer & Shaver, 2007), attachment to God has implications for psychological functioning, with secure attachment to God linked to more effective functioning. In developing this knowledge base, researchers have used various methods (e.g., longitudinal, Ellison, Bradshaw, Kuyel,

& Marcum, 2011; a newspaper survey, Kirkpatrick & Shaver, 1992) and samples (e.g., community adults, Kirkpatrick & Shaver, 1992; college women, Homan, 2012; college undergraduate students, Reiner, Anderson, Hall, & Hall, 2010; Presbyterian elders, Ellison et al., 2011). Some research suggests that security in the attachment to God relationship can serve a protective function for believers. For example, findings indicate that secure (vs. anxious or avoidant) attachment to God is linked to lower loneliness, anxiety, physical illness (Kirkpatrick & Shaver, 1992), depression (Kelley, 2012; Kirkpatrick & Shaver, 1992), and stress over time (Ellison et al, 2011). Secure attachment to God is also related to higher life satisfaction (Kirkpatrick & Shaver, 1992) and higher stress-related growth (i.e., being able to see benefits from a stressful experience) following a death loss (Kelley, 2012). Studies further suggest that secure attachment to God can serve as a buffer to harmful effects of life stress (Ellison et al., 2011) or other negative life events, such as the negative effect of media exposure on body image (Homan, 2012). Not surprisingly, empirical findings also suggest that insecure attachment to God is associated with psychological problems. Both attachment anxiety and avoidance significantly predicted perceived stress among college students (Reiner et al., 2010), and Ellison et al. (2011) found that an anxious attachment to God could exacerbate the harmful effects of stress. Thus, it appears that attachment to God may serve as a resilience or risk factor for believers' psychological well-being, with anxious and avoidant attachment comprising risk factors. Further, anxious and avoidant attachment may function differently as risk factors, due to the different affect management strategies they engender that motivate greater, for anxious, and lesser, for avoidance, reliance on the attachment to God.

Shame, Guilt, and Self-Compassion

In this section, I start with a theoretical, research-supported overview of shame and of guilt, addressing the meaning of both terms and their relevance to my study. Last, I address self-compassion.

Shame and Guilt

Shame and guilt are two important, sometimes debilitating emotional experiences that have garnered the interest of psychologists from the times of Freud, perhaps because they are common emotions felt by most people at some point. Historically, shame and guilt have been positively linked to psychopathology (e.g., depression) and negatively linked to effective interpersonal functioning (Tangney & Dearing, 2002). Although the terms are often used interchangeably (Tangney & Dearing, 2002), early theorists (e.g., Benedict, 1946) distinguished between shame and guilt based on the context and content of the event eliciting the emotion. For example, Benedict's (1946) public-private theory suggested that shame was a public emotion stemming from exposure of one's shortcomings in a social context, whereas guilt was a more private experience stemming from internal conflict with one's own conscience. Research has, however, consistently failed to support this theory and indicates that both emotions occur in public and in private. Further, the type of eliciting situation (e.g. moral failure, socially inappropriate behavior) does not consistently determine whether shame or guilt is experienced (Tangney, Marschall, Rosenberg, Barlow, & Wagner, 1994; Tangney, Miller, Flicker, & Barlow, 1996).

Instead, as first proposed by Lewis (1971), shame and guilt, respectively, are distinguished by a negative personal evaluation that is focused on the self or a negative

evaluation that is focused on the behavior by the person. Research is consistent with theory in indicating that shame and guilt are conceptually and phenomenologically distinct experiences that influence psychological functioning in different ways (Tangney & Dearing, 2002). Further, the self-behavior distinction has been supported in research across developmental stages (e.g., adolescence, adulthood), cultures (e.g., Indian, Italian, Filipino), and religious backgrounds (e.g., Catholic, Jewish, Protestant) (Anolli & Pascucci, 2005; Bagozzi, Verbeke, & Gavino, 2003; Ferguson & Stegge, 1999; Lindsay-Hartz, 1984; Tangney et al., 1994; Tangney et al., 1996). Nonetheless, shame and guilt are similar in that both refer to self-conscious emotional reactions to personal transgressions. The emotional reactions lead to some degree of evaluation of the self or the self's actions, and ultimately aid in self-regulation (Tangney & Fischer, 1995). However, the terms differ in regard to the object of negative evaluation, accompanying emotions, problem-solving tendencies (e.g., withdrawal for shame, reparation for guilt), and the influence on self-image and functioning, including spiritual functioning.

More specifically, shame focuses on a negative evaluation of the self (e.g., as when a person thinks, "I am bad"), and this global negative evaluation of the self profoundly and negatively influences the person's self-image (Gilbert, 1998; Tangney & Dearing, 2002). Shame, which ranges from mild embarrassment to a person feeling a sense of being seriously flawed and desiring to disappear into the ground or crawl into a hole (Tangney & Dearing, 2002), is uncomfortable in its milder forms and is profoundly distressing and painful in its more intense forms. In addition, shame is accompanied by self-oriented concerns, such as feeling helpless, inferior, exposed, humiliated, and angry, and by avoidance tendencies, such as withdrawal, isolation, and hiding (Tangney &

Dearing, 2002). Research indicates that with higher (vs. lower) shame, instead of perceiving the self as having control, people attribute events to generalized, stable, non-controllable factors, such as natural forces, fate, or others' intentions (Anolli & Pascucci, 2005; Tracy & Robins, 2006). In terms of religious functioning, recent research found that shame is positively associated with higher extrinsic religiosity (Woien et al., 2003), that is, superficial engagement in religious behaviors/beliefs for mostly utilitarian self-serving rewards (e.g., a social status; Allport & Ross, 1967) versus mostly personal, internal rewards (e.g., a meaningful relationship with God).

In contrast, guilt focuses on a negative evaluation of a behavior (e.g., as when a person thinks, "I did something bad"), but this negative evaluation of a specific behavior does not necessarily alter self-image (Frijda et al., 1989; Tracy & Robins, 2004). Guilt is generally less painful than shame and ranges from mild forms characterized by tension and discomfort to more intense forms characterized by regret and a desire to confess (Tangney & Dearing, 2002). In addition, guilt is accompanied by other-oriented concerns (e.g., remorse), empathic feelings, and attempts to repair the relationship or apologize to the other person in order to make amends (Tangney & Dearing, 2002). Unlike shame, guilt reactions can be healthy and adaptive, and promote prosocial behaviors (Kim, Thibodeau, & Jorgensen, 2011). In terms of religious functioning, research found that guilt is positively associated with intrinsic religiosity (Woien et al., 2003), that is, engaging in religious practices for internally motivated purposes, such as pursuing the ultimate goals of the religious tradition and developing a construct from which to contextualize other aspects of life (Allport & Ross, 1967).

Self-Compassion

Self-compassion is viewed as a way to regulate distressing emotion (Neff, 2003); in particular, the term refers to an emotionally positive way of relating to the self in response to pain or failure, such as occurs when a person fails at some endeavor (e.g., an exam) or fails to live up to the self's moral, ethical, or personal standards (Neff, 2003). Accordingly, self-compassion is an important aspect of effective functioning and is positively related to happiness, optimism, and life satisfaction (Neff & Vonk, 2009). In addition, increased self-compassion is often a useful goal in therapeutic work that aims to help clients better regulate emotional distress (Adams & Leary, 2007), particularly shame and guilt (Leary et al., 2007). Because of its therapeutic potential, self-compassion has been clearly structured and integrated into some psychotherapy models, for example, in Acceptance and Commitment Therapy (ACT; Roemer & Orsillo, 2010). In these specific models, and more generally as well, self-compassion is useful to people in managing distressing affect.

In terms of its meaning, self-compassion is composed of three elements (Neff, 2003b). The first element, self-kindness, refers to being kind to the self and accepting the self in a nonjudgmental manner, which contrasts with responding to negative experiences with self-criticism. Accordingly, being kind to the self involves accepting difficult experiences, which thwarts and prevents increasing distress that accrues from harshly judging the self. For example, when a project designed for work does not go as planned, Anita tells herself "This is disappointing but it's ok, I tried my best, and I will keep working on it," rather than telling herself "I'm stupid and incompetent and don't deserve this job." The second element, common humanity, refers to viewing the self's

experiences, including failure and suffering, as natural parts of being human. Common humanity contrasts with irrationally viewing the self's perceived failure as specific only to the self and as indicating inherent flaws within the self. Accordingly, common humanity promotes people having an ongoing awareness of and connection to the universal experience of being human and prevents self-isolation. For example, after getting fired, Marcos reminds himself that getting fired is a common occurrence and that many people he knows have been fired; subsequently, he turns to his friends for support rather than withdrawing from his friends and isolating himself due to thinking that being fired is an experience that others cannot relate to. The third element, mindfulness, refers to having a non-judgmental, receptive state of mind in which negative emotions are accepted with openness and clarity, which contrasts with attempting to repress or exaggerate negative emotions or overidentifying with emotions (i.e., perceiving the self's negative emotional states as indicative of the self being flawed). Accordingly, mindfulness involves using metacognitive strategies to achieve a balanced perspective on painful feelings, that is, continuing to feel some distress while also gaining an awareness of the meaning of the distress, rather than increasing the distress by obsessing on feelings or ruminating on thoughts, which leads to becoming stuck in a cycle of maintaining distress (Neff, 2003b). For example, when anxious before a dance performance, Sonya non-judgmentally observes and acknowledges her thoughts, feelings, and physical reactions, thereby staying in the experiential moment, without trying to change the anxiety. She would tell herself, "I'm feeling anxious right now, and that's normal and ok; I can still perform." This observation and acknowledgement contrasts with trying to deny the anxiety or judging herself to be a weak and fearful person because she is feeling

anxious, as is reflected in telling herself, "I need to stop being anxious right now, or I won't be able to perform." This latter strategy would maintain and increase the anxiety, whereas the mindfulness strategy enables her to learn that she can feel anxious, which is normal, and still perform. Thus, being mindful may not result in Sonya's anxiety going away completely, but the intensity of the emotion is lessened and, thus, has less influence over her performance. Instead of being locked into a polarized all or none anxious response, she can be anxious and perform.

In studies, researchers have typically examined self-compassion as one whole concept rather than reporting results separately for the three different components. Consistent with the general definition of self-compassion as an emotional regulation strategy, research indicates that self-compassion can function to diminish negative emotional responses, such as shame, and promote more adaptive emotional responses, such as guilt without shame (Neff, Hsieh, & Dejitterat, 2005). Accordingly, higher self-compassion was related to more positive emotions (Neff & Vonk, 2009) and to effectively attending to both the self and the partner's needs during conflict (Yarnell & Neff, 2012). In terms of differentiating self-compassion from the defensive tendency to deny the self's shortcomings, in two studies (Neff & Vonk, 2009; Leary et al., 2007), self-compassion was not significantly related to a self-enhancement bias but was positively associated with taking responsibility for mistakes. Therefore, researchers concluded that self-compassion is positively associated with accurately perceiving the self's strengths and acknowledging the self's shortcomings, but self-compassion does not lead to artificially inflating perceptions of the self.

Psychological Well-being

Although much of therapy-related psychology has focused primarily on problems (e.g., depression) and emotions (e.g., shame, guilt) that interfere with effective functioning, a few theorists, past and present, have examined positive functioning. More specifically the nature of positive psychological functioning was identified in several early psychological theories, as exemplified by Erikson's (1959) psychosocial development theory, Rogers' (1961) actualizing tendency and fully functioning person, and Maslow's (1962) self-actualization. For example, Erikson's (1959) model identifies polarized crises that occur throughout different stages of life, with the more positive pole linked to more effective functioning. For example, adolescents establishing a unique sense of identity and readiness for interpersonal intimacy would enhance functioning and the effectiveness of the developmental trajectory into the next stage. Rogers' (1951) actualizing tendency described the organismic human drive to develop, change, and grow towards the self's full potential. In this theory, the fully functioning person represents the epitome of effective functioning, characterized by congruence between the self-concept and the self's experienced reality, resulting in a cohesive self that is open to new experiences and capable of adapting to new environments. Although widely referenced in therapy, these constructs have received little empirical support, largely because the authors did not develop and publish measures to test their theoretical principles (Ryff, 1989).

More recently, social scientists have addressed positive functioning by identifying and examining different forms of well-being, for example, by viewing well-being as a

product of happiness and meaningfulness (Snyder, 2000). In examining the extant literature, Ryan and Deci (2001) noted that most well-being theories describe one of two discrete, but related, types of well-being. First, hedonia focuses on a subjective sense of well-being linked to immediate functioning and sensations (e.g., the presence of positive affect and absence of negative affect; Bradburn, 1969), and tends to fluctuate based on daily life experiences. Second, eudaimonia focuses on the structural components of adaptive adjustment and positive functioning, and is relatively stable across life experiences.

Psychological well-being, a form of eudaimonic well-being, is a multi-faceted construct that extends beyond subjective well-being to fulfilling the self's potential and living a life that is meaningful and consistent with the self's values (Warr, Cook, & Wall, 1979). Although somewhat similar to the older notions of positive functioning, such as Rogers' (1951) individually focused fully functioning person, psychological well-being focuses on universal human psychological needs (e.g., the need for connection, competence, purpose). These psychological well-being theories differ in the emphasis placed on fulfilling specific needs. For example, Diener et al. (2009) emphasizes social relatedness needs (e.g., having satisfying interpersonal relationships), whereas Steger et al., (2006) emphasizes purposeful living needs (e.g., finding meaning in life). In addition, the current well-being theories range from a domain specific focus (e.g., job-related psychological well-being; Warr et al., 1979) to a context-free or general focus (e.g., global life satisfaction; Liang, 1984).

Following in this intellectual tradition, Ryff (1989) developed a unique, complex conceptualization of psychological well-being that addresses a range of universal

psychological needs and is not specific to any one life domain. The complexity of psychological well-being in her model is captured by six theoretically-derived core dimensions (i.e., autonomy, environmental mastery, personal growth, purpose in life, positive relations with others, and self-acceptance). These dimensions, which she developed into a measure, were derived by her summary and theoretical analysis of previous developmental, clinical, and mental health theories of positive psychological functioning.

The six dimensions address multiple core and universal psychological needs (Ryff, 1989). Autonomy addresses the need for self-determination and includes the person evaluating the self by personal standards rather than looking to others for approval and submitting to social pressure. Environmental mastery addresses the need for competence and includes the person creating or adapting various environments to suit the self's needs and abilities. Personal growth addresses the need for realizing the self's potential and includes the person continuing to grow and develop while facing new challenges at different stages of life. Purpose in life addresses the need for living a meaningful life and includes the person having a sense of direction in life that is driven by goals and intentions. Positive relations with others addresses the need for meaningful social connections and includes the person being able to form emotionally deep interpersonal connections and possessing adequate satisfying relationships. Self-acceptance addresses the need for having a positive attitude towards the self and includes the person accepting both good and bad personal qualities, and viewing the past positively. Following this model, I define the construct of psychological well-being as positive functioning across these psychological dimensions.

In general, psychological well-being, regardless of the complexity of the definition or measure, is positively linked to effective life functioning. For example, with regard to meaningful relationships, psychological well-being was positively related to romantic relationship satisfaction (Lowyck et al., 2009). With regard to emotional regulation, psychological well-being was positively related to having positive affect (Ryff, 1989) and using adaptive coping strategies (e.g., cognitive restructuring, seeking social support, emotional calmness; Carrasco et al., 2013). With regards to psychological health, psychological well-being was negatively related to psychopathology (e.g., depression; Wong, 1998).

Rationale, Research Question, and Hypotheses

In this section, I recapitulate the overview of the study. Then I introduce the mediation model. After an argument about secure attachment, I develop my rationale for my two research questions and the overarching hypotheses and sub-hypotheses for both anxious attachment and avoidant attachment to God.

Overview

Considerable research indicates that spirituality is linked to positive psychological outcomes, for example, effective coping with stressful events (Pargament, 1997). Findings indicate that (a) prayer, which may function as proximity seeking to God, increases under stress and is commonly used to cope with death losses and illnesses (Neighbors, Jackson, Bowman, & Gurin, 1983; Rosenstiel & Keefe, 1983) and (b) spiritual practices are positively related to favorable mental health outcomes (Baumesiter, 2002; Koenig, McCullough, & Larson, 2001). However, to better understand spirituality's relation to psychological well-being, it is important to examine specific

aspects of spirituality, rather than examining spirituality as a single unitary construct. The believer's attachment to God is at the heart of spiritual experiences but is not yet sufficiently well understood, particularly as to how the attachment relationship may explain psychological well-being. Research indicates that attachment to God is distinct from other religiosity aspects, such as belief and practice (Kirkpatrick & Shaver, 1992), and from other attachment relationships, such as attachment to mother and father (Sim & Loh, 2003). Additionally, Kirkpatrick and Shaver (1992) observed that only attachment to God (vs. other religious variables such as religious beliefs, service attendance, intrinsic vs. extrinsic religious orientation) was significantly associated with positive functioning and mental health outcomes such as life satisfaction, depression, and anxiety.

This relatedness can be explained by attachment theory, because the caregiver accessibility and response to proximity seeking, through the safe haven and secure base functions, are critical to the person's reducing distress and enhancing well-being (Bowlby, 1969). In distressing circumstances, attachment styles would directly influence psychological well-being through the person's characteristic emotional regulation (e.g., hyperactivating or deactivating strategy) that is triggered by threats or danger (Bowlby, 1988). For instance, seeking the caregiver allows the securely attached person to obtain the safe haven and secure base functions that deactivate the threat-related emotion (e.g., anxiety) and attachment system, thereby allowing the person to re-activate exploratory (e.g., learning) behaviors, as is consistent with secure attachment being linked to more effective developmental outcomes (Bowlby, 1988; Mikulincer & Shaver, 2007). Therefore, I would expect that individual differences in attachment to God (i.e., attachment styles) would be linked to psychological well-being.

The Mediation Model

The pathways that link attachment to God and psychological well-being are not yet clear, though I propose that shame, guilt, and self-compassion mediate attachment to God and psychological well-being (see Figure 1). Individual differences in attachment (i.e., styles) function in such a way that people have different, characteristic emotional and cognitive reactions and interpretations of events (Mikulincer & Shaver, 2007). Shame, guilt and self-compassion are emotional and cognitive responses to personal failure or transgressions; and research indicates that each of these variables is linked to both romantic or parental attachment styles (Akbağ & Imamoglu, 2010) and psychological functioning (Neff & Mcgehee, 2010). Therefore, it could be that these constructs mediate attachment to God and psychological well-being.

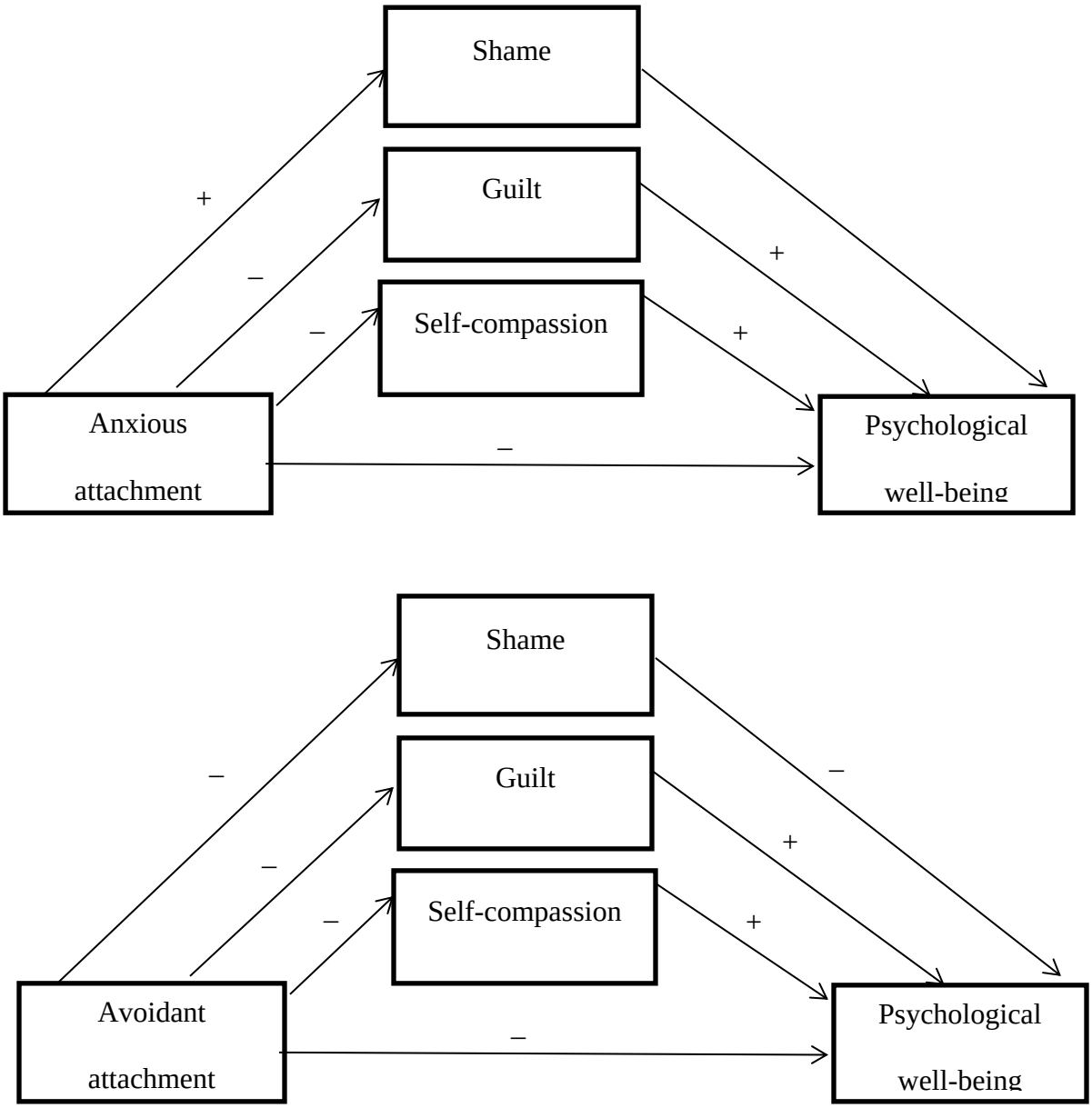

Figure 1. Hypothesized directions of paths in mediation models of anxious attachment to God and psychological well-being and avoidant attachment to God and psychological well-being

There is support for this mediation model, which I demonstrate here using an argument about secure attachment, prior to developing my hypotheses for anxious and

avoidant attachment. As noted previously, theory and research indicate that attachment to God functions similarly to other attachment relationships, for example, parental and romantic attachment (Kirkpatrick and Shaver, 1992). In addition, research has found that secure attachment is negatively related to shame and positively related to guilt (Lopez et al., 1997) and that the securely attached with high guilt maintain proximity to attachment figures and take reparative action in order to reduce guilt feelings (Ghorbani, Liao, Çayköylü, & Chand, 2013). Additionally, individuals who are securely attached are more likely to be kind and nurturing to the self (Mikulincer and Shaver, 2005), as is consistent with research finding that attachment security is associated with higher self-compassion (Raque-Bogdan et al., 2011). High self-compassion is also related to positive interpersonal functioning and higher relational well-being (Yarnell & Neff, 2012), which seem consistent with characteristics of psychological well-being (i.e., positive relations with others). For example, research found that self-compassion is positively related to being more supportive of and emotionally connected to romantic partners (Neff & Beretvas, 2013) and mediates between romantic attachment and mental health (Neff & Mcgehee, 2010; Raque-Bogdan et al., 2011).

In terms of the mediation process, secure attachment to God is associated with viewing God as loving and forgiving and with having a sense of optimism and competence (Batson, Schoenrade, & Ventis, 1993; Myers, 1992). Thus, following a personal failure or personal transgression, a person with a secure attachment would experience shame or guilt and use self-compassion to regulate that affect. With a positive view of God as nurturing and compassionate, the person would experience stress in relation to the transgression, seek proximity and the safe haven and secure base functions,

deactivate any attachment-related affect, and use the exploratory system to regulate the shame or guilt response. More specifically, if feeling shame, the person may use self-compassion to (a) maintain connection to common humanity, thereby counteracting the tendency toward isolation and narrow self-focus, and (b) achieve the balanced emotional and cognitive perspective of mindfulness. This self-regulation would allow the person to differentiate between negative evaluations of the self and the self's behaviors and effectively reduce shame. If feeling guilty, the person may use self-compassion to acknowledge the transgression and the self's shortcomings (vs. denying or hiding from mistakes), extend kindness to the self, and attempt to repair the error. Thus, the secure attachment to God would help believers navigate challenging situations and, for example, make reparations after a personal transgression with confidence and security. This reasoning is consistent with research indicating that secure attachment to God is associated with lower shame, higher guilt, and higher self-compassion. Because low shame, high guilt, and high self-compassion are all related to higher psychological well-being (Baer, Lykins, & Peters, 2012; Orth, Robins, & Soto, 2010), as is secure romantic attachment (La Guardia, Ryan, Couchman, & Deci, 2000), it is likely that secure attachment to God (i.e., low anxiety and low avoidance) would be positively related to psychological well-being. Using this argument as the basis of my rationale, I now develop the two overarching hypotheses (i.e., for anxious attachment to God and for avoidant attachment to God) for the study.

Rationale for the Hypotheses

Attachment research indicates that the insecurely attached have less effective exploratory outcomes. For anxious attachment, the consistent hyperactivation of the

attachment system interferes in exploratory behavior; and for avoidant attachment, the defensive suppression of attachment information sometimes compromises the effectiveness of exploratory behavior (Mikulincer & Shaver, 2007). Therefore, I would expect that both anxious attachment to God and avoidant attachment to God would be negatively related to psychological well-being, that is, highly anxious attachment and highly avoidant attachment would be linked to lower levels of psychological well-being, though mediation would change the significance of that relatedness.

Anxious attachment to God. Drawing from theory and previous research, I predict that shame, guilt, and self-compassion will mediate the relationship between anxious attachment to God and psychological well-being. In terms of the model and its paths from anxious attachment to God and the mediating variables (see Figure 1), overall, if individuals are highly anxiously attached to God, it is likely that following a personal failure, they will interpret their behavior as a reflection of their incompetence and badness as a person, avoid taking reparative action, and ruminate on or overidentify with their emotions. They will likely worry that God will not love them as much and react with high shame, low guilt, and low self-compassion. More specifically, first, shame is positively related to feeling unlovable and incompetent (Tangney & Dearing, 2002). Therefore, persons with a highly anxious attachment to God, who would have negative beliefs about the self's lovability and competence, may report high shame, as is consistent with parental and romantic attachment research finding that the anxiously attached were higher on shame than the avoidantly or securely attached (Lopez et al., 1997; Magai et al., 2000). Thus, believers with a highly anxious attachment to God may perceive God as more punishing and report high shame; that is, anxious attachment to

God may be positively related to shame. Second, guilt is positively related to feelings of competency and to a sense of responsibility that lead to the person taking reparative actions (Tangney & Dearing, 2002). However, a person with a highly anxious attachment to God, who would feel unlovable and incompetent may feel helplessness and despair. Therefore, the person may be overwhelmed with shame following a transgression, making it difficult to differentiate between shame and any guilt feelings. That is, the person's negative view of the self may enhance the shame reaction of feeling that the self is bad. If so, the anxiously attached may not experience high levels of guilt, as is consistent with romantic attachment research finding that high attachment anxiety was associated with lower guilt (Lopez et al., 1997). Thus, an anxious attachment to God may be negatively associated with guilt. Third, the anxiously (vs. the avoidantly or securely) attached report higher emotional distress immediately following an action (e.g., making a mistake that might disappoint the attachment figure) that threatens the attachment relationship (Feeney, 2005). In such circumstances, the ability to regulate distress using self-compassion requires the use of metacognitive strategies (e.g., reminding oneself that everyone makes mistakes, keeping a balanced perspective of emotions without overidentifying with them), but the negative views of the self that characterize anxious attachment may impede the person's use of these strategies, thereby resulting in lower self-compassion. Thus, anxious attachment to God may be negatively related to self-compassion.

In terms of the associations between shame, guilt, self-compassion and psychological well-being, I expect that shame will be negatively related to psychological well-being, guilt will be positively related to psychological well-being, and self-

compassion will be positively related to well-being. Fourth, more specifically, in terms of the paths in the model, research indicates that shame is negatively associated with psychological well-being (Orth, Robins, & Soto, 2010). To explain, research demonstrates that shame is negatively related to self-esteem (Woien et al., 2003) and positively related to feeling inferior and helpless (Anolli & Pascucci, 2005; Tracy & Robins, 2006), all of which are aspects of psychological well-being's self-acceptance and autonomy dimensions. In addition, shame is positively associated with the risk for psychopathology (Kim, Thibodeau, & Jorgensen, 2011) and with higher somatization, depression, and anxiety (Woien et al., 2003), all of which may be construed as conflicts with psychological well-being's environmental mastery and personal growth dimensions. Therefore, shame will likely be negatively related to psychological well-being. Fifth, research found that high levels of guilt were linked to having higher empathic reactions and maintaining proximity during distress by taking direct reparative actions to regulate emotional distress (Ghorbani, Liao, Çayköylü, & Chand, 2013; Tangney & Dearing, 2002). These findings are relevant to psychological well-being's environmental mastery, personal growth, and positive relations with others dimensions. In addition, guilt was also positively associated with self-regulation (Tangney, Wagner, & Gramzow, 1992) and with higher existential well-being (Woien et al.,2003), which are aspects of psychological well-being's autonomy and purpose in life dimensions; and when shame is statistically controlled, guilt is positively related to psychological well-being (Orth, Robins, & Soto, 2010). Therefore, guilt will likely be positively associated with psychological well-being. Sixth, self-compassion was positively associated with higher life satisfaction and a sense of social connectedness (Baer, Lykins, & Peters, 2012; Neff, 2003a), which are aspects of

the purpose in life and positive relations with others dimensions. Additionally, self-compassion was negatively associated with psychopathology (e.g., depression and anxiety; Neff & Mcgehee, 2010) and problematic cognitive regulation patterns (e.g., self-criticism, rumination, thought suppression; Neff 2003b; Neff et al. 2007), all of which can be construed as conflicts linked to the environmental mastery and self-acceptance dimensions. Therefore, self-compassion will likely be positively linked to psychological well-being, as was found in research (Baer, Lykins, & Peters, 2012).

Seventh, as argued above (p. 44), I expect that anxious attachment to God will be negatively related to psychological well-being. However, I also expect that this relatedness may not be significant due to shame, guilt, and self-compassion mediating the relatedness of anxious attachment to God and psychological well-being.

Avoidant attachment to God. Shame, guilt, and self-compassion will likely also mediate the association between avoidant attachment to God and psychological well-being. In terms of the model (Figure 1), overall, I expect that avoidant attachment to God may be negatively related to shame, guilt, and self-compassion. More specifically, first, because shame is characterized as intense negative affect (Tangeny & Dearing, 2002) and because the avoidantly attached typically minimize negative emotions, (Mikulincer & Shaver, 2007), it is likely that the avoidantly attached will suppress shame following a personal transgression or failure. In addition, research found a negative association between attachment avoidance and shame (Akbağ & İmamoğlu, 2010; Consedine & Magai, 2003). Therefore, I expect that avoidant attachment to God will be negatively related to shame. Second, because guilt is a negative and distressing emotion, it is likely that the avoidantly attached will also suppress guilt following a personal failure, as is

consistent with research finding a negative association between attachment avoidance and guilt (Akbağ & İmamoğlu, 2010; Consedine & Magai, 2003). Therefore, I expect that avoidant attachment to God will be negatively related to guilt. Third, research findings are inconsistent on the association between attachment avoidance and self-compassion. Although Neff and McgGehee (2010) found no significant avoidant attachment and self-compassion association, Wei, Liao, Ku, and Shaffer, (2011) reported a negative association between avoidance and self-compassion. With an avoidant attachment to God, believers may view God as uninterested or inaccessible. Following a personal failure, they may rely on the self (vs. seeking proximity to God) and use their attachment-related deactivating emotion regulation strategy to regulate the distress, thereby suppressing the emotion. If so, then, they would be unlikely to use self-compassion as an emotion regulation strategy, because they would not be consciously coping with shame or guilt. Additionally, avoidant attachment includes holding defensively positive beliefs about the self (Mikulincer & Shaver, 2007), and self-compassion requires the capacity to realistically acknowledge the self's shortcoming and failures (Neff & Vonk, 2009), which is not consistent with a defensively positive view of the self. This reasoning suggests that avoidant attachment to God would be negatively associated with self-compassion.

In terms of the model, for the paths of the mediating variables to psychological well-being (Figure 1), I expect that shame will be negatively related to psychological well-being, guilt will be positively related to psychological well-being, and self-compassion will be positively related to psychological well-being in my model. The arguments above, labeled fourth through six, for shame, guilt, and self-compassion, would be similar in for both the anxious and avoidant attachment to God models. Finally,

I also expect that avoidant attachment to God will be negatively related to psychological well-being as is noted above on p. 44.

Research Question and Hypotheses

In the present study, I test two overarching research questions (RQ1and RQ2). RQ1 is: Do shame, guilt, and self-compassion mediate the relatedness of anxious attachment To God and psychological well-being? RQ1 leads to one overarching hypothesis followed by seven sub-hypotheses. My first overarching hypothesis (H1) is that shame, guilt, and self-compassion fully mediate the relatedness of anxious attachment to God and psychological well-being. The sub-hypotheses for the direct effects are: anxious attachment to God will be positively associated with shame (H1a), anxious attachment to God will be negatively associated with guilt (H1b), anxious attachment to God will be negatively associated with self-compassion (H1c), shame will be negatively associated with well-being (H1d), guilt will be positively associated with well-being (H1e), self-compassion will be positively associated with well-being (H1f), and anxious attachment to God will be negatively associated with psychological well-being (H1g). The sub-hypotheses for the indirect effects are: the effect of shame mediating the anxious attachment to God and psychological well-being relatedness will be negative (H1h), effect of guilt mediating the anxious attachment to God and psychological well-being relatedness will be negative (H1i), and the effect of self-compassion mediating the anxious attachment to God and psychological well-being relatedness will be negative (H1j).

Research Question 2 (RQ2) is: Do shame, guilt, and self-compassion mediate the relatedness of avoidant attachment to God and psychological well-being? RQ2 leads to

one overarching hypothesis followed by seven subhypotheses. My second overarching hypothesis (H2) is that shame, guilt, and self-compassion fully mediate the relatedness of avoidant attachment to God and psychological well-being. The sub-hypotheses for the direct effects are: avoidant attachment to God will be negatively associated with shame (H2a), avoidant attachment to God will be negatively associated with guilt (H2b), avoidant attachment to God will be negatively associated with self-compassion (H2c), shame will be negatively associated with well-being (H2d), guilt will be positively associated with well-being (H2e), self-compassion will be positively associated with well-being (H2f), and avoidant attachment to God will be negatively associated with psychological well-being (H2g). The sub-hypotheses for the indirect effects are: the effect of shame mediating the avoidant attachment to God and psychological well-being relatedness will be positive (H2h), effect of guilt mediating the avoidant attachment to God and psychological well-being relatedness will be negative (H2i), and the effect of self-compassion mediating the avoidant attachment to God and psychological well-being relatedness will be negative (H2j).

CHAPTER 3. METHOD

In this chapter, I start with the data screening procedures. Then I present a description of the sample, research procedure, instrumentation, and data analysis plan. I also include limitations of the study. The purpose of this study is to examine the mediating factors (i.e. shame, guilt and self-compassion) between attachment to God and psychological well-being. For this study examining mediating models in the relatedness of attachment to God to psychological well-being, I had two inclusion criteria: the participant believes in a God/Higher Power and has a relationship with that Higher Power. This information is noted in the recruitment materials (Appendix A) and in the demographic form, as is described below under Instruments (p. 52).

Participants

Prior to describing the sample, I screened the data. The survey was sent to 4,000 students. After obtaining 329 responses, for a response rate of 8.23%, though I have no way of knowing how many student actually received, read, and acted on the recruitment email, I addressed missing data. I deleted 118 cases due to incomplete responses (e.g., a full scale was not completed). I deleted 48 cases due to participants not meeting both the inclusionary criteria. Of these 48 deleted cases, 20 responded to the belief in God/Higher Power item with “I do not know if God exists” or with “I do not believe in a God or

Higher Power" (see demographic form, p. 121), thereby not qualifying for the research because of not meeting the qualification of believing in a God/Higher Power. Not surprisingly, these 20 participants also indicated no personal relationship with a God/Higher Power. However, out of the 48 deleted cases, 28 responded to the belief in God/Higher Power item with a response indicating that they believe in a God/Higher Power but do not have a personal relationship with God/Higher Power, thereby not qualifying for the research because of not meeting the qualification of a relationship with a God/Higher power. With these 48 deletions, my sample for data analysis was $N = 163$. At this point, the inclusion criteria indicated that frequencies for believing in a Higher Power were 128 (78.5%) "I do and have no doubts about it" and 35 (21.5%) "Generally I do, although sometimes I have doubts." Frequencies for having a personal relationship with God or other Higher Power were 163 (100%) "Yes, I have a personal relationship with God or other Higher Power." Finally, I examined the remaining data to determine if they met the statistical requirements for analysis of the hypotheses. For cases with data missing completely at random (e.g., random missing items on scales), I imputed missing values by using the Expectation Maximization algorithm, which has been demonstrated to be an effective method of dealing with missing data (Bunting, Adamson, & Mulhall, 2002). Missing data accounted for less than 1% of the overall responses. Next, in examining variables to identify univariate and multivariate outliers and to determine normality and distribution of the data, I found that *z* scores for the variables indicated no univariate outliers, and Mahalanobis statistics indicated no multivariate outliers. The skewness and kurtosis statistics for all variables were less than ± 2, indicating that the data were normal and appropriate for the study's planned mediation analyses.

The sample (*N* = 163) included 110 (68%) undergraduate (UG) and 51 (32%) graduate students from a large Midwestern university. As can be viewed in Table 1, for the religious/spiritual demographic items, which were ordered first in obtaining demographic information, participants reported religious affiliation as 2 (1.2%) Buddhist, 34 (20.9%) Catholic, 95 (58.3%) Christian (Protestant), 1 (0.6%) Hindu, 2 (1.2%) Jewish, 4 (2.5%) Mormon, 7 (4.3%) Muslim, 6 (3.7%) Unaffiliated, and 12 (7.4%) Other (e.g., Christian non-denominational, Pentecostal). For the importance of religion in a participant's life, on a scale of 1 = *not at all important* to 7 = *very important*, the mean was 5.84 (*SD* = 1.41; *Mdn* = 6.00). For the importance of spirituality in a participant's life, on the same scale, the mean was 6.32 (*SD* = 0.96; *Mdn* = 7.00). For attending religious services, aside from weddings and funerals, on a scale of 1 = *Never* to 4 = *Once/week* to 7 = *More than once a day*, the mean was 3.86 (*SD* = 1.27; *Mdn* = 4.00). In terms of praying, meditating, or otherwise communicating with God, outside of attending religious services, on a scale of 1 = *Never* to 4 = *Once/week* to 7 = *Several times a day*, the mean was 5.77 (*SD* = 1.27; *Mdn* = 6.00). Additional demographic information follows Table 1.

Table 1

Demographic Characteristics of Sample and University Students

Demographic Variable	Participants		University
	n	%	%
Religious Affiliation			
Buddhist	2	1.2	
Catholic	34	20.9	
Christian (Protestant)	95	58.3	
Hindu	1	0.6	
Jewish	2	1.2	
Mormon	4	2.5	
Muslim	7	4.3	
Unaffiliated	6	3.7	
Other (please specify)	12	7.4	
Self-Identified Gender[a]			
Female	101	62.3	43
Male	60	37.0	57
Unspecified	1	0.6	
Educational Status			
First year undergraduate	16	9.9	13
Sophomore	27	16.8	18
Junior	31	19.3	18
Senior	36	22.4	26
Masters student	25	15.5	13
Doctoral student	26	16.1	8
Race/Ethnicity			
African/Black, Non-Hispanic	9	5.6	3.3
Asian	16	9.8	4.7
Caucasian/White, Non-Hispanic	121	74.7	62.6
Hispanic, Latino/a, Chicano(a)	8	4.9	3.5
Native American/ American Indian	0	0.0	.2
Pacific Islander	1	0.6	.1
Multiracial/multiethnic	5	3.1	1.6
Other	2	1.2	
Total ethnic minorities	41	25.3	22.1[b]

Table 1 (*Continued)*

Demographic Variable	Participants		University
	n	%	%
Residency			
International student	16	9.8	22
Domestic student	143	89.9	78
Relational/affectional orientation			
Heterosexual/straight	156	96.9	
Gay	1	0.6	
Lesbian	1	0.6	
Bisexual	1	0.6	
Questioning	1	0.6	
Other	1	0.6	
Relationship Status			
Single	79	49.1	
Partnered/In a relationship	57	35.4	
Married	24	14.9	
Other	1	0.6	

[a]Self-identification, presumably gender, in the participant group is compared to sex in the University group. [b]For racial/ethnic group, University numbers do not include international students.

As for additional demographic information (Table 1), the sample's mean age was 22.89 (*SD* = 5.54; *Mdn* = 21.5) (Table 1), which is higher than the typical college student population, and is likely due to the high number of graduate student participants in the sample. In addition, 101 (62%) participants self-identified as female, 60 (36.8%) self-identified as male, 1 (0.6%) self-identified as androgyne, and 1 (0.6%) did not report. Of these, 16 (9.9%) were first year undergraduates, 27 (16.8%) sophomores, 31 (19.3%) juniors, 26 (22.4%) seniors, 25 (15.5%) Masters, and 26 (16.1%) Doctoral students, thereby resulting in 110 UG and 51 Graduate students. Regarding race and ethnicity, 9 (5.5%) were African American/Black Non-Hispanic; 16 (9.8%) Asian, 121(74.2%)

Caucasian/White, Non-Hispanic; 8 (4.9%) Hispanic, Latino(a)/Chicano(a); 1 (0.6%) Pacific Islander; 5 (3.1%) multiracial/multiethnic; 2 (1.2%) another race or ethnicity, and 1 (.6%) did not report. Notably, 16 (9.8%) were international students (see Appendix B), 143 (87.7%) were domestic students, and 4 (2.5%) did not report. In terms of relational/affectional orientation, 156 (95.7%) identified as heterosexual/straight, 1 (0.6%) identified as gay, 1 (0.6%) identified as lesbian, 1 (0.6%) identified as bisexual, 1 (0.6%) identified as questioning; 1 (0.6%) identified as other (i.e., uninterested); and 2 (1.2%) did not report. For relationship status, 79 (48.5%) reported as single, 57 (35.0%) as partnered/in a relationship, 24 (14.7%) married, 1 (0.6%) other, and 2 (1.2%) did not report. The demographic information and comparable information for the University (Purdue University, 2013a), if available, are in Table 1.

I compared my sample to data for the Midwestern university. In general, the university has approximately 28,000 UG and 7800 graduate students, with a diverse student body population representing the 50 U.S. states and over 130 countries (Purdue University, 2013a). Several students have an active religious life, as is evidenced by more than 50 operating religious / spiritual student organizations at the university (Purdue University, 2013b). In viewing Table 1, I note that my sample's percentage of women is higher (62% vs 43%) and percentage of men is lower (37% vs 57%) than the university data. In addition, I totaled my percentages of UG and graduate students in order to compare the sample to university data. My sample had fewer (67% vs 76%) UGs and more (31% vs 21%) graduate students. In addition, my sample had fewer (9.8% vs 22%) international students than the university. Finally, my sample's percentage of ethnic minorities was slightly higher (26% vs 22%) than the university's.

Procedure

Following IRB approval (Appendix C), UG and graduate students were recruited for this web-based study, using the two inclusion criteria of the participant believing in a God/higher power and having a relationship with that higher power. The university Registrar sent my recruitment email (Appendix D) to a random sample of 4,000 UG and graduate students, identified by a simple random sampling. A reminder email (Appendix D) was sent after three weeks. The recruitment email asked students to volunteer for the study and included a link for participants to access the web survey. I also offered an incentive (i.e., being entered into drawing for a $25 Amazon.com gift card, with odds for winning being 1:100) in order to increase response rates. At the end of the survey, participants entered the drawing by following a link to a separate site in which they were given the option to provide their email address to be entered into the drawing. Because 212 students participated in the drawing, I provided three gift cards with the recipient identified through a simple random sampling; and I then deleted the file. The survey included an information recruitment page (Appendix E) with directions to complete the questionnaire only once, in order to reduce potential overlap and duplicate responses from participants. The online research packet is ordered as reported in the Instruments section.

Instruments

Participants respond to demographic information and four scales on the web survey. The instructions for the various scales accompany the instruments (see Appendices F-J).

Demographic Information

In this form (Appendix F) that I designed for this study, the first two items are the two screening questions that are the inclusion criteria for the study (see Recruitment email, Appendix D). Specifically, participants indicate if (a) they believe in a Higher Power, and (b) they have a relationship with that Higher Power. To be included in the study, participants need to both believe in a Higher Power and have a relationship with that Higher Power. Then, another five items obtain information pertinent to religious belief, affiliation, and practice. Two of these questions (i.e., "How important is religion in your life?" and "How important is spirituality in your life?") are rated on a 7-point Likert-type scale anchored by 1 = *not at all important* and 7 = *very important*. Another two questions (i.e., "How often do you attend religious services?" and "How often do you pray, meditate, or otherwise communicate with God or other Higher Power?") are rated on a 7-point Likert-type scale anchored by 1 = *never*, 4 = *once/week*, 7 = *more than once a day*. After completing the scales, participants provided demographic information including age, sex, educational status, ethnicity, and romantic relationship status.

Attachment to God

The 28-item Attachment to God Inventory (AGI; Beck & McDonald, 2004; Appendix G) measures a person's attachment to God with two 14-item subscales: (a) attachment anxiety (e.g., "I often worry about whether God is pleased with me" "I get upset when I feel God helps others but forgets about me"), and (b) attachment avoidance (e.g., "I prefer not to depend too much on God" "I am uncomfortable being emotional in my communication with God"). Participants rate items on a Likert-type scale ranging from 1 = *disagree strongly* to 7 = *agree strongly*. For each subscale, items are summed

for a total score, with some items reverse scored. Higher scores indicate higher attachment anxiety or attachment avoidance. The anxiety and avoidance subscales cannot be summed together for a total score.

The AGI (Beck & McDonald, 2004) is based on the Experiences in Close Relationships Scale (ECR; Brenna et al., 1998), which assesses attachment anxiety and avoidance dimensions in adult romantic relationships. In developing the AGI, Beck and McDonald (2004) rewrote items to reflect attachment to God and tested the scale in three studies using a college student sample from a Christian university in the first two studies and a community sample from three different faith groups (i.e., Roman Catholic, Non-Denominational Charismatic, and Church of Christ) in the third study. Construct validity was indicated by an exploratory factor analysis (EFA) in the first study and a follow-up confirmatory factor analysis (CFA) in the second study finding two factors that corresponded to anxiety and avoidance, with the scales being orthogonal as expected. That is, Anxiety and Avoidance were not significantly related ($r = .25$, $p = .06$) and shared only 1.4% ($r = .12$) of variance. Convergent validity was demonstrated by AGI anxiety ($r = .48$, $p < .01$) and AGI avoidance ($r = .25$, $p < .01$) correlating significantly with the respective ECR anxiety and ECR avoidance scores. In addition, the AGI was significantly related to the religious well-being subscale of the Spiritual Well-being Scale (Paloutzian & Ellison, 1982) ($r = -.61$, $p < .001$ for anxiety and $r = -.62$, $p < .001$ for avoidance). Cronbach's alpha internal consistency was reported only for the latter two studies and ranged from .80 to .87 for Anxiety scores and .84 to .86 for Avoidance scores (Beck & McDonald, 2004). In my study, Cronbach's alpha internal consistency for Anxiety scores = .88, and alpha for Avoidance = .86.

Shame and Guilt

The 69-item Test of Self-Conscious Affect-3 (TOSCA-3; Tangney, Dearing, Wagner, & Gramzow, 2000) is the most recent version of the Test of Self-Conscious Affect (TOSCA; Tangney et al., 1989). The TOSCA uses 16 scenarios to measure an individual's proneness to shame and guilt and other self-conscious emotions. The 11 negative and 5 positive scenarios are designed to reflect everyday occurrences (e.g. "You are taking care of your friend's dog while your friend is on vacation, and the dog runs away"). Each scenario has four or five possible reactions (i.e., response items). The items comprise six subscales: shame-proneness (16 items; e.g., "You would think 'I am irresponsible and incompetent"); guilt-proneness (16 items; e.g., "You would vow to be more careful next time"); detachment or not being concerned about the event (11 items; e.g., "You would think your friend could just get a new dog"); externalization, or using external reasoning for why events occur (16 items; e.g., "You would think your friend must not take very good care of the dog or it wouldn't run away"); alpha pride, or pride in self (5 items; e.g., "You would feel very satisfied with yourself"); and beta pride, or pride in one's behavior (5 items; e.g., "You would feel great that you had helped other"). Participants rate each response item using a 5-point Likert-type scale ranging from 1 = *not likely* to 5 = *very likely*. Items are summed for scores on each of the six subscales. Higher scores indicate greater proneness to the particular emotion (e.g., shame or guilt). The TOSCA-3 version (Tangney et al., 2000) that I use does not include the five positive scenarios and, therefore, does not contain the pride subscale. In addition, I use only the shame and guilt subscales, which derive only from the negative scenarios.

Regarding the scale and the psychometric qualities of its scores, Tangney et al. (1989) developed the original TOSCA from college and non-college adult narratives of personal guilt, shame, and pride experiences. The TOSCA (Tangney et al., 1989) construct validity was indicated by a CFA finding four factors representing the theorized constructs of shame-proneness, guilt-proneness, externalization, and detachment (Fontaine, Luyten, De Boeck, & Corveleyn, 2001). In addition, shame- and guilt-proneness correlated at $r = .45$, $p < .001$ (Tangney et al., 1992) but also accounted for unique variance (e.g. Tangney et al., 1992; Woien et al., 2003). Further, shame-proneness was linked to poorer psychological adjustment and to psychiatric symptomatology, and guilt-proneness was not significantly correlated with psychological adjustment and psychiatric symptomatology but was linked to higher self-regulation. In terms of the TOSCA's (Tangney et al., 1989) concurrent validity, Woin et al. (2003) reported that higher shame was associated with lower self-esteem (Rosenberg Self-Esteem Scale; Rosenberg, 1965, $r = -.27$, $p < .001$), higher perceived stress (The Stress 10 Scale; Cole, 1999, $r = .37$, $p < .001$), lower self-regulation (the Self-Regulation Questionnaire; Brown, Miller, & Lawendowski, 1999, $r = -.26$, $p < .001$), and lower existential well-being (the Spiritual Well-being Scale; Ellison et al., 2011, $r = -.23$, $p < .001$). In addition, higher guilt was associated with higher self-regulation ($r = .22$, $p < .001$) and higher existential well-being ($r = .14$, $p < .01$). In addition, the TOSCA-3 short and long versions correlate at $r = .94$ for shame and $r = .93$ for guilt (Tangney and Dearing, 2002). Test-retest reliability of the TOSCA guilt and shame subscales over a 3–5 week period was $r = .85$ for shame and $r = .74$ for guilt (Tangney, Wanger, Fletcher, & Gramzow, 1992). For the TOSCA-3 full version across three studies, Tangney and Dearing (2002) reported

Cronbach's alpha internal consistency was.77 to .88 for shame-proneness, .70 to .83 for guilt-proneness,.66 to .80 for externalization, and .60 to .77 for detachment scores, all of which are in acceptable range for the reliability of scores on scenario-based measures in which reliability is underestimated due to the unique variance associated with each scenario (Tangney & Dearing, 2002). In my study, alpha for shame = .79, and alpha for guilt = .74.

Self-Compassion

The 26-item Self-Compassion Scale (SCS; Neff, 2003; Appendix H) measures an individual's propensity toward self-compassion across six domains: Self-Kindness (5 items, "I'm tolerant of my own flaws and inadequacies"), Self-Judgment (5 items, "When I see aspects of myself that I don't like, I get down on myself"), Common Humanity (4 items, "When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am"), Isolation (4 items, "When I fail at something that's important to me I tend to feel alone in my failure"), Mindfulness (4 items, "When something upsets me I try to keep my emotions in balance."), and Over-Identification (4 items, "When I'm feeling down I tend to obsess and fixate on everything that's wrong"). Respondents rate each item a 5-point Likert-type scale ranging from 1 = *almost never* to 5 = *almost always*. To obtain an overall global self-compassion score, all items are summed, with the items on three subscales (i.e., self-judgment, isolation, and over-identification) being reverse scored; then the total is divided by the total number of items (i.e., 26) to obtain a total mean score. Higher mean scores reflect a higher propensity towards self-compassion.

In terms of psychometric information, Neff (2003) demonstrated construct validity with an initial EFA of the 71 items. After omitting items with loadings lower

than 0.40, a follow-up CFA revealed a final 26 items that loaded above .40 on six intercorrelated factors, with a single higher-order factor of self-compassion explaining the inter-correlations between the six factors. Convergent validity was evidenced by self-compassion being positively correlated with self-acceptance (r = .62, p < .01), as measured by the Self-acceptance Scale (Berger, 1952), and emotional processing (r = .39, p < .01), as measured by the Emotional Approach Coping Scale (Stanton, Kirk, Cameron, & Danoff-Burg, 2000). Additionally, self-compassion was negatively correlated with depression (r = -.55, p < .01), as measured by the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), anxiety (r = .-.66, p < .01), as measured by the Speilberger State-Trait Anxiety Inventory Form (Speilberger, Gorsuch, & Lushene, 1970), rumination (r = .-.50, p < .01), as measured by the Ruminative Responses Scale (Nolen-Hoeksema & Morrow, 1991), and thought suppression (r = -.37, p <.01), as measured by the White Bear Suppression Inventory (Wegner & Zanakos, 1994). In terms of discriminant validity, the SCS was not significantly related to narcissism (r = -.08, p = .23), as measured by the Narcissistic Personality Inventory (Raskin & Hall, 1979). SCS test-retest reliability was r = .93 over three weeks, and alpha internal consistency was .92 for the total score (Neff, 2003). In my study, alpha for total self-compassion scores = .90.

Psychological Well-being

The original 120-item Scales of Psychological Well-being (SPWB; Ryff, 1989; Appendix J) measures psychological well-being over six 9-item domains: (a) autonomy (e.g. “My decisions are not usually influenced by what everyone else is doing”), environmental mastery (e.g. “I am quite good at managing the many responsibilities of

my daily life"), personal growth (e.g. "I am not interested in activities that will expand my horizons"), positive relations with others (e.g. "I don't have many people who want to listen when I need to talk"), purpose in life (e.g. "I am an active person in carrying out the plans I set for myself"), and self-acceptance (e.g. "In general, I feel confident and positive about myself"). Individuals rate each item on a 6-point Likert-type scale ranging from 1 = *very strongly disagree* to 6 = *strongly agree.* Scores for each subscale are summed, with some items reverse scored; then the subscales are summed for a total score. I use the total score, with higher scores indicating more mastery (vs. challenge) in each domain.

In terms of scale development and psychometric information on the scores, the SPWB (Ryff, 1989), was developed from theory about positive psychological functioning and has several versions, ranging from 120 items version to 18 items. I use the 42-item version, which is cost effective, is time efficient, and reduces respondent burden. In terms of construct validity for the original 120-item version, two CFAs revealed the multidimensional structure of the scale, with each of the six theoretical dimensions loading onto six distinct factors (Clarke, Marshall, Ryff, & Wheaton, 2001; Ryff & Keyes, 1995). For the 42-item version, a CFA revealed the six-factor model and a second-order factor of well-being (Abbott et al., 2010). For convergent validity for the 120-item SPWB, Ryff and Keyes (1995) reported that total scores correlated significantly and positively (i.e., *r*s range from .25 to .73, *p*s < .001) with other well-being scales (e.g., $r = .25$, $p < .001$, Affect Balance Scale, Bradburn, 1969; $r = .73$, $p < .001$, Life Satisfaction Index, Neugarten, Havighurst, & Tobin, 1961). Additionally, the SPWB correlated significantly and negatively with measures of problematic psychological

functioning (e.g., $r = -.60$, $p < .05$, Zung Depression Scale, Zung, 1965). Although researchers have not reported the relatedness of the 120-item and the 42-item versions, Cronbach alpha internal consistency coefficients for the scores for the six subscales of the 120-item version ranged from .86 to .93 (Schmutte & Ryff, 1997). For the 42-item version, internal consistency for scores are: autonomy = .70, environmental mastery = .72, personal growth = .77, positive relations with others = .78, purpose in life = .79, and self-acceptance = .79, and total score = .79 (Marks, 1996). In my study, alpha for total psychological well-being scores = .91.

CHAPTER 4: RESULTS

In this chapter, I present the data analyses and results of the study. The purpose of the analyses are to test the study's two hypotheses that shame, guilt, and self-compassion fully mediate the relatedness of anxious attachment to God and psychological well-being (H1) and the relatedness of avoidant attachment to God and psychological well-being (H2).

Preliminary Data Analyses

For this correlational research design, I used IBM SPSS 21 for both preliminary analyses and analysis of the hypotheses. In the initial set of preliminary analyses, I calculated means, standard deviations, and internal consistency (i.e., Cronbach's alpha) for the scales' scores (Table 2). As shown in the table, the means for each scale (i.e., AGI, Beck & McDonald, 2004; TOSCA-3, Tangey & Dearing, 2002; SCS, Yarnell & Neff, 2012; SPWB, Ruini, Vescovelli, & Albieri, 2013) are consistent with the specific scales' use in previous research with college student/young adult samples. The most notable difference is for the TOSCA-3 Guilt scale; the mean and standard deviation in this study was M = 67.20, SD = 6.96, which were slightly higher than ranges of means and standard deviations (e.g., M = 63.43 to 65.43; SD = 7.51 to 754; Tangney & Dearing, 2002) reported in previous research with college students, but still within one standard deviation.

In addition, the scales' scores had internal consistencies ranging from .74 to .91. The AGI anxiety and avoidance internal consistency reliabilities were .88 and .86, respectively. These values are consistent with previous research finding alphas ranging from .80 to .87 for anxiety scores and .84 to .86 for avoidance scores (Beck & McDonald, 2004). The TOSCA-3 shame and guilt internal consistency reliabilities were .79 and .74, respectively, and are within an acceptable range for internal consistency (Cortina, 1993). These values are consistent with previous research reporting TOSCA-3 alphas ranging from.77 to .88 for shame and .70 to .83 for guilt (Tangney & Dearing, 2002). The SCS self-compassion internal consistency reliability was .90, which is consistent with previous finding alpha of .92 (Neff, 2003). The SPWB psychological well-being internal consistency reliability was .91, which is consistent with research reporting alphas ranging from .86 to .94 (Schmutte & Ryff, 1997).

Table 2

Means, Standard Deviations, and Internal Consistency Estimates

	Current Study		Previous Research		
Scale/Measure	*M*	*SD*	*M*	*SD*	*α*
AGI Anxiety	39.59	14.15	36.74 to 47.03	13.11 to 15.03	.88
AGI Avoidance	42.28	13.67	36.91 to 41.06	11.42 to 13.83	.86
TOSCA-3 Shame	48.59	9.71	44.93 to 48.33	9.32 to 11.32	.79
TOSCA-3 Guilt	67.20	6.96	63.43 to 65.43	7.51 to 7.54	.74
SCS Self-Compassion	3.05	0.60	2.94 to 3.01	0.04 to 0.06	.90
SPWB Psy Wellbeing	187.68	25.05	187.57 to 205.26	17.50 to 37.10	.91

Note. $N = 163$. AGI = Attachment to God Inventory; TOSCA-3 = Test of Self Conscious Affect -3; SCS = Self-Compassion Scale; SPWB = Scales of Psychological Well-being

Next, I performed two procedures to ensure that the data were appropriate for my planned regression-based analyses. First, I calculated Pearson's correlations to examine

the relatedness among the variables (i.e., attachment anxiety, attachment avoidance, shame, guilt, self-compassion, and psychological well-being). All variables were significantly positively or negatively related, with significant *r*s ranging from absolute values of .16 to .61 (Table 3). Second, I calculated variance inflation factors (VIF) for all variables to examine the magnitude of multicollinearity. The VIFs ranged from 1.34 to 1.98. Because the correlations were all below .80 and VIFs were all below 3, multicollinearity is likely not a concern (Tabachnick & Fidell, 2007).

Table 3

Summary of Intercorrelations for AGI, TOSCA-3, SCS, and SPWB

Variable	1	2	3	4	5	6
1. AGI Anxiety	-	.20*	.24**	-.20**	-.40**	-.47**
2. AGI Avoidance		-	.20**	-.18*	-.31**	-.37**
3. TOSCA-3 Shame			-	.26**	-.37**	-.31**
4. TOSCA-3 Guilt				-	.16*	.33**
5. SCS Self-Comp					-	.61**
6. SPWB Psy-Wellbeing						-

Note. $N = 163$.

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

Finally, in order to determine whether I needed to control for any of the demographic categorical items, I conducted several one-way Multivariate Analyses of Variance (MANOVAs) to examine mean differences, using demographic variables (i.e., religious affiliation, identified gender, educational status, race/ethnicity, domestic/international, affectional orientation, relationship status) as the independent variables and the scores for AGI anxiety, AGI avoidance, TOSCA-3 shame, TOSCA-3 guilt, SCS self-compassion and PSWB psychological well-being as the dependent

variables. For significant MANOVA *F* values, I examined the follow-up univariate analyses. My intent was to control for variables that did not have small effect sizes (i.e., above .10; Cohen, 1992). Although the MANOVAs were significant for identified gender, race/ethnicity, domestic/international student, and relationship status (see Appendix I for non-significant results and significant results with small effect sizes ranging from .05-.17), identified gender was the only demographic variable with an effect size exceeding .10. More specifically, the MANOVA *F* was significant for identified gender, Wilks' Lambda = .83, $F(6, 157) = 5.45$, $p < .001$, $\eta^2 = .17$. The univariate analyses indicated that women reported significantly higher levels of TOSCA-3 shame ($M = 50.87$, $SD = 9.11$) than men ($M = 44.30$, $SD = 9.24$), with the univariate effect size being .11. This finding is in line with previous research indicating that women report higher shame than men on the TOSCA-3 (Tangney & Dearing, 2002). Nonetheless, I elected not to control for identified gender, because the effect size (i.e., .11) was only slightly above .10 and because it was for only one of the study's variables. Identified gender differences among the variables are reported in Table 4.

Table 4

Identified Gender Differences for All Variables

Variables	Women (n = 101)		Men (n = 60)		F	η^2	Observed
	M	*SD*	*M*	*SD*	*(1,159)*		Power
AGI Anxiety	38.91	14.15	40.99	14.36	0.81	.01	.15
AGI Avoidance	40.88	13.15	44.15	14.27	2.19	.01	.31
TOSCA-3 Shame	50.90	9.11	44.30	9.24	19.56*	.11	.99
TOSCA-3 Guilt	67.44	7.21	66.58	6.48	0.57	.00	.12
SCS Self-Compassion	3.05	0.60	3.06	0.61	0.03	.00	.05
SPWB Psy Wellbeing	188.40	25.15	187.53	24.81	0.05	.00	.06

Note. N = 163. AGI Anxiety and AGI Avoidance scores were obtained for all responses
*$p < .05$. ** $p < .01$.

Analyses of the Hypotheses

I have hypothesized two mediation models, first, that shame, guilt, and self-compassion will fully mediate the relatedness of anxious attachment to God and psychological well-being (H1) and, second, that shame, guilt, and self-compassion will fully mediate the relatedness of avoidant attachment to God and psychological well-being (H2) (see Figure 2 for the H1 and H2 models). To test these hypothesized models, I used a regression-based path analytic framework that estimates the direct and indirect effects of the model and uses bootstrapping procedures to examine the significance of those effects. Regression analyses provide estimates of non-causal relationships among a set of variables in a specified model. More specifically, mediation hypotheses posit how a predictor variable (i.e., anxious attachment, avoidant attachment) influences the

dependent variable (i.e., psychological well-being) through one or more intervening or mediating variables (i.e., shame, guilt, and self-compassion; Baron & Kenny, 1986).

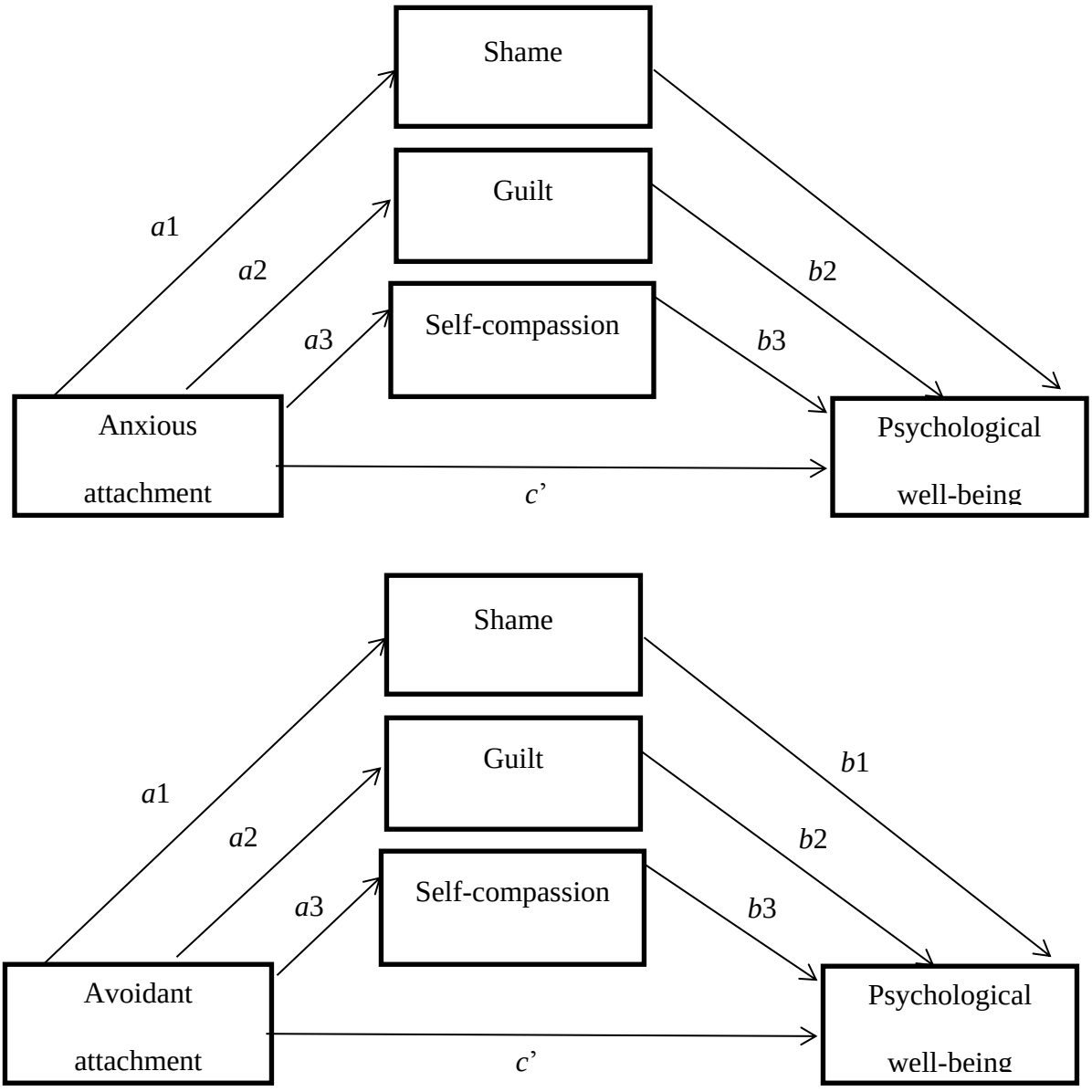

Figure 2. H1 and H2 mediation models

As a method for testing mediation effects, bootstrapping is a nonparametric procedure that estimates standard errors and tests for statistical significance of direct and indirect (i.e., mediated) effects using the estimated standard errors. Bootstrapping

procedures offer several advantages over other mediation testing procedures (e.g., causal step method; Baron & Kenny, 1986; product of coefficients approach; Sobel, 1982), including having more statistical power in detecting indirect effects and minimizing the number of statistical tests used (Fritz & MacKinnon, 2007; Hayes & Preacher, 2010). For instance, because of not requiring a normal distribution, bootstrapping can be performed with small and medium sample sizes. A sample size of at least 100 is recommended to achieve the power of .80 to detect effects (Fritz & MacKinnon, 2007). In contrast, the Sobel (1982) test assumes normality, which is usually probable only in very large sample sizes. Because my sample is only 163 participants, I preferred the bootstrapping procedure even though I had a normal sample.

Bootstrapping is a multi-step procedure. In the first step, the data set (N = 163) was repeatedly sampled with replacements thousands of times, and the indirect, or mediated, effect was estimated in each resampled data set to create an empirical sampling distribution of the effect. The *a* paths (e.g., from anxious attachment to shame, guilt, and self-compassion) are the direct effects relating the predictor variable to the mediators; the *b* paths (e.g., from shame, guilt, and self-compassion to psychological well-being) are the direct effects relating the mediators to the dependent variable, psychological well-being; and the non-pictured *c* path (e.g., from anxious attachment to psychological well-being) is the direct path relating the predictor and outcome variables. The product (i.e., *ab*) of the paths to and from the mediators is the indirect or mediated effect. In the second step, an estimate of the sampling distribution of the product term (i.e., *ab*), which was obtained from the procedure in the first step, is used to construct bias-corrected percentile-based confidence intervals. Mediation exists when zero is not within the confidence intervals

for the indirect effect, that is, when the confidence intervals' absolute values are greater than zero (Preacher & Hayes, 2008). Full mediation exists when *c* (e.g., the anxious attachment to God-psychological well-being path) is significant but becomes nonsignificant after the inclusion of the mediators, as demonstrated by *c*'.

To test H1 and H2, I used the bootstrapping analyses in SPSS 21 and the Preacher and Hayes (2008) macro program, with anxious attachment as the H1 predictor variable and avoidant attachment as the H2 predictor variable (Figure 2). I used a bootstrapping sample of 5,000 and 95% confidence intervals, as recommended by Preacher and Hayes (2004). As seen in Figure 2, for H1, the model specifies, consistent with the sub-hypotheses H1a-H1j (p. 48), the direct effects from anxious attachment to God to the mediating variables, shame (H1a is *a*1), guilt (H1b is *a*2), and self-compassion (H1c is *a*3). The model also specifies the direct effects of these mediating variables to psychological well-being (i.e., H1d is *b*1 for shame, H1e is *b*2 for guilt, and H1f is *b*3 for self-compassion). In my analyses, I obtained estimates for each of the direct effects (e.g., path *a*1, path *b*1, path *c*, which would reflect shame) and for the three specific non-pictured indirect, or mediated, effects (i.e., *a*1*b*1, *a*2*b*2, *a*3*b*3), which reflect anxious attachment and shame, guilt, and self-compassion products, respectively. I also obtained the total non-pictured indirect effect (i.e., the sum of the specific indirect effects, that is, *a*1*b*1 + *a*2*b*2 + *a*3*b*3). These estimates are quantified as unstandardized coefficients. I further conducted contrast analyses to determine significant differences between specific indirect effects; for example, I contrasted path *a*1*b*1 for shame and path *a*2*b*2 for guilt to determine if the indirect effect via shame is stronger than the indirect effect via guilt. In the contrast analyses, the mediators are all quantified in the metric of the dependent

variable so that the specific indirect effects of each mediator can be directly compared. Finally, the model also specifies the direct effect of anxious attachment to God on psychological well-being (a) when the mediating variables are accounted for, as reflected by path *c'* and (b) when the mediating variables are not accounted for, as reflected by path *c*, (which is not depicted). Note the c' path is the direct effect, and the c path is the total effect. In order to assess the degree of prediction in the model, *p* values (i.e., the probability of the null hypothesis being falsely rejected) were obtained for the various paths, including the total effect *c* path. I used an alpha of .05 or less as the criterion to decide if the path is statistically significant. To test H2 (i.e., shame, guilt, and self-compassion fully mediate the relatedness of avoidant attachment to God and psychological well-being), I conducted the same analysis as described for H1, using avoidant attachment to God as the predictor variable.

Hypothesis 1 Results

For H1, all effects between the independent variable (i.e., anxious attachment), mediator variables (i.e., shame, guilt, self-compassion), and the dependent variable (i.e., psychological well-being) were significant in the hypothesized directions (Figure 3). Specifically, for the direct *a* paths, for H1a, anxious attachment to God was significantly positively associated with shame ($B = .16$, $p = .002$); for H1b, anxious attachment to God was negatively associated with guilt ($B = -.10$, $p = .009$); and for H1c, anxious attachment to God was negatively associated with self-compassion ($B = -.02$, $p < .0001$). For the direct *b* paths, for H1d, shame was negatively associated with psychological well-being ($B = -.44$, $p = .01$); for H1e, guilt was positively associated with well-being ($B = .96$, $p < .001$); and for H1f, self-compassion was positively associated with well-being ($B =$

17.61, $p < .001$). Finally, for H1g, the total effect c path, anxious attachment to God was negatively associated with psychological well-being ($B = -.83$, $p < .0001$). Thus, all H1 sub-hypotheses (H1a – H1g) were supported. The unstandardized estimates from the mediation model are depicted in Figure 3 and reported in Table 5.

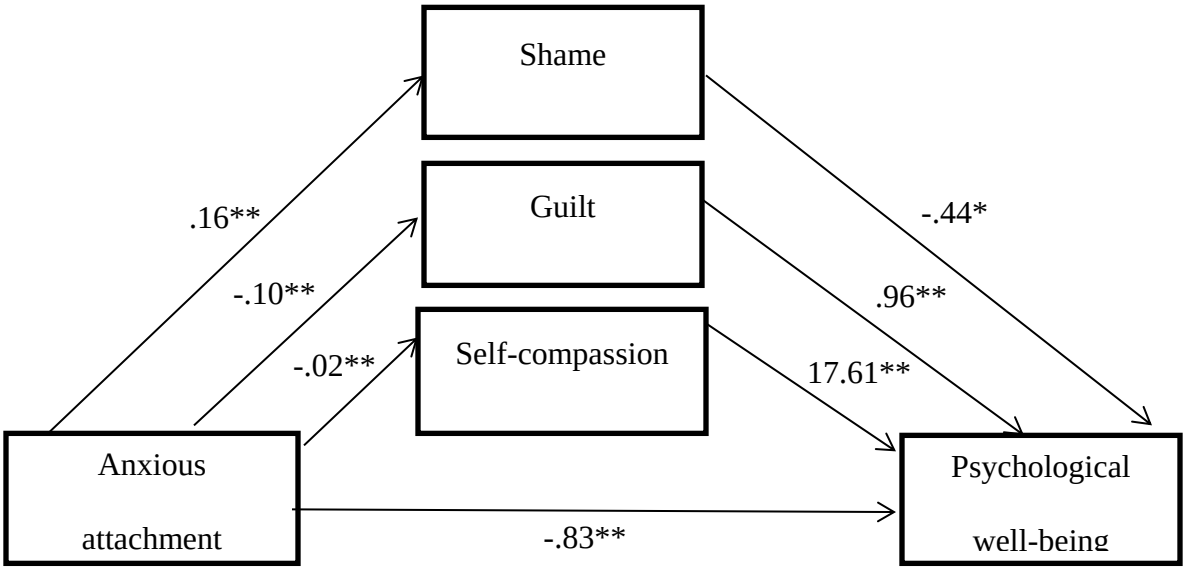

Figure 3. Direct effect coefficients among variables in H1 anxious attachment mediation model.

Table 5

Coefficients for the Anxious Attachment Mediation Model

Mediator	Path *a*	Path *b*
	B (*SE*)	*B* (*SE*)
TOSCA-3 Shame	.16** (.05)	-0.44* (0.17)
TOSCA-3 Guilt	-.10** (.04)	0.96** (0.23)
SCS Self-Compassion	-.02** (.01)	17.61** (2.77)

Note. *SE* = Standard Error. The *a* paths are from anxious attachment to the listed variable; the *b* paths are from the listed variables to psychological well-being.

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

For the subhypotheses H1h-H1j, the indirect (*ab)* effects of H1h shame, H1i guilt, and H1j self-compassion were all significant and in the hypothesized negative direction (see Figure 4 and Table 6), thereby supporting the hypotheses. Contrast analysis indicated that the indirect effect through self-compassion was significantly higher than the indirect effects for shame (contrast = .23, CIs [.07, .40], *SE* = 0.08) and for guilt (contrast = .20, CIs [.03, .38], *SE* = 0.09). Together, attachment anxiety, shame, guilt, and self-compassion, as represented in the indirect *ab* paths, accounted for 49% of the variance (R^2 = .4942) in psychological well-being.

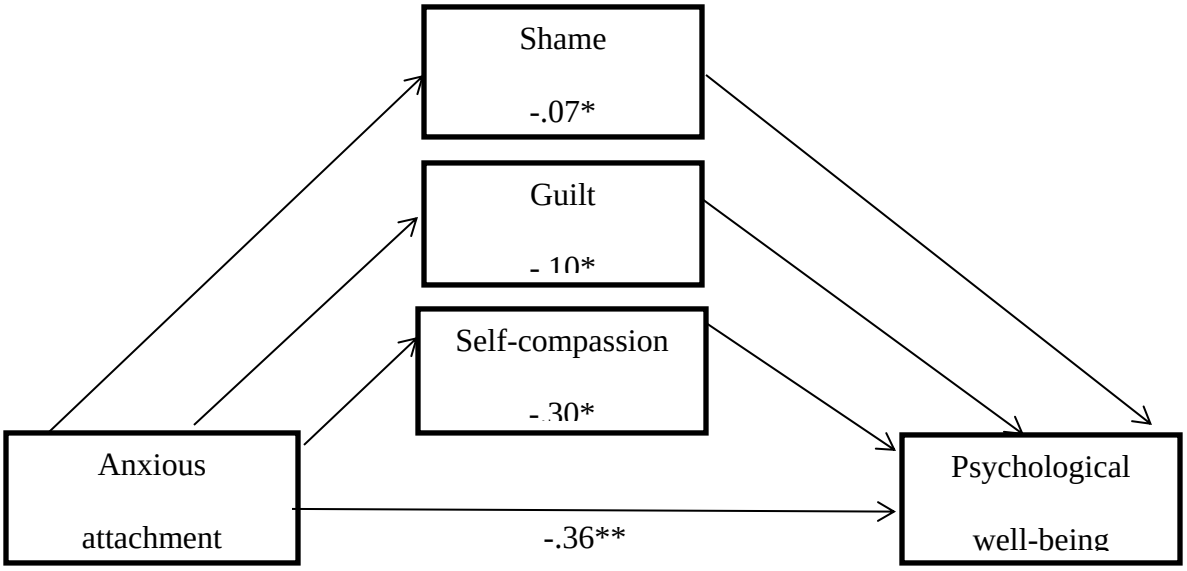

Figure 4. Indirect effect coefficients among variables in H1 mediation model.

Table 6

Indirect (Mediated) Effects of Anxious Attachment to God and Psychological Well-being

	Product of Coefficients (*ab*)	BC 95% CI	
Mediator	Point Estimate (*SE)*	Lower	Upper
TOSCA-3 Shame	-.07* (.04)	-.18	-.01
TOSCA-3 Guilt	-.10* (.05)	-.22	-.02
SCS Self-Compassion	-.30* (.06)	-.45	-.19
Total	-.47* (.08)	-.64	-.33

Note. *SE* = Standard Error; BC = Bias Corrected; CI = Confidence Interval.
*$p < .05$.

Overall, the total effect (*c*) of attachment anxiety on psychological well-being was negative and statistically significant ($B = -.83$, $p < .0001$) when no mediators were in the model. However, when the total indirect effects of shame, guilt, and self-compassion (*ab* = -.47, CIs [-.63, -.33]) were included in the model, the effect of anxiety on psychological well-being (*c*') was lower, although still significant ($B = -.36$, $p = .002$). Thus, shame, guilt, and self-compassion only partially mediated the negative relationship between attachment anxiety and psychological well-being. Therefore, the overarching H1 was only partially supported.

Hypothesis 2 results

For H2, all effects between the independent variable (i.e., avoidant attachment), mediator variables (i.e., shame, guilt, self-compassion), and the dependent variable (i.e., psychological well-being) were also significant (Figure 5). Specifically, for the direct *a* paths, for H2a, avoidant attachment to God was significantly positively associated with shame ($B = .14$, $p = .01$); for H2b, avoidant attachment to God was negatively associated

with guilt (*B* = -.09, *p* = .02); for H2c, avoidant attachment to God was negatively associated with self-compassion (*B* = -.01, *p* = .0001). For the direct *b* paths, for H2d, shame was negatively associated with psychological well-being (*B* = -.47, *p* < .001); for H2e, guilt was positively associated with well-being (*B* = 1.02, *p* < .001); and for H2f, self-compassion was positively associated with well-being (*B* = 18.92, *p* < .001). Finally, for H2g, the direct *c* path, avoidant attachment to God was negatively associated with psychological well-being (*B* = -.67, *p* < .0001). All direct effects were significant in the hypothesized directions, with the exception of H2a shame. H2a shame was significant but in the positive (vs. the hypothesized negative) direction. Thus, only sub-hypotheses H1b-H1g were supported. The unstandardized estimates from the avoidant attachment H2 mediation model are depicted in Figure 5 and reported in Table 7.

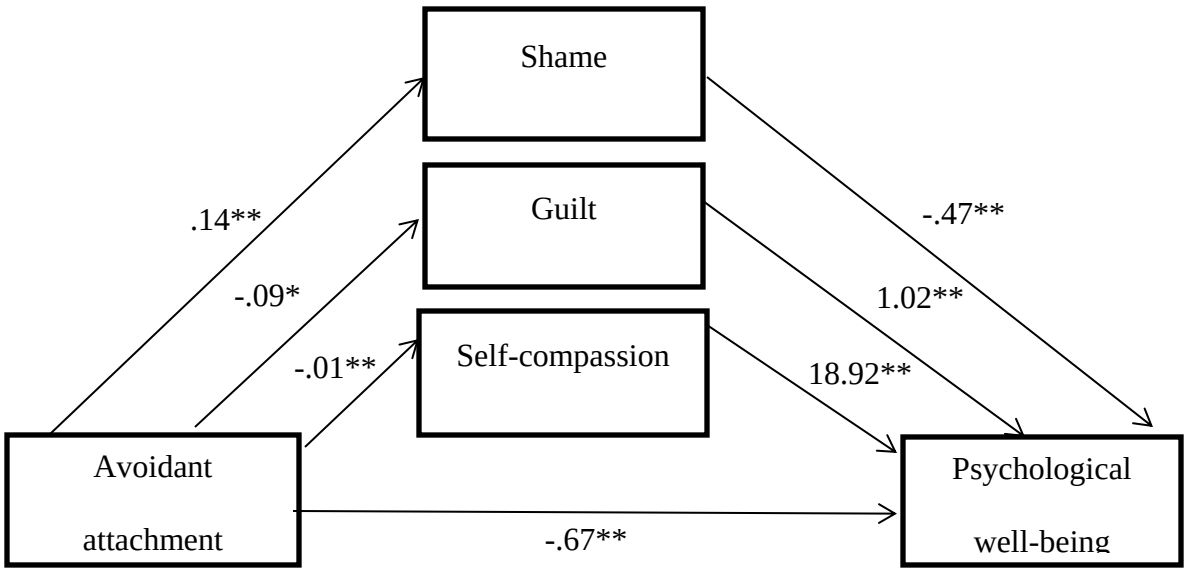

Figure 5. Direct effect coefficients among variables in H2 avoidant attachment mediation model.

Table 7

Coefficients for the H2 Mediation Model of Avoidant Attachment to God and Psychological Well-being

Mediator	Path *a*	Path *b*
	B (*SE*)	*B* (*SE*)
TOSCA-3 Shame	.14** (.05)	-0.47** (0.17)
TOSCA-3 Guilt	-.09* (.04)	1.02** (0.23)
SCS Self-Compassion	-.01** (.01)	18.92** (2.76)

Note. *SE* = Standard Error. The *a* paths are from anxious attachment to the listed variable; the *b* paths are from the listed variables to psychological well-being.
*$p < .05$. **$p < .01$.

For H2h-H2j, the indirect (*ab)* effects of shame, guilt, and self-compassion were all significant and in the hypothesized directions, as is depicted in Figure 6 and displayed in Table 8. Thus, sub-hypotheses H2h, H2i, and H2j were supported. Contrast analysis indicated that the indirect effect through self-compassion was significantly higher than the indirect effect for shame (contrast = .19, CIs [.03, .37], *SE* = 0.09). Together, attachment avoidance, shame, guilt, and self-compassion, as represented in the indirect *ab* paths, accounted for 47% of the variance (R^2 = .4772) in psychological well-being.

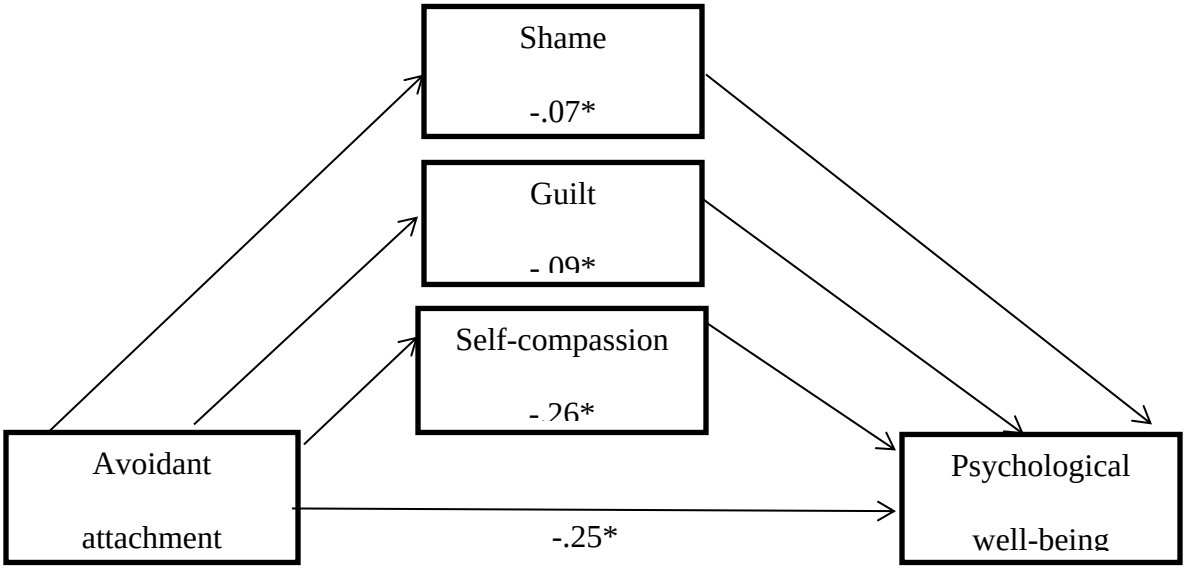

Figure 6. Indirect effect coefficients among variables in H2 avoidant attachment mediation model.

Table 8

Indirect (mediated) Effects of Avoidant Attachment to God and Psychological Well-being

	Product of Coefficients (*ab*)	BC 95% CI	
Mediator	Point Estimate (*SE)*	Lower	Upper
TOSCA-3 Shame	-.07 (.04)*	-.18	-.01
TOSCA-3 Guilt	-.09 (.05)*	-.21	-.02
SCS Self-Compassion	-.26 (.07)*	-.42	-.14
Total	-.42 (.08)*	-.60	-.27

Note. *SE* = Standard Error; BC = Bias Corrected; CI = Confidence Interval

*$p < .05$.

The direct effect (*c*) of attachment avoidance on psychological well-being was negative and statistically significant ($B = -.67$, $p < .0001$) when no mediators were in the

model. When the total significant indirect effects of shame, guilt, and self-compassion (*ab* = -.42, CIs [-.60, -.27]) were included in the model, the effect of attachment avoidance on psychological well-being (*c'*) was lower, although still significant (*B* = -.25, *p* = .03). Thus, shame, guilt, and self-compassion only partially mediated the negative relationship between attachment avoidance and psychological well-being, offering partial support for the overarching H2.

Summary of Results

Both H1 and H2 were partially supported in that the overall mediation was partial (as opposed to full). That is, shame, guilt, and self-compassion accounted for some, but not all, of the relatedness between anxious (H1) and avoidant (H2) attachment to God and psychological well-being. For the subhypotheses (H1a-H1j and H2a-H2j), the independent variables (i.e., anxious attachment and avoidant attachment), mediator variables (i.e., shame, guilt, self-compassion), and the dependent variable (i.e., psychological well-being) were all significantly associated with each other. More specifically, for H1 and H2, anxious and avoidant attachment to God were significantly positively associated with shame, significantly negatively associated with guilt, and significantly negatively associated with self-compassion. Of note, for H2a, I had hypothesized that avoidant attachment to God would be negatively associated with shame, but unexpectedly, analysis revealed a positive association between the two variables, as is similar to anxious attachment.

For the overarching H1 hypothesis, shame, guilt, and self-compassion partially mediated the relatedness between anxious attachment to God and psychological well-being, as indicated by (a) the reduction of the total effect of attachment anxiety on

psychological well-being from -.83 to -.47 once the mediators were added and, (b) the significant individual indirect effect paths (i.e., *a*1*b*1, *a*2*b*2, *a*3*b*3). Also of note, when examining the individual mediating effects, analysis indicated that self-compassion had a stronger mediating effect than the individual effects of both shame and guilt. Additionally, the mediated model of attachment anxiety, shame, guilt, and self-compassion accounted for 49% of the variance in psychological well-being.

For the overarching H2 hypothesis, shame, guilt, and self-compassion partially mediated the relatedness between avoidant attachment to God and psychological well-being, as indicated by (a) the reduction of the total effect of attachment avoidance on psychological well-being from -.67 to -.25 once the mediators were added and, (b) the significant individual indirect effect paths. Of note, for H2 avoidant attachment, self-compassion had a stronger mediating effect than only shame, in contrast to the anxious attachment model in which self-compassion was significantly stronger than both shame and guilt. Additionally, in comparison to the anxious attachment model, the independent and mediating variables (i.e., attachment avoidance, shame, guilt, and self-compassion) explained slightly less variation in psychological well-being (i.e., 47% variance explained in the avoidant model as opposed to 49% in the anxious model). In terms of the overall mediation of attachment and psychological well-being, there were few differences in anxious and avoidant attachment (see Table 9).

Table 9

Similarities and Differences in the H1 and H2 Models

Hypothesis path	Anxious (H1) Direction / Outcome	Avoidance (H2) Direction / Outcome
a. attachment to shame	Positive / Supported	Negative / Not Supported
b. attachment to guilt	Negative / Supported	Negative / Supported
c. attachment to self-compassion	Negative / Supported	Negative / Supported
d. shame to psychological well-being	Negative / Supported	Negative / Supported
e. guilt to psychological well-being	Positive / Supported	Positive / Supported
f. self-compassion to psychological well-being	Positive / Supported	Positive / Supported
g. attachment to psychological well-being	Negative / Supported	Negative / Supported
h. indirect shame	Negative / Supported	Negative / Supported
i. indirect guilt	Negative / Supported	Negative / Supported
j. indirect self-compassion	Negative / Supported	Negative / Supported
Overall mediation	Partial Mediation / Partially Supported	Partial Mediation / Partially Supported
Explained variance	49%	47%

CHAPTER 5: DISCUSSION

In this chapter, I discuss the results. I begin by addressing the preliminary analysis results. Then I discuss the results from the analysis of the hypotheses. Next, I discuss limitations of this study. Last, implications for future research and practice are described and followed by a conclusion.

Preliminary Analyses

I discuss two sets of preliminary analyses, the correlations and the MANOVAs. The correlation analyses revealed that all the variables (i.e., attachment anxiety, attachment avoidance, shame, guilt, self-compassion, and psychological well-being) were significantly related to each other but were not so highly correlated as to indicate multicollinearity. That is, the significant correlations were below ± .80 (Tabachnick & Fidell, 2007). These correlations are also consistent with previous research (e.g., Baer, Lykins, & Peters, 2012; Kirkpatrick & Shaver, 1992; Lopez et al., 1997; Raque-Bogdan et al., 2011). In addition, the MANOVA analyses revealed significant differences for identified gender, international versus domestic student, race/ethnicity, and relationship status. However, the effect sizes indicated that the demographic variables accounted for very little of the difference. Therefore, I did not control for these variables in analyzing the hypotheses. Interestingly, the MANOVA indicated no significant religious affiliation group differences, which is consistent with research indicating that attachment to God is distinct

from and more strongly associated with mental health functioning than other religiosity aspects, such as belief and practice (Kirkpatrick & Shaver, 1992). Overall, the preliminary analyses indicated that the data was appropriate for the planned analysis.

Analyses of the Hypotheses

There were two hypotheses for the study. For H1, I hypothesized that shame, guilt, and self-compassion would fully mediate the relatedness of anxious attachment to God and psychological well-being. For H2, I hypothesized that shame, guilt, and self-compassion would fully mediate the relatedness of avoidant attachment to God and psychological well-being. The hypotheses were each partially supported by the results. For each hypothesis, I will discuss the significant findings and their meaning.

Hypothesis One (H1) – Anxious Attachment

For H1, shame, guilt, and self-compassion significantly mediated the relationship between anxious attachment to God and psychological well-being. In addition, anxious attachment was significantly negatively associated with psychological well-being and, in conjunction with the mediating variables, explained 49% of the variance in psychological well-being. Furthermore, when examining the unique contributions of shame, guilt, and self-compassion to individually account for the effect of anxious attachment to psychological well-being, self-compassion was a significantly stronger mediator than shame and guilt. I discuss each of the direct subhypotheses (i.e., H1a-H1c, from anxious attachment to shame, guilt, and self-compassion; H1d-H1f, from these mediating variables to psychological well-being; H1g, from anxious attachment to psychological well-being) and indirect subhypotheses (H1h-H1i) before addressing the overarching hypothesis.

Direct subhypotheses. Consistent with H1, the direct subhypotheses from anxious attachment to the mediating variables (i.e., shame, guilt, and self-compassion) were supported. Consistent with H1a, the results indicated that people who were more anxious in their attachment to God were more prone to experiencing shame in situations of personal failure or transgression. Research indicates that people with an anxious attachment to God perceive God as inconsistent and punishing (Proctor et al., 2009; Rowatt & Kirkpatrick, 2002), view themselves as undeserving of God's love (Proctor et al., 2009), and have poorer emotional regulation and higher stress and negative affect (Byrd & Boe, 2001; Rowatt & Kirkpatrick, 2002). Thus, following a personal transgression, an anxiously attached believer may fear that God will not love the self as much, interpret the personal behavior as a reflection of unworthiness, and experience higher attachment-related emotional distress, such as shame. Additionally, shame is positively associated with higher extrinsic religiosity, (Woien et al., 2003), that is, a superficial engagement in religious behaviors/beliefs for mostly utilitarian self-serving rewards versus personal internal rewards. Therefore, individuals who are anxiously attached and high in shame might have difficulty forming a trusting and stable emotional relationship with God because of a hyperactivated attachment system, that is, preoccupation with losing God's perceived love and accessibility when needed to soothe transgressions, especially when narrowly focused on religion's external rewards.

Consistent with H1b, the results indicated that people who were more anxious in their attachment to God were less prone to experiencing guilt in situations of personal failure or transgressions. This finding is expected because previous research indicates that anxious attachment is related to an underlying sense of incompetence and helplessness

(Mikulincer & Shaver, 2007), whereas guilt is related to feelings of competency (Tangney & Dearing, 2002). Following a transgression, anxiously attached believers, who are concerned with the self's worth (Proctor et al., 2009) may become overwhelmed with shame, rather than guilt, because of being unable to differentiate between negative evaluations of the behavior (i.e., guilt) versus negative evaluations of the self. To explain, although the securely attached with high guilt take reparative action and maintain proximity to attachment figures in order to reduce guilt (Ghorbani, Liao, Çayköylü, & Chand, 2013), anxiously attached believers may avoid taking steps to mitigate their actions. Due to the hyperactivated attachment system, they may become preoccupied with worry that God will abandon them or punish them. They would, therefore, primarily seek to deactivate the attachment anxiety and focus on the self not being perceived by God as worthy. If so, they could react with high shame and likely not be able to focus effectively on mitigating their actions through reparative action. This possibility could be examined in future research.

Consistent with H1c, the results indicated that people who were more anxious in their attachment to God also had lower levels of self-compassion. Self-compassion involves the ability to regulate distress through being kind to the self, contextualizing one's shortcomings within the broader human experience, and keeping a balanced perspective of emotions without overidentifying with them (Neff, 2003). Anxiously attached believers may be so preoccupied with negative feelings about the self and attachment-related emotional distress that they may be less able to develop or use self-compassion, as is consistent with research indicating that lower attachment security is related to lower self-compassion (Raque-Bogdan et al., 2011). Thus, during times of

personal failure, the anxiously attached may become preoccupied with images of God as punishing and themselves as unloveable; and they may ruminate on their negative emotions while disconnecting from others. In such a state, they may be unable to use self-compassion to obtain attachment-related safe haven comfort from God, which would be needed in order to deactivate their attachment-related distress.

Consistent with H1, the direct effects of the mediating variables to psychological well-being (H1d-H1f) were also supported. In support of H1d, my results indicated that anxiously attached believers who reported high shame also had lower psychological well-being, as has been demonstrated in previous studies (e.g., Orth, Robins, & Soto, 2010). Shame is associated with lower self-esteem (Woien et al., 2003) and feelings of inferiority (Anolli & Pascucci, 2005), both of which conflict with the self-acceptance and autonomy principles that constitute psychological well-being (Ryff, 1989). Therefore, it is consistent with previous research that believers who are more prone to experiencing shame in situations also have lower psychological well-being. For H1e, the results indicated that people who experienced higher guilt also had higher psychological well-being; this finding aligns with previous findings (Orth, Robins, & Soto, 2010). Guilt is positively associated with empathy (Ghorbani, Liao, Çayköylü, & Chand), self-regulation (Tangney, Wagner, & Gramzow, 1992), and existential well-being (Woien et al.,2003). Thus, individuals who are more prone to experiencing guilt may be more likely to acknowledge and take responsibility for their actions and also have more mastery of the domains of psychological well-being, in particular the principles of positive relations with others, environmental mastery, and purpose in life. Therefore, my finding of guilt as positively related to well-being seems logical. For H1f, the results indicated that people

who reported higher self-compassion also reported higher psychological well-being. Individuals who are high in self-compassion are kind to themselves, mindful of their emotions, and feel connected with humanity; they also report lower depression and anxiety (Neff & Mcgehee, 2010), higher relational well-being (Yarnell & Neff, 2012), and higher life satisfaction (Baer, Lykins, & Peters, 2012). These qualities are consistent with higher psychological well-being, for example, in domains such as positive relations with others and purpose in life.

Consistent with H1g, results supported the hypothesis that believers who had higher anxiety in their attachment to God also had lower psychological well-being. Highly anxiously attached individuals employ hyperactivating emotion regulation strategies when faced with threats or danger; the hyperactivating strategy can paralyze or weaken the exploratory (e.g., thinking) system (Bowlby, 1988). Thus, individuals who are highly anxiously attached to God may be less effective in using their relationship with God to reduce distress and explore their environment, and, thus, may be less able to develop the skills needed to achieve high levels of psychological well-being. This speculation is consistent with attachment theory and research indicating that anxious attachment is linked to less effective developmental outcomes (Bowlby, 1988; Mikulincer & Shaver, 2007).

Indirect effects. Sub-hypotheses H1h-H1j were also supported. More specifically, because the effect of anxious attachment to God on shame was positive (H1a) and the effect of shame on psychological well-being was negative (H1d), the indirect effect of shame mediating anxious attachment and psychological well-being was negative (H1h). Additionally, because the effect of anxious attachment to God on guilt was negative (H1b)

and the effect of guilt on psychological well-being was positive (H1e), the indirect effect of guilt mediating anxious attachment and psychological well-being was negative (H1i). Last, because the effect of anxious attachment to God on self-compassion was negative (H1c) and the effect of self-compassion on psychological well-being was positive (H1f), the indirect effect of self-compassion mediating anxious attachment and psychological well-being was negative (H1j). Notably, all three mediating effects are in the same direction as the direct anxious attachment to God to psychological well-being path, meaning that the mediating variables serve to explain the negative association between anxious attachment to God and psychological well-being. More specifically, higher anxiety promotes higher shame, lower guilt, and lower self-compassion which lead to lower psychological well-being. Because the mediation paths are central to H1, I address the meaning of these results as I discuss the model in the next paragraph.

The mediation model. In terms of the overarching hypothesis (H1) that shame, guilt, and self-compassion would fully mediate the relatedness between anxious attachment to God and psychological well-being, the results partially supported the hypothesis. More specifically, when the total indirect effects of shame, guilt, and self-compassion (*ab* = -.47, CIs [-.63, -.33]) were included in the model, the effect of attachment anxiety on psychological well-being (*c'*) was lower, although still significant (*B* = -.36, *p* = .002 vs. *B* = -.83, *p* < .0001 for the negative direct effect of attachment anxiety on psychological well-being).

As noted, shame, guilt, and self-compassion were all significant mediators of attachment to God and psychological well-being; but the three variables only partially, rather than fully, mediated the relatedness. This mediation effect may be explained by the

way shame, guilt, and self-compassion function in self-appraisal during times of personal failure. People respond differently in situations depending on how they appraise the situation. The anxious attachment style, with its concomitant internal working model, influences the interpretation of events and consequently results in a distinct emotional and cognitive response to threat. The automatic mental process then influences subsequent cognitive and behavioral coping strategies (e.g. support seeking, denial) that may inhibit positive adjustment and well-being (Mikulincer & Florian, 2000). Shame, guilt, and self-compassion are three differing types of automatic self-appraisal responses during negative experiences, and my results indicate that they mediate the relatedness between anxious attachment to God and psychological well-being. Because the anxiously attached use hyperactivating emotional strategies, have negative perceptions of God and themselves, and often feel disappointed with God (Proctor, 2009), when in situations marked by personal transgression, they seem to experience a heightened sense of shame and a diminished guilt and self-compassion response. These automatic responses may then initiate problematic coping strategies (e.g., avoidance of reparative action, self-criticism), which prevent the anxiously attached from being satisfied in seeking proximity to God; that is, they do not gain a sense of felt security and cannot effectively reduce distress in order to achieve psychological well-being. Thus, my results suggest that shame, guilt, and self-compassion are some of the pathways through which attachment to God influences psychological well-being.

Additionally, my analysis of the standardized indirect effects revealed that the mediating effect of self-compassion was significantly stronger than both shame and guilt. This result could be attributed to shame and guilt being primarily affective responses

(Elison, 2005), whereas self-compassion reflects affective as well as cognitive responses (Leary et al., 2007). To explain, according to attachment theory, internal working models influence appraisals of relational situations (Bowlby, 1969). The automatic hyperactivating response implicit in anxious attachment may defer or inhibit a subsequent higher order cognitive processing for interpreting the experience. The emotional strategy that functions to maintain or regain proximity to God with near constant proximity seeking that is crucial in attachment emotional regulation may interfere with the person functioning from the exploratory system with a more thoughtful response. Thus, self-compassion may be inhibited because of requiring higher order cognitive processes (e.g., being mindful of feelings of shame or guilt and cognitively choosing to react to the self with kindness). The use of self-compassion to regulate shame and guilt may, therefore, be inhibited for the anxiously attached and inhibit well-being. Hence, the pathway from attachment to God to self-compassion may be particularly salient in increasing psychological well-being

Nonetheless, because my results did not support a full mediation effect, other pathways may also explain the relatedness between attachment to God and psychological well-being. For example, the anxious attachment to psychological well-being pathway remained significant after the shame, guilt, and self-compassion mediators were added to the model, though anxious attachment had a reduced effect on psychological well-being. This finding indicates that shame, guilt, and self-compassion only partially explain the relatedness between anxious attachment and psychological well-being.

Hypothesis Two (H2) – Avoidant Attachment

For H2, shame, guilt, and self-compassion significantly mediated the relationship between avoidant attachment to God and psychological well-being, with self-compassion being a significantly stronger mediator than shame. In addition, avoidant attachment was significantly associated with psychological well-being, and in conjunction with the rest of the mediating variables, explained 47% of the variance in psychological well-being. I discuss each of the direct subhypotheses (i.e., H2a-H2c, from avoidant attachment to shame, guilt, and self-compassion; H2d-H2f, from these mediating variables to psychological well-being; H2g, from avoidant attachment to psychological well-being) and indirect subhypotheses (H2h-H2i) before addressing the overarching hypothesis.

Direct subhypotheses. For H2, unexpectedly, H2a, the direct subhypothesis from avoidant attachment to shame was not fully supported; however, the direct H2b and H2c subhypotheses from avoidant attachment to the other two mediating variables (i.e., guilt and self-compassion, respectively) were supported. In contrast with hypothesis H2a, which stated that avoidant attachment would be negatively associated with shame, the results indicated that people who were more avoidant in their attachment to God were more prone to experiencing shame in situations of personal failure or transgression. Research findings have been inconsistent in determining the relationship between attachment avoidance and shame, with some studies finding a negative association between the two (e.g., Akbağ & İmamoğlu, 2010; Consedine & Magai, 2003) and others finding no significant association (e.g., Gross & Hansen, 2000). The current finding might be explained by the avoidantly attached, who typically minimize negative emotions and appear to have a positive sense of self, defensively masking an underlying sense of unworthiness with a confident view of self (Bowlby, 1988; Mikulincer & Shaver, 2007).

This speculation is supported by Proctor et al. (2009) who describe the avoidantly attached believer as "reporting a range of self-esteem states from an overall devaluing of oneself such as 'I'm not worth anything' to a confidence in the self that in reality lacks depth, a defensive position such as 'I'm fine there's nothing wrong with me'"(p.250). Additionally, shame is largely relational in nature, and a rejection by a loved one is considered to be a prototypical shame-engendering experience that has the potential to be internalized as a rejection of self (Lewis, 1971). Following this rationale, avoidantly attached believers who experience God as emotionally important and as rejecting or abandoning the self during times of threat (Proctor et al., 2009; Rowatt & Kirkpatrick, 2002) may internalize this perception of God's rejection as a rejection of the self. This experience of rejection may then engender an underlying belief of the self's unworthiness that they protect against with a defensively positive view of self. Subsequently, during times of personal failure, their defensive confidence may break down and the underlying sense of unworthiness may manifest in shame. Further, because they avoid relying on God (Proctor et al., 2009), they may expend resources to deactivate the attachment system and not want or be able to effectively utilize the secure base function to regulate their distress. This explanation is consistent with research indicating that the defensive maneuver to suppress the attachment system can fail in circumstances in which the avoidantly attached are experiencing cognitive overload (Mikulincer & Shaver, 2007).

Consistent with hypothesis H2b, the results indicated that people who were more avoidant in their attachment to God were less prone to experiencing guilt in situations of personal failure or transgressions. This finding is expected because the avoidantly attached typically minimize negative emotions (Mikulincer & Shaver, 2007). Their

attachment system deactivation strategy may result in their suppressing guilt following a personal failure, as is consistent with research finding a negative association between attachment avoidance and guilt (Akbağ & İmamoğlu, 2010; Consedine & Magai, 2003).

Consistent with H2c, the results indicated that people who were more avoidant in their attachment to God also had lower levels of self-compassion. This finding was expected because self-compassion requires the capacity to realistically acknowledge the self's shortcoming and failures (Neff & Vonk, 2009). In contrast, avoidantly attached believers hold defensively and possibly fragile positive beliefs about the self that protect against underlying negative beliefs about the self (Proctor et al., 2009). Thus, during times of personal failure, avoidantly attached believers, who try to keep the attachment system deactivated and do not rely on God, may fluctuate between positive and negative views of self and be unable to realistically assess their strengths and shortcomings. In addition to not being able to rely on God for the safe haven comforting (e.g., compassion) function, they may, also be unable to use self-compassion to respond to the self with kindness. Because they minimize or suppress emotional distress (Bowlby, 1988; Mikulincer & Shaver, 2007), they are less able to be mindful of their experiences, for instance, by fusing with rather than observing their feelings, and are then less able to react to emotions appropriately. Additionally, self-compassion involves contextualizing and connecting one's experience with common humanity, which conflicts with the avoidantly attached believer's rigid self-reliance. Thus, for avoidantly attached believers, the attachment system deactivation emotion regulation strategy may lead to a tendency toward isolation rather than connecting with common humanity.

Consistent with H2, the direct effects of the mediating variables to psychological well-being (H2d-H2f) were also supported. Shame (H2d) was negatively associated with psychological well-being, and guilt (H2e) and self-compassion (H2f) were positively associated with psychological well-being. These same associations were supported in the H1 anxious attachment model, as is as discussed on p. 85. As expected, both the anxious and avoidant attachment models were similar in the mediating variables effects on the outcome variable (i.e., psychological well-being.

Consistent with H2g, results supported the hypothesis that believers who had higher avoidance in their attachment to God also had lower psychological well-being. Highly avoidantly attached individuals employ deactivating emotional regulation strategies when faced with threats or danger; this deactivating strategy results in the person suppressing attachment information in order to not approach or be in close proximity to the caregiver (Bowlby, 1988). Because of this suppressed distress, the avoidantly attached are often able to explore the environment with relative independence and confidence. However, the deactivating strategy is not always effective, that is, can fail, for instance when the person is experiencing cognitive overload or under high stress (Mikulincer & Shaver, 2007). Thus, individuals who are highly avoidantly attached to God may be less effective in using their relationship with God to obtain the safe haven and secure base functions during times of attachment-related threat. The rigid self-reliance may have negative consequences; that is, the person may not develop the skills, such as the ability to create and maintain intimate relationships, that are needed to achieve high levels of psychological well-being. Thus, they may be less effective overall in reducing distress and accordingly experience lower levels of psychological well-being.

Indirect effects. Sub-hypotheses H2h was not supported, and H2i and H2j were supported. More specifically, for H2h, shame did not positively mediate the avoidant attachment to psychological well-being path, though shame did significantly and negatively mediate avoidant attachment and psychological well-being. To explain, because the effect of avoidant attachment to God on shame was positive (H2a) and the effect of shame on psychological well-being was negative (H2d), the indirect effect of shame mediating avoidant attachment and psychological well-being was negative (H2h). For H2i because the effect of avoidant attachment to God on guilt was negative (H2b) and the effect of guilt on psychological well-being was positive (H2e), the indirect effect of guilt mediating avoidant attachment and psychological well-being was negative (H2i), as expected. Last, for H2j, because the effect of avoidant attachment to God on self-compassion was negative (H2c) and the effect of self-compassion on psychological well-being was positive (H2f), the indirect effect of self of self-compassion mediating avoidant attachment and psychological well-being was negative, as expected. Notably, all three mediating effects are in the same direction as the direct avoidant attachment to God to psychological well-being path. . More specifically, higher avoidance promotes higher shame, lower guilt, and lower self-compassion, thereby leading to lower psychological well-being. Because the mediation paths are central to H2, I address the meaning of these results as I discuss the overarching hypothesis in the next paragraph.

The mediation model. In terms of the overarching hypothesis (H2) that shame, guilt, and self-compassion would fully mediate the relatedness between avoidant attachment to God and psychological well-being, the results partially supported the hypothesis. As in H1, shame, guilt, and self-compassion were all significant mediators of

attachment to God and psychological well-being, but the three variables only partially mediated the relatedness. As explained above (p. 85), this mediation effect may be explained by the way shame, guilt, and self-compassion function in self-appraisal during times of personal failure. More specifically, the avoidantly attached use deactivating emotion strategies, have negative perceptions of God, and fluctuating and defensively positive perceptions of the self; when in situations marked by personal transgression, they seem to experience a heightened sense of shame and a diminished guilt and self-compassion response. These automatic responses may then initiate problematic coping strategies. More specifically, during times of personal failure that can trigger attachment-related threat, the avoidantly attached may be overwhelmed by shame and focus more on avoidance and deactivating the attachment system rather than taking reparative action and utilizing the attachment relationship to de-escalate distress and seek proximity to God. They do not, therefore, gain a sense of felt security and cannot effectively reduce distress in order to enact effective exploratory activities (e.g., problem-focused coping) that would enable them to achieve psychological well-being. Nonetheless, in general, my results suggest that shame, guilt, and self-compassion are some of the pathways through which attachment to God influences psychological well-being.

Additionally, my analyses revealed that the mediating effect of self-compassion was significantly stronger than shame, though not stronger than both shame and guilt as was true for H1. As discussed above (p. 85), this finding suggests that the pathway from attachment to God to self-compassion may be particularly salient in increasing psychological well-being in the avoidantly attached. That is, counseling psychology researchers and clinicians might focus on better understanding this path.

Limitations

There are a few limitations in this study. First, because the design and analyses are correlational and data is only collected at one point in time, cause cannot be determined. Second, the results may not be generalized to all students, even at the data-collection university. As noted in Chapter 3 (Table 1, p. 52) the participants are not representative of the overall student body at the university of data collection. Because of sampling procedures the sample has a higher percentage of women, lower percentage of undergraduates, lower percentage of international students, and higher percentage of ethnic minorities than the university population as a whole. Additionally, because the participants are volunteers, there might be a bias, such as being interested in the study's variables, that differentiates participants and non-participants, particularly from students at a different university in another area of the country. Nonetheless, the U.S. Midwest is an appropriate geographic area for this study, because results from a 2007 nationwide survey suggests that the Midwest most closely resembles the religious makeup of the overall U.S. population in terms of religious affiliations (Pew Forum's U.S. Religious Landscape Survey, 2007). Still, my sample may not represent the general Midwest or U.S. population. Future research can address this limitation by obtaining a nationally representative sample. Third, the generalizability of the study to all adults is limited by the sample being university students. There is, however, little reason to believe that college students display significantly different attachment style responses in their relationship with God than the general population. Further, because the study is theory-based research, results support attachment theory and can be thoughtfully applied to other individuals with limitations in mind (Mikulincer & Shaver, 2007). The attachment system

also seems to be universal across settings and cultures (Bowlby, 1988; Van IJzendoorn & Sagi-Schwartz, 2008). Nonetheless, other variables, such as diversity (e.g., age, sex, religious denomination), may account for or influence the results in some way. Future research could examine the variables with samples of non-college adults and with participants representing different aspects of diversity. Fourth, the research relied on participants' self-report; thus, responses could be biased and self-serving. Responses to the guilt, shame, and self-compassion items might especially be influenced by a social desire to portray oneself positively, though researchers have found no significant association between the TOSCA-3, SCS, or SPWP scores and the Marlowe-Crowne Social Desirability Scale (M-C SDS; Crowne & Marlowe, 1960) (McConnell, 2012; Neff, 2003; Urry et al., 2004).

Implications for Counseling Psychology Research and Practice

The results of my study contribute to the knowledge base on the link between spirituality and mental health and support attachment theory as useful in research examining client's perceptions of God and themselves. My results and their support of attachment theory may also be helpful for counseling psychologists to use with clients who are exploring their perceptions of God and themselves in therapy. My results indicate that shame, guilt, and self-compassion are some of the pathways through which attachment to God influences psychological well-being. However, because the results did not support a full mediation effect, other pathways may also explain the relatedness between attachment to God and psychological well-being. Future research can explore other variables (e.g., attachment to romantic partner or counselor, religious coping, intrinsic vs. extrinsic religious orientation, perceived social support, and depression,

anxiety, or other indicators of mental distress) that are related to spirituality and well-being and might mediate this relationship.

Future research can also build upon my results by further examining how attachment to God, shame, guilt, and self-compassion are related to other outcomes that might require the management of self-conscious emotions, for instance, forgiveness, help-seeking, and religious coping. Future studies can also more broadly examine how attachment to God influences functioning. For example, research can investigate how individual differences in attachment to God influence interpersonal functioning by examining variables such as relationship satisfaction and conflict resolution. Additionally, attachment theory and research indicate that although attachment itself is universal, the most common attachment style (e.g., secure vs avoidant vs anxious) can vary across countries and cultures (Sagi et al., 1985; van Ijzendoorn and Kroonenberg, 1988). Future research can focus on better understanding if similar group differences exist in people's attachment to God; for instance, researchers could examine attachment to God style among believers across different ethnic, religious, or age groups. Future research can also build upon my study by exploring how the variables (e.g., attachment to God, guilt, shame) influence individual differences in religious practice and expression, for instance, frequency of both prayer and attending religious services. Additionally, a longitudinal study can offer better understanding of the development of the attachment to God by following believers from early childhood when the attachment presumably forms and noting changes or developments in the relationship in association with factors such as overall spiritual development and formation of new attachment relationships.

In order to promote future attachment to God research and knowledge, it is important that research findings be generalizable and comparable across different groups. The Attachment to God Inventory (Beck & McDonald, 2004) that I used in this study was developed using a predominantly Christian sample. However, because my study focuses on the relationship people have with God or other Higher Power (vs. people's specific religious beliefs), I did not limit the sample to people from particular religious backgrounds or specific religious denominations or institutions. Research suggests that attachment to God is distinct from related constructs (e.g., religiosity and religious salience) and explains personality variables (e.g., agreeableness, negative affect) when doctrinal orthodoxy is controlled for (Rowatt & Kirkpatrick, 2002). Additionally, the results of the preliminary MAOVA analyses implied that religious affiliation did not significantly affect the other variables. Nonetheless, because my sample was predominately Christian (79%), future research can examine my variables with samples from different religious denominations to determine the extent to which these findings are generalizable or if other important group differences exist.

The results of my study also have several practical implications for counseling psychologists in practice positions. First, in order to practice in an evidenced-based, culturally sensitive manner (Vera & Speight, 2003), counseling psychologists could use the results from this study to conceptualize and incorporate clients' spirituality in therapy. In practicing with multicultural competence (APA, 2003), it is important that the clinician seek to understand and integrate client's theories of problems, change, and health as they relate to presenting concerns. Thus, because religion and spirituality can be core to a person's identity, counselors need to understand how religious and spiritual experiences

can influence clients' overall worldview, including their perspective of their personal problems and their view of well-being (Cornish et al., 2014). Because my results suggest that the attachment to God is related to psychological well-being, counselors may find it beneficial for the client to explore his or her relationship with God. For instance, counselors can conduct a spiritual history using tools, such as a client's spiritual lifemap (see Hodge, 2005), and listen for attachment experiences (e.g., feelings of closeness or separateness from God, perceptions of God as responsive, uninterested, or inconsistent) in the client's relationship with God. Conceptualizing clients' relationship with God from an attachment theory perspective can then help counselors better understand the complex emotional and interpersonal processes that unfold in therapy with spiritual clients and assist clients in drawing from their spiritual strengths or exploring their spiritual struggles. For example, a securely attached believer may draw strength from the comfort of God's closeness during stressful times, whereas an anxiously attached believer may feel chronically punished by God.

Using theory and my results, counseling psychologists can also better tailor interventions to help clients develop more adaptive emotional regulation strategies that address shame and guilt in a spiritual relational context. For example, Thomas and Parker (2004) suggest that different types of therapeutic interventions are necessary to be effective when working with shame or guilt in relation with a client's spirituality. For instance, relational interventions focusing on building supportive caregiver bonds (i.e., building a supportive bond with God/Higher Being or a romantic partner, or a parent) and strengthening the core self (e.g., viewing the self as worthy of God's love) would be more appropriate for working with shame. Behavioral interventions focusing on problems (e.g.,

relying on the security of God's love and the self's worthiness to explore the personal transgression or failure) and solutions (e.g., relying on God's support to explore actions to repair the transgression) would likely be more appropriate for guilt (Thomas & Parker, 2004). Research suggests that, for clients with low self-esteem and images of God as harsh and punishing, therapeutic spiritual interventions allowing them to personally experience God's love and support have positive effects on self-esteem and self-worth (Bergin, Masters, & Richards, 1987). For example, exercises such as meditating on Scriptures that give account of God's love or reflecting on times in their life when they felt supported by God may be particularly effective in helping anxiously or avoidantly attached believers, who have low or fluctuating concepts of self-worth and harsh or distant perceptions of God, to reduce shame and create a more stable sense of self-worth. In addition to individual therapy, counseling psychologists can deliver such interventions in group modalities. In a process group, members can explore their spiritual relationships and gain feedback from other members. In a psychoeducational group, counseling psychologists can deliver presentations or short work-shops to religious student groups or pastors/chaplains working with college students. This type of group can help students identify and address spiritual relational struggles.

Additionally, my results revealed that self-compassion had a significantly stronger mediating effect on the attachment to God and psychological well-being pathway than shame and guilt. This finding implies that the pathway from attachment to God to self-compassion may be particularly salient in increasing psychological well-being and would, thus, be an important point of intervention in psychotherapy. Counseling psychologists can use a variety of interventions to help clients increase self-compassion. For instance,

to facilitate self-kindness, counselors can encourage clients to be understanding of themselves and their limitations and abilities. Specifically, clinicians can help clients self-monitor instances in which they relate to themselves with harsh self-judgment and then help them reframe their self-talk to be more kind and compassionate. To increase the common humanity aspect of self-compassion, clinicians might promote clients' maintaining awareness of and connection to their experience as being part of the universal human experience (vs. isolating their experience and separating themselves as different from others). For example, clinicians can normalize distressing experiences such as failure, transgressions, and emotions such as shame and guilt, to help client's contextualize their experiences. To promote self-compassion mindfulness, counselors can encourage clients to utilize metacognitive strategies to achieve a balanced perspective on painful feelings (vs. over-identifying with the pain or becoming stuck in a cycle of rumination) (Neff, 2003b). For example, clinicians can educate clients about the constantly fluctuating nature of emotions and coach clients to observe their emotions with a nonjudgmental stance rather than fearing or trying to change their emotions. For spiritually diverse clients, these interventions can also be approached from a spiritual relational perspective. Examples of interventions include reading Scripture passages that speak to the above concepts of acceptance, emotional distress, and compassion. Meditative or contemplative-type prayers can also be used to focus on increasing closeness to God. One such prayer, the Christian practice of centering prayer (see Keating, 2002), emphasizes silence and resting in God's presence rather than actively communicating with God, and has been shown to decrease stress and increase a sense of collaboration with God (Ferguson, Willemsen, & Castañeto, 2010). The expectation,

based on my results, is that clients' increased self-compassion will link to increased levels of psychological well-being and spiritual relational interventions might be especially helpful in fostering self-compassion in spiritual clients.

Conclusion

In this study, I used attachment theory to examine individual differences in peoples' relationships with God or their Higher Power and the influence of these relationships on shame, guilt, self-compassion, and their overall psychological well-being. Results indicate that shame, guilt, and self-compassion are some of the pathways through which attachment to God influences psychological well-being. Specifically, the anxiously and avoidantly attached who have negative perceptions of God and themselves, seem to experience a heightened sense of shame and diminished adaptive guilt and self-compassion in response to personal failures, which might prevent them from effectively reducing distress in order to achieve psychological well-being. In contrast, I would expect from my results that individuals who are more securely attached experience less shame and higher adaptive guilt and self-compassion in response to personal failures, and overall higher psychological well-being. Using these results, I hope psychologists may (a) better understand the complex emotional processes that unfold in therapy with spiritually diverse clients, (b) assist these clients in drawing from spiritual strengths or exploring spiritual struggles, and (c) better tailor interventions to help clients develop more adaptive emotional regulation strategies that reduce shame and cultivate self-compassion.

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APPENDICES

Appendix A

Initial Recruitment Email

Subject line: Chance to win $25: Participate in Spiritual Experience study

Greetings!

We are inviting you to participate in our research examining people's spiritual experiences. This research will help us to have a better understanding of people's experiences in their relationship with God or other Higher Power. We are offering you a chance to **win a $25 Amazon gift certificate** if you participate in this study by completing a brief survey. Participation in this research study is voluntary, and participants must be (a) **at least 18 years old**, (b) **identify as having a belief in God or other Higher Power,** and (c) **have a personal relationship with a Higher Power**. This research project is being conducted by a doctoral student, Mary Varghese, M.S. Ed. and by M. Carole Pistole, Ph.D. of the Department of Educational Studies at Purdue University.

If you chose to participate, you will be asked some questions about your thoughts and feelings related to your spiritual relationship and general feelings about yourself. Your answers will be completely anonymous. Results will be reported as aggregate data, and your responses cannot be identified as yours. You may skip any questions that make you uncomfortable or that you do not wish to answer. You may withdraw at any time, without penalty. If you do not wish to participate, simply ignore this email and the reminder email that you will receive in about two weeks. Please complete this survey only once.

Your participation in this research project would be greatly appreciated. If you are interested in participating in this study, you can access this survey at:

If you have any questions concerning this research study, please do not hesitate to contact us. This study has been approved by the Institutional Review Board at Purdue University.

Thank you for considering our invitation!

Sincerely,

Mary E. Varghese, M.S. Ed. (mvarghes@purdue.ed)
M. Carole Pistole, Ph.D. (pistole@purdue.edu)
Counseling Psychology Program
Dept. of Educational Studies
Purdue University

Appendix B

International Student Demographics

Country	Number of Participants
China	3
Egypt	1
Hong Kong	1
India	2
Indonesia	1
Korea	1
Malaysia	2
Nigeria	1
Saudi Arabia	1
Panama	1
Singapore	1
Zimbabwe	1
TOTAL	16

Appendix C
IRBApproval

PURDUE UNIVERSITY

HUMAN RESEARCH PROTECTION PROGRAM
INSTITUTIONAL REVIEW BOARDS

To:	MARY PISTOLE BRNG 5176
From:	JEANNIE DICLEMENTI, Chair Social Science IRB
Date:	11/26/2013
Committee Action:	**Exemption Granted**
IRB Action Date:	11/26/2013
IRB Protocol #:	1310014139
Study Title:	Attachment to God and Psychological Well-being: Shame, Guilt, and Self-compassion as Mediators

The Institutional Review Board (IRB) has reviewed the above-referenced study application and has determined that it meets the criteria for exemption under 45 CFR 46.101(b)(2) .

If you wish to make changes to this study, please refer to our guidance "**Minor Changes Not Requiring Review**" located on our website at http://www.irb.purdue.edu/policies.php. For changes requiring IRB review, please submit an **Amendment to Approved Study** form or **Personnel Amendment to Study** form, whichever is applicable, located on the forms page of our website www.irb.purdue.edu/forms.php. Please contact our office if you have any questions.

Below is a list of best practices that we request you use when conducting your research. The list contains both general items as well as those specific to the different exemption categories.

General

- To recruit from Purdue University classrooms, the instructor and all others associated with conduct of the course (e.g., teaching assistants) must not be present during announcement of the research opportunity or any recruitment activity. This may be accomplished by announcing, in advance, that class will either start later than usual or end earlier than usual so this activity may occur. It should be emphasized that attendance at the announcement and recruitment are voluntary and the student's attendance and enrollment decision will not be shared with those administering the course.
- If students earn extra credit towards their course grade through participation in a research project conducted by someone other than the course instructor(s), such as in the example above, the students participation should only be shared with the course instructor(s) at the end of the semester. Additionally, instructors who allow extra credit to be earned through participation in research must also provide an opportunity for students to earn comparable extra credit through a non-research activity requiring an amount of time and effort comparable to the research option.
- When conducting human subjects research at a non-Purdue college/university, investigators are urged to contact that institution's IRB to determine requirements for conducting research at that institution.
- When human subjects research will be conducted in schools or places of business, investigators must obtain written permission from an appropriate authority within the organization. If the written permission was not

submitted with the study application at the time of IRB review (e.g., the school would not issue the letter without proof of IRB approval, etc.), the investigator must submit the written permission to the IRB prior to engaging in the research activities (e.g., recruitment, study procedures, etc.). This is an institutional requirement.

Category 1

- When human subjects research will be conducted in schools or places of business, investigators must obtain written permission from an appropriate authority within the organization. If the written permission was not submitted with the study application at the time of IRB review (e.g., the school would not issue the letter without proof of IRB approval, etc.), the investigator must submit the written permission to the IRB prior to engaging in the research activities (e.g., recruitment, study procedures, etc.). This is an institutional requirement.

Categories 2 and 3

- Surveys and questionnaires should indicate
  - only participants 18 years of age and over are eligible to participate in the research; and
  - that participation is voluntary; and
  - that any questions may be skipped; and
  - include the investigator's name and contact information

Appendix D

Follow-up Recruitment E-mail

Subject line: Chance to win $25: Participate in Spiritual Experience study

Greetings!

Two weeks ago, I sent you an email asking you to participate in my research study. Please
consider participating to help further research about spiritual experiences and for **a chance to win a $25 gift certificate.**

We are inviting you to participate in our research examining people's spiritual experiences. This research will help us to have a better understanding of people's experiences in their relationship with God or other Higher Power. We are offering you a chance to **win a $25 Amazon gift certificate** if you participate in this study by completing a brief survey Participation in this research study is voluntary, and participants must be **at least 18 years old**, and **identify as having a belief in God or other Higher Power** and as **having a personal relationship with that Higher Power**. If you choose to participate, you will be asked some questions about your thoughts and feelings related to your spiritual relationship and general feelings about yourself. This research project is being conducted by a doctoral student, Mary Varghese, M.S. Ed. and by M. Carole Pistole, Ph.D. of the Department of Educational Studies at Purdue University.

If you chose to participate, your answers will be completely anonymous. Results will be reported as aggregate data, and your responses cannot be identified as yours. You may skip any questions that make you uncomfortable or that you do not wish to answer. You may withdraw at any time, without penalty. If you do not wish to participate, simply ignore this email. Please complete this survey only once.

Your participation in this research project would be greatly appreciated. If you are interested in participating in this study, you can access this survey at:

If you have any questions concerning this research study, please do not hesitate to contact us. This study has been approved by the Institutional Review Board at Purdue University.

Thank you for considering our invitation!

Sincerely,

Mary E. Varghese, M.S. Ed. (mvarghes@purdue.ed)

M. Carole Pistole, Ph.D. (pistole@purdue.edu)

Counseling Psychology Program

Dept. of Educational Studies

Purdue Universit

Appendix E

Recruitment Information Letter

Welcome!

We are asking you to participate in our research examining people's spiritual experiences. This research project is being conducted by a doctoral student, Mary Varghese, M.S. Ed. and by M. Carole Pistole, Ph.D. of the Department of Educational Studies at Purdue University.

The information you provide will be a valuable contribution to helping us better understand people's experiences in their relationship with God or other Higher Power. The study involves the completion of brief questionnaires about your thoughts and feelings related to your spiritual relationship and general feelings about yourself. The survey will take you about 15-20 minutes to complete. Participants must (a) be **at least 18 years old**, (b) **identify as having a belief in God or other Higher Power,** and (c) **have a personal relationship with a Higher Power**.

In participating in our study, you may benefit from increased knowledge of yourself and your perceptions as well as increased knowledge of social science research. There is little or no discomfort expected from this survey research. The risks of participating are not greater than those ordinarily encountered in daily life; however, if you have distressing feelings after completing these questionnaires and feel that you may need to talk with someone, you can contact the campus counseling center, Counseling and Psychological Services clinic (CAPS) at 494-6995.

There will be an opportunity at the end of the questionnaire to be in a drawing for a **$25 Amazon gift card**. The odds of winning depend on the number of responses received but are expected to be 1 in 100 or better. There is no way of connecting your responses to your email address. To ensure anonymity, separate data files will be used to store your email address and your responses. An email address(es) will be randomly selected from the email address data file. After the winning email address(es) is selected, all email addresses will be destroyed. The researcher will send the gift card to the email address of the selected participant(s).

No identifying information is included in the questionnaires and no IP addresses or emails will be collected. The email address you may provide to participate in the drawing for gift certificates will not be associated with your responses and will be deleted when the gift certificates are distributed. Your responses are anonymous, and your individual responses cannot be identified. Only the university researchers will see your responses. All raw data from the study will be destroyed seven years after any publication related to the group data.

Your participation in the research is completely voluntary, and refusal to participate will involve no penalty or loss to you. You may skip any questions. Additionally, you can save your answers and come back later to finish.

If you have any questions about the study or your participation in it, please feel free to contact Mary Varghese, at 214-293-8335 or mvarghes@purdue.edu or M. Carole Pistole, Ph.D. at 765-494-9744 or pistole@purdue.edu. If you have any questions about your rights as a research participant, you can contact the Committee on the Use of Human Research Subjects at Purdue University, 610 Purdue Mall, Hovde Hall Room 307, West Lafayette, IN 47907-2040. The phone number for the Committee's secretary is (765) 494-5942. The email address is irb@purdue.edu.

If you agree to participate, please complete and submit the following web-based survey.

Appendix F

Demographics

Please provide the following information about yourself.

Do you believe in a God or other higher power? Choose one of the following answers:

- Yes I do, and I have no doubts about it
- Yes, generally I do, although sometimes I have doubts
- I do not know if a God or other higher power exists
- I do not believe in a God or other form of higher power

If you indicated yes above, do you have a personal relationship with God or other higher power?

- Yes, I have a personal relationship with God or other higher power
- I believe in a personal God or other higher power but I myself do not have a personal relationship with God
- I do not know if a God or other higher power exists
- I do not believe in a God or other form of higher power

What religious affiliation/belief system, if any, do you identify yourself with? Please select the ONE affiliation that best applies and specify denomination if appropriate:

- Baha'i
- Buddhist
- Catholic
- Christian (Protestant)
- Hindu
- Jain
- Jehovah's Witness
- Jewish
- Mormon
- Muslim
- Native spirituality
- Sikh
- Unaffiliated
- Unitarian
- Wicca
- Zoroastrian

- Other (please specify)

How important is religion in your life?

1-------2-------3-------4-------5-------6-------7

Not at all important Very important

How important is spirituality in your life?

1-------2-------3-------4-------5-------6-------7

Not at all important Very important

Aside from weddings and funerals, how often do you attend religious services?

1-------2-------3-------4-------5-------6-------7

Never Once a week More than once a day

Outside of attending religious services, how often do you pray, meditate, or otherwise communicate with God or other higher power

1-------2-------3-------4-------5-------6-------7

Never Once a week Several times a day

Age:

Do you identify as:

- Female
- Male
- Transgender
- Intersex
- Androgyne
- Other

Educational Status

- First year undergraduate
- Sophomore
- Junior
- Senior
- Masters student
- Doctoral student

Racial/ethnicity:

- African American/Black, Non-Hispanic
- Asian
- Caucasian/White, Non-Hispanic
- Hispanic, Latino/a, Chicano/a
- Native American/American Indian
- Pacific Islander
- Multiracial/multiethnic (please specify)
- Other

Are you an international student?

- Yes (please specify country of origin _____)
- No

Relational/affectional orientation

- Heterosexual/straight
- Gay
- Lesbian
- Bisexual
- Questioning
- Other

Relationship status — please check the item that best describes you:

- Single
- Partnered/In a relationship
- Polyamorous
- Married
- Separated
- Divorced
- Widowed
- Other

Appendix G

The Attachment to God Inventory (Beck and McDonald, 2004)

The following statements concern how you feel about your relationship with God. We are interested in how you generally experience your relationship with God, not just in what is happening in that relationship currently. Respond to each statement by indicating how much you agree or disagree with it.

1	2	3	4	5	6	7
Disagree Strongly			Neutral/Mixed			Agree Strongly

_____ 1. I worry a lot about my relationship with God.

_____ 2. I just don't feel a deep need to be close to God.

_____3. If I can't see God working in my life, I get upset or angry.

_____ 4. I am totally dependent upon God for everything in my life. (R)

_____ 5. I am jealous at how God seems to care more for others than for me.

_____ 6. It is uncommon for me to cry when sharing with God.

_____ 7. Sometimes I feel that God loves others more than me.

_____ 8. My experiences with God are very intimate and emotional. (R)

_____ 9. I am jealous at how close some people are to God.

_____10. I prefer not to depend too much on God.

_____11. I often worry about whether God is pleased with me.

_____12. I am uncomfortable being emotional in my communication with God.

_____13. Even if I fail, I never question that God is pleased with me. (R)

_____14. My prayers to God are often matter-of-fact and not very personal.

_____15. Almost daily I feel that my relationship with God goes back and forth from "hot" to "cold."

_____16. I am uncomfortable with emotional displays of affection to God.

_____17. I fear God does not accept me when I do wrong.

_____18. Without God I couldn't function at all. (R)

_____19. I often feel angry with God for not responding to me when I want.

_____20. I believe people should not depend on God for things they should do for themselves.

_____21. I crave reassurance from God that God loves me.

_____22. Daily I discuss all of my problems and concerns with God. (R)

_____23. I am jealous when others feel God's presence when I cannot.

_____24. I am uncomfortable allowing God to control every aspect of my life.

_____25. I worry a lot about damaging my relationship with God.

_____26. My prayers to God are very emotional. (R)

_____27. I get upset when I feel God helps others, but forgets about me.

_____28. I let God make most of the decisions in my life. (R)

Appendix H

Self-Compassion Scale (Neff, 2003)

Please read each statement carefully before answering. To the left of each item, indicate how often you behave in the stated manner, using the following scale:

Almost never				Almost always
1	2	3	4	5

_____ 1. I'm disapproving and judgmental about my own flaws and inadequacies.
_____ 2. When I'm feeling down I tend to obsess and fixate on everything that's wrong.
_____ 3. When things are going badly for me, I see the difficulties as part of life that everyone goes through.
_____ 4. When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.
_____ 5. I try to be loving towards myself when I'm feeling emotional pain.
_____ 6. When I fail at something important to me I become consumed by feelings of inadequacy.
_____ 7. When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am.
_____ 8. When times are really difficult, I tend to be tough on myself.
_____ 9. When something upsets me I try to keep my emotions in balance.
_____ 10. When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.
_____ 11. I'm intolerant and impatient towards those aspects of my personality I don't like.
_____ 12. When I'm going through a very hard time, I give myself the caring and tenderness I need.
_____ 13. When I'm feeling down, I tend to feel like most other people are probably happier than I am.
_____ 14. When something painful happens I try to take a balanced view of the situation.
_____ 15. I try to see my failings as part of the human condition.
_____ 16. When I see aspects of myself that I don't like, I get down on myself.
_____ 17. When I fail at something important to me I try to keep things in perspective.
_____ 18. When I'm really struggling, I tend to feel like other people must be having an easier time of it.
_____ 19. I'm kind to myself when I'm experiencing suffering.
_____ 20. When something upsets me I get carried away with my feelings.
_____ 21. I can be a bit cold-hearted towards myself when I'm experiencing suffering.
_____ 22. When I'm feeling down I try to approach my feelings with curiosity and openness.
_____ 23. I'm tolerant of my own flaws and inadequacies.
_____ 24. When something painful happens I tend to blow the incident out of proportion.

_____ 25. When I fail at something that's important to me, I tend to feel alone in my failure.
_____ 26. I try to be understanding and patient towards those aspects of my personality I don't like.

Appendix I

Supplemental Information relevant to Chapter 4 Analyses

This appendix reports detail on various analyses. For instance, I address additional information on comparing my means to means in other research and findings from the preliminary analyses of demographic variables.

Detail on the Comparison of Means/Standard Deviations in This and Other Research

In comparing the means for my variables in this in other studies, the AGI Anxiety mean and standard deviation in this study was *M* = 39.59, *SD* = 14.15, which fits within the range of means and standard deviations (e.g., *M* = 36.74 to 47.03; *SD* = 13.11 to 15.03; Beck & McDonald, 2004) reported in previous research with college students. The AGI Avoidance mean and standard deviation in this study was *M* = 42.28, *SD* = 13.67, which also aligns with ranges of means and standard deviations students (e.g., *M* = 36.91 to 41.06; *SD* = 11.42 to 13.83; Beck & McDonald, 2004) reported in previous research with college. The TOSCA-3 shame mean and standard deviation in this study was *M* = 48.59, *SD* = 9.71, as compared with *M* = 44.93 to 48.33 and *SD* = 9.322 to 11.32 (Tangney & Dearing, 2002) in previous research with college students. The mean and standard deviation for SCS Self-compassion in this study was *M* = 3.05, *SD* = .60, which was similar to previous research (e.g., *M* = 2.94 to 3.01, *SD* = .06; Yarnell & Neff, 2012) with college students. The mean and standard deviation for SPWB Psychological well-being in this study was *M* = 187.68, *SD* = 25.05, which fit within the ranges of means and standard deviations (e.g., *M* = 187.57 to 205.26, *SD* = 17.5 to 37.1; Ruini, Vescovelli, & Albieri, 2013; Salami, 2010) reported in previous research with young adults.

MANOVAs -- Preliminary Analyses Detail

In the preliminary analyses to determine if I needed to control for any demographic variables, the MANOVA analyses were significant for international versus domestic student, race/ethnicity, and relationship status. The MANOVA *F* was also significant for international versus domestic student status, Wilks' Lambda = .87, $F(6, 157) = 3.75$, $p = .02$, $\eta^2 = .13$. The univariate analyses indicated that international students reported significantly higher levels of SCS self-compassion ($M = 3.34$, $SD = .70$) than domestic students ($M = 3.01$, $SD = .58$), with a univariate effect size of .03. For race/ethnicity, categories with $n < 5$ (i.e., Pacific Islander, multiracial/multiethnic) were recoded into the category of Other, because the analysis required each cell to have a minimum of 5; so the analysis was conducted for African/Black; Caucasian/White; Hispanic, Latino(a), Chicano(a); and Other as the independent variables. The MANOVA was significant, Wilks' Lambda = .77, $F(6, 157) = 1.73$, $p = .02$, $\eta^2 = .06$. For relationship status, the categories were single, partnered/in a relationship, and married); The Other category was excluded from the analysis because it only had a cell size of 1. The MANOVA was significant, Wilks' Lambda = .85, $F(6, 157) = 2.13$, $p = .02$, $\eta^2 = .07$. For race/ethnicity and relationship status, there were nosignificant univariate *F* values; *F* values across both variables ranged from .73 to 2.19. The effect sizes were not above .10; η^2 across both variables ranged from .01 to .05, and several of the categories had small *n*s.

Table I1

MANOVAs for Preliminary Analyses

Demographic item	*F(1, 159)*	η^2
Religious affiliation	1.42	.05
Identified gender	5.45**	.17
Educational status	.71	.03
Race/ethnicity	1.73*	.06
Domestic/international	3.75**	.13
Affectional orientation	2.17	.08
Relationship status	2.13*	.08

Note. $N = 163$.

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

VITA

VITA

Mary E. Varghese

EDUCATION

2014 – 2015 (expected)	**Loma Linda University School of Medicine, Loma Linda, CA** Predoctoral Internship in Clinical Psychology (Apa-accredited)
2015 (expected)	**Purdue University, West Lafayette, IN** Ph.D. Counseling Psychology (APA-accredited)
2013	**Purdue University, West Lafayette, IN** M.S. Ed. Concentration: Counseling psychology
2009	**University of Texas, Austin, TX** B.A. Major: Psychology Minor: Business Administration
2008	**Danish Institute for Study Abroad, Copenhagen, Denmark** Non-Degree. Concentration: Cross-cultural psychology and child development

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CLINICAL EXPERIENCE

Loma Linda University School of Medicine, *Loma Linda, CA*

Pre-doctoral Clinical Psychology Intern, September 2014 – Present

Psycho-cardiology Rotation: International Heart Institute, Loma Linda University Medical Center

Responsibilities: Provide behavioral health interventions and short-term therapy for patients with cardiovascular disease presenting with affective disorders, adjustment problems, and end-of-life issues; conduct capacity evaluations for

organ transplant candidates; provide behavioral health consultation for multidisciplinary team of medical providers; disseminate psychoeducational information concerning mind-body connection in heart disease

Bariatric Rotation: Metabolic and Bariatric Surgery Program, Loma Linda University Heart and Surgical Hospital

Responsibilities: Conduct psychological evaluations to assess bariatric surgery candidacy; administer, interpret, and provide feedback for psychological (i.e., Millon® Behavioral Medicine Diagnostic) and symptom-specific assessments; provide behavioral health consultations and write reports for interdisciplinary healthcare team; provide short-term individual pre-op and post-op behavioral health interventions; co-facilitate pre- and post-surgical support groups;

Eating Disorders Rotation: Partial-Hospitalization Program, Loma Linda University Behavioral Medicine Center

Responsibilities: Provide group and family therapy for adolescent and adult patients being treated for Anorexia Nervosa or Bulimia Nervosa in partial hospitalization and intensive outpatient programs; groups lead include Dialectical Behavioral Therapy skills, art and expressive therapy, relapse prevention, interpersonal process, coping skills and stress management, and family education; administer, score, and interpret cognitive, personality, and symptom-specific assessments (e.g., Eating Disorders Inventory-3, WAIS IV, MCMI-III) and provide written reports and verbal feedback to interdisciplinary treatment team

General Mental Health Rotation: Loma Linda University Behavioral Health Institute

Responsibilities: Provide outpatient individual psychotherapy and psychological assessment services to university and community patients, including psychological testing, neuropsychological assessment, and clinical intakes; administer neuropsychological, cognitive, and diagnostic assessments for adult

and gero patients on inpatient and partial hospitalization units and provide integrative assessment reports for interdisciplinary health team

Supervisors: Carlos Fayard, Ph.D., William Britt, Ph.D, Janet Sonne, Ph.D.

Purdue Psychology Treatment and Research Clinics, *West Lafayette, IN*

Psychologist-in-Training, August, 2013 – December 2013

Responsibilities: Evaluate college student and community clients for learning disabilities, ADHD, mood disorders, and autism spectrum disorders; administer, interpret, and provide feedback for neuropsychological, intellectual, achievement, personality, and symptom specific assessment batteries; prepare integrative reports and recommendations for informing treatment and obtaining disability accommodations; communicate with external health providers and family members

Supervisor: Elizabeth Akey, Ph.D., HSPP

Purdue Counseling and Guidance Center, Career Assessment Services, *West Lafayette, IN*

Psychologist-in-training, August 2013 – December 2013

Responsibilities: Provide career assessment services for adolescent high-school community students; conduct pre-assessment interviews with client and client's parents; administer career and personality assessment battery (e.g. MBTI, Strong Interest Inventory); score, interpret, and summarize assessment data into integrated reports and conduct feedback sessions.

Supervisor: Heather Servaty-Seib, Ph.D., HSPP

Four County Counseling Center, *Logansport, IN*

Psychologist-in-training, August 2012 – July 2013

Responsibilities: Provided therapeutic services at the following affiliated locations: Four County Community Mental Health Center: Provided outpatient individual and couples counseling for adults and adolescent community members with

minimal economic resources presenting with a wide range of Axis I and Axis II disorders; conducted disability determination assessments and prepared integrated reports for Social Security disability services; conducted state mandated semi-structured interviews to assess risk and determine patient functioning level for triage and disposition planning; Collaborated and consulted with community services including Assertive Community Treatment (ACT), supported employment services, and substance abuse services to meet broad range of client needs

Four County Acute Care Unit: Conducted intake assessments, emergency crisis interventions, mental status exams, treatment planning, and individual counseling for clients hospitalized on acute care unit and presenting with substance intoxication/dependence, suicidality and self-harm, homicidality, psychosis, severe mood and anxiety disorders, and personality disorders; provided time-limited interventions aimed at facilitation of step-down in necessary level of care, including behavioral skills training, cognitive interventions, symptom monitoring and assessment, and motivational interviewing; conducted two weekly psychoeduational groups from Illness Management Recovery (IMR) curriculum; conducted collateral consultations with family members and significant others; participated in grand rounds with multidisciplinary health services team and collaborated with attending psychiatrist for triage, discharge planning, safety assessment, and after-care planning

Adult Intensive Rehabilitative Services (AIRS): Developed 14-week curriculum and facilitated weekly psychoeducational mindfulness and stress-management group for adult group home residents in intensive outpatient program

Cass County Corrections Department: Facilitated weekly Thinking for a Change cognitive-based process groups for adults in Work Release program to identify and change problematic thinking patterns related to criminal and addictive behaviors and to promote positive community re-integration

Supervisor: James Noll, Ph.D., HSPP

Indiana University- Purdue University, Indianapolis Counseling and Psychological Services (IUPUI CAPS), ***Indianapolis, IN,***

Psychologist-in-training, August 2011 - May 2012

Responsibilities: Provided individual and couples counseling to traditional and non-traditional college students presenting with a range of adjustment disorders, mood disorders, eating disorders, trauma-based disorders, and relationship, gender identity, and career issues; completed referrals for specialized services and consulted with staff psychiatrist as needed; consulted with campus organizations, external health providers, and employers to meet clients' needs; participated in university wide screening/outreach activities; participated in weekly didactic training in a variety of topics including dialectical behavior therapy, acceptance and commitment therapy, and imago therapy; participated in weekly staffing/case management meetings

Supervisors: Misty Spitler, PsyD., HSPP; Michael Hines, PsyD, HSPP

Purdue Counseling and Guidance Center, Therapeutic Assessment Services, ***West Lafayette, IN,***

Therapeutic Assessment Consultant, January *2012 – May 2012*

Responsibilities: Conducted collaborative pre-assessment interviews, assessment sessions (including personality and career interest assessments, e.g. MMPI – 2, Strong Interest Inventory) with first-generation college students in the Purdue Promise program who were currently on academic probation; scored, interpreted, and summarized assessment data into integrated reports and conducted collaborative therapeutic feedback sessions in accordance with Finn's model of Therapeutic Assessment (TA)

Supervisor: William Hanson, Ph.D.

Purdue Counseling and Guidance Center, ***West Lafayette, IN,***

Psychologist-in-training, *August 2010 – May 2011*

Responsibilities: Providing individual psychotherapy to college students, staff,

and community members presenting with issues such as anxiety, depression, grief, relationship problems, and acculturation problems; conducted psychological assessment battery (e.g., MMPI, MCMI) to inform treatment; prepared integrative report, and delivered feedback

Supervisors: William Hanson, Ph.D., M. Carole Pistole, Ph.D.

BRIDGe, *West Lafayette, IN,*

Group Co-facilitator, *February 2010 – May 2010*

Responsibilities: Co-facilitated weekly bereavement support group for community pre-teens

Supervisor: Heather Servaty-Seib, Ph.D., HSPP

RESEARCH AND PROGRAM DEVELOPMENT EXPERIENCE

Loma Linda University School of Medicine, Department of Psychiatry

World Health Organization: Mental Health Gap Action Plan, Honduras, *August 2014 - present*

Responsibilities: Co-create community workshop aimed to train gatekeepers (e.g., spiritual and educational leaders) in Honduras provide prevention interventions for community members exposed to trauma and violence using CBT techniques and Seligman's positive psychology PERMA model; train leaders to screen and identify individuals needing additional services and connect with primary care providers

Loma Linda Metabolic and Bariatric Surgery Program

Psychological Services, *August 2014 - present*

Responsibilities: Assist in establishing psychological services program for Loma Linda bariatric surgery program; assist in developing comprehensive protocol for pre-surgical psychological evaluation, including creation of research-based interview instrument and informed consent procedure and selection of assessment

tools; assist in developing protocol for pre- and post-op individual behavioral health interventions and monthly support group meetings; assist in creating database for tracking program outcomes

Doctoral Dissertation Research Project, Purdue University

Attachment to God and Psychological Well-being: Shame, Guilt, and Self-Compassion as Mediators

Responsibilities: Collect original data and use quantitative research design to examine if shame, guilt, and self-compassion mediate the relationship between attachment to God and psychological well-being, using a young adult sample (N = 163).

Advisor: M. Carole Pistole, Ph.D.

Attachment Research Team, Purdue University

Research team member, August 2009 – present

Responsibilities: Conduct original research using attachment theory as a model in various topics including spirituality and cyberbullying among college students; attend research team meetings and review and provide feedback for team members' research programs

Purdue University Discovery Learning Research Center, *West Lafayette, IN,*

Graduate Research Assistant, *January 2010 – August 2014*

Responsibilities: Lead and co-lead assessment and evaluation projects with multidisciplinary teams for various grant-funded projects (e.g. Interns for Indiana funded by the Lily grant, zipTrips funded by Howard Hughes Medical Institute); assisted in conducting external evaluation for the Military Family Research Institution (MFRI); assisted developing protocols for institutional review board; participated in instrument development and collected quantitative (e.g. surveys) and qualitative (e.g. focus groups, "think aloud" interviews) data; conducted quantitative and qualitative data analyses using various software programs (e.g.

SPSS, NVivo); wrote integrated evaluation reports to be submitted to funding institutions; developed scholarly publications and presentations

University of Texas Psychology Department, *Austin, TX,*

Undergraduate Research Assistant, *January 2008 – December 2008*

Responsibilities: conducted experiments on participants for study on the effects of mood on cognitive tasks in a social psychology lab; performed qualitative data analyses for a study on family language use and health behaviors in the Pennebaker developmental psychology lab

PROFESSIONAL PRESENTATIONS/ PUBLICATIONS

Varghese, M.E., Pistole, M.C. (In Press). College Student Cyberbullying: Self-Esteem, Depression, Loneliness, and Attachment. *Journal of College Counseling*

Varghese, M. E., Pistole M.C. (2012). College Student Cyberbullying and Psychological Risk Factors. Poster presented at the American Psychological Association (APA) Convention, Orlando, FL

Varghese, M. E., Parker, L.C., Adedokun, O., Shively, M., Burgess, W., Childress, A., & Bessenbacher, A. (2012). Experiential Internships: Understanding the process of student learning in small business internships, *Journal of Industry and Higher Education*, *26*(5), 357 - 367

Parker, L.C., Varghese M. E., Adedokun, O.A., Burgess, W.D., Shively, M.M., & Bessenbacher, A.M. (2012). Entrepreneurial internship experiences: Changes in perceptions and interest in small businesses and entrepreneurship. Paper presented at the 2012 annual meeting of the American Educational Research Association, Indianapolis, IN

Varghese, M.E., Hetzel, K., Adedokun, L., Parker, L.C., Burgess, W., Loizzo, J., &

Robinson, J.P. (2011). An Evaluation of the Impact of an Electronic Field Trip on Students' Perceptions of Scientists. Poster presented at the 2011 Annual Meeting of the National Association for Research in Science Teaching, Orlando, FL

Varghese, M. E. (2011). College Students: Loneliness, Depression, Self Esteem, Attachment, and Cyberbullying. Poster presented at the Great Lakes Regional Conference, Bloomington, IN.

WORKSHOPS AND PRESENTATIONS

Varghese, M.E., Montanari, R., (October, 2014). *Acceptance and Commitment Therapy for Major Depressive Disorder*. Presentation to psychiatry residents and pre-doctoral psychology interns as part of Department of Psychiatry's evidence-based practice seminar series. *Loma Linda University School of Medicine, Loma Linda, CA.*

AD HOC REVIEW

2012 *International Journal of Industry and Higher Education*

TEACHING AND SUPERVISION EXPERIENCE

School of Medicine, Loma Linda University, *Loma Linda, CA*

Assistant, MS-2 Clinical Interviewing, 2014

Responsibilities: Provide live supervision and feedback for second year medical students in clinical interviewing course; evaluated student presentations and provided verbal and written feedback

Supervisor: Antonia Ciovica, Ph.D.

Department of Psychiatry, Loma Linda University School of Medicine, *Loma Linda,*

CA

Guest Lecturer, PGY-2 Cognitive Behavioral Techniques, 2014

Responsibilities: Lectured to second year psychiatry residents on topic of CBT techniques and demonstrated interventions. Administered and graded evaluations.
Supervisor: William Britt, Ph.D.

Practicum II Supervision, Loma Linda Behavioral Medicine Center*, Loma Linda, CA*

Intern Supervisor, 2014

Responsibilities: Provide group supervision for doctoral level practicum students at Behavioral Medicine Center; attend weekly supervision of supervision
Supervisor: Janet Sonne, Ph.D.

Department of Educational Studies, Purdue University*, West Lafayette, IN*

Course Instructor, EDPS 105 Academic and Career Planning, 2009

Responsibilities: Led classroom lectures and activities, evaluated course assignments, and advised students; analyzed students' career related inventories (Decision Making Style, Career Decision Making Difficulties, Career Decision Making Patterns), led group interpretation of personality inventories (MBTI), and provided written feedback to 20 students

HONORS AND AWARDS

Vicki Spurlock Memorial Scholarship (2014) - Indiana Psychological Association
Battlemind to Home Scholarship Recipient (2013) – Military Family Research Institute
Golden Key International Honor Society Invitee (2013) – Purdue University
Graduate Student Travel Award (2011, 2012) - Purdue University
Magna Cum Laude (2008-2009) - University of Texas, Austin
University Honors (2007, 2008) - University of Texas, Austin
James A. Bush Merit Scholarship (2006) - University of Texas, Austin

OUTREACH ACTIVITIES

2012 *Screening for Eating Disorders*

IUPUI CAPS, Indianapolis, IN

Provided psychoeducational information and conducted screenings for eating disorders for students and staff at campus student center; made referrals to CAPS as necessary

2011 *Building Pride and Potential*

St. Vincent's, Indianapolis, IN

Co-facilitated teen groups and family groups in two research-based workshops designed to build communication and resiliency among at-risk community families and youth

2011 *Screening for Substance Use Disorders*

IUPUI CAPS, Indianapolis, IN

Provided psychoeducational information and conducted screenings for substance use disorders for students and staff at campus student center; made referrals to CAPS as necessary

RELEVANT WORK EXPERIENCE

2008 – 2009 *Autism Spectrum Instructional Resources (ASPIRe), Austin, TX*

Applied Behavior Analysis (ABA) Therapist,

Provided weekly ABA therapy for children, adolescents, and teens with autism spectrum disorders and pervasive developmental disorders; collaborated with interdisciplinary treatment team and family members to develop personalized therapeutic interventions and goals

2008 *Bornehaven Child Development Center, Copenhagen, Denmark*

Child Development Intern

Supervised students and oversaw developmental activities in a 1st grade classroom for immigrant and refugee children with conduct and behavioral problems

SELECTED ADDITIONAL TRAINING

2013 *Battlemind to Home*

Richard L. Roudebush VA Medical Center, Indianapolis, IN

Two-day series of training seminars for mental health professionals working with veterans, military members, and military families; seminars addressed mental health treatment in areas including substance abuse, homelessness, suicide prevention, community intervention, chronic pain, and PTSD

2012 *QPR Suicide Prevention Gatekeeper Certification*

Four County Counseling Center, Logansport, IN

Suicide prevention training following the evidence-based QPR model

2012 *Healing from Within: Using positive psychology with grieving people*

Association for Death Education and Counseling, Distance education webinar

Training for utilizing therapeutic positive psychology approaches and core character strengths in individual and group grief counseling

2012 *Behavioral Activation for Treating Depression*

American Psychological Association Convention, Orlando, FL

Skill-building session for providing behavioral activation in the treatment of depression

2011 *American Red Cross Disaster Training*

American Red Cross, Lafayette, IN

Training for credentials to provide disaster relief mental health assistance in affiliation with the American Red Cross- Disaster Response Network

PROFESSIONAL AFFILIATIONS

American Psychological Association (APA),

APA, Division 17: Society for Counseling Psychology, Student Affiliates of Seventeen (SAS)

APA Division 36: Society for the Psychology of Religion and Spirituality

APA Division 38: Health Psychology

APA Graduate Students (APAGS)

Psi Chi, The International Honor Society in Psychology

PROGRAM AND COMMUNITY LEADERSHIP

Loma Linda Internship Review Committee, 2014

Battlemind to Home IV Symposium, Session Facilitator, 2013

Purdue Counseling and Development Student Group 2009 - present

Secretary, 2010 – 2011

Program Mentor 2010 – 2012

Social Co-Chair, 2009 – 2010

Purdue CPSY Multicultural Committee, 2009 - present

Social Co-Chair, 2010 - 2011

Purdue CPSY New Student Orientation Planning Committee, 2010

Purdue CPSY Interview Day Planning Committee, 2010, 2012