Examining the Links Between Spiritual Struggles and Symptoms of Psychopathology in a National Sample

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The present study investigated the relationship between spiritual struggles and various types of psychopathology symptoms in individuals who had and had not suffered from a recent illness. Participants completed self-report measures of religious variables and symptoms of psychopathology. Spiritual struggles were assessed by a measure of negative religious coping. As predicted, negative religious coping was significantly linked to various forms of psychopathology, including anxiety, phobic anxiety, depression, paranoid ideation, obsessive–compulsiveness, and somatization, after controlling for demographic and religious variables. In addition, the relationship between negative religious coping and anxiety and phobic anxiety was stronger for individuals who had experienced a recent illness. These results have implications for assessments and interventions targeting spiritual struggles, especially in medical settings. © 2006 Wiley Periodicals, Inc. J Clin Psychol 62: 1469–1484, 2006.

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Religious coping methods are among the resources available to individuals who have experienced difficult events. Across various samples, the prevalence of religious coping ranges from under 20% to over 90% (see Pargament, 1997 for a review). For example, following the September 11, 2001 attacks on the United States, 75% of a sample of adults

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indicated that they turned to religion to help deal with the stress of the attacks (Schuster et al., 2001). Ninety-two percent of a sample of clergy members looked to God for strength and support following the attacks (Meisenhelder & Marcum, 2004). In a sample of older adults, religious coping behaviors were spontaneously mentioned 17% of the time as strategies for dealing with difficult life events (Koenig, George, & Siegler, 1988). In a sample of depressed men admitted to a medical center, 20% spontaneously identified religion as a primary coping strategy and 56% rated themselves as 7.5 or higher on a 10-point scale assessing the degree to which religious beliefs and activities were helpful coping behaviors (Koenig et al., 1992). Various factors may account for the range in prevalence of religious coping. However, these numbers indicate that religious coping strategies are prominent methods for dealing with difficult events (Pargament, 1997).

Although research has shown that religious coping is often associated with beneficial outcomes, stressful events can also lead individuals to struggle with their religious beliefs, religious institution, or relationship with the divine. Spiritual struggles have been consistently associated with anxiety and depression in the research literature. However, researchers have not yet examined the relationship between spiritual struggles and symptoms of other types of psychopathology. In addition, indirect evidence suggests that spiritual struggles may be especially problematic for individuals with a recent medical illness. The purpose of this study is to examine the relationship between spiritual struggles and symptoms of specific types of psychopathology symptoms and to explore whether this relationship is stronger in individuals who have experienced a recent illness or injury.

Effects of Religious Coping

Initial research on the correlates of religious coping used global indices of religiousness, such as general religious practices and religious orientation (see Fehring, Miller, & Shaw, 1997; Kendler, Gardner, & Prescott, 1999; Koenig et al., 1992; Pargament, 1990) and generally indicated that religious variables are associated with positive constructs. However, in recent investigations, researchers have begun to differentiate among various types of religious coping and have found that not all religious variables are associated with positive variables. For example, a recent and well-researched distinction has been made between positive religious coping and spiritual struggles (Pargament, Koenig, & Perez, 2000; Pargament, Smith, Koenig, & Perez, 1998). Positive religious coping rests on a sense of spirituality, a secure relationship with God, a belief in life's meaning, and spiritual connectedness with others (Pargament et al., 1998). Positive religious coping strategies include trying to find a lesson from God in the event, seeking spiritual support, and providing spiritual support to others. These religious coping strategies have been associated with healthier psychological adjustment to stress (Ano & Vasconcelles, 2005), less depression (Smith, McCullough, & Poll, 2003), and increases in stress-related growth over time (Pargament, Koenig, Tarakeshwar, & Hahn, 2004).

Spiritual struggles are defined as "efforts to conserve or transform a spirituality that has been threatened or harmed" (Pargament, Murray-Swank, Magyar, & Ano, 2005, p. 247). They are expressions of conflict, question, and doubt regarding matters of faith, God, and religious relationships. Spiritual struggles are differentiated from other forms of spiritual coping by the spiritual stress that emerges within the coping process. Researchers have identified three types of spiritual struggles: interpersonal, intrapersonal, and divine (Pargament et al., 2005). Interpersonal spiritual struggles include spiritually related conflicts with family, friends, and congregations. Intrapersonal spiritual struggles are characterized by questions and doubts about spiritual beliefs and issues. Finally, divine spiritual struggles include tension in the individual's relationship with the divine. For example,

individuals may see the event as a punishment from God, question God's power, or express anger to God in response to the event (Pargament et al., 1998). Divine struggles are the most extensively studied type of spiritual struggle.

Spiritual struggles tend to be less common than positive religious coping (Meisenhelder & Marcum, 2004; Tarakeshwar & Pargament, 2001) and are generally associated with negative constructs. For example, in a recent meta-analysis of 49 studies on the relationship between religious coping and psychological adjustment to stress, spiritual struggles were directly related to anxiety and negative affect (Ano & Vasconcelles, 2005). In addition, an earlier meta-analysis of 147 studies on the relationship between religiousness and depression found that spiritual struggles were associated with higher levels of depression (Smith et al., 2003).

These meta-analyses indicate that spiritual struggles are generally tied to greater psychological distress across a variety of samples facing diverse stressors. For example, in a study on religious coping with the Gulf War, spiritual struggles were associated with greater negative affect and psychological distress (Pargament et al., 1994). Similar results emerged in a sample of victims of the 1993 Midwest flood in which spiritual struggles were linked to more psychological distress (Smith, Pargament, Brant, & Oliver, 2000). Religious discontent, an indicator of spiritual struggle, predicted higher levels of depression and perceived burden in caregivers of Alzheimer's patients (Shah, Snow, & Kunik, 2001). Spiritual struggles were also predictive of greater emotional distress and higher levels of psychosomatic symptomatology in college students who experienced a recent negative event (Pargament et al., 1998). The relationship between spiritual struggles and distress is robust and consistent across studies. However, spiritual struggles have also been tied to posttraumatic growth (Pargament et al., 1998, 2000), suggesting that spiritual struggles are, at times, associated with personal improvement.

Overall, the empirical research indicates that spiritual struggles are related to greater psychological distress. However, research on the relationship between spiritual struggles and symptoms of specific types of psychopathology has been limited to investigations of anxiety and depression (Bosworth, Park, McQuoid, Hays, & Steffens, 2003; Burker, Evon, Sedway, & Egan, 2004; Tarakeshwar & Pargament, 2001) and posttraumatic stress symptoms (Meisenhelder & Marcum, 2004; Witvliet, Phipps, Feldman, & Beckham, 2004). The relationship between spiritual struggles and symptoms of other forms of psychopathology, such as paranoia, somatization, phobic anxiety, and obsessive–compulsiveness, has not been examined. This study addresses this gap in the literature by exploring the relationship between spiritual struggles and symptoms of various types of psychopathology.

Spiritual Struggles Following an Illness

Research suggests that the relationship between spiritual struggles and symptoms of psychopathology may be especially strong among individuals who have suffered an illness. Consistent with research on other samples, spiritual struggles appear to increase the risk of psychological distress in these individuals. For example, in a longitudinal study of inpatients in a medical rehabilitation unit, spiritual struggles were positively correlated with depression at admission and 4 months later. Spiritual struggles at admission also predicted greater depression and lower life satisfaction at the 4-month follow-up (Fitchett, Rybarczyk, DeMarco, & Nicholas, 1999). Similar results emerged in various studies of medically ill elderly inpatients. In this sample, spiritual struggles predicted higher levels of depression and lower quality of life after controlling for the severity of participants' medical illnesses (Koenig et al., 1998; Pargament et al., 1998). Spiritual struggles also predicted increased risk for mortality, decreases in quality of life, and increases in

depressed mood 1 to 2 years later (Pargament, Koenig, Tarakeshwar, & Hahn, 2001; Pargament et al., 2004). In rheumatoid arthritis patients, spiritual struggles have been associated with higher levels of depression (Vandecreek et al., 2004) and lower levels of positive mood (Keefe et al., 2001).

Indeed, there is some indirect evidence to suggest that the relationship between spiritual struggles and negative constructs may be especially strong among individuals dealing with an illness. First, research indicates that individuals experiencing illnesses are more likely to experience spiritual struggles than individuals dealing with other stressors. For example, in one study, hospital patients scored significantly higher on four of seven indices of spiritual struggle than college students dealing with a negative life event (Pargament et al., 2000). In addition, comparisons of spiritual struggle in medical outpatients and the general population suggest that spiritual struggles are more prevalent among medical patients (Fitchett et al., 2004).

Individuals suffering from an illness may be particularly vulnerable to spiritual struggles because of the potentially powerful effects of the illness on their worldviews. According to Pargament (1997), people are guided by an orienting system, a generalized system of beliefs, practices, relationships, and values that shape their way of viewing and approaching the world. This orienting system also contains coping resources that people draw on to deal with stressful events and burdens that decrease their ability to cope successfully. Spiritual beliefs, practices, relationships, and values are a significant part of the orienting system for many people. Although orienting systems can guide people through diverse life experiences, they are vulnerable to stress. Each individual has a breaking point, a point at which he or she becomes "disoriented" and unable to cope with stressful experiences successfully. This breaking point is determined by two factors: the magnitude of the stressor and the strength of the orienting system (Pargament, 1997).

Individuals coping with an illness may be especially vulnerable to the detrimental effects of spiritual struggles because illnesses often place considerable strain on the orienting system, including the spiritual dimension. For example, for many people, the belief in a loving God who ensures that bad things do not happen to good people is central to their view of the world (Pargament, 1997). An illness may threaten this belief and lead to questions such as "How could [this illness] happen if I am a good person and God truly watches over me?" (Pargament, 1997, p. 222). Consistent with this conceptualization, caregivers of terminally ill patients who viewed their situation as the result of an apathetic or unfair God reported higher levels of depression and anxiety and lower levels of purpose in life and positive religious outcomes (Mickley, Pargament, Brant, & Hipp, 1998). Therefore, an illness may significantly increase an individual's vulnerability to spiritual struggles by shaking, threatening, or damaging core spiritual assumptions, values, beliefs, and practices that are central to the individual's orienting system.

Present Study

The present study assessed the relationship between spiritual struggles and symptoms of various types of psychopathology in individuals who had and had not suffered a recent illness. Two hypotheses were tested. First, we hypothesized that spiritual struggles would be associated with higher levels of psychopathology symptoms. Second, we hypothesized that the relationship between spiritual struggles and symptoms of psychopathology would be moderated by illness. Specifically, we predicted that the relationship between spiritual struggles and mental health would be stronger for individuals who had experienced a recent illness than for individuals who had experienced other types of stressors.

Method

Participants

The sample comprised 1629 participants with a mean age of 49.1 years (SD = 17.76). The sample was predominantly White (90.4%) and married (61.1%); 50.1% were men. In addition, 15.5% of the sample (n = 253) indicated that they had experienced a serious injury or illness in the past year.

The religiousness of the sample was assessed through questions about religious affiliation, frequency of attendance at religious services, frequency of private prayer, and self-rated religiosity. The sample was primarily Christian (75.3%) with 33.6% of participants identifying as Protestant, 21.5% as Catholic, and .9% as Orthodox Christian. The option, "other Christian religion" was endorsed by 19.3% of the sample. In addition, 4.6% of the sample identified as Jewish, .6% identified as Muslim, 1.2% endorsed an "Eastern religion," 2.4% endorsed "other non-Christian religion," 12.6% indicated "none," and 3.3% preferred not to answer.

Ten percent of the participants reported attending religious services "several times per week" to "every day." Approximately one-third of the sample (32.9%) reported attending services "almost every month" to "once per week" and 56.2% reported attending "almost every month" or less. With respect to prayer, over half of the sample (55.3%) reported engaging in private prayer "every day" or "almost every day." In addition, 19.3% reported praying privately "a few times a month" to "several times per week," whereas 24.5% reported praying "almost every month" or less. Finally, in terms of their self-rated religiousness, "very religious" was endorsed by 18.8% of the sample. Almost half of the sample (41.1%) endorsed "fairly religious" while 26.8% endorsed "not too religious." Finally, 13.1% of the sample endorsed "not at all religious."

Measures

Mental health indices. Six of the 9 subscales of the Symptom Assessment-45 Questionnaire (Davison et al., 1997) were used to assess psychiatric symptomatology. The Psychosis subscale was not included due to the low base rate of psychotic symptoms. In addition, the Interpersonal Sensitivity and Hostility subscales were not included because they do not directly assess symptoms of psychopathology. Comparisons of patient and nonpatient scores on the SA-45 indicate that it is a valid measure of psychiatric status (Davison et al., 1997). Correlations among the subscales ranged from .44 to .74 with a median correlation of .59. These moderate intercorrelations may reflect the general distress associated with the experience of psychopathology symptoms. In addition, these correlations may also reflect possible moderate comorbidity among various types of psychopathology.

Each subscale is composed of five items that assess the dominant characteristics of the relevant psychiatric domain. Participants rate the degree to which each symptom bothered or distressed them in the previous month on a 5-point scale ranging from "not at all" to "extremely." Higher scores indicate more distress related to the symptom. Responses to the five items are summed to create subscale scores. The Anxiety subscale (Cronbach's alpha = .74)[1] assesses feelings of fearfulness, panic, tension, and restlessness (Maruish, 2004). The Depression subscale (Cronbach's alpha=.87) asks participants to rate the

[1]Cronbach's alphas presented in this section are from previous research with the SA-45 (Davison et al., 1997). Cronbach's alphas for the current sample are presented in Table 1.

degree to which they were bothered by feelings such as loneliness, hopelessness, and worthlessness. The Obsessive–Compulsive subscale (Cronbach's alpha = .81) assesses the degree to which participants experience difficulty concentrating or making decisions and repetitive checking behaviors. Subtle forms of paranoid thinking are assessed with the Paranoid Ideation subscale (Cronbach's alpha = .78). Participants are asked the degree to which they feel others cannot be trusted, fail to give them credit for their achievements, and talk about them. On the Phobic Anxiety subscale (Cronbach's alpha = .82), participants rate the degree to which they experience fear in places such as crowds and when using public transportation. Finally, the Somatization subscale (Cronbach's alpha = .80) assesses vague physical symptoms such as hot and cold spells, numbness, and soreness.

Spiritual struggles. Spiritual struggles were assessed with the Negative Religious Coping subscale of the shortened version of the RCOPE, a measure of religious coping methods (Pargament et al., 2000). The Brief RCOPE is a 14-item measure composed of seven negative religious coping and seven positive religious coping items. Each item describes a religious coping strategy. Participants rate the frequency with which they use each religious coping strategy to deal with a negative life event on a five-point scale ranging from "never" to "always." Higher scores indicate more frequent use of the coping strategy. Responses are summed to create subscale scores. The Negative Religious Coping subscale includes items that focus largely on divine struggles, such as "wondered whether God had abandoned me" and "questioned God's love for me." In two different samples, Cronbach's alpha coefficient estimates for the negative religious coping subscale were .81 and .69 (Pargament et al., 1998).

Social support. Social support was measured with six items adapted from Zimet, Dahlem, Zimet, and Farley (1988). This scale assesses the degree to which participants feel there is someone in their life that cares about them and is available to them during difficult times. Participants rate each item on a 4-point scale ranging from "strongly disagree" to "strongly agree." Items are summed to create a total score. Higher scores indicate perceptions of greater social support. The internal consistency of the scale for the current sample was adequate (Cronbach's alpha = .94).

Stressors. Participants indicated whether they had experienced each of a variety of stressors in the past year on a dichotomous (yes/no) scale. The stressors included "a serious illness or injury myself." This item was used to identify participants who had experienced a recent illness or injury. Participants were not asked to indicate whether their illness was physical or mental in nature.

Procedure

The data for this study were taken from The Spirituality and Health 2004 National Study of Religion and Health. The survey was created by Robert O. Scott (editor of *Spirituality & Health)*, and Kevin J. Flannelly and Andrew J. Weaver (both with The HealthCare Chaplaincy) and was placed on a Web site maintained by Equation Research (Estes Park, Colorado), a market research firm. The complete survey consisted of 135 items that assessed demographic, religious, and physical and mental health variables.

The sample was recruited from a sampling panel of 2.6 million individuals throughout the United States compiled by Survey Sampling International (SSI; Fairfield, CT).

Table 1
Descriptive Statistics for Scales

	M	*SD*	Obtained range	α
Scale				
Anxiety	2.19	2.83	0–15	.84
Phobic Anxiety	1.01	2.33	0–15	.86
Depression	3.32	3.55	0–15	.88
Paranoid Ideation	2.57	2.98	0–15	.81
Obsessive–Compulsive	3.12	3.14	0–15	.85
Somatization	3.39	3.18	0–15	.80
Social Support	12.48	3.59	0–15	.94
Negative Religious Coping	2.90	3.78	0–20	.86

Panel participants were solicited by banner ads and other online recruitment methods at thousands of Web sites. They received incentives and small monetary rewards for serving on the panel. The consistency of the panel closely reflects the U.S. Census data on gender, race, age, income, and state of residence.

We purchased the e-mail addresses of a randomly selected sample of 8,500 U.S. adults from SSI and sent each an e-mail, inviting them to complete a Web-based survey. 1,895 individuals from all 50 states and Washington DC, completed the survey between August 5 and August 10, 2004. This 22% response rate is consistent with previous research using a Web-based survey and single e-mail solicitation (Kaplowitz, Hadlock, & Levine, 2004; Porter & Whitcom, 2003; Yun & Trumbo, 2000). Due to missing demographic information, 266 surveys were excluded.

Results

Table 1 contains descriptive statistics and alpha coefficients from the current sample for each subscale. The distributions of the SA-45 subscales were positively skewed. Specifically, the bulk of the data fell at the low end of the response scale. In addition, the mean value for negative religious coping indicated that participants do not frequently utilize negative religious coping strategies. Finally, participants in this sample reported high levels of social support. Although the distributions of these variables were skewed, the obtained range and alpha coefficients were large enough to test the relationships between symptoms of psychopathology and spiritual struggles.

A series of regression analyses were conducted for each of the six scales of psychopathology symptoms: Anxiety, Phobic Anxiety, Depression, Paranoid Ideation, Obsessive–Compulsiveness, and Somatization.[2] In Model 1, the predictors were age, gender, education,

[2]The data for the regression analyses were adjusted for gender, age, income, Hispanic origin (Hispanic or non-Hispanic), and ethnicity to more closely match the 2000 U.S. census data. The weight variable was created by identifying all possible combinations of the gender, age, income, Hispanic origin, and ethnicity variables. The number of sample participants in each of these categories was then divided by the number of people in that category from the census. The number created for each combination of gender, age, income, Hispanic origin, and ethnicity was used to weight the data of participants in that category. The regression analyses were conducted with the weighted and unweighted data. The results did not differ. Therefore, only analyses of the unweighted data are presented.

ethnicity (non-White or White), income, marital status, frequency of prayer, frequency of church attendance, social support, and occurrence of illness or injury. In Model 2, negative religious coping was added to the predictors in Model 1 to test our first hypothesis that spiritual struggles would be associated with higher levels of psychopathology symptoms.

In Model 3, the interaction of negative religious coping and occurrence of illness or injury was added to the predictors in Model 2 to test our second hypothesis that the relationship between spiritual struggles and symptoms of psychopathology would be stronger for individuals who suffered an illness or injury. Note that the term *predictors* is used in the statistical sense. The correlational nature of these analyses precludes conclusions regarding the causal relationship between symptoms of psychopathology, negative religious coping, and illness. Before entering the predictors into the analyses, the sample means for age, education, frequency of prayer, frequency of church attendance, and negative religious coping were subtracted from the respective main effects terms to control for multicollinearity (Table 2; see Aiken & West, 1991).

Main Effect of Negative Religious Coping on Symptoms of Psychopathology

Model 1 was a significant predictive equation of all subscales of the SA-45 (see Table 3).[3] In this model, lower income, less social support, and experience of an illness or injury significantly predicted all criterion variables (see Table 4). In addition, younger age was a significant predictor of anxiety, phobic anxiety, depression, paranoid ideation, and obsessive–compulsiveness. Female gender predicted anxiety and somatization. Greater frequency of prayer significantly predicted anxiety, phobic anxiety, and somatization. Finally, lower education predicted paranoid ideation and being married predicted somatization.

For Model 2, negative religious coping was added to the predictors of Model 1 (see Table 3). The overall model was a significant predictive equation of all subscales of the SA-45. In addition, the change in R^2 from Model 1 to Model 2 was significant for all criterion measures. These findings indicate that more frequent use of negative religious coping strategies was associated with greater anxiety, phobic anxiety, depression, paranoid ideation, obsessive–compulsiveness, and somatization after controlling for religious and demographic variables. It is also important to note that the main effects of negative religious coping were relatively large and robust.

Interaction of Negative Religious Coping and Illness/Injury on Symptoms of Psychopathology

For Model 3, the interaction of negative religious coping and illness or injury was added to the predictors of Model 2. As in Models 1 and 2, the overall model significantly predicted all subscales of the SA-45 (see Table 3). The change in R^2 from Model 2 to Model 3 was small, but significant for Anxiety (R^2 change $= .003$, $p < .05$). Specifically, the interaction of negative religious coping with illness or injury significantly predicted Anxiety (see Figure 1).[4] The relationship between negative religious coping and Anxiety

[3] Omitted items were not replaced for the demographic or criterion measures. As a result, the sample size differs across criterion measures, ranging from 1524 to 1555.

[4] Figures for the two significant interaction effects were similar. Therefore, only one figure is presented as a pictorial representation of the significant interaction effects.

Table 2
Correlations Among Predictor Variables

	1	2	3	4	5	6	7	8	9	10	11
Age (1)	—	−.17***	.18***	.11***	.01	.15***	.09***	.12***	.12***	.04	−.13***
Gender (2)		—	.03	−.19***	−.11***	−.03	.07**	.02	.15***	.09***	.01
Ethnicity (3)			—	−.06*	.01	.11***	−.01	−.04	.00	.07**	−.03
Education (4)				—	.36***	.06*	−.02	.07**	−.05	.02	−.08**
Income (5)					—	.34***	−.03	.02	−.06*	.16***	−.11***
Marital status (6)						—	.10**	.13***	.10***	.28***	−.11***
Self-rated religiosity (7)							—	.67***	.69***	.15***	−.04
Church attendance (8)								—	.55***	.19***	−.03
Prayer (9)									—	.12***	.00
Social support (10)										—	−.18***
Negative religious coping (11)											—

Note. Gender: 0 = male, 1 = female; ethnicity: 0 = White; 1 = non-White; marital status: 0 = not married; 1 = married.
*$p < .05$. **$p < .01$. ***$p < .001$.

Table 3
Regression Analyses for Main Effect of Negative Religious Coping (NRC) and Interaction of NRC and Illness/Injury

Criterion variable	R^2 Model 1[a]	R^2 Model 2[b]	β NRC[c]	Change in R^2 (Model 1 to 2)	R^2 Model 3[d]	β NRC[e]	β NRC × Illness[e]	Change in R^2 (Model 2 to 3)
Anxiety	.13***	.23***	.33***	.10***	.23***	.30***	.11*	.003*
Phobic Anxiety	.09***	.14***	.24***	.06***	.15***	.19***	.15***	.009***
Depression	.23***	.33***	.32***	.10***	.33***	.30***	.08	.001
Paranoid Ideation	.20***	.30***	.33***	.10***	.30***	.32***	.05	.001
OC	.09***	.17***	.29***	.08***	.17***	.28***	.05	.001
Somatization	.11***	.15***	.22***	.05***	.15***	.23***	−.03	.000

Note. Standardized beta values are reported for the main effect of negative religious coping. Unstandardized beta values are reported for the interaction of negative religious coping and illness. OC = Obsessive–compulsive.
[a]Predictors: Age, gender, education, ethnicity, income, marital status, frequency of prayer, frequency of church attendance, social support, personal illness/injury. [b]Predictors: Age, gender, education, ethnicity, income, marital status, frequency of prayer, frequency of church attendance, social support, personal illness/injury, negative religious coping. [c]Beta values come from Model 2. [d]Predictors: Age, gender, education, ethnicity, income, marital status, frequency of prayer, frequency of church attendance, social support, personal illness/injury, negative religious coping, negative religious coping × personal illness/injury. [e]Beta values come from Model 3.
*$p < .05$. **$p < .01$. ***$p < .001$.

was stronger for participants who suffered an illness or injury in the previous year after controlling for negative religious coping and religious and demographic variables.

The change in R^2 from Model 2 to Model 3 was also small, but significant for Phobic Anxiety (R^2 change = .009, $p < .001$). The interaction of negative religious coping with illness or injury was a significant predictor of Phobic Anxiety. The relationship between negative religious coping and Phobic Anxiety was stronger for participants who suffered an illness or injury in the previous year after controlling for negative religious coping and religious and demographic variables.

Table 4
Beta Values for Demographic Variables

	Anxiety	Phobic Anxiety	Depression	Paranoid Ideation	OC	Somatization
Age	−.25***	−.19***	−.28***	−.33***	−.19***	−.01
Gender	.06*	−.01	.03	−.05	.02	.08**
Education	.01	−.03	.02	−.06*	−.01	−.03
Ethnicity	−.02	.01	−.04	.01	.00	.00
Income	−.08**	−.12***	−.13***	−.08**	−.09**	−.09**
Marital status	.04	.04	−.03	.01	.02	.06*
Prayer	.09**	.08*	.04	.03	.06	.10**
Church attendance	.01	−.02	−.01	.00	.02	−.05
Social support	−.19***	−.15***	−.30***	−.25***	−.14***	−.13***
Illness	.14***	.11***	.15***	.11***	.18***	.26***

Note. OC = obsessive–compulsiveness; gender: 0 = male, 1 = female; ethnicity: 0 = White; 1 = non-White; marital status: 0 = not married; 1 = married.
*$p < .05$. **$p < .01$. ***$p < .001$.

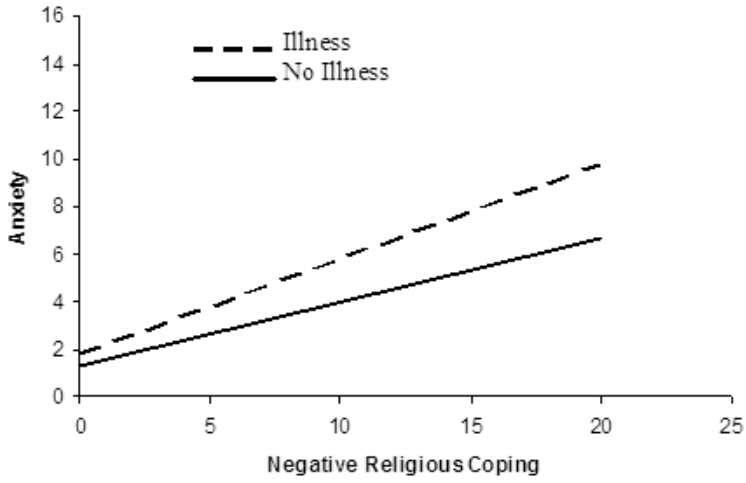

Figure 1. Interaction of negative religious coping and personal illness with anxiety.

The change in R^2 from Model 2 to Model 3 was not significant for Depression, Paranoid Ideation, Obsessive–Compulsiveness, or Somatization.[5]

Discussion

Empirical studies have consistently shown that spiritual struggles are associated with anxiety and depression. This study extends these findings to symptoms of other forms of psychopathology. Spiritual struggles were positively associated with a wide range of psychopathology symptoms, including symptoms of anxiety, phobic anxiety, depression, paranoid ideation, obsessive–compulsiveness, and somatization. These relationships were robust, remaining significant after controlling for demographic and religious variables. Therefore, spiritual struggles appear to have implications for psychological functioning that go beyond anxiety and depression to encompass symptoms of other types of psychopathology.

In addition, this study suggests that the relationship between spiritual struggles and symptoms of certain types of psychopathology is stronger for individuals who experienced a recent illness or injury than individuals dealing with other stressors. The effect sizes for these relationships were small. However, they are noteworthy for statistical, theoretical, and pragmatic reasons. First, moderated multiple regression provides a conservative estimate of the magnitude of interaction effects, decreasing the likelihood of a Type I error (Bobko, 1995). Second, these findings are consistent with the theory that illnesses are especially stressful events that challenge individuals' spiritual orientation to the world, including beliefs in God as a loving being who protects good people from negative events (Pargament, 1997). Third, practically, these results suggest that individuals dealing with an illness or injury may be especially susceptible to psychopathology associated with spiritual struggles. With their orientation to the world shaken and threatened, people dealing with illness or injury may be more vulnerable to the detrimental effects of spiritual struggles.

[5] Statistics from the regression analyses not presented in this article are available from the first author upon request.

In this study, illness moderated the relationship between spiritual struggles and anxiety-related pathologies. Individuals dealing with an illness may be particularly vulnerable to anxiety due to the unpredictability and uncontrollability of their illness. By challenging their spiritual orientation, spiritual struggles may decrease individuals' abilities to cope with their illness, exacerbating their anxiety. Future research should explore why spiritual struggles are associated with anxiety-related pathologies in individuals dealing with an illness or injury.

These findings permit two major interpretations. First, higher levels of psychopathology symptoms may trigger spiritual struggles. Like a physical illness, psychological symptomatology may challenge the individual's spiritual worldview, resulting in significant turmoil about spiritual matters. For example, the experience of depression, anxiety, and somatization may elicit feelings of being punished or abandoned by God, anger toward the divine, or serious questions about the existence of a loving God. Although empirical evidence supporting this interpretation is scant, a number of mental health practitioners have reported that the quality of their clients' perceived relationships with God declines with the onset of psychological problems and improves following successful psychological treatment (e.g., Jones, 1991; Rizzuto, 1979).

A second explanation for these findings is that spiritual struggles trigger higher levels of symptoms of psychopathology. Because they reflect tension and conflict at the most fundamental level of values, beliefs, and practices, spiritual struggles may elicit powerful psychological reactions. A few longitudinal investigations provide support for this latter interpretation, showing that greater reports of spiritual struggles at baseline are predictive of significant increases on indices of psychological distress over time (Fitchett et al., 1999; Pargament et al., 1994, 2004). Of course, both causal applications may apply here; that is, psychopathology may lead to spiritual struggles that, in turn, exacerbate psychological symptoms.

These results have practical implications for efforts to help people successfully cope with difficult experiences. First, this study underscores the importance of assessing spiritual struggles in individuals dealing with stressful experiences. Those who experience spiritual struggles following stressful events may be at risk for developing psychopathology. By identifying these individuals early, professionals could intervene before spiritual struggles have a detrimental effect. Medical professionals should be particularly alert to signs of spiritual struggle in their patient populations; spiritual struggles in this group appear tied to even greater risk for psychopathology. Therefore, early identification of spiritual struggles among medical patients is especially important for patients' health and well-being.

Despite strong evidence of a relationship between religious and spiritual variables and well-being in medical patients (Burker et al., 2004; Koenig et al., 1988, 1992), spirituality is often overlooked as a salient dimension in assessments of this population. However, as evidence of the relationship between religious and health variables builds, researchers are beginning to promote assessment of religious well-being in medical patients (see Brady, Peterman, Fitchett, Mo, & Cella, 1999). In this vein, models of assessment that include spiritual and religious dimensions have been developed for use with different populations (see Fallot, 1998; Fitchett, 1993). The results of this study suggest that measures of spiritual struggles should be included in these spiritual assessments. Through this process, health professionals could identify patients who would benefit from discussions of their religious or spiritual beliefs or a referral to a professional chaplain or pastoral counselor (Fitchett et al., 1999, 2004).

Second, these results suggest that interventions targeting spiritual struggles may help reduce and prevent psychological distress and psychopathology in individuals facing

stressful experiences. In addition, the strength of the relationship between spiritual struggles and psychopathology symptoms among individuals with a recent illness suggests that interventions tailored to medical populations may be particularly valuable for prevention and treatment of psychopathology in these individuals. Research on psychospiritual interventions is just beginning (Pargament et al., 2005). For example, Cole and Pargament (1999) developed a psychospiritual intervention for cancer survivors that targets spiritual struggles by encouraging participants to explore feelings of abandonment by and anger towards God. This psychospiritual intervention was compared to a no-treatment control condition (Cole, 2005). Results indicated that pain severity remained stable from pretreatment to posttreatment for the psychospiritual group but increased in the control group. In addition, depression remained stable over an 8-week follow-up in the psychospiritual group but increased in the control group.

Interventions that focus primarily on divine spiritual struggles have also been developed. For example, Zornow (as cited in Pargament et al., 2005) developed a program designed to address feelings of abandonment, anger, and isolation in relationships with God. This intervention has not been evaluated. However, these techniques may be beneficial for medical patients who feel their illness is a punishment from God. In addition, Murray-Swank and Pargament (2005) developed a psychospiritual intervention for female survivors of sexual abuse that targets divine spiritual struggles. This 8-week individual intervention addresses participants' image of God and feelings of divine abandonment and anger toward God. Four of the five participants in the intervention reported significant reductions in psychological distress over the course of the intervention and at follow-up.

The goal of these interventions is not necessarily to eliminate spiritual struggles. Despite their negative correlates, spiritual struggles have also been associated with posttraumatic growth (Pargament et al., 1998; Profitt, Calhoun, Tedeshi, & Cann, 2004), suggesting that individuals can benefit from spiritual struggles. However, research also suggests that the longer individuals struggle spiritually, the more likely they are to experience detrimental outcomes (Pargament et al., 2001, 2004). Therefore, the goal of these psychospiritual interventions is to facilitate growth by helping individuals resolve the struggles before any detrimental effects occur. This process may include helping individuals find adaptive coping strategies to deal with their stressful experiences.

The results of this study are limited by reliance on self-report data and a cross-sectional design. In addition, although the national sample allows broad generalizations, the nature of the relationship between spiritual struggles and symptoms of psychopathology in specific populations and contexts remains unclear.

Future studies should address these limitations by including a variety of assessment tools, such as objective measures of health and psychopathology symptoms. In addition, the measure of spiritual struggle used in this study focuses on divine struggles. Additional studies are needed to examine the relationship between intrapersonal and interpersonal struggles and psychopathology. Longitudinal studies are also necessary to explore the causal relationship between spiritual struggles and psychopathology symptoms. Replication of this study with more homogeneous samples, such as medical and psychiatric inpatients, individuals with specific illnesses, and individuals struggling with stressors other than illness is needed to examine whether the relationship between spiritual struggles and symptoms of psychopathology differs across contexts and stressors. In addition, replication of this study with mental health patients may more clearly distinguish general distress from more serious psychopathology and allow stronger conclusions regarding the relationship between spiritual struggles and psychopathology. Finally, future studies should explore the specific mechanisms linking spiritual struggles with specific types of psychopathology. Researchers should also consider potential moderators, such as the

type of stressor or characteristics of the individual's spiritual orienting system that may explain unique relationships between spiritual struggles and specific types of psychopathology.

Despite its limitations, the results of this study suggest that spiritual struggles are tied to greater risk of significant psychological problems. This risk may be especially great for individuals who have suffered an illness. Professionals may be able to reduce the risk of psychopathology and promote greater psychological well-being by identifying individuals who are experiencing spiritual struggles and helping them resolve their struggles before they become problematic.

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