Attachment to God, Images of God, and Psychological Distress in a Nationwide Sample of Presbyterians

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Abstract

Drawing broadly on insights from attachment theory, the present study outlines a series of theoretical arguments linking styles of attachment to God, perceptions of the nature of God (i.e., God imagery), and stressful life events with psychological distress. Main effects and potential stress-moderator effects are then evaluated using data from a nationwide sample of elders and rank-and-file members of the Presbyterian Church (U.S.A.). Key findings indicate that secure attachment to God is inversely associated with distress, whereas both anxious attachment to God and stressful life events are positively related to distress. Once variations in patterns of attachment to God are controlled, there are no net effects of God imagery on levels of distress. There is only modest support for the hypothesis that God images moderate the effects of stressful life events on psychological distress, but no stress-moderator effects were found for attachment to God. Study limitations are identified, and findings are discussed in terms of their implications for religion-health research, as well as recent extensions of attachment theory.

A growing literature shows that religious involvement is associated with desirable mental health outcomes (for a review, see Ellison & Levin, 1998). Much of this research, however, has focused on only a few aspects of religious life, including involvement in organized religious institutions; religious coping styles; and, more recently, religious support systems. Far fewer studies have systematically investigated other facets of religious participation, such as intimate relationships with God (Bradshaw, Ellison, & Flannelly, 2008; Ladd & Spilka, 2002; Pollner, 1989; Poloma & Gallup, 1991). In light of the sizable literature demonstrating the beneficial effects of human social relationships, attachments, and support on psychological well-being (House, Umberson, & Landis, 1988; Mirowsky & Ross, 2003; Seeman, 1996), the dearth of research on interactions with the divine represents a considerable gap in our knowledge.

The present study addresses this shortcoming by drawing on recent applications of attachment theory to religious phenomena. Building on Bowlby's (1969, 1973, 1980) theory of parent–child attachments, researchers have shown that close, interpersonal relations are not only crucial for a child's development, but are important for adults as well (Hazan & Shaver, 1987; Kirkpatrick & Davis, 1994; Kirkpatrick & Hazan, 1994; Shaver, Hazan, & Bradshaw, 1988; Sroufe & Fleeson, 1986). Recent work has even suggested that intimate

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relations with God may have profound consequences for psychosocial well-being (Granqvist, 1998; Granqvist & Hagekull, 1999, 2003; Kirkpatrick, 2005). The research presented here extends our knowledge in this area by examining whether relationships with God—as tapped with measures of secure and anxious attachment to God, as well as perceptions of the nature of God (i.e., loving and remote God imagery)—are associated with levels of psychological distress: (a) directly; and/or (b) in a manner that buffers against, or exacerbates, the effects of stressful life events on mental health.

These issues are addressed by first reviewing the relevant literature. Two different conceptual models of the associations between intimate relations with God, stressful life events, and psychological distress are then formulated. These models are then empirically examined using data from a large national survey of U.S. adults collected in 2007 by the Presbyterian Church U.S.A. The results of these analyses are then presented, and their relevance for research on the religion-mental health connection is discussed. Promising directions for future research are also identified.

THEORETICAL AND EMPIRICAL BACKGROUND

Attachment Theory and Mental Health: The Basics

A sizable literature has linked social relationships, attachments, and support with mental health (Cohen, 2004; Ellison & Levin, 1998; House et al., 1988; Mirowsky & Ross, 2003). Although numerous theoretical perspectives inform research in this area, attachment theory appears to be particularly promising. Briefly, building on the well-established fact that infants seek socio-emotional support from their caretakers, attachment theory argues that this evolved need for social attachment endures into adulthood, and subsequently manifests itself not only in parent–child relations but also in those between romantic partners, friends, and possibly even between humans and God (Hazan & Shaver, 1987; Kirkpatrick, 2005; Kirkpatrick & Davis, 1994; Kirkpatrick & Hazan, 1994; Shaver et al., 1988; Sroufe & Fleeson, 1986).

According to this perspective, attached individuals routinely display "proximity-seeking" behaviors toward their attachment figures—that is, they seek out their company, particularly during stressful times. Attachment figures, in turn, serve as a "haven of safety" and a "secure base" in an uncertain world. Several different "styles" of attachment have been identified. Secure attachment is characterized by feelings of love, approval, closeness, and warmth toward attachment figures. Anxious attachment is characterized by feelings of inconsistence and confusion, and attachment figures are perceived as warm, loving, and reliable at certain times and cold, distant, and unreliable at others. Avoidant attachment, a third style that is commonly mentioned in the literature, is simply the inverse of secure attachment—that is, potential attachment figures are perceived as consistently cold, distant, and unreliable.

Much of the work on attachment relationships has focused on either the developmental origins of attachment styles or the degree of correspondence (or lack thereof) between attachments in differing domains of social life (e.g., parent–child, romantic partners, etc.; Hazan & Shaver, 1987; Sroufe & Fleeson, 1986). Recent research, however, has also documented clear links between attachment styles and various aspects of psychosocial functioning (Kirkpatrick & Davis, 1994; Kirkpatrick & Hazan, 1994). For example, differences in attachment styles have been shown to predict depressive symptoms and other forms of psychological distress, likely via the quality of affectional bonds established between individuals (Murphy & Bates, 1997; Pielage, Luteijn, & Arrindell, 2005; Riggs, Vosvick, & Stallings, 2007). Differences in attachment styles also lead to disparate coping

strategies in the face of stressors (Mikulincer & Florian, 1998)—a finding that explains at least part of the connection with mental health.

Only within the past two decades, however, have investigators systematically applied insights from attachment theory to the study of religion, thus far with impressive results (Granqvist, 1998; Granqvist & Hagekull, 1999, 2003; Kirkpatrick, 2005). Moreover, few of the works in this tradition have specifically examined the relationships between styles of attachment to God and mental health (Rowatt & Kirkpatrick, 2002). The next section begins addressing this shortcoming in the literature.

Attachment to God and Mental Health

A small but growing literature, which has extended attachment theory to include religious phenomena, suggests that intimate relationships between humans and God meet the defining criteria of attachments—that is, proximity-seeking behavior, a haven of safety, and a secure base (Hood et al., 1996; Kirkpatrick, 2005). Although rarely framed in these terms, the conception of God as a parental attachment figure is consistent with the beliefs and teachings of many religious traditions. In other words, the perceived availability and responsiveness of a loving God is a fundamental dynamic underlying Christianity and other world's religions. In these religious traditions, individuals proceed with the faith that they can directly interact—through prayer, a proximity-seeking behavior—with a God who will be available to protect and comfort them when danger threatens. This is an obvious haven of safety. It may also be the case that the mere knowledge of God's presence and accessibility allows many religious individuals to approach the problems and difficulties of human existence with confidence and security, an example of the secure base function of attachment relationships. In fact, God may be the absolutely adequate attachment figure (i.e., an omnipotent, omniscient, omnipresent, and infallible one), whereas humans are oftentimes inadequate (Kirkpatrick, 2005).

Empirical support for God as an attachment figure is scattered throughout the literature. For example, research has shown that individuals routinely turn to God for help during stressful times (Argyle & Beit-Hallahmi, 1975; Pargament, Kennell, & Hathaway, 1988). This is clearly proximity-seeking behavior, and exemplifies the haven of safety function of attachment relations. More recent scholarship has even attempted to precisely measure attachment styles as they pertain to the relationship between humans and God. In the first study on this topic, Kirkpatrick and Shaver (1992) adapted Hazan and Shaver's (1987) categorical self-report measure in order to classify respondents as securely, avoidantly, or anxiously attached to God based on their agreement with predefined descriptions of each— that is, their perceptions of God as warm and responsive, impersonal and distant, or inconsistent, respectively. Later work by Rowatt and Kirkpatrick (2002) extended our knowledge in this area by developing a scale (which is employed in the present study) to identify—based on factor analysis—two continuous and relatively orthogonal dimensions of attachment to God: avoidant (the inverse of secure) and anxious. It is important to note that both of these factors are consistent with the broader literature on nonreligious attachments— that is, they closely parallel secular attachment styles such as those between parents and their children, romantic partners, and so on.

If God really is an attachment figure, this should pose implications for mental health that are consistent with the literature on secular attachments—that is, being securely attached to God should be associated with desirable mental health, whereas being anxiously attached should correlate with poor mental health. Indeed, a couple of studies have already found support for this proposition. In the first one, Kirkpatrick and Shaver (1992) reported that secure attachment to God was associated with greater life satisfaction and lower levels of anxiety and depression. In a follow-up study, Kirkpatrick, Shillito, and Kellas (1999) found that

secure attachment to God was inversely associated with loneliness among women. In the most recent and highest quality study on this topic, Rowatt and Kirkpatrick (2002) found that avoidant attachment to God (the inverse of secure attachment) was inversely associated with symbolic immortality and agreeableness. Anxious attachment, in contrast, was found to be positively associated with neuroticism and negative affect, and inversely correlated with positive affect. Overall, these findings are informative, but much work remains to be done in this area.[1]

God Imagery and Mental Health

These recent studies of attachment to God are not the only ones that are relevant here. In contrast to attachment theory, which examines "styles" of attachment, research on perceptions of the nature of God (i.e., God imagery), which has been ongoing for at least 50 years, focuses on the "object" of attachment (i.e., the characteristics of God). Despite vast differences in samples, study designs, and methods, investigators have reached broad consensus regarding some of the most important dimensions of God imagery. In particular, several factor-analytic studies have shown a close association among a number of beneficent images of God—for example, as "loving," "forgiving," "caring," and "protective" (Gorsuch, 1968; Spilka, Armatas, & Nussbaum, 1964). According to Kirkpatrick (1997), a prominent figure in the extension of attachment theory into the realm of religion, "It would be difficult to write a list of characteristics that better describe an ideal attachment figure" (p. 123). Other God images—including "remote," "distant," and "uninterested"—have received attention in the literature as well (Gorsuch, 1968).

Similar to the research linking attachment styles with mental health, the literature on God imagery suggests that perceptions of the object of attachment may also pose important implications for psychological well-being. Although empirical examinations of this hypothesis are sparse, a few studies do appear to provide support. For example, individuals who envision a benevolent, loving deity tend to have higher self-esteem, whereas those who experience a remote deity report higher levels of shame (Benson & Spika, 1973; Good, 1999; Spilka, Addison, & Rosensohn, 1975). Further, persons with loving images of God tend to adopt more collaborative, constructive styles of spiritual coping, which in turn has implications for depression and psychological well-being (Belavich & Pargament, 2002; McElroy, 1999). In perhaps the most influential and widely cited study in this area, Pollner (1989) found that the correlation between an intimate relationship with God and psychological well-being varied depending upon one's perception of the nature of God.

Stressful Life Events, Relations with God, and Mental Health: Two Conceptual Models

In addition to religious factors, one of the primary correlates of psychological distress is the occurrence of stressful life events—for example, the death of a loved one, financial hardship, serious illness, poor physical health, and significant family conflicts, among others. In an attempt to understand how religious participation may affect individual responses to such stressors, several researchers have integrated insights from the psychology and sociology of religion with conceptual models borrowed from the life stress (or stress and

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[1]Unfortunately, many of the studies in this area suffer from major weaknesses. In addition to being somewhat dated (i.e., several were published in the 1960s), Rowatt and Kirkpatrick (2002) claimed that the self-report measure of attachment to God employed in early research on this topic "suffers from several important shortcomings" (p. 639), including its categorical nature, which forces respondents to select the one attachment style (i.e., secure, avoidant, or anxious) that best describes their beliefs about and relationship with God. This is problematic given that recent research suggests that secure and avoidant attachment are opposite ends of a single continuum and that there is extensive variation within each of these styles. In essence, despite the importance of the ideas presented previously for the broader literature on social relationships and psychological well-being, research on attachments to God and mental health is severely underdeveloped. The present study addresses this shortcoming by examining the relationships between secure and anxious attachment to God, as well as loving and remote God imagery, and mental health using: (a) data from a large sample of U.S. adults (N =1,041) collected in 2007, and (b) the best measures of attachment to God and God imagery that are currently available.

coping) paradigm (Ellison, 1994; Ellison, Boardman, Williams, & Jackson, 2001; Fabricatore, Handal, Rubio, & Gilner, 2004). Two such conceptual models are particularly germane to the present study: (a) the direct (i.e., offsetting/additive) effects model, which posits independent influences of stressors and attachment to God/God imagery; and (b) the moderator (i.e., buffering/exacerbating) effects model, in which the estimated net effects of stressful events vary across differences in attachment to God/God imagery (see Figures 1 and 2).

More specifically, in the direct effects model, which is depicted in Figure 1, stressful events are positively associated with feelings of distress, whereas secure attachment to God and loving God imagery are inversely associated with distress, and anxious attachment to God and remote God imagery are positively associated. In one case, close relationships with God —gauged in terms of both secure attachment to God and loving images of God—have salutary effects on mental health, thereby at least partially "offsetting" the deleterious influence of stressful life events. In the other case, undesirable relationships with God— tapped with measures of anxious attachment and remote God imagery—have negative effects on mental health, thereby "adding" to the already noxious influence of stressful life events. Crucially, in this model the effects of stressors are not contingent upon attachment styles or God imagery.

Figure 2 displays the moderator model. As in Figure 1, stressful life events are assumed to have a positive association with distress. However, in addition to whatever direct effects attachment styles or God imagery may exert, they may also moderate the stress–distress association. Specifically, the consequences of stressors might be significantly weaker among persons with relatively secure attachments to God, and/or who perceive of God as loving. Thus, secure attachments and loving God imagery mitigate the deleterious psychological effects of stressors (buffering effects). In contrast, the negative consequences of stressors may be greatest among persons with anxious attachments to God, and/or who envision God as remote. If true, these indicators of relationships with God could be said to amplify the already harmful effect of stressful life events on psychological distress (exacerbating effects). Overall, the primary goal of the present study is to test these alternative theoretical models.

METHODS

Participants

To examine these models, data on 1,041 participants in a national panel survey conducted among representative samples of two populations affiliated with the Presbyterian Church (U.S.A.) were analyzed: (a) active elders (i.e., active members who have been ordained as an elder in a Presbyterian congregation and who are currently serving on the session, or governing board, of a Presbyterian congregation); and (b) other active members (i.e., all active members minus the subset of active elders). For convenience, these populations and the samples derived from them are referred to simply as "elders" and "members" in this article.

Elders were sampled in a two-stage process. First, all congregations (N=11,019) were classified into strata based on region, racial-ethnic composition, and size. A sample of 400 congregations was then drawn, with the number in each stratum proportional to the number of elders currently serving in the congregations of that stratum. Random sampling was used within strata to select the specific congregations. Second, each selected congregation was contacted by mail and asked to provide the names of all active elders if the session size was eight or fewer, or if larger, to sample eight names by matching eight preassigned random

numbers to a numbered list of the session. In all, 206 (51%) congregations cooperated, providing 1,471 names.

The member sample was also drawn in two stages. First, congregations were allocated to strata based on region, race-ethnic composition, and size. Then a sample of 500 was drawn from the population of congregations, with the number selected in each stratum proportional to the membership total of the congregations in that stratum. Random sampling was used within strata. Second, sampled congregations were contacted by mail and asked to provide eight member names by matching eight preassigned random numbers to a numbered list of active members. In all, 273 (54%) congregations cooperated, providing 1,892 names.

The individuals in each sample were mailed a questionnaire in the fall of 2005. A total of 1,163 elders (79%) and 1,099 members (58%) returned this screening survey. These respondents comprise the panel. The present study uses data on sociodemographic characteristics and religious involvement from the screening survey, and on psychological distress from the fifth wave, administered in January 2007. Because of attrition, the number of participants in each panel sample had declined slightly by the fifth wave. At that time there were 1,135 elders, of whom 693 (61%) responded, and 1,037 members, of whom 557 (53%) responded. Data from these two samples were combined in the current analysis, for a total sample size of 1,250. Because of missing data on one or more variables, however, the effective sample size was 1,041.

Measures

Dependent variable—Psychological distress was gauged with a mean index composed of the following six questions, each of which was coded 1 (*none of the time*) to 5 (*all of the time*; Cronbach's a=0.816): "During the past 30 days, how much of the time did you feel … (a) so sad nothing could cheer you up; (b) nervous; (c) restless or fidgety; (d) hopeless; (e) that everything was an effort; and (f) worthless?" This is the K6 scale of psychological distress developed by Kessler and colleagues (2002), and it distinguishes negative affect based on the type and amount of severity of the problem rather than diagnosis. To reduce the skewed nature of this variable prior to analysis, it was normalized via a square-root transformation.

Independent variables—Attachment to God was gauged with Rowatt and Kirkpatrick's (2002) nine-item, multidimensional measure. The coding of two latent factors representing secure and anxious attachment to God was based on theory and previous empirical research, as well as bivariate correlations and a principal component analysis of the data. Secure attachment to God was tapped with a mean index (a=.866) composed of the following six questions, coded 1 (*not true*) to 7 (*very true*), all of which had factor loadings that ranged from 0.53 to 0.86: "(a) God seems impersonal to me (reverse coded). (b) God seems to have little or no interest in my personal problems (reverse coded). (c) God seems to have little or no interest in my personal affairs (reverse coded). (d) I have a warm relationship with God. (e) God knows when I need support. and (f) I feel that God is generally responsive to me." Anxious attachment to God, a second latent construct, was gauged with a mean index constructed from the following three items (a=.698), each of which was also coded 1 (*not true*) to 7 (*very true*): "(a) God sometimes seems responsive to my needs, but sometimes not. (b) God's reactions to me seem to be inconsistent. and (c) God sometimes seems very warm and other times very cold to me." The factor loadings for these three items ranged from 0.69 to 0.78.

Perceptions of the nature of God, which are theoretically and empirically distinct from the relationships between humans and the divine as tapped by the attachment measures described above, were gauged with the following four God imagery questions: "How

strongly do you agree or disagree with that God is … Loving, Approving, Forgiving, and Remote?" Each of these items was coded 1 (*strongly disagree*) to 7 (*strongly agree*). To tap loving God imagery, a three-item index was constructed from the questions regarding God as loving, approving, and forgiving (a=0.781). Both bivariate correlations and a principal component analysis revealed that these three items were all highly correlated with each other, and thus tapped a central underlying construct of loving God imagery—a finding that was consistent with previous research (Benson & Spika, 1973; Gorsuch, 1968; Spilka et al., 1964). Of importance, loving God imagery surfaced as a third, and thus somewhat independent, latent factor even when factor-analyzed simultaneously with the questions tapping attachment to God. The factor loadings for this construct ranged from 0.71 to 0.91. These same analyses also revealed that remote God imagery was not highly correlated with any of the other three latent variables (or their component items), and thus it was utilized as a single-item measure.

Stressful life events were gauged with the following six questions: "During the past year … (a) Did your spouse, child, parent, grandparent, or grandchild die? (b) Did you suffer from a major financial loss that involved 20% or more of your income? (c) Did your spouse, child, parent, grandparent, or grandchild suffer from a serious illness or accident? (d) Did you have a major disagreement with your spouse, child, parent, grandparent, or grandchild? (e) Did you have a major disagreement or serious argument with a close friend? and (f) Did you experience any other major problem or challenge?" Each of these questions was coded 1 (*no*) or 2 (*yes*), and the questions were examined both as single-item measures and in the form of a mean index.

Covariates—To control for differences in religious commitment among the groups included in the sample, elder status was gauged with a dichotomous variable (elder =1). Other covariates that have been linked with religious participation, attachment styles, God imagery, and/or psychological distress in previous studies were also included: age was measured in years (14–93), whereas both female (female =1) and race (White =1) were dichotomous variables. Education was tapped with a continuous measure coded 1 if the respondent reported having an eighth-grade education or less to 8 if they possessed a graduated degree (e.g., M.D., Ph.D., J.D.). Marital status (married =1) was a dichotomous variable, whereas family income was a continuous variable that is coded 1 =less than $10,000 per year to 16 =$250,000 a year or more. To control for more traditional and distal aspects of religious life, the frequency of attendance at religious services was gauged with a single-item question, coded 1 (*never*) to 8 (*every week*): "How often do you generally attend Sunday worship at your congregation?" Likewise, frequency of prayer was gauged with a single-item question: "Approximately how frequently do you pray privately?" Response categories for this variable ranged from 1 (*never*) to 7 (*daily/almost daily*).

Statistical Analyses

The conceptual models outlined above were tested in several steps. First, descriptive statistics for all study variables were calculated. Bivariate correlations and a series of regression models were then estimated. Because the dependent variable employed was a continuous measure of psychological distress, ordinary least squares regression was utilized. Both main effects of religious variables, as well as interactive relationships with stressful life events, were examined.

RESULTS

Descriptive Statistics

Table 1 shows descriptive statistics for all of the measures. For the dependent variable, psychological distress, the mean was quite low. Given the skewed nature of this variable, a square-root transformation was conducted prior to the regression analyses. In this sample, the mean age was 59.18, women made up slight more than half of the respondents, most of the sample was White, and roughly three out of four participants were married. The mean level of education was a bachelor's degree, whereas family income before taxes was $70,000 to $79,999 per year. Religious attendance averaged nearly every week, whereas the average frequency of prayer was roughly several times a week. With respect to the key independent variables, the average respondent experienced 1.16 (on a 1–2 scale) stressful life events. The means for secure attachment to God and loving God imagery were quite high, whereas they were relatively low for anxious attachment and remote God imagery.

Bivariate Correlations

Table 2 shows bivariate correlations for key dependent and independent variables. Secure attachment to God was found to have a moderate inverse relationship with psychological distress, whereas anxious attachment to God showed a positive one. Loving God imagery was not highly correlated with distress, whereas remote God imagery was found to be positively associated with this aspect of mental health. Stressful life events had a moderate correlation with levels of distress. The correlations between the religion variables were fairly strong, but as discussed previously, factor analysis revealed that these were semi-independent latent constructs.

Testing Direct Effects Models

Table 3 shows ordinary least squares parameter estimates from the regression of attachments to God, images of God, stressful life events, and covariates on psychological distress. Model 1 replicated a considerable amount of previous research by showing that stressful life events were positively associated psychological distress. This model served as a baseline for the others, which tested the two conceptual models outlined earlier. As shown in Figure 1a, two direct effects models were theorized. The offsetting effects model suggested that a secure attachment to God and loving God imagery would both be inversely associated with psychological distress, whereas stressful life events would be positively correlated. The additive effects model predicted that anxious attachment to God, remote God imagery, and stressful life events would all be positively associated with psychological distress. These two conceptual models were evaluated by looking at the main effects of all of these measures net of the others. Models 2 and 4 provided strong support for the offsetting effects model, as secure attachment to God (negatively) and stressful life events (positively) were both independently associated, in opposite directions, with psychological distress. This means that they at least partially offset the effects of each other. Similarly, Models 3 and 4 both provided support for the additive effects model. Anxious attachment to God and stressful life events were both positively associated with distress independent of the others in the full model. In the full model (Model 4), attachments to God made an independent contribution to levels of distress net of all of the other variables in the model, whereas God imagery did not.

Testing Moderator Effects Models

Two moderating effects models were also outlined earlier in this article. Shown in Figure 2, the buffering effects model suggested that intimate relationships with God and stressful life events would interact in such a way that the harmful effects of stressful life events on psychological distress would be reduced among those who were securely attached to God

and/or perceived of God as loving. The exacerbating effects model, in contrast, predicted that the positive effect of stressful life events on psychological distress would be stronger among individuals who had an anxious attachment to God and/or perceived of God as remote. The analyses, which are shown in Table 4, found some, although extremely limited, support for the God imagery models (note: all models contained controls for the covariates shown in Table 3, but only the key findings are displayed). Specifically, models estimated using zero-centered predictors to reduce multicollinearity—as recommended by Aiken and West (1991)—found only two statistically significant interactions. According to the findings shown in both Model 1 (Table 4) and Figure 3a, suffering a major financial loss of 20% or more was positively associated with distress, and this effect was exacerbated among individuals who perceived of God as remote. Remote God imagery also interacted with another stressful life event: having a major disagreement with a friend. Model 2 (Table 4) and Figure 3b showed that disagreements with friends were more strongly associated with distress among individuals who perceived of God as remote.

It is important, however, not to overstate the significance of these interactive findings. We estimated 28 different models for interactive effects, and with a Bonferroni test (adjusting the significance levels for the number of interactions estimated), the two reported here were no longer significant. Thus, these findings should be interpreted with caution. Nevertheless, the limited evidence of interactive patterns found here seemed interesting and worthy of reporting for two reasons. First, they involved God imagery (which had no real main effects) and not attachment styles. Second, they centered mainly on the deleterious effects of remote God imagery—that is, the stress-exacerbating effects of "spiritual struggles"—rather than on the buffering effects of positive spirituality. Given that theory strongly predicts that interactions in this area should be common, future research should certainly continue to explore this possibility.

DISCUSSION

Drawing broadly on insights from attachment theory and the life stress paradigm, and using data on a large sample of elders and members of the Presbyterian Church (U.S.A.), this study has investigated the main and interactive effects of attachments to God, images of God, and stressful life events on psychological distress. Several empirical findings are noteworthy:

1. Styles of attachment to God are more potent and consistent predictors of distress than are images of God.

2. Secure attachment to God (i.e., positive relations with the divine) and anxious attachment (two different types of "spiritual struggles") are both independently associated with feelings of distress.

3. With regard to the interplay of intimate relations with God and stressful life events in shaping levels of distress, two different direct effects models—that is, offsetting and additive effects—were clearly supported.

4. By contrast, there is little clear or consistent evidence that attachment to God or God imagery moderates the deleterious effects of stressful events on feelings of distress. What minimal evidence there is involves remote God imagery, which marginally exacerbates the effects of certain stressors.

Taken together, these findings are important for several reasons. First, using data on a large probability sample, the results confirm that one's relationship with God is linked with mental health over and above the effects of conventional indicators of religious practice (i.e., frequency of prayer and church attendance). This bears out the wisdom of attachment theory

and underscores the value of its core ideas for the psychology and sociology of religion (Granqvist, 1998; Granqvist & Hagekull, 1999, 2003; Kirkpatrick, 2005; Rowatt & Kirkpatrick, 2002). This theoretical apparatus is useful for understanding the sequelae of attachment to God—in this instance, for psychological well-being—as well as for individual variations in antecedents and patterns of such attachment. Further, these findings highlight the distinction between two particular aspects of the human–God relationship: "styles" of attachment (i.e., secure/insecure and anxious) and the "object" of attachment (i.e., images of God as loving and remote). Previous research in this area has tended to focus on God imagery (Benson & Spilka, 1973; Dickie, Eshleman, & Merasco, 1997; Pollner, 1989), but these results reveal that attachment styles are more important predictors of distress.

Second, these findings underscore the significance of spiritual struggles for mental health outcomes. A balanced approach to the study of religion and health must take into account both positive (or salutary) and negative (or pernicious) effects of religious practice and experience. As interest in the phenomenon of spiritual struggles has expanded, a growing body of work has explored the implications of internal or intrapsychic struggles (e.g., religious doubting) for health and well-being (Ellison & Levin, 1998; Pargament, 2002; Pargament, Koenig, Tarakeshwar, & Hahn, 2001). The present study highlights the importance of interactional struggles, or troubled relationships with God, as well. On average, individuals who experience anxious or inconsistent relationships with God—that is, close at some points, but distant at other times—report higher levels of psychological distress than other persons.

Third, there is only weak evidence that the links between relationships with God and psychological functioning depend upon stress levels. To the contrary, both secure and anxious attachments to God are influential for individuals' psychological well-being regardless of whether they are coping with stressful life events. Thus, the effects of personal relationships with God on feelings of distress appear to be quite robust in this regard. In a similar vein, it does not appear that secure relationships buffer, or that anxious attachments exacerbate, the harmful effects of social stressors on mental health (at least not to a considerable degree). Nevertheless, because there is clear theoretical rationale for anticipating such interactive patterns (Ellison, 1994; Fabricatore et al., 2004), and because the present study was only able to examine a handful of specific acute stressors (i.e., major life events) rather than chronic stressful conditions, it may be premature to dismiss the possibility of at least some stress-moderator role for relationships with God without further investigation.

Even though this study did not focus on prayer, a brief discussion of this aspect of religious life is nonetheless warranted. In the analyses just presented, no significant relationship between prayer and distress was found until attachments to God and God imagery (particularly the former) were held constant. Once they were, however, a positive relationship was revealed. What might this mean? Even though the causal order here is impossible to determine in this cross-sectional study, this finding may be interpreted in the following ways. Perhaps individuals who pray more frequently are seeking, but in some cases never finding, a secure connection with God. Either this may be motivated by feelings of high distress or, alternatively, distress may emerge from the unsatisfying or unsettling nature of prayer experiences in this context. Unrequited love or unsuccessful help-seeking may even imply a strained relationship with God, which is one aspect of spiritual struggle (Exline, 2002; Pargament, 2002). This suppressor pattern may help to account for the mixed results in the literature on prayer and mental health (Bradshaw et al., 2008), which is based primarily on cross-sectional studies. Future longitudinal work will be required to shed light on this complex relationship, however.

Like all studies, this investigation is characterized by several limitations, two of which are particularly significant. First, the present study is based on data on elders and members of a single Christian denomination: the Presbyterian Church (U.S.A.). Although this is a large probability sample, there are issues of nonresponse and attrition across panels of the survey —common in projects of this type—that may limit the representativeness of the sample. Moreover, the findings from this study cannot be generalized to other religious groups, or to the general U.S. adult population, which is likely to be less religiously committed than respondents to this survey. In addition, because the sample—like the Presbyterian Church (U.S.A.) membership—is largely White, older, more educated, and more affluent than the U.S. adult population as a whole, it is not possible to explore possible subgroup variations in the links between relationships with God and feelings of distress. Exploring generalizability and subgroup patterns will be possible only through the collection and analysis of new data from more representative samples. Another limitation is the cross-sectional nature of the data, which makes it impossible to establish the causal order among the key variables in this study. For example, although the interpretation of the findings presented here is certainly plausible, it is also conceivable that psychological distress or stressful life events may affect one's relationship with the divine. Future research using longitudinal designs—ideally with three or more waves of data—will be required to address this limitation. Within such a longitudinal analytic framework, it may also be feasible to test potential stress-moderator patterns more conclusively. A reliance on self-report measures is another weakness due to the possibility of shared method variance, as well as the numerous potential biases inherent in such measures including impression management, a lack of self-awareness, and so on. These problems could potentially confound this study. Also, the strength of the associations reported here are rather modest and should not be overstated.

Despite these weaknesses, the findings reported here do suggest a number of fruitful avenues for future inquiry. For example, although this study has focused on psychological distress, one specific mental health outcome, it will be important to extend this research to cover other aspects of mental health, including symptoms and diagnoses of specific conditions (e.g., depression, anxiety, addictive disorders, etc.), as well as positive outcomes such as life satisfaction and personal happiness. It is conceivable that the findings concerning the relative effects of positive versus negative styles of attachment to God may be different when positive indicators of well-being are examined instead of distress. Moreover, future studies should explore the potential effects of relationships with God on physical health outcomes (e.g., self-rated health, mobility, morbidity, pain management), and on the risk of mortality.

In addition, future studies might profitably distinguish between attachments to religious versus nonreligious others (e.g., parents, romantic partners, etc.) to isolate the unique effect of the latter on mental health. Such work could also test the "amplification" and "compensation" hypotheses articulated by Kirkpatrick (2005) and others. Briefly, these competing arguments suggest that attachment to God may either (a) add to, or even multiply, the beneficial effects of nonreligious attachments on mental health, thereby providing the greatest benefits to persons who enjoy secure social attachments to parents, spouses, and so on, or (b) compensate for deficits in nonreligious attachments, thus affording greater advantages to persons with insecure or anxious attachments to the nonreligious others in their lives.

In sum, despite the limitations noted earlier, this study has made a fresh contribution to the growing literature on religion and mental health by examining the links between styles of attachment to God, God imagery, stressful life events, and psychological distress. Viewed broadly, the results underscore the value of attachment theory as it has been integrated into the study of religion, as well as recent refinements in the measurement of attachment to God.

It is hoped that future research will replicate and extend these findings to cast new light on the complex psychosocial implications of individual relationships with the divine.

Acknowledgments

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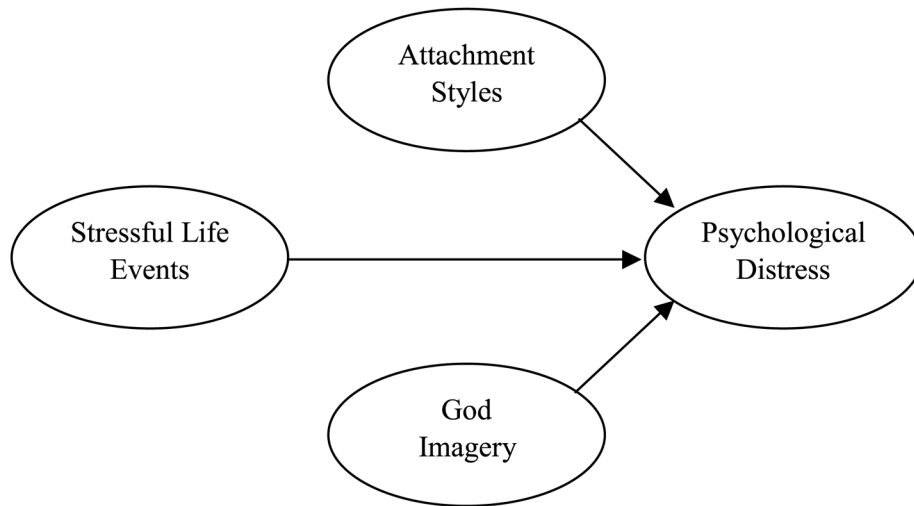
FIGURE 1.
Direct (offsetting/additive) effects model.
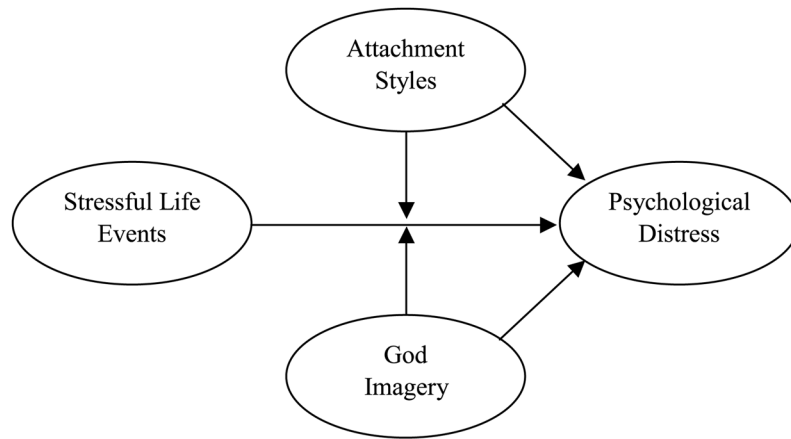
FIGURE 2.
Moderating (buffering/exacerbating) effects model.
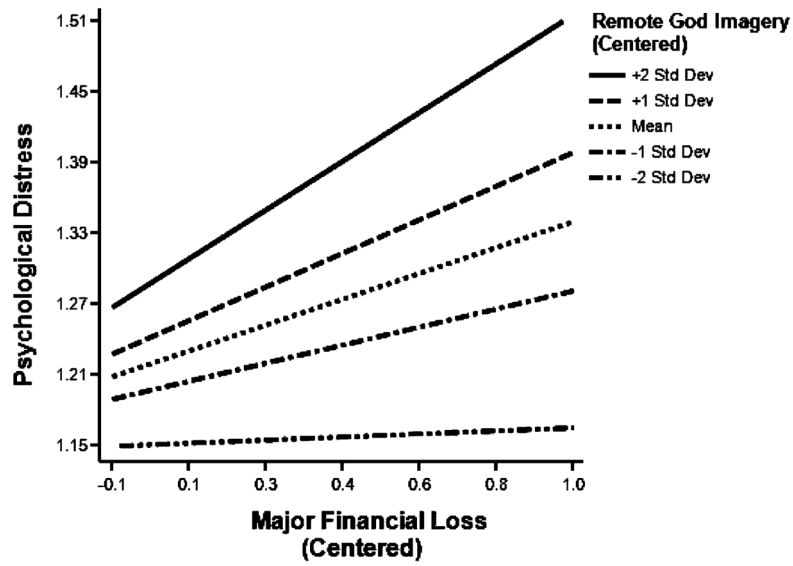
(a)

(b)

FIGURE 3.
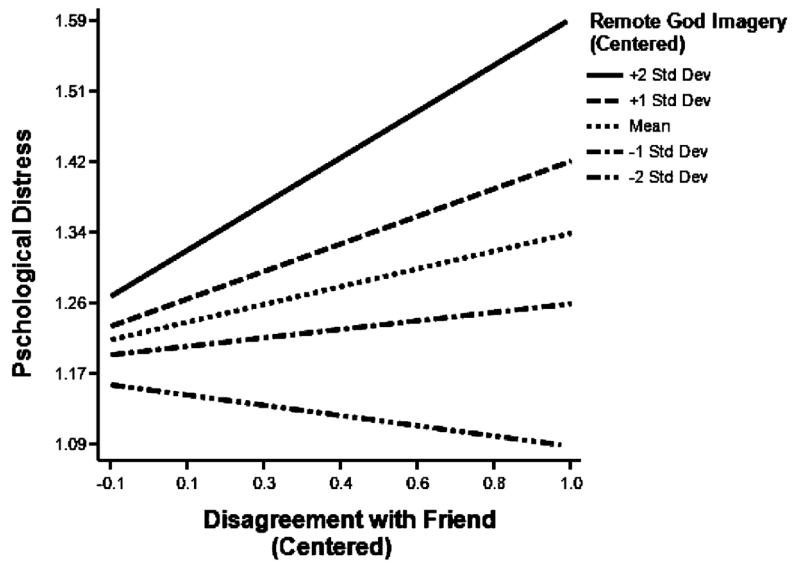Graphical representations for moderator effects.

TABLE 1

Descriptive Statistics

	M	**SD**	**Min-Max**
Psychological distress	9.184	3.143	6–26
Elder	.438		0–1
Age	59.183	13.998	14–93
Female	.565		0–1
White	.969		0–1
Education	6.028	1.774	1–8
Married	.773		0–1
Income	8.974	3.439	1–16
Attendance	6.988	1.170	1–8
Prayer	6.372	1.257	1–7
Stressful life events	1.156	.177	1–2
Secure attachment to God	5.935	1.033	1–7
Loving God imagery	6.279	.906	1–7
Anxious attachment to God	2.665	1.255	1–7
Remote God imagery	2.603	1.623	1–7

Note. *N*=1,041.

TABLE 2

Bivariate Correlations

	Psychological Distress	Secure Attachment to God	Loving God Imagery	Anxious Attachment to God	Remote God Imagery	Stressful Life Events
Psychological distress	1.000					
Secure attachment to God	−.098	1.000				
Loving God imagery	−.010	.386	1.000			
Anxious attachment to God	.170	−.311	−.142	1.000		
Remote God imagery	.112	−.433	−.230	.297	1.000	
Stressful life events	.364	.065	.042	.034	−.024	1.000

Note. N =1,041.

TABLE 3

Ordinary Least Squares Parameter Estimates (Standized Estimates in Parentheses) From the Regression of Attachment to God, Images of God, Stressful Life Events, and Covariates on Psychological Distress in Models 1 to 4

	(Model 1)	(Model 2)	(Model 3)	(Model 4)
Elder	.013 (.014)	.016 (.017)	.014 (.014)	.016 (.017)
Age	$-.006^{***}$	$-.006^{***}$	$-.006^{***}$	$-.006^{***}$
	$(-.171)$	$(-.178)$	$(-.168)$	$(-.173)$
Female	.014	.029	.026	.033
	(.015)	(.030)	(.027)	(.034)
White	.061	.037	.057	.042
	(.022)	(.013)	(.021)	(.015)
Education	$-.006$	$-.007$	$-.003$	$-.004$
	$(-.023)$	$(-.027)$	$(-.010)$	$(-.016)$
Married	$-.093^{**}$	$-.073^{*}$	$-.077^{*}$	$-.069^{*}$
	$(-.081)$	$(-.064)$	$(-.067)$	$(-.060)$
Income	$-.001$	$-.002$	$-.002$	$-.003$
	$(-.005)$	$(-.013)$	$(-.015)$	$(-.019)$
Attendance	$-.025^{\dagger}$	$-.015$	$-.020$	$-.015$
	$(-.060)$	$(-.036)$	$(-.048)$	$(-.036)$
Prayer	.016	$.037^{***}$	$.024^{*}$	$.035^{**}$
	(.041)	(.097)	(.064)	(.093)
Stressful life events	$.894^{***}$	$.904^{***}$	$.880^{***}$	$.888^{***}$
	(.330)	(.334)	(.325)	(.328)
Secure attachment to God	—	$-.071^{***}$	—	$-.046^{*}$
	—	$(-.153)$	—	$(-.098)$
Loving God imagery	—	.001	—	.005
	—	(.002)	—	(.009)
Anxious attachment to God	—	—	$.052^{***}$	$.046^{***}$
	—	—	(.136)	(.119)
Remote God imagery	—	—	$.021^{*}$	.013
	—	—	(.070)	(.042)
Constant	3.454^{***}	3.283^{***}	3.337^{***}	3.264^{***}
Adj. R^2	.168	.184	.194	.198

Note. $N = 1,041$.

$^{\dagger}p < .10.$

$^{*}p < .05.$

$^{**}p < .01.$

$^{***}p < .001.$

TABLE 4

Ordinary Least Squares Parameter Estimates for Moderator Effects in Models 1 to 2

	(Model 1)	(Model 2)
Stressful life events measures		
Major financial loss (single item)	.100***	—
Disagreement with friend (single item)	—	.098***
Loving God imagery	−.001	.002
Remote God imagery	.005	.006
Major Financial Loss ×Remote God Imagery	.027*	—
Disagreement with Friend × Remote God Imagery		.036**
Adj. R^2	.114	.114

Note. N =1,041 (All models include controls for elder, age, female, white, education, married, income, attendance, prayer, secure attachment to God, and insecure attachment to God).

*
$p < .05$.

**
$p < .01$.

***
$p < .001$.