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To cite this article: Gene. G. Ano & Kenneth. I. Pargament (2013) Predictors of spiritual struggles: an exploratory study, *Mental Health, Religion & Culture*, 16:4, 419-434, DOI: [10.1080/13674676.2012.680434](https://doi.org/10.1080/13674676.2012.680434)


To link to this article: <http://dx.doi.org/10.1080/13674676.2012.680434>

 Published online: 30 Apr 2012.

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Predictors of spiritual struggles: an exploratory study

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(Received 13 February 2012; final version received 25 March 2012)

The purpose of the current study was to identify factors that predict spiritual struggles. It was hypothesised that factors from religious (e.g., God image, attachment to God, church attitudes, religious history), personal (e.g., neuroticism, pessimism, trait anger), social (e.g., social support, loneliness), and situational (e.g., negative appraisals) domains may predispose people to spiritual struggles during times of distress. Participants (309 undergraduate students) filled out questionnaires measuring relevant constructs and a two-step hierarchical multiple regression equation was generated separately for each of the four domains. Upon identifying significant predictors from each of the four domains, a final hierarchical regression equation revealed that: (1) more negative appraisals of a stressful situation, (2) an insecure ambivalent attachment to God, and (3) neuroticism significantly predicted unique variance in spiritual struggles beyond the effects of relevant religious variables, thus generally supporting the hypothesis that spiritual struggles are complex phenomena that stem from multiple factors.

Keywords: spiritual struggles; religious coping; religion; spirituality; predictors

A number of studies have shown that people who experience spiritual struggles are at a greater risk for distress. As yet, however, very few studies have investigated how and why people develop spiritual struggles. This study is one of the first attempts to explore and identify predictors of spiritual struggles.

Definition of spiritual struggles

Spiritual struggles are defined as religious/spiritual expressions that reflect a religious/spiritual system in tension and turmoil. This tension may be manifested: (1) with the Divine, such as anger at God or a higher power, (2) interpersonally, such as conflicts with one's religious community, or (3) intrapersonally, such as inner struggles to believe and religious doubting, religious fear, and religious guilt (see Pargament, Murray-Swank, Magyar, & Ano, 2005, for a review).

Although some people may experience spiritual struggles apart from specific major stressors, they still occur within the context of grappling with vexing existential issues or coping with life in general. Therefore, spiritual struggles were examined from a coping

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framework in this study, occurring within specific situations and conceptualised as negative religious coping (see Pargament, Smith, Koenig, & Perez, 1998). Admittedly, some people tend to struggle with religious issues more chronically than others (see Nielsen, 1998); however, such spiritual struggles still seem to be more *state*-oriented than *trait*-oriented (Pargament et al., 2005; Roesch & Ano, 2003). Spiritual struggles are contextually specific, whether they evince themselves while grappling with difficult existential issues, coping with life in general, or coping with specific stressful situations.

Implications of spiritual struggles

Although a few studies suggest that spiritual struggles may lead to growth (see Pargament, Desai, & McConnell, 2006, for a review), the majority of research shows that spiritual struggles generally have negative implications for well-being. For example, in a meta-analysis of 49 studies of religious coping among a total of 13,512 participants, spiritual struggles were associated with greater negative psychological adjustment, such as anxiety, depression, guilt, hopelessness, hostility, social dysfunction, and suicidality (Ano & Vasconcelles, 2005). In one of the largest studies to date involving a national sample of 1629 participants across the entire United States, spiritual struggles were associated with greater anxiety, depression, paranoid ideation, obsessive-compulsiveness, and somatisation (McConnell, Pargament, Ellison, & Flannelly, 2006). In another national sample of 1272 clergy members, spiritual struggles were significantly linked to psychological distress (Ellison, Roalson, Guillory, Flannelly, & Marcum, 2010). Among college students, a group that may be particularly vulnerable to spiritual struggles (Bryant & Astin, 2008; Johnson & Hayes, 2003), spiritual struggles have been associated with greater depression, anxiety, emotional distress, suicidality, neuroticism, and psychosomatic symptomatology, as well as lower levels of self-esteem (Exline, Yali, & Lobel, 1999; Exline, Yali, & Sanderson, 2000; Pargament, Smith, et al., 1998; Pargament, Zinnbauer, et al., 1998; Wood et al., 2010).

Most studies have examined the implications of spiritual struggles cross-sectionally. However, longitudinal studies of spiritual struggles have yielded similar results. For example, in a two-year longitudinal study of medically ill hospitalised elderly patients, participants who experienced chronic spiritual struggles became more depressed and experienced declines in quality of life, independence in daily activities, and spiritual outcomes (Pargament, Koenig, Tarakeshwar, & Hahn, 2004), as well as a greater risk of mortality (Pargament, Koenig, Tarakeshwar, & Hahn, 2001). In a study of cancer survivors, anger toward God was associated with poorer adjustment concurrently and at follow-up one year later (Exline, Park, Smyth, & Carey, 2011). In a study of medical rehabilitation patients, spiritual struggles were significantly related to poorer recovery of somatic autonomy at follow-up four months post-admission (Fitchett, Rybarczyk, DeMarco, & Nicholas, 1999). In sum, while a few studies suggest that spiritual struggles may lead to growth, findings from the majority of cross-sectional and longitudinal studies show that spiritual struggles typically have negative implications.

Theory for the development of spiritual struggles

Because spiritual struggles are particularly relevant for people dealing with major life stressors, it is important to understand how and why they might develop. However, most of the literature has focused on the outcomes of spiritual struggles. To date, only one

published study has examined factors that predict spiritual struggles. In a sample of 5472 students from 39 public and private colleges and universities across the United States, spiritual struggles among those seeking help at their respective university or college counselling centre were predicted by various factors: confusion about values, problematic relationships with peers, sexual concerns, and thoughts about being punished for one's sins (Johnson & Hayes, 2003). While this study demonstrated that spiritual struggles are predicted by various factors, it did not offer an overarching theory for understanding how and why they might develop.

Pargament (1997) suggested that the particular forms of religious coping that are chosen to deal with major life stressors are determined by what is available to the individual and what is compelling. Whether or not particular coping strategies are available or compelling, in turn, is determined by the individual's general orienting system (Pargament, 1997; Roesch & Ano, 2003). The orienting system contains three elements: religious, personal, and social. Religious elements include religious beliefs, values, practices, behaviours, and relationships. Personal elements of the orienting system involve personality characteristics, attributes, and general dispositions toward one's environment. Social elements may include interpersonal relationships and social support networks.

Because people draw on religious coping methods that are a part of their general orienting systems, it was suspected that spiritual struggles (i.e., negative religious coping) stem from orienting systems that are characterised by conflict, strain, and weakness. In this sense, negative religious coping strategies may be more readily available than positive religious coping strategies. Periods of acute life stress may also elicit spiritual struggles if tragic events cannot be reconciled with an individual's religious orientation. For instance, a tragedy may raise fundamental questions about beliefs in an all-loving, all-powerful God, or a church that people felt would be there for them in times of crisis. During such times, negative religious coping may become more compelling than positive religious coping methods. Thus, spiritual struggles may grow out of two factors: (1) weak orienting systems (in which negative religious coping may be more available) and/or (2) a major stressor that throws the individual's life and orienting system into question (creating conditions in which negative religious coping may be more compelling). With this theoretical framework in mind, potential predictors of spiritual struggles were examined from four domains: religious, personal, social, and situational. The predictor variables were chosen based on the theoretically or empirically based assumption that they would weaken the individual's orienting system.

Religious predictors

The first religious predictor examined was a negative God image. Since more negative images of God have been related to lower self-esteem (Benson & Spilka, 1973), personal adjustment (Tisdale et al., 1997), and insecure religious attachments (Kirkpatrick & Shaver, 1992), it was assumed that a negative God image may lead to spiritual struggles. The second religious predictor chosen was an insecure religious attachment because it has been associated with more negative forms of religious coping (Belavich & Pargament, 2002). In an attempt to explore the interpersonal dimension of spiritual struggles, a negative attitude toward the church was examined as another religious predictor. The final religious predictor selected was a weak familial religious history. Because stronger parental religious history has been associated with better functioning and greater life satisfaction (Varon & Riley, 1999), it was assumed that a weaker familial religious history might have

negative implications for the spiritual domain, including a greater likelihood of spiritual struggles.

Personal predictors

Neuroticism was the first personal predictor examined because it has been associated with disappointment and anger with God (Wood et al., 2010). Neuroticism may also predispose people to maladaptive coping strategies (Boland & Cappeliez, 1996). Another personal predictor explored was pessimism because it has been associated with maladaptive coping strategies and less adaptive forms of psychological functioning (Scheier, Carver, & Bridges, 2001). The final personal predictor investigated was trait anger. It was assumed that trait anger might lead to spiritual struggles during stressful situations because it has been associated with negative coping strategies (Diong & Bishop, 1999).

Social predictors

In the social domain, a lack of social support was examined as a potential predictor of spiritual struggles because reduced social support weakens the orienting system. For example, decreased social support has been linked with greater depression and lower subjective well-being (Savelkoul, Post, De Witte, & Van Den Borne, 2000). Another social variable presumed to predict spiritual struggles was loneliness because it has been positively associated with images of God as wrathful (Schwab & Petersen, 1990) and negatively associated with spiritual well-being (Walton, Shultz, Beck, & Walls, 1991).

Situational predictors

Major stressors that push people beyond the limits of their orienting system may also lead to spiritual struggles. According to Janoff-Bulman (1989), people generally operate on assumptions that the world is good and meaningful. However, traumatic events may threaten these assumptive worldviews. For example, in the spiritual domain, anger toward God was frequently reported in response to negative events (Exline et al., 2011). Thus, major stressors that were appraised as “shaking up” the individual’s life, unjust or unfair, and uncontrollable were examined as situational predictors of spiritual struggles.

The present study

The purpose of the current study was to identify factors that predict spiritual struggles. Based upon the notion that people draw on their orienting systems in coping and are more likely to struggle when faced with events that push them beyond the capacity of their orienting systems, several possible predictors from four domains were identified (e.g., religious, personal, social, and situational). Given the lack of theory and research in this area, this study was exploratory in terms of the variables examined. Religious predictors included: (1) a negative God Image, (2) insecure religious attachment, (3) negative attitudes toward the church, and (4) a weak familial religious history. Personal predictors were: (5) neuroticism, (6) pessimism, and (7) trait anger. Social predictors included: (8) a

lack of social support and (9) loneliness. Finally, situational predictors involved major life stressors that were appraised as (10) having a negative impact on one's life, (11) "shaking up" one's life (12) unjust or unfair, and (13) uncontrollable.

Because this study explored predictors of spiritual struggles, it was necessary to ensure that some, if not many, of the participants had experienced a spiritual struggle. College students are particularly vulnerable to spiritual struggles because they experience a variety of stressors during this life stage, are confronted with a greater diversity of value systems that conflict with their own, and are developing increasing independence from their families (see Bryant & Astin, 2008; Johnson & Hayes, 2003). Thus, college students represented an appropriate population for studies of spiritual struggles.

Method

Sample

The sample consisted of undergraduate students ($N=309$) from a university in the Midwestern United States who volunteered for the study in order to receive extra credit in an introductory psychology course. The majority of the sample was female (70.8%, males = 29.2%) and the average age of the participants was 19 years with a range of 18–26 years. In terms of ethnicity, the majority of the sample was Caucasian (88.6%), with a small minority of Blacks (7.1%), Hispanics (1.3%), Asian Americans (1.0%), and others including Native-American and Multi-racial ethnicities (2.0%). Almost all of the participants were single (97.7%) and most reported an annual familial household income of \$50,000–\$74,999. In terms of the religiosity of the sample, 46.1% reported being Protestant or Non-denominational Christian, 43.8% identified themselves as Catholic, and 10.1% endorsed other religious traditions, such as Judaism, Islam, Buddhism, or none. The majority of the sample described themselves as moderately religious (51.6%) and moderately spiritual (42.2%). On average, participants reported that they attend religious services about once a month and pray privately about once a week.

Procedure and measures

Stimulus and situational appraisals

Participants filled out questionnaires¹ assessing demographic information and relevant constructs. Upon completion of the demographic portion of the questionnaire, participants were asked to choose three of the most significant negative events that have happened to them in the last three years from a list of 27 different stressors (e.g., "romantic relationship difficulty", "trouble with employer", etc.) (Moos, 1986). Then, participants were asked to rate on a four-point Likert scale ranging from 0 = *not at all* to 3 = *a great deal* the extent to which they felt the event: (1) had a "negative impact" on their lives, (2) "shook up" their lives, (3) was "unfair or unjust," and (4) was "uncontrollable." All four situational appraisal questions for each of the three stressful events were combined to form a single scale for the situational predictors. A total score was calculated by summing the responses and higher scores represented more negative appraisals ($M=21.1$, $SD=6.5$, $\alpha=0.76$).

Spiritual struggles

Participants were asked how they coped with each of the three stressors using the Brief RCOPE (Pargament, Smith, et al., 1998), which assesses the extent to which people use particular religious coping strategies during stressful situations. Spiritual struggles were measured by seven items assessing negative religious coping strategies, such as spiritual discontent, punishing God reappraisals, interpersonal religious discontent, demonic reappraisal, and reappraisal of God's powers (see Pargament, Smith, et al., 1998, for a description of these particular strategies).

In the standard response format, participants indicate the extent to which they used each religious coping strategy on a four-point Likert scale ranging from 0 = *not at all* to 3 = *a great deal*. In the current study, the response format was slightly modified in order to assess the extent and duration to which each strategy was used. Respondents were asked to indicate whether they had used each coping strategy by answering *yes* = 1 or *no* = 0 for each item. If they did report using the strategy, they were asked to indicate how long they used each method on a four-point Likert scale ranging from 1 = *one day to one week* to 4 = *longer than one year*. Both unweighted and weighted versions of the scale were developed for this study. The unweighted version of the scale was developed by summing the number of *yesses* to each negative religious coping item. The weighted version of the scale was created by multiplying each *yes* response by the length of time this strategy was used and summing the scores. In the current study, the weighted version of the scale was used in all analyses because it displayed greater statistical power. In order to remain consistent with the method of measurement used for the situational appraisals, negative religious coping items were combined over each of the three stressful events to form a single scale for spiritual struggles ($M = 6.0$, $SD = 9.2$, $\alpha = 0.86$).

Negative God image

Negative image of God was measured using the Loving and Controlling God Scale, a 10-item measure that consists of adjective pairings to which participants responded on a seven-point scale ranging from 0 to 6, indicating the extent to which they perceive God as *Damning-Saving*, *Demanding-Not Demanding*, etc. (Benson & Spilka, 1973). In the current study, a total score for the God Image scale was calculated by summing the responses and lower scores represented a more negative God image ($M = 43.2$, $SD = 8.9$, $\alpha = 0.78$).

Insecure religious attachment

Insecure religious attachment was measured using a modified version of Kirkpatrick and Shaver's (1992) measure of Attachment to God, which consists of three paragraph-length descriptions of different attachment styles: secure, insecure ambivalent, and insecure avoidant. Based upon the statements from the original measure, Belavich and Pargament (2002) developed a continuous scale of religious attachment to God which demonstrated greater statistical power, adequate psychometric properties, and construct validity. In the current study, participants responded to statements (e.g., "God sometimes seems warm and responsive to my needs, but sometimes not.") on a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. A total score was calculated for secure attachment ($M = 14.9$, $SD = 3.0$, $\alpha = 0.80$), insecure ambivalent attachment ($M = 7.9$, $SD = 2.5$, $\alpha = 0.68$), and insecure avoidant attachment ($M = 7.5$, $SD = 3.1$, $\alpha = 0.87$) by

summing the responses from each subscale. Higher scores represented greater endorsement of each attachment style.

Negative attitudes toward the church

A negative attitude toward the church was measured by a shortened version of the Attitude Toward the Church scale, a 45-item instrument designed to measure a range of favourable and unfavourable attitudes toward the church (Thurstone & Chave, 1929). For the current study, 10 of the most relevant items were chosen (e.g., “It seems absurd for a thinking man to be interested in the church”) and respondents indicated the degree to which they endorsed each statement on a five-point Likert scale ranging from 0 = *strongly disagree* to 4 = *strongly agree*. A total score was calculated for the scale by summing the responses ($M = 11.2$, $SD = 7.3$, $\alpha = 0.90$). Relevant items were recoded so that higher scores represented more negative attitudes toward the church.

Weak familial religious history

A weak familial religious history was measured using the Family History of Religiousness subscale of the Spiritual History Scale in Four Dimensions (SHS-4) (Hays, Meador, Branch, & George, 2001). The Family History of Religiousness subscale contains five positive items (e.g., “When I was a child, I was very involved in the church”) and one negative item (e.g., “When I was a child, my parents left my religion up to me”). Respondents indicated the degree to which they endorsed each item on a five-point Likert scale ranging from 0 = *strongly agree* to 5 = *strongly disagree*. A total score for the scale was calculated by summing the responses ($M = 22.5$, $SD = 5.2$, $\alpha = 0.83$) and lower scores represented a weak familial history.

Neuroticism

Neuroticism was measured using the Neuroticism subscale of the NEO Five Factor Inventory (NEO-FFI), one of the most widely used assessment tools for measuring the five-factor model of personality (Costa & McCrae, 1992). The neuroticism subscale contains 12 items (e.g., “I often feel tense and jittery”). Respondents indicated the degree to which they endorsed each statement on a five-point Likert scale ranging from 1 = *strongly agree* to 5 = *strongly disagree*. A total score was calculated by summing the responses ($M = 23.6$, $SD = 7.7$, $\alpha = 0.81$) and higher scores represented more neuroticism.

Pessimism

Pessimism was measured with the pessimism subscale of the Optimism and Pessimism Scale (Dember, Martin, Hummer, Howe, & Melton, 1989). The pessimism subscale contains 18 items (e.g., “The future looks very dismal.”) designed to measure the extent to which people expect bad things to happen and are predisposed toward the negative aspects of life. Respondents indicated the degree to which they agreed with each statement on a four-point Likert scale ranging from 1 = *strongly agree* to 4 = *strongly disagree* and a total score was calculated by summing the responses ($M = 35.5$, $SD = 8.1$, $\alpha = 0.91$). Higher scores represented greater pessimism.

Trait anger

Trait anger was measured with the Trait Anger subscale of the State-Trait Anger Expression Inventory-2 (STAXI-2) (Spielberger, 1999). The Trait Anger subscale contains 10 items (e.g., "I have a fiery temper") assessing dispositional anger. Respondents indicated the extent to which they endorsed each statement on a four-point Likert scale ranging from 1 = *almost never* to 4 = *almost always*. A total score was calculated by summing the responses ($M = 19.5$, $SD = 5.3$, $\alpha = 0.84$) and higher scores represented greater trait anger.

Social support

Social support was measured by the Multidimensional Scale of Perceived Social Support (MSPSS), a 12-item instrument designed to measure peoples' perceptions of social support adequacy from family, friends, and a significant other (G.D. Zimet, Dahlem, S.G. Zimet, & Farley, 1988). Respondents indicated the degree to which they agreed with various statements (e.g., "My friends really try to help me.") on a five-point Likert scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. A total score was calculated by summing the responses ($M = 50.7$, $SD = 8.4$, $\alpha = 0.92$) and lower scores represented less social support.

Loneliness

Loneliness was measured with an abbreviated version of the Social and Emotional Loneliness Scale for Adults (SELSA) (DiTommaso & Spinner, 1993). The original SELSA is a 37-item instrument designed to measure three types of loneliness: social loneliness and emotional loneliness, which is broken down into two factors, romantic and family emotional loneliness. A 15-item abbreviated version of the SELSA was later developed and demonstrated to be a valid measure through exploratory and confirmatory factor analyses (Cramer, Ofose, & Barry, 2000). Respondents indicated the degree to which they endorsed various statements (e.g., "I have someone who fulfills my needs for intimacy") on a seven-point Likert scale ranging from 1 = *strongly disagree* to 7 = *strongly agree*. In the current study, items were recoded so that higher scores represented greater loneliness and a total score was calculated by summing the responses ($M = 39.8$, $SD = 13.5$, $\alpha = 0.86$).

Results

Correlational analyses

Pearson bivariate correlations between the demographic variables and the criterion variable were calculated in order to determine which demographic variables may need to be controlled for. Global spirituality was the only demographic variable significantly related to spiritual struggles, indicating that those who identified themselves as more spiritual reported less spiritual struggles.

In order to develop a general understanding of the relationships among the predictor variables and the criterion variable, a bivariate correlation matrix was generated and is presented in Table 1. Within the religious domain, all three religious attachment styles were significantly correlated with spiritual struggles. Whereas people who reported more secure attachments to God experienced less spiritual struggles, people who reported more insecure ambivalent and insecure avoidant attachments to God reported greater

Table 1. Correlations between predictor variables and criterion variable.

Variables	2	3	4	5	6	7	8	9	10	11	12	13
Religious predictors												
1. God image	-0.32**	0.09	0.40**	-0.21*	-0.43**	-0.03	0.11	-0.12*	0.12*	-0.15*	0.06	-0.05
2. Att. to church	-	-0.38**	-0.47**	-0.40**	0.56**	0.05	0.12*	0.11	-0.18**	0.10	-0.11	0.02
3. Fam. rel. history	-	-	0.25**	-0.20**	-0.25**	-0.02	-0.01	0.01	0.08	-0.04	0.06	0.04
4. Sec. attachment	-	-	-	-0.64**	-0.70**	-0.26**	-0.33**	-0.15*	0.31**	-0.24**	0.00	-0.17**
5. I nsec. amb. att.	-	-	-	-	0.60**	0.31**	0.33**	0.13*	-0.18**	0.14**	0.07	0.22**
6. Insec. avoid. att.	-	-	-	-	-	0.19**	0.35**	0.07	-0.30**	0.19**	0.01	0.19**
personal predictors												
7. Neuroticism	-	-	-	-	-	-	0.56**	0.41**	-0.22**	0.13*	0.22**	0.27**
8. Pessimism	-	-	-	-	-	-	-	0.15*	-0.35**	0.32**	0.12*	0.27**
9. Trait anger	-	-	-	-	-	-	-	-	-0.05	-0.05	0.11	0.18**
social predictors												
10. Social support	-	-	-	-	-	-	-	-	-	-0.58**	-0.04	-0.07
11. Loneliness	-	-	-	-	-	-	-	-	-	-	0.06	0.10
situational predictors												
12. Sit. appraisals	-	-	-	-	-	-	-	-	-	-	-	0.32**
criterion variable												
13. Neg. rel. coping	-	-	-	-	-	-	-	-	-	-	-	-

Notes: * $p < 0.05$; ** $p < 0.01$

spiritual struggles. None of the other religious variables, God image, negative attitudes toward the church, or familial religious history were significantly associated with spiritual struggles. All of the variables from the personal domain were significantly associated with spiritual struggles. People who were more neurotic, pessimistic, and characteristically angry reported greater spiritual struggles. None of the variables from the social domain, social support or loneliness, were significantly correlated with spiritual struggles. Finally, major stressors that were appraised more negatively were significantly correlated with greater spiritual struggles.

In terms of the intercorrelations among predictor variables, Licht (1996) suggested that correlations of ($r > 0.80$) between predictors represent potential problems of multicollinearity. In the current study, all of the intercorrelations among predictor variables fell within acceptable limits, suggesting that multicollinearity was not a problem for the present data. The median of the intercorrelations among all predictors was ($r = 0.01$) with a range of ($r = 0.07$ to $r = 0.31$) for those predictors that were significant in the final regression analysis (see Table 1).

Hierarchical multiple regression analyses

For each of the four domains (e.g., religious, personal, social, and situational), a two-step hierarchical multiple regression equation was generated. In the first step, global spirituality was entered into the equation. In the second step, individual variables from each of the four domains were entered simultaneously and ΔR^2 was calculated to determine whether they predict unique variance in the criterion variable beyond the effects of global spirituality. Significant predictors from each of the four domains were identified by examining their standardised beta coefficients and were entered into a final equation to determine those variables that most strongly predict spiritual struggles. Results for all of the hierarchical multiple regression analyses performed in this study are presented in Table 2.

Results of the first set of regression analyses indicated that religious variables significantly predicted 12% of unique variance in spiritual struggles. Within this domain, insecure ambivalent attachment to God was the only variable that significantly predicted spiritual struggles. None of the other religious variables, insecure avoidant religious attachment, secure attachment to God, God image, negative attitudes toward the church, and a weak familial religious history significantly predicted spiritual struggles.

Results of the second hierarchical multiple regression equation indicated that personal variables significantly predicted 11% of unique variance in spiritual struggles. Within the personal domain, both neuroticism and pessimism were significant predictors of spiritual struggles. Trait anger did not significantly predict spiritual struggles.

Results of the third hierarchical multiple regression analysis were nonsignificant. Neither social support nor loneliness significantly predicted spiritual struggles. However, although nonsignificant, the results for both social variables were in the expected directions, indicating that people who had lower levels of social support and people who were more lonely seemed more likely (albeit modestly) to struggle during times of distress.

Results of the fourth set of analyses indicated that situational variables (i.e., negative appraisals of stressful events) significantly predicted 10% of unique variance in spiritual struggles. Thus, situations that were appraised as having a negative impact on one's life, "shaking up" one's life, being unfair or unjust, and being uncontrollable significantly predicted spiritual struggles beyond the effects of global spirituality.

Table 2. Hierarchical multiple regression equations of predictor variables on criterion variable.

Predictors	R Square	ΔR^2	β
Equation 1			
Step 1: global spirituality	0.02*	–	–0.13*
Step 2: religious predictors	0.13**	0.12**	–
God image	–	–	0.01
Attitude towards the church	–	–	–0.09
Familial religious history	–	–	0.05
Secure attachment to God	–	–	–0.06
Insecure ambivalent attachment	–	–	0.25**
Insecure avoidant attachment	–	–	0.14
Equation 2			
Step 1: global spirituality	0.02*	–	–0.15*
Step 2: personal predictors	0.12**	0.11**	–
Neuroticism	–	–	0.18*
Pessimism	–	–	0.15*
Trait anger	–	–	0.09
Equation 3			
Step 1: global spirituality	0.01	–	–0.11
Step 2: social predictors	0.03	0.01	–
Social support	–	–	–0.06
Loneliness	–	–	0.06
Equation 4			
Step 1: global spirituality	0.01	–	–0.11
Step 2: situational predictors	0.11**	0.10**	–
Situational appraisals	–	–	0.31**
Equation 5			
Step 1: global spirituality	0.02	–	–0.13*
Step 2: previous significant predictors	0.20**	0.19**	–
Insecure ambivalent attachment	–	–	0.18**
Neuroticism	–	–	0.17*
Pessimism	–	–	0.07
Situational appraisals	–	–	0.23**

Note: All beta weights presented are standardized beta coefficients.

* $p < 0.05$; ** $p < 0.01$

Results of the final hierarchical multiple regression equation incorporating all of the previously identified significant predictors indicated that variables from three (e.g., religious, personal, and situational) of the four domains significantly predicted 19% of unique variance in spiritual struggles beyond the effects of global spirituality. More specifically, negative appraisals of major stressors (i.e., situational variables), an insecure ambivalent attachment to God, and neuroticism significantly predicted spiritual struggles in this final analysis. Pessimism did not significantly predict spiritual struggles in the final equation.

Discussion

The results of the current study provide initial empirical support for the theory that spiritual struggles grow out of the interaction between stressful life experiences and the

individual's orienting system (Pargament et al., 2005). Religious (e.g., insecure ambivalent attachment to God), personal (e.g., neuroticism), and situational (e.g., more negative appraisals) variables predicted spiritual struggles during times of distress beyond the effects of relevant religious variables. Although research has demonstrated that spiritual resources are generally resilient to the adverse effects of traumas and transitions (see Pargament, 1997, for a review), religious beliefs and practices are not invincible. The individual's capacity to retain spiritual equilibrium during times of distress is contingent upon the quality of the individual's orienting system and the severity of the situation experienced.

According to the results of the current study, one factor that might weaken an individual's orienting system is an insecure ambivalent attachment to God. When faced with major life stressors, people who reported having an insecure ambivalent attachment to God experienced greater spiritual struggles. These results are similar to previous research in which an insecure ambivalent attachment to God was related to spiritual struggles while waiting for a loved one undergoing inpatient surgery (Belavich & Pargament, 2002). These findings also contribute to the existing literature because they demonstrate the implications of an insecure ambivalent attachment to God among college students. During college, as individuals struggle to assimilate various worldviews, individuate from their family of origin, and find their identity, attachment to God seems particularly relevant. Perhaps those with an insecure ambivalent attachment to God may occasionally experience God's love during life's triumphs, but feel abandoned by God during life's trials. During college, when many aspects of life might seem uncertain, the instability of an insecure ambivalent attachment to God may exacerbate such uncertainty and lead to spiritual struggles.

Neuroticism is another factor that might weaken an individual's orienting system. In the current study, those who were more neurotic reported greater spiritual struggles during times of distress. These results are similar to previous research that showed higher neuroticism was associated with greater disappointment and anger with God (Wood et al., 2010). Thus, the tendency to experience chronic negative affects, such as depression, guilt, and self-consciousness, carries over to the spiritual dimension as well during stressful situations. For example, depression may translate into feeling unloved by God, or guilt and self-consciousness may lead to feelings of punishment and abandonment from God.

Although previous research has shown that greater dissatisfaction with one's social support system (Brome, Owens, Allen, & Vevaina, 2000) and loneliness (Schwab & Petersen, 1990) were associated with lower levels of spiritual well-being, neither of these social variables significantly predicted spiritual struggles in the current study. However, spiritual struggles were measured by retrospective accounts of how participants used negative religious coping strategies in previous stressful situations, whereas social support and loneliness were measured at present. It is possible that people's perceptions of social support and loneliness changed over time and were different when they encountered stressful situations in the past.

Finally, according to the results of the present study, people were more vulnerable to spiritual struggles when they appraised stressful situations as having a more negative impact on their life. Similar to previous research demonstrating that traumatic events may threaten an individual's assumptions about the benevolence and meaningfulness of the world (Janoff-Bulman, 1989), these results suggest that negative appraisals might also threaten one's assumptions about the benevolence of God, resulting in anger toward God (Exline et al., 2011). Because negative appraisals of situations were the strongest predictor of spiritual struggles from all domains examined in this study (e.g., religious, personal,

social, and situational), situations that are appraised as “uncontrollable, unjust, or unfair” are especially key risk factors for the development of spiritual struggles.

Implications of the study

These findings have implications for the assessment of spiritual struggles. Because more negatively appraised events were the strongest predictors of spiritual struggles in this study, therapists working with clients undergoing traumatic experiences need to be sensitive to the possibility that such traumas might elicit spiritual struggles, particularly among individuals with less religious, personal, or social resources. Since clients may be reluctant to address spiritual issues in therapy, therapists may need to take the initiative and assess for spiritual struggles when necessary or relevant (Pargament, 2007).

This study also has implications for the treatment of spiritual struggles. Because spiritual struggles stem from multiple domains, comprehensive treatments that focus on enhancing religious, personal, and social resources may need to be developed. However, spiritual struggles are complex phenomena that cannot be merely reduced to other psychosocial experiences because they have unique implications for psychological and physical well-being. Thus, individually tailored treatments that specifically target spiritual struggles as a focus of intervention seem warranted and have recently been developed (see Pargament, 2007).

Limitations and future directions

One limitation of the present study is its cross-sectional design. Spiritual struggles were measured by retrospective accounts of negative religious coping strategies, whereas other variables (e.g., social support, loneliness) were measured by participants' present experiences. As mentioned earlier, this might account for the fact that none of the social variables explored in this study significantly predicted spiritual struggles. Since spiritual struggles were significantly predicted by one social variable (e.g., problematic relationships with peers) in previous research (Johnson & Hayes, 2003), future studies should examine other social variables that might lead to spiritual struggles. Furthermore, because of its cross-sectional design, conclusive statements that particular religious, personal, social, or situational variables necessarily cause spiritual struggles cannot be derived from the present study. Future research should include longitudinal designs that examine people before, during, and after their struggles in order to clarify the temporal sequence proposed by the current theory.

This study is also limited by its exclusive use of pre-existing scales in order to generate quantitative data. For example, the Brief RCOPE (Pargament, Smith et al., 1998) is the most commonly used measure of spiritual struggles and is stacked in favour of struggles with the Divine. However, it contains only one item specifically addressing interpersonal spiritual struggles (e.g., “I wondered whether my church had abandoned me.”), which might explain why none of the social variables significantly predicted spiritual struggles in this study. Because spiritual struggles are complex phenomena that involve struggles with the Divine, interpersonal struggles, and intrapersonal struggles, future research should examine each type of spiritual struggle more precisely with more comprehensive measures. In addition, future studies might assess spiritual struggles with qualitative interviews or more descriptive, narrative measures. Such qualitative data might provide rich information about the phenomenological process of spiritual struggles.

Finally, the generalisability of the current findings is limited because of the restricted representativeness of this college student sample. A large majority of the sample was Caucasian (88.6%) and affiliated with Christian or Catholic religious traditions (89.9%). However, despite this apparent limitation, it is advantageous to examine spiritual struggles among college students because college is a time when individuals become exposed to diverse religious traditions, engage in critical scholarly discussions, and develop, solidify, or potentially abandon their traditional religious beliefs, values, practices, and identities (see Bryant & Astin, 2008). Nevertheless, future studies should also examine spiritual struggles among members of other ethnicities, cultures, religious traditions, and life stages in order to determine whether such factors play a part in the development of spiritual struggles.

Note

1. Most of the measures used in this study have demonstrated strong reliability and validity and can be found in the references provided.

References

- Ano, G.G., & Vasconcelles, E.B. (2005). Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology, 61*, 461–480.
- Belavich, T.G., & Pargament, K.I. (2002). The role of attachment in predicting spiritual coping with a loved one in surgery. *Journal of Adult Development, 9*, 13–29.
- Benson, P., & Spilka, B. (1973). God image as a function of self-esteem and locus of control. *Journal for the Scientific Study of Religion, 12*, 297–310.
- Boland, A., & Cappeliez, P. (1996). Optimism and neuroticism as predictors of coping and adaptation in older women. *Personality and Individual Differences, 22*, 909–919.
- Brome, D.R., Owens, M.D., Allen, K., & Vevaina, T. (2000). An examination of spirituality among African American women in recovery from substance abuse. *Journal of Black Psychology, 26*, 470–489.
- Bryant, A.N., & Astin, H.S. (2008). The correlates of spiritual struggle during the college years. *The Journal of Higher Education, 79*(1), 1–27.
- Costa, P.T., & McCrae, R.R. (1992). *Revised NEO Personality Inventory and NEO Five Factor Inventory professional manual*. Odessa, FL: Psychological Assessment Resources.
- Cramer, K.M., Ofosu, H.B., & Barry, J.E. (2000). An abbreviated form of the Social and Emotional Loneliness Scale for Adults (SELSA). *Personality and Individual Differences, 28*, 1125–1131.
- Dember, W.N., Martin, S.H., Hummer, M.K., Howe, S.R., & Melton, R.S. (1989). The measurement of optimism and pessimism. *Current Psychology: Research and Reviews, 8*, 102–119.
- Diong, S.M., & Bishop, G.D. (1999). Anger expression, coping styles, and well-being. *Journal of Health Psychology, 4*, 81–96.
- DiTommaso, E., & Spinner, B. (1993). The development and initial validation of the Social and Emotional Loneliness Scale for Adults (SELSA). *Personality and Individual Differences, 14*, 127–134.
- Ellison, C.G., Roalson, L.A., Guillory, J.M., Flannelly, K.J., & Marcum, J.P. (2010). Religious resources, spiritual struggles, and mental health in a nationwide sample of PCUSA clergy. *Pastoral Psychology, 59*, 287–304.
- Exline, J.J., Park, C.L., Smyth, J.M., & Carey, M.P. (2011). Anger toward God: Social-cognitive predictors, prevalence, and links with adjustment to bereavement and cancer. *Journal of Personality and Social Psychology, 100*, 129–148.

- Exline, J.J., Yali, A.M., & Lobel, M. (1999). When God disappoints: Difficulty forgiving God and its role in negative emotion. *Journal of Health Psychology, 4*, 365–379.
- Exline, J.J., Yali, A.M., & Sanderson, W.C. (2000). Guilt, discord, and alienation: The role of religious strain in depression and suicidality. *Journal of Clinical Psychology, 56*, 1481–1496.
- Fitchett, G., Rybarczyk, B.D., DeMarco, G.A., & Nicholas, J.J. (1999). The role of religion in medical rehabilitation outcomes: A longitudinal study. *Rehabilitation Psychology, 44*, 333–353.
- Hays, J.C., Meador, K.G., Branch, P.S., & George, L.K. (2001). The Spiritual History Scale in Four Dimensions (SHS-4): Validity and reliability. *The Gerontologist, 41*, 239–249.
- Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social Cognition, 7*, 133–136.
- Johnson, C.V., & Hayes, J.A. (2003). Troubled spirits: Prevalence and predictors of religious and spiritual concerns among university students and counseling center clients. *Journal of Counseling Psychology, 50*, 409–419.
- Kirkpatrick, L.A., & Shaver, P.R. (1992). An attachment-theoretical approach to romantic love and religious belief. *Personality and Social Psychology Bulletin, 18*, 266–275.
- Licht, M.H. (1996). Chapter 2: Multiple regression and correlation. In G.G. Grimm & P.R. Yarnold (Eds.), *Reading and understanding multivariate statistics* (pp. 19–64). Washington, DC: American Psychological Association.
- McConnell, K.M., Pargament, K.I., Ellison, C.G., & Flannelly, K.J. (2006). Examining the links between spiritual struggles and symptoms of psychopathology in a national sample. *Journal of Clinical Psychology, 62*, 1469–1484.
- Moos, R.H. (1986). *Coping with life crises: An integrated approach*. New York, NY: Plenum.
- Nielsen, M.E. (1998). An assessment of religious conflicts and their resolutions. *Journal for the Scientific Study of Religion, 37*, 181–190.
- Pargament, K.I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York, NY: Guilford.
- Pargament, K.I. (2007). *Spiritually integrated psychotherapy: Understanding and addressing the sacred*. New York, NY: Guilford.
- Pargament, K.I., Desai, K.M., & McConnell, K.M. (2006). Spirituality: A pathway to posttraumatic growth or decline? In L.G. Calhoun & R.G. Tedeschi (Eds.), *Handbook of posttraumatic growth: Research & practice* (pp. 121–137). Mahwah, NJ: Erlbaum.
- Pargament, K.I., Koenig, H.G., Tarakeshwar, N., & Hahn, J. (2001). Religious struggle as a predictor of mortality among medically ill elderly patients: A two year-longitudinal study. *Archives of Internal Medicine, 161*, 1881–1885.
- Pargament, K.I., Koenig, H.G., Tarakeshwar, N., & Hahn, J. (2004). Religious coping methods as predictors of psychological, physical and spiritual outcomes among medically ill elderly patients: A two-year longitudinal study. *Journal of Health Psychology, 9*, 713–730.
- Pargament, K.I., Murray-Swank, N., Magyar, G.M., & Ano, G.G. (2005). Spiritual struggle: A phenomenon of interest to psychology and religion. In W.R. Miller & H. Delaney (Eds.), *Judeo-Christian perspectives on psychology: Human nature, motivation, and change* (pp. 245–268). Washington, DC: APA Books.
- Pargament, K.I., Smith, B.W., Koenig, H.G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion, 37*, 710–724.
- Pargament, K.I., Zinnbauer, B.J., Scott, A.B., Butter, E.M., Zerwin, J., & Stanik, P. (1998). Red flags and religious coping: Identifying some religious warning signs among people in crisis. *Journal of Clinical Psychology, 54*, 77–89.
- Roesch, S.C., & Ano, G.G. (2003). Testing an attribution and coping model of stress: Religion as an orienting system. *Journal of Psychology and Christianity, 22*, 197–209.
- Savelkoul, M., Post, M.W.M., De Witte, L.P., & Van Den Borne, H.B. (2000). Social support, coping and subjective well-being in patients with rheumatic diseases. *Patient Education and Counseling, 39*, 205–218.

- Scheier, M.F., Carver, C.S., & Bridges, M.W. (2001). Optimism, pessimism, and psychological well-being. In E.C. Chang (Ed.), *Optimism and pessimism: Implications for theory, research, and practice* (pp. 189–216). Washington, DC: American Psychological Association.
- Schwab, R., & Petersen, K.U. (1990). Religiousness: Its relation to loneliness, neuroticism, and subjective well-being. *Journal for the Scientific Study of Religion*, 29, 335–345.
- Spielberger, C.D. (1999). *State-trait Anger Expression Inventory-2: Professional manual*. Odessa, FL: Psychological Assessment Resources.
- Thurstone, L.L., & Chave, E.J. (1929). *The measurement of attitude: A psychophysical method and some experiments with a scale for measuring attitude toward the church*. Chicago, IL: University of Chicago Press.
- Tisdale, T.C., Key, T.L., Edwards, K.J., Brokaw, B.F., Kemperman, S.R., Cloud, H., . . . Okamoto, T. (1997). Impact of treatment on God image and correlations of God image to personal adjustment and object relations development. *Journal of Psychology and Theology*, 25, 227–239.
- Varon, S.R., & Riley, A.W. (1999). Relationship between maternal church attendance and adolescent mental health and social functioning. *Psychiatric Services*, 50, 799–805.
- Walton, C.G., Shultz, C.M., Beck, C.M., & Walls, R.C. (1991). Psychological correlates of loneliness in the older adult. *Archives of Psychiatric Nursing*, 5, 165–170.
- Wood, B.T., Worthington Jr, E.L., Exline, J.J., Yali, A.M., Aten, J.D., & McMinn, M.R. (2010). Development, refinement, and psychometric properties of the Attitudes Toward God Scale (ATGS-9). *Psychology of Religion and Spirituality*, 2, 148–167.
- Zimet, G.D., Dahlem, N.W., Zimet, S.G., & Farley, G.K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52, 30–41.