Sacrilege: A Study of Sacred Loss and Desecration and Their Implications for Health and Well-Being in a Community Sample

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In this study, we proposed that people understand major life events in terms of spiritual as well as psychological, social, and physical dimensions. Specifically, we examined the possibility that life events that are perceived to be sacred losses or violations of the sacred (i.e., desecrations) have significant implications for the health and well-being of the individual. A total of 117 adults, randomly selected from a community, identified the most negative life event they had experienced in the past two years. They then completed measures of the degree to which they appraised this event as a sacred loss and as a desecration, as well as measures of religious coping, the impact of the event, and four sets of criteria: traumatic impact, physical health, emotional distress, and growth. These hypotheses were largely supported. Sacred loss and desecration were unrelated to physical health. However, they were tied to higher levels, though somewhat differential patterns, of emotional distress. While sacred loss was predictive of intrusive thoughts and depression, desecration was tied to more intrusive thoughts and greater anger. Furthermore, sacred loss was linked to greater posttraumatic growth and positive spiritual change; in contrast, desecration was associated with less posttraumatic growth. The links between the spiritual appraisals and outcomes were partially mediated by positive and negative methods of religious coping. These findings underscore the importance and multidimensionality of the spiritual meanings people attribute to major life stressors.

I could not comprehend the level of on-going purposeful deceit on the part of my significant other. [It was] unimaginable that an "upstanding, prominent, religious, moral, preaching" person could be so utterly deceitful in so many ways for such an extended period of time. (48-year-old woman after discovering that her partner had been maintaining three-year affair with a mutual friend)

Negative life events affect people not only psychologically, socially, and physically, but also spiritually. For many people, the terrorist attacks on September 11, 2001 reflected more than a terrible loss of life and property; they represented a violation of fundamental spiritual symbols and values, including the sacredness of the nation, the sanctity of life, and the sublime virtues of justice and compassion. Private as well as public events can affect people spiritually as we hear in the pain and anger voiced by the woman above. Or consider the words of one adult survivor of childhood sexual abuse: "We feel that God, like almost everyone else, has abandoned us in our time of need. We feel alone, left even by our creator" (Flaherty 1992:71). Although researchers have documented the psychological, social, and physical effects of life crises (e.g., Aldwin 1994; Miller 1989), they have paid relatively little attention to the spiritual impact of major life events. And yet, there are some good reasons to suspect that negative life events that are seen as holding spiritual meaning may have special power and significance in people's lives. In this article, drawing on three different lines of theory and research, we hypothesize and test the notion that negative life events that are perceived to be sacred losses or desecrations will have particularly powerful implications for the health and well-being of the individual.

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SANCTIFICATION THEORY

Pargament and Mahoney (2002, in press) have described how people can sanctify various aspects of their lives, imbuing them with spiritual character and significance. Through the process of sanctification, they note, aspects of life can be linked directly to God (theistic sanctification) or imbued with divine qualities (nontheistic sanctification), including timelessness, ultimate value, and transcendence. Thus, marriage can become a sacred covenant between both spouses and God, a block of wood can become a crucifix, a piece of land can become hallowed ground, a nurse can become a saint, and a day of the week can become the Sabbath. The process of sanctification extends the realm of the sacred beyond concepts of God and the divine to include a wide range of aspects of life.

Pargament and Mahoney theorized that sanctification has a number of important implications. First, people are likely to invest more of themselves in the pursuit and care of those things they hold sacred. In this vein, Tarakeshwar et al. (2001) studied a nationally representative sample of Presbyterians and found that those who perceived the environment to be sacred to a greater extent were more likely to invest personal funds to support environmental causes. Second, people are more likely to preserve and protect sacred aspects of their lives that are threatened. For example, working with a community sample, Mahoney et al. (1999) found that husbands and wives who sanctified their marriages to a greater degree were more protective of their relationships; they responded to conflict with better problem-solving strategies, including more collaboration, less verbal aggression, and less stalemating. Third, people are likely to derive greater satisfaction and well-being from the pursuit and experience of the sacred. Sacred objects, LaMothe (1998) suggests, can help provide a sense of personal identity, continuity, and cohesion, and can soothe and comfort people in times of stress (see also Greenberg et al. 1995). For instance, in the Mahoney et al. (1999) study, greater sanctification of the marriage was tied to greater global marital satisfaction and more personal benefits from marriage.

The final implication of sanctification theory is most directly relevant to this study. People may suffer more severe consequences when sanctified aspects of their lives are lost (i.e., sacred loss) or violated (i.e., desecration), and they may be more likely to lash out against the perpetrators of the injury. History has been marked by periods of violence and conflict following perceptions of sacred loss or desecration. Indeed, one explanation of the September 11, 2001 attacks was that they were a response to the desecration of Arab soil by United States troops stationed in Saudi Arabia. Only a few studies, as yet, have examined the impact of desecration and sacred loss (see Doehring 1993). Magyar, Pargament, and Mahoney (2000) examined the implications of desecration in a sample of college students who had been recently hurt in a romantic relationship. As predicted, students who perceived their hurt or betrayal as a desecration of a sacred relationship reported more negative affect and physical health symptoms, poorer mental health, and, interestingly, more personal and spiritual growth. These effects remained significant even after controlling for the negativity of the event. Thus, the experience of desecration had distinctive implications for the health and well-being of these participants. As yet, researchers have not studied the health implications of sacred losses.

ASSUMPTIVE WORLDS AND NARRATIVES

Janoff-Bulman (1989) has argued persuasively that people make certain general assumptions about the world and themselves to make life more meaningful and more comfortable. In the United States, she asserts, most people assume that the world is benevolent, life is fair, and the individual is deserving of good things. These assumptions, however, can be challenged. Life traumas can "shatter" the individual's assumptive world, raising fundamental questions about benevolence, justice, and self-worth (e.g., Lilliston 1985). Moreover, empirical studies suggest, the process of

recovery for those whose worlds have been most seriously shaken is likely to be longer and more difficult (Wortman and Silver 1989).

Beliefs about whatever a person holds sacred are another critical ingredient of the individual's assumptive world (Pargament and Mahoney 2002). For example, some people may assume that there are certain aspects of life that are everlasting (e.g., bonds between parents and children, the marital vow). Others may assume that sanctified objects hold a special power that protects objects and owners from violation or loss. Although these assumptions may be held implicitly, they are no less powerful. The death of a loved one, the end of a marriage, or the experience of victimization may be terribly traumatic because they damage not only the individual's sense of benevolence, justice, and self-worth, but also his or her core spiritual worldview.

In a related sense, the sacred may be central to the stories and themes people live by. Narrative theorists have described how people lend meaning to their lives by structuring their experiences into "macronarratives," encompassing life stories, and "micronarratives," smaller stories (Neimeyer and Levitt 2001). Narratives that are interwoven with a sacred dimension may be particularly compelling. Relevant here is Emmons's (1999) work that examined the role of spirituality in personal strivings. Strivings describe "what a person is typically trying to do" (1999:26). They add unity and coherence to daily behavior and to the individual's life story. Emmons, Cheung, and Tehrani (1998) have found that spiritual strivings may be particularly valuable in this regard. They asked a sample of 78 adults to report their strivings. About 25 percent of these strivings were coded as either theistic (e.g., live a godly life) or spiritual (e.g., teach my children spiritual truths). People with a higher proportion of theistic and spiritual strivings reported significantly greater purpose in life, greater subjective well-being, and greater coherence and integration among their goals. Spiritual strivings, Emmons concluded, can help to unify and integrate personality. However, there is a potential downside to the sanctification of an individual's strivings and larger life narrative. Events that result in a violation or loss of the sacred are likely to disrupt the narrative flow of an individual's life. The old story the individual had planned to live by may no longer be viable, and a new tale must be constructed. Ultimately, the individual may see this unfolding story as growthful, but the process is likely to be painful.

Coping Theory

According to coping theory, the impact of a life event depends, in part, on the way that event is appraised (Lazarus and Folkman 1984). In a series of classic studies, Lazarus and his colleagues demonstrated that cognitive appraisals of events mediated the impact of the event on emotions (see Lazarus 1984). Specifically, events that were appraised as threatening or harmful to the individual's goals and values elicited stronger emotional reactions than events appraised as benign. It follows that people may be particularly sensitive to situations that are appraised as spiritual threats or losses; after all, sacred aspects of life are likely to be of preeminent value.

Coping theory also suggests that perceptions of sacred loss and violation may be associated with distinctive emotional responses. Lazarus (1991) demonstrates how different cognitive appraisals are followed by different emotional reactions. For example, appraisals of loss and helplessness to change the situation are likely to be followed by sadness and even depression. Situations that are appraised as willful violations of meaningful goals are more likely to elicit anger and frustration. Similarly, we might expect perceptions of sacred loss and purposeful violations of the sacred (desecrations) to be associated with distinctive emotional outcomes. Specifically, perceptions of sacred loss may be more strongly related to internalized distressful emotions (e.g., depression and sadness), while perceptions of desecration may be more closely tied to externalized distress (e.g., anger).

Finally, it is important to add that the impact of a life event is mediated not only by the appraisal of the event, but also how the individual copes with it. Consistent with this mediating

model, previous studies have shown that stressful life events mobilize a variety of religious coping methods, positive and negative (Koenig, Pargament, and Nielsen 1998; Pargament et al. 1998). Events perceived as sacred losses and violations may be particularly likely to elicit both positive and negative religious methods of coping, since these stressful life events are affecting the spiritual dimension. The choice of coping methods, in turn, can shape adjustment to critical life stressors (see Aldwin 1994 for a review). In the spiritual realm, religious methods of coping with stressors have also been linked to adjustment (Pargament 1997). For example, positive methods of religious coping (e.g., spiritual support, benevolent religious reframing, forgiveness) have been associated with greater subjective well-being, spiritual growth, and less emotional distress. Conversely, negative methods of religious coping (e.g., spiritual discontent, feeling punished by God) have been tied to poorer mental health and physical health, and greater risk of mortality (Pargament et al. 1998, 2001). These findings suggest that the impact of sacred losses and violations on health and well-being may depend, in part, on the way the individual copes religiously with the situation.

Present Study

Prior research in the area of appraisals, stress, coping, and religion has often focused on religious samples or people facing major traumas. However, the constructs of sacred loss and desecration may have applicability to a wider population. Thus, the present study examines the implications of perceptions of sacred loss and desecration for the health and well-being of a community sample of adults.

The concepts of health and well-being are multidimensional. In this study, we focus on four sets of health-related criteria: traumatic impact of the event (e.g., intrusive thoughts, avoidant behavior); emotional distress (e.g., depressive symptomatology, anger, anxiety); physical health (e.g., symptomatology, medication use, doctor visits, absenteeism); and growth (e.g., posttraumatic growth, positive spiritual change). It is important to include a broad range of criteria because spiritual appraisals could conceivably relate in distinctive ways to these different trauma-related, emotional, physical, and growth-related outcomes (see Pargament 2002).

Drawing from the three theoretical literatures presented above, we hypothesize that:

1. Greater perceptions of both sacred loss and desecration will be associated with greater trauma impact, higher levels of emotional distress, and poorer physical health outcomes.
2. In comparison to desecration, greater perceptions of sacred loss will be linked to greater depression. In comparison to sacred loss, perceptions of desecration will be linked to greater anger.
3. The effects of sacred loss and desecration on outcomes will be partially mediated through positive and negative religious coping. More specifically, greater perceptions of sacred loss and desecration will be tied to higher levels of both positive and negative religious coping. While positive religious coping is expected to relate to less traumatic impact, emotional distress, better physical health, and more growth, negative religious coping should be associated with more traumatic impact, emotional distress, poorer physical health, and less growth. Controlling for the effects of positive and negative religious coping is expected to diminish the relationships of sacred loss and desecration to outcomes.

Finally, we explore the relationship between perceptions of sacred loss and desecration with indicators of growth. Intuitively, perceptions of loss and violation would seem likely to interfere with an individual's personal and spiritual growth and development. However, these spiritual perceptions could also be seen as necessary steps toward the development of a more mature spirituality, one capable of encompassing the full range of human experience, including pain and suffering (see Magyar, Pargament, and Mahoney 2000).

METHOD

Participants

The sample consisted of 117 adults drawn from a mid-sized, mixed small town/surburban/rural county in the Midwest. About 65 percent of the respondents were female with an average age of 47 years ($SD = 13.94$, range 18–86); 95.2 percent identified themselves as white and 76 percent were married. The breakdown of annual family income in 2001 dollars was: 18 percent less than $35,000, 48 percent between $35–75,000, and 34 percent more than $75,000. The highest level of education of the participants was: 18 percent high school graduation, 43 percent some college, 21 percent college graduate, and 18 percent graduate or professional training. The sample was predominantly Protestant (56 percent) and Roman Catholic (29 percent), with 10 percent endorsing "other," and 5 percent "none." In comparison to the population of the county, the sample was overly representative of women and higher SES individuals.

Participants' self-reported religiousness was based on four marker variables taken from the General Social Survey (NORC 1998). Specifically, the breakdown of frequency of church attendance was: never (7 percent), twice or less per year (26 percent), several times per year (11 percent), one to three times per month (18 percent), weekly (31 percent), and several times per week (7 percent). The breakdown of frequency of prayer was: never (10 percent), twice a month or less (8 percent), several times per month (11 percent), one to three times per week (19 percent), once a day (24 percent), and more than once a day (28 percent). Twenty-one percent of the sample defined themselves as very religious, 44 percent moderately religious, 26 percent slightly religious, and 9 percent not at all religious. Twenty-four percent of the sample defined themselves as very spiritual, 47 percent moderately spiritual, 24 percent slightly spiritual, and 5 percent not at all spiritual. For primary data analyses, these four items were transformed to z-scores and summed to create a global religiousness index score ($\alpha = 0.80$), with greater scores indicating greater religiousness/spirituality.

Design and Procedure

To recruit participants, we purchased 1,000 names from a national polling company, along with corresponding addresses, telephones numbers, gender, and age. Individuals on this list were initially sent a postcard, which briefly described the study and informed them that they would be contacted by phone. The research team then attempted to contact these people by phone to recruit them into the study. Up to three phone calls were made to request participation. Of these attempts, 499 individuals could not be solicited for participation because they were deceased, did not answer phone, were not at home when called, or had phone numbers that were disconnected or changed. A total of 501 people were contacted by phone: 248 (49.5 percent) agreed and 253 (50.5 percent) declined to participate. Of the 248 people who initially agreed to participate, 117 (47 percent) actually returned usable questionnaires. Thus, the overall response rate among those who could be solicited for participation was 23 percent (i.e., 117/501).

Measures

Significant Negative Life Event, Loss, and Violation

Participants responded to a checklist to indicate the most significant personal negative life event that took place in the past two years (e.g., death of relative, personal injury or illness, divorce). The events were drawn from commonly used event checklists (Moos et al. 1984; Pargament et al. 1990). Participants were encouraged to mark only one type of event that best described their most significant negative life event. They were then asked to describe the event and how it affected

them in a detailed, open-ended format. Participants answered three questions about the time since the event occurred, how long the event lasted, and whether the participants perceived that another person caused the significant negative life event they described in the study.

To better understand how participants perceived the event, they were also asked: "If you had to choose, which label best describes this event? 'a loss,' 'a violation,' 'both a loss and a violation,' or 'neither a loss nor a violation'?" Participants next specified the aspects of life that were lost or violated by checking all the descriptions that applied (e.g., a physical object, a relationship, emotional well-being, abilities) or writing in the appropriate object if it did not appear on the checklist.

Sacred Loss and Desecration

The Sacred Loss and Desecration Scale is a 28-item questionnaire that was developed for the present study by the Spirituality and Psychology Research Team (SPiRiT) at Bowling Green State University. This scale expanded on previous sanctification and desecration indices that were developed for earlier studies. Fourteen items were generated for each of the appraisals of sacred loss and desecration. To increase the range and applicability of the scales, half of the items for each of the appraisals were phrased theistically and the other half were phrased nontheistically. Theistic loss items assessed the degree to which a negative event was perceived as a loss of something directly connected to God, and therefore explicitly referenced God (e.g., "This event involved losing a gift from God"). Nontheistic loss items assessed the degree to which a negative event was perceived as a loss of something sacred; that is, something indirectly associated with belief in God, a higher power, religious faith, or spirituality (e.g., "My life lacks something that once gave me a sense of spiritual fulfillment"). Theistic desecration measured the extent to which a negative event was perceived as a purposeful violation of something directly connected to God (e.g., "Something symbolic of God was purposefully damaged"), while nontheistic desecration assessed the extent to which a negative event was perceived as a purposeful violation of something sacred; again, something indirectly associated with belief in God, a higher power, religious faith, or spirituality (e.g., "Something that was sacred to me was destroyed"). Participants were asked to indicate how closely each statement described their perception of the negative life event on a five-point scale ranging from (1) "not at all" to (5) "very much."

The 28 items that assessed sacred loss and desecration were analyzed using a principal components analysis with promax rotation. Using an eigenvalue of >1 as the criterion for extraction, four factors emerged from this analysis. However, the items primarily appeared to reflect two basic dimensions. This encouraged a second factor analysis forcing a two-factor structure. The items appeared to reflect the two basic appraisals: Sacred Loss and Desecration. Both theistic and nontheistic items loaded on the Sacred Loss and Desecration factors. Thus, participants did not make sharp distinctions between sacred losses and desecrations that were directly and indirectly related to God. The results are given in Table 1. This factor structure accounted for 57.2 percent of the variance, with the first factor accounting for 45 percent of the variance (eigenvalue = 12.70) and the second factor accounting for 12 percent of the variance (eigenvalue = 3.49). Five items cross-loaded on both factors and those were deleted. The other items loaded cleanly on their appropriate factors without cross-loadings. Based on the factor analysis, items were summed to create a total score for Sacred Loss (13 items, $\alpha = 0.93$) and Desecration (10 items, $\alpha = 0.92$). The two scales correlated 0.48 ($p < 0.001$), suggesting that Sacred Loss and Desecration are related, yet distinct, constructs.

As another initial test of the discriminant validity of the scales, analyses of variance were conducted using the Sacred Loss and Desecration scales as dependent variables and the participants' categorizations of their negative event (loss, violation, both loss and violation, neither loss nor violation) as the dependent variable. The analyses of variance yielded significant results for both Sacred Loss (F(3,113) = 4.94, $p < 0.01$) and Desecration (F(3,113) = 15.54, $p < 0.001$).

TABLE 1
FACTOR ANALYSIS

Item	Predicted Factor*	Sacred Loss**	Desecration**
Something from God was torn out of my life.	3	0.877	−0.171
Something that gave sacred meaning to my life is now missing.	2	0.876	−0.059
Something of sacred importance in my life disappeared when this event took place.	2	0.843	−0.041
Something symbolic of God left my life.	1	0.853	−0.231
A part of my life in which I experienced God's love is now absent.	1	0.812	−0.091
My life lost something that once gave me a sense of spiritual fulfillment.	1	0.799	−0.085
I suffered a loss of something that was given to me by God.	2	0.765	−0.164
Something I held sacred is no longer present in my life.	2	0.722	−0.017
This event involved losing a gift from God.	1	0.717	−0.038
Something that connected me to God is gone.	1	0.687	0.093
A source of spirituality became absent in my life.	2	0.680	0.176
Something that contained God is now empty.	1	0.561	0.197
In this event, something central to my spirituality was lost.	2	0.570	0.295
A part of my life that God made sacred was attacked.	3	***	***
I lost something I thought God wanted for me.	1	***	***
A violation of something spiritual to me occurred.	4	***	***
The Divine in my life was intentionally harmed through this event.	3	***	***
Part of the pain of this event involved the loss of a blessing.	2	***	***
This event was an immoral act against something I value.	4	−0.311	0.954
The event was a sinful act involving something meaningful in my life.	4	−0.268	0.951
This event was both an offense against me and against God.	3	−0.178	0.925
Something evil ruined a blessing in my life.	4	−0.168	0.878
Something sacred that came from God was dishonored.	3	0.003	0.816
This event ruined a blessing from God.	3	−0.018	0.676
Something symbolic of God was purposely damaged.	3	0.176	0.664
A sacred part of my life was violated.	4	0.269	0.636
This event was a transgression of something sacred.	4	0.304	0.583
Something that was sacred to me was destroyed.	4	0.252	0.579

*Hypothesized factor loading during scale development phase.

**Component loadings from Principal components analysis with promax rotation and Kaiser normalization, forcing two factors.

***Item excluded due to cross-loading.

1 = Theistic Loss, 2 = Nontheistic Loss, 3 = Theistic Desecration, 4 = Nontheistic Desecration.

Sacred Loss scores were greatest for those who categorized their event as a loss (Mn = 26.96) and both a loss and a violation (Mn = 25.71) and less for those who categorized their events as a violation (Mn = 15.71) or neither a loss nor violation (Mn = 14.63). Desecration scores were highest for those who labeled their event both a loss and a violation (Mn = 23.39) and lower for those who categorized their event as a violation (Mn = 13.43), a loss (Mn = 13.00), or neither a loss nor violation (Mn = 11.81).

Intrusive Thoughts and Avoidant Behaviors

The Impact of Event Scale (IES) was used to assess intrusive thoughts and avoidant behaviors often associated with anxiety disorders or stress-response syndromes to traumatic events (Horowitz, Wilner, and Alvarez 1979). Seven items were summed to assess intrusive thoughts, such as "pictures about it popped into my mind" and "I had waves of strong feelings about it." Eight items were summed to assess avoidant behaviors, for example, "I tried not to talk about it" and "I stayed away from reminders of it." Items on both subscales were rated by their frequency on a four-point scale: (0), "not at all," (1), "rarely," (2), "sometimes," and (3), "often." In previous research the internal consistency of both subscales was adequate (intrusion subscale $\alpha = 0.78$, avoidance subscale $\alpha = 0.82$; Horowitz, Wilner, and Alvarez 1979). In this study, respondents answered all 15 IES questions about subjective distress associated specifically with the negative event they described.

Depressive Symptomatology

Depressive symptomatology was assessed with the 20-item Center for Epidemiological Studies—Depression Scale (CES-D; Radloff 1977). The CES-D was originally developed to measure depression in the general population and was therefore appropriate for the present community sample. The CES-D measures the level of current depressive symptoms, with an emphasis on the affective component of depressed mood. Extensive research has been conducted with the CES-D. It has demonstrated good internal consistency with community samples ($\alpha = 0.85$; Radloff 1977). Items on the CES-D are rated on a four-point scale from (1), "rarely or none of the time" to (4) "most or all of the time." In addition, five items of "state depression" (sad, blue, down, depressed, and tearful) were developed for the present study to correspond with the state anger and anxiety measures described below. Participants were asked to rate how well these items described the feelings they associate with their negative life event on a scale from (1), "not at all" to (5) "very much." Reliability for the five items of state depression was high ($\alpha = 0.94$).

Anger

Five items adapted from the State-Trait Anger Expression Inventory (Spielberger 1991) were used to assess anger associated with the particular negative life event participants described. The five items selected for this study included the words: angry, furious, annoyed, mad, and irritated. Participants were asked to rate how well these items described the feelings they associate with their negative life event on a scale from (1), "not at all" to (5) "very much." Reliability for the state anger scale in its original form was high ($\alpha = 0.93$). Reliability for this five-item version was also high ($\alpha = 0.97$).

Anxiety

Five items adapted from the State-Trait Anxiety Inventory (Form Y; Spielberger 1983) were used to assess anxiety associated with this specific negative life event. Items included the words nervous, tense, worried, upset, and strained. The response format was the same for these items

as for the depression and anger items noted previously. Reliability for the original 12-item state anxiety scale was high ($\alpha = 0.86$–0.95 in four different samples). The reliability of the five-item version in this study was also high ($\alpha = 0.91$).

Physical Health

Negative health symptoms were measured by a scale created by Reifman, Biernat, and Lang (1991). We assessed health by asking participants the number of days (never, 1–2, 3–6, 7–14, 15+ days) they experienced various physical symptoms (e.g., cold or flu, headaches, nausea or upset stomach) over a month's time. Reliability for the scale was adequate in samples of college students ($\alpha = 0.83$; Magyar, Pargament, and Mohaney 2000) and married professional women with small children ($\alpha = 0.72$; Reifman, Biernat, and Lang 1991). In addition, number and type of medications taken in the past month and three questions adapted from Schuler (1998) regarding frequency of doctor visits and missed days of work or school were also assessed.

Posttraumatic Growth

The Posttraumatic Growth Inventory (PTGI) was designed to assess positive outcomes following a traumatic experience (Tedeschi and Calhoun 1996). Nineteen items from the PTGI were used to assess positive change (e.g., relating to others, new possibilities, personal strength, appreciation for life). Response choices were distributed on a five-point scale with the endpoints, (0), "I did not experience this change as a result of this negative event," and (4), "I did experience this change to a great degree as a result of this negative event." The internal consistency of the combined PTGI is high ($\alpha = 0.90$; Tedeschi and Calhoun 1996).

Spiritual Change

Participants answered three questions that assess spiritual changes that took place since the negative event ("I have grown closer to God," "I have grown closer to my church," and "I have grown spiritually;" Pargament et al. 1990). These three questions were embedded in the PTGI and therefore used the same response format as the PTGI. The measure has shown good internal consistency in community samples ($\alpha = 0.87$; Pargament et al. 1990).

Religious Coping

Religious coping methods with the specific negative event were measured using the 14 items from the Brief RCOPE and 27 additional items from the full RCOPE that assess a wider range of positive and negative religious coping strategies (Pargament, Koenig, and Perez 2000). Twenty-six items assessing positive coping strategies were summed to generate a positive religious coping score. Examples include questions regarding spiritual connection, spiritual support, religious conversion, and religious forgiving. Fifteen items were summed to create the negative religious coping score, including questions regarding perceived punishment from God, spiritual and religious discontent, demonic reappraisal, and reappraisal of God's power. Respondents were asked to indicate how frequently they engaged in religious methods of coping after the experience of their particular negative life event. Items were rated on a four-point scale from (0), "not at all" to (3), "a great deal." Previous research reported acceptable reliability for the RCOPE subscales, ranging from $\alpha = 0.78$–0.94 (Pargament, Koenig, and Perez 2000).

Table 2 provides all scale means, standard deviations, ranges, and reliability coefficients yielded in this study.

TABLE 2
DESCRIPTIVE DATA ON ALL MEASURES

Variable	Mean	Std. Dev.	Range	α
Sacred loss	24.6	12.30	13–65	0.93
Desecration	16.4	9.31	10–50	0.92
Global religiosity	0.0	3.20	−8.0–5.1	0.80
Positive religious coping	27.0	18.08	0–68	0.96
Negative religious coping	4.2	5.74	0–25	0.84
Intrusive thoughts	9.0	5.65	0–21	0.89
Avoidant behaviors	7.4	5.45	0–24	0.83
State anger	10.8	6.66	4–25	0.97
State anxiety	11.2	6.07	2–25	0.91
State depression	12.4	6.39	5–25	0.94
Depression	34.2	12.57	20–77	0.94
Negative health symptoms	9.2	8.86	0–49	0.89
Medication use	19.3	4.79	5–33	0.45
Doctor visits (in past month)	0.7	0.97	0–3	*
Days absent from school/work (in past month)	0.2	0.48	0–3	*
Posttraumatic growth	35.3	19.66	0–76	0.95
Spiritual change	3.9	4.00	0–12	0.91

*Single item variable.

RESULTS

Significant Negative Life Events

Participants categorized the negative life event they experienced in checklist format. When individuals did not mark a categorization the researchers categorized the event by examining the qualitative description of the event. The most commonly reported event was the death of a close family member (29.2 percent), followed by serious illness/injury of a family member (12.5 percent), parenting/family relationship difficulty (10.8 percent), job loss/termination (9.2 percent), personal illness (6.7 percent), and divorce or separation (6.7 percent). Fifty percent of the sample characterized the event as a loss, whereas only 6 percent chose to describe the event as a violation of something important to them. Thirty-five percent indicated that the event was both a loss and a violation. Finally, participants reported the qualities of their lives that were lost or violated in the negative event they described. The most common aspects of life affected were emotional well-being (50.8 percent), a person (44.2 percent), a relationship (42.5 percent), psychological well-being (42.5 percent), and personal values (36.7 percent). On average, the event had occurred 16 months ago and had lasted for 5 months.

Descriptive Data and Zero-Order Correlations

Descriptive data are given in Table 2. Four missing data points were replaced with the group mean of that variable to ensure equivalent subject numbers across analyses. Table 2 indicates that all scales demonstrated adequate internal consistency, with the exception of medication use. Specifically, both Sacred Loss and Desecration demonstrated high internal consistency and adequate variability, although both were somewhat positively skewed. Over 38 percent of the sample reportedly perceived the event as a sacred loss to some degree. Over 24 percent of the

TABLE 3
CORRELATION MATRIX

	Sacred Loss	Desecration	Global Religiosity	Positive Religious Coping	Negative Religious Coping
Sacred loss	–				
Desecration	0.484***	–			
Global religiosity	0.134	0.187*	–		
Positive religious coping	0.237**	0.095	0.712***	–	
Negative religious coping	0.348***	0.599***	0.187*	0.267**	–
Intrusive thoughts	0.476***	0.398***	0.224*	0.366***	0.488***
Avoidant behaviors	0.415***	0.558***	0.169	0.134	0.595***
State anger	0.169	0.480***	0.069	−0.017	0.497***
State anxiety	0.203*	0.334***	0.112	0.167	0.440***
State depression	0.385**	0.278**	0.109	0.259**	0.405***
Depression	0.384***	0.266**	0.068	0.156	0.474***
Negative health symptoms	0.173	0.111	0.073	0.158	0.344***
Medication use	0.093	−0.066	−0.015	0.080	−0.054
Doctor visits (in past month)	−0.055	−0.171	0.222*	0.181	0.005
Days absent from school/work (in past month)	0.014	−0.077	0.114	0.090	0.010
Posttraumatic growth	0.287**	−0.020	0.239*	0.563***	0.189*
Spiritual change	0.238**	0.152	0.573***	0.732***	0.233*

$^*p \leq 0.05$; $^{**}p \leq 0.01$; $^{***}p \leq 0.001$.

participants perceived the event as a desecration to some degree. Participants endorsed Sacred Loss to a greater extent than Desecration when describing their appraisals of their negative life event (average item means 1.9 and 1.3, respectively).

Pearson correlations between Sacred Loss, Desecration, Global Religiosity, and Positive and Negative Religious Coping are presented in Table 3. Hypothesis 1 predicted significant correlations between Sacred Loss and Desecration and the measures of outcomes. Consistent with this hypothesis, Sacred Loss and Desecration were significantly intercorrelated with the trauma impact of the event (IES) and emotional distress. Specifically, higher levels of Sacred Loss and Desecration were associated with more intrusion, avoidance, anxiety, and depression. Desecration was also significantly correlated with higher levels of anger. Sacred Loss was also associated with greater stress-related growth and spiritual change. Contrary to Hypothesis 1, neither Sacred Loss nor Desecration was significantly correlated with physical health outcomes.

Hierarchical Regression Analyses

To test Hypothesis 2 and the differential predictive validity of Sacred Loss and Desecration, regression analyses were conducted using the criteria of trauma impact, emotional distress, physical health, and growth. First, an analysis was conducted of potential confounding variables that also may predict the criteria. Two potential variables were identified. Specifically, the report that another person caused the negative event to occur, and the number of objects lost or violated in the event (e.g., person, value) were significantly related to at least four of the criteria measures. Thus, these two variables were controlled for in Step 1, along with global religiosity, to isolate the unique predictive ability of Sacred Loss and Desecration beyond situational factors and traditional indices of religiousness. Next, Sacred Loss and Desecration were entered in Step 2. Table 4

TABLE 4
HIERARCHIAL REGRESSION ANALYSES

Criterion	Step	R^2	R^2 change	Beta in Step 2	
				Sacred Loss	Desecration
Hierarchical Regression Models					
Intrusive thoughts	1	0.231	0.231***		
	2	0.355	0.124***	0.335***	0.082
Avoidant behaviors	1	0.257	0.257***		
	2	0.412	0.155***	0.212*	0.297**
State anger	1	0.263	0.263***		
	2	0.333	0.070**	−0.015	0.316**
State anxiety	1	0.205	0.205***		
	2	0.225	0.020	0.071	0.111
State depression	1	0.177	0.177***		
	2	0.245	0.068**	0.265*	0.030
Depression	1	0.208	0.208***		
	2	0.290	0.083**	0.343***	−0.096
Negative health symptoms	1	0.064	0.064		
	2	0.085	0.020	0.176	−0.109
Medication use	1	0.031	0.031		
	2	0.040	0.009	0.107	−0.107
Multiple Regression Models					
Doctor visits (in past month)	1	0.058	0.058		
	2	0.107	0.049	−0.004	−0.254*
Days absent from school/work (in past month)	1	0.024	0.024		
	2	0.060	0.036	0.104	−0.255*
Posttraumatic growth	1	0.101	0.101**		
	2	0.208	0.107***	0.375***	−0.349**
Spiritual change	1	0.331	0.331***		
	2	0.359	0.028	0.203*	−0.075

*$p \leq 0.05$; **$p \leq 0.01$; ***$p \leq 0.001$.
Step 1: Global religiosity, perpetrator item, and number of objects lost/violated.
Step 2: Sacred loss and desecration.

presents the test of the significance of the R^2 change in Step 2 and the standardized beta weights for Sacred Loss and Desecration. It is important to note that the terms "predictor" and "criterion" are used in the statistical sense here and do not imply a causal relationship between the variables.

Focusing on the significance of the R^2 change in Step 2, Sacred Loss and Desecration accounted for a significant portion of the variance in 6 of the 12 criteria. Inspection of the standardized beta weights reveals support for the differential prediction of Sacred Loss and Desecration across the various criterion measures. Specifically, as predicted in Hypothesis 2, Sacred Loss was tied to greater internalized emotional distress (i.e., depression) and Desecration was associated with greater externalized distress (i.e., anger). Furthermore, Sacred Loss predicted greater posttraumatic stress symptoms (intrusion and avoidance) and positive change scores (posttraumatic growth and spiritual change), while Desecration predicted greater avoidance-type trauma symptoms and less posttraumatic growth. Interestingly, Desecration also predicted fewer absences from school or work and few doctor visits in the past month.

Regression analyses were also conducted to test whether sex, global religiousness, religious affiliation, time since the negative life event, and religious coping moderated the relationship between sacred loss, desecration, and the criterion variables. The interaction term was entered into Step 3 of the regression analysis and then tested for incremental significance. However, no noteworthy moderators were found in this study.

Religious Coping as a Mediator

As a test of Hypothesis 3, regression analyses were conducted to determine whether positive or negative religious coping mediated the relationship between sacred loss and outcome variables and desecration and outcome variables. Mediation effects were evaluated by the method outlined in Baron and Kenny (1986). According to this method, to establish mediation the independent variable (IV), dependent variable (DV), and potential mediator must be significantly correlated. These conditions were met in 17 of the 32 analyses. In these instances, three separate regression equations were run in which the potential mediator was regressed on the IV (Equation 1), the DV was regressed on the IV (Equation 2), and the DV was regressed on both the IV and the potential mediator (Equation 3). Mediation was indicated when the effect of the IV on the DV was less in the third equation than in the second. This was determined by comparing standardized beta coefficients from Equations 2 and 3 (the standardized beta coefficient should be less in Equation 3 than in Equation 2). To provide a more formal assessment of mediation effects, we also conducted Sobel (1982) tests. This test assesses whether the indirect effect of the IV on the DV via the mediator is significantly different from zero (see also MacKinnon et al. 2002). Tables 5 and 6 display the results of the regression analyses and Sobel tests for mediation.

The mediator analysis of negative religious coping was consistent with predictions. Focusing on the change in standardized beta coefficients, Table 5 reveals that the standardized beta coefficients were less in Equation 3 than in Equation 2 in 11 of the 13 analyses. Inspection of the results of the Sobel tests in Table 5 confirms these findings and indicates that negative religious coping acted as a strong mediator linking both sacred loss and desecration to several measures of emotional distress and trauma impact. Specifically, negative religious coping linked sacred loss with depressive symptoms as measured by the CES-D and the five-item state depression scale, with both the intrusion and avoidance dimensions of the IES scale, and with anxiety. Negative religious coping did not act as a mediator linking sacred loss with spiritual change and posttraumatic growth. Furthermore, negative religious coping linked desecration with depressive symptoms as measured by the CES-D and the five-item state depression scale, with both the intrusion and avoidance dimensions of the IES scale, desecration with state anxiety, and with state anger.

With respect to positive religious coping, Table 6 presents a few clear signs of mediation. In three of the four analyses, the standardized beta coefficients were less in Equation 3 than in Equation 2. Once again, this pattern of findings was confirmed by significant Sobel tests. Specifically, positive religious coping mediated the relationships between sacred loss and both growth measures (i.e., spiritual change and posttraumatic growth) and the intrusion dimension of the IES scale. Positive religious coping did not mediate the ties between sacred loss and state depression. Tests for mediation of the relationship between desecration and outcomes by positive religious coping were not conducted, since the conditions for potential mediation were not met (i.e., positive religious coping was not associated with desecration).

In the case of significant mediating effects, it is important to note that the mediating variables reduced, but generally did not eliminate, the relationships of sacred loss and desecration with the outcome variables. Thus, negative and positive religious coping partially rather than fully mediated the relationships between these variables.

TABLE 5
REGRESSION ANALYSES FOR SACRED LOSS AND DESECRATION—NEGATIVE RELIGIOUS COPING AS THE MEDIATOR VARIABLE

Independent Variable	Mediator Variable	Spiritual Change	Posttraumatic Growth	CES-D	State Depression	State Anxiety	State Anger	IES-Intrusion	IES-Avoidance
						Dependent Variables			
Sacred loss	Negative religious coping	No mediation	No mediation	1. $\Delta R^2 = 0.121^{***}$	1. $\Delta R^2 = 0.121^{***}$	1. $\Delta R^2 = 0.121^{***}$	N/A	1. $\Delta R^2 = 0.121^{***}$	1. $\Delta R^2 = 0.121^{***}$
				$\beta = 0.348$	$\beta = 0.348$	$\beta = 0.348$		$\beta = 0.348$	$\beta = 0.348$
				2. $\Delta R^2 = 0.148^{***}$	2. $\Delta R^2 = 0.148^{***}$	2. $\Delta R^2 = 0.041^{*}$		2. $\Delta R^2 = 0.226^{***}$	2. $\Delta R^2 = 0.172^{***}$
				$\beta = 0.384$	$\beta = 0.385$	$\beta = 0.203$		$\beta = 0.476$	$\beta = 0.415$
				3. $\Delta R^2 = 0.280^{***}$	3. $\Delta R^2 = 0.232^{***}$	3. $\Delta R^2 = 0.197^{***}$		3. $\Delta R^2 = 0.345^{***}$	3. $\Delta R^2 = 0.403^{***}$
				$\beta = 0.249$	$\beta = 0.278$	$\beta = 0.056$		$\beta = 0.348$	$\beta = 0.237$
				$\Delta\beta = \mathbf{0.135}$	$\Delta\beta = \mathbf{0.107}$	$\Delta\beta = \mathbf{0.147}$		$\Delta\beta = \mathbf{0.128}$	$\Delta\beta = \mathbf{0.178}$
				$Z = 2.56^{**}$	$Z = 2.60^{**}$	$Z = 2.99^{**}$		$Z = 2.94^{**}$	$Z = 3.39^{***}$
Desecration	Negative religious coping	N/A	N/A	1. $\Delta R^2 = 0.358^{***}$	1. $\Delta R^2 = 0.358^{***}$	1. $\Delta R^2 = 0.358^{***}$	1. $\Delta R^2 = 0.358^{***}$	1. $\Delta R^2 = 0.358^{***}$	1. $\Delta R^2 = 0.358^{***}$
				$\beta = 0.599$	$\beta = 0.599$	$\beta = 0.599$	$\beta = 0.599$	$\beta = 0.599$	$\beta = 0.599$
				2. $\Delta R^2 = 0.071^{**}$	2. $\Delta R^2 = 0.077^{**}$	2. $\Delta R^2 = 0.111^{***}$	2. $\Delta R^2 = 0.231^{***}$	2. $\Delta R^2 = 0.158^{***}$	2. $\Delta R^2 = 0.311^{***}$
				$\beta = 0.266$	$\beta = 0.278$	$\beta = 0.334$	$\beta = 0.480$	$\beta = 0.398$	$\beta = 0.558$
				3. $\Delta R^2 = 0.226^{***}$	3. $\Delta R^2 = 0.166^{***}$	3. $\Delta R^2 = 0.202^{***}$	3. $\Delta R^2 = 0.299^{***}$	3. $\Delta R^2 = 0.256^{***}$	3. $\Delta R^2 = 0.417^{***}$
				$\beta = -0.028$	$\beta = 0.055$	$\beta = 0.109$	$\beta = 0.285$	$\beta = 0.164$	$\beta = 0.315$
				$\Delta\beta = \mathbf{0.294}$	$\Delta\beta = \mathbf{0.223}$	$\Delta\beta = \mathbf{0.225}$	$\Delta\beta = \mathbf{0.195}$	$\Delta\beta = \mathbf{0.234}$	$\Delta\beta = \mathbf{0.243}$
				$Z = 4.08^{***}$	$Z = 3.18^{***}$	$Z = 3.25^{***}$	$Z = 3.05^{***}$	$Z = 3.47^{***}$	$Z = 3.93^{***}$

$^{*}p \leq 0.05$; $^{**}p \leq 0.01$; $^{***}p \leq 0.001$.

Note: Step 1: Mediator regressed on independent variable (sacred loss or desecration); Step 2: Dependent variable regressed on independent variable; Step 3: Dependent variable regressed on independent variable and the mediator, $\beta =$ standardized beta coefficient; $\Delta\beta =$ change in the standardized beta from regression Equation 2 to regression Equation 3; N/A = not applicable because did not meet initial correlational criteria to test for mediation effects (Baron and Kenny 1986); Z = test of whether indirect effect of independent variable on dependent variable via the mediator is significantly different from zero (Sobel 1982).

TABLE 6
REGRESSION ANALYSES FOR SACRED LOSS AND DESECRATION—POSITIVE RELIGIOUS COPING
AS THE MEDIATOR VARIABLE

Independent Variable	Mediator Variable	Dependent Variables							
		Spiritual Change	Posttraumatic Growth	CES-D	State Depression	State Anxiety	State Anger	IES-Intrusion	IES-Avoidance
Sacred loss	Positive religious coping	1. $\Delta R^2 = 0.056^{**}$ $\beta = 0.237$ 2. $\Delta R^2 = 0.057^{**}$ $\beta = 0.238$ 3. $\Delta R^2 = 0.540^{***}$ $\beta = 0.068$ $\boldsymbol{\Delta\beta = 0.170}$ $Z = 2.55^{*}$	1. $\Delta R^2 = 0.056^{**}$ $\beta = 0.237$ 2. $\Delta R^2 = 0.083^{***}$ $\beta = 0.287$ 3. $\Delta R^2 = 0.343^{***}$ $\beta = 0.163$ $\boldsymbol{\Delta\beta = 0.124}$ $Z = 2.42^{*}$	N/A	No Mediation	N/A	N/A	1. $\Delta R^2 = 0.056^{**}$ $\beta = 0.237$ 2. $\Delta R^2 = 0.226^{***}$ $\beta = 0.476$ 3. $\Delta R^2 = 0.294^{***}$ $\beta = 0.412$ $\boldsymbol{\Delta\beta = 0.064}$ $\boldsymbol{Z = 2.01^{*}}$	N/A
Desecration	Positive religious coping	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

$^{*}p \leq 0.05$; $^{**}p \leq 0.01$; $^{***}p \leq 0.001$.

Note: Step 1: Mediator regressed on independent variable (sacred loss or desecration); Step 2: Dependent variable regressed on independent variable; Step 3: Dependent variable regressed on independent variable and the mediator, β = Standardized beta coefficient; $\Delta\beta$ = change in the standardized beta from regression Equation 2 to regression Equation 3; N/A = not applicable because did not meet initial correlational criteria to test for mediation effects (Baron and Kenny 1986); Z = test of whether indirect effect of independent variable on dependent variable via the mediator is significantly different from zero (Sobel 1982).

Discussion

In this article, we proposed that people understand life events in terms of spiritual as well as psychological, social, and physical dimensions. Our focus here was on two spiritual appraisals—appraisals of the loss of sacred aspects of life and appraisals of the violation of the sacred (i.e., desecration)—and their implications for health and well-being. Our findings were largely consistent with our predictions. Below we discuss the central findings.

First, a significant number of participants in the community sample viewed the most significant negative event of their lives in the past two years as a sacred loss and/or desecration. According to the average item means of the sacred loss and desecration scales, over 38 percent of the sample reportedly perceived the event as a sacred loss to some degree or more. Over 24 percent of the participants perceived the event as a desecration to some degree or more. Thus, it appears that many people in the general community lend some sort of spiritual meaning to their most critical life events.

Second, as we hypothesized, sacred loss and desecration were associated with greater trauma impact and emotional distress. These results are consistent with Magyar, Pargament, and Mahoney's (2000) study of college students who had been hurt in romantic relationships. Desecration in their sample was tied to reports of poorer mental health. The present study extends Magyar, Pargament, and Mahoney's findings to the phenomenon of sacred loss and to a community sample dealing with a wider range of life events. However, in contrast to the Magyar, Pargament, and Mahoney study and our own predictions, we did not find significant links between sacred loss, desecration, and physical health.

Third, consistent with our predictions, we found that sacred loss and desecration had distinctive correlates. After controlling for global religiousness and two event-related variables (whether the individual identified a perpetrator to his/her negative event, the number of objects the participant reported lost or violated in the event), sacred loss emerged as a significant predictor of not only greater depression, but also more intrusive thoughts about the event, greater posttraumatic growth, and positive spiritual outcomes. Desecration, on the other hand, was predictive of not only more anger, but also lower levels of posttraumatic growth. Interestingly, desecration was also predictive of fewer days absent from school or work in the past month and fewer doctor visits in the past month.

These distinctive correlates underscore the multidimensional character of spirituality. Spirituality has been defined in terms of a diverse array of thoughts, behaviors, emotions, motivations, and relationships that have as their focus the sacred (Pargament and Mahoney 2002). Differentiating among these expressions of spirituality is essential to untangling the complex connections between spirituality, health, and well-being (Ellison and Levin 1998). There are, these findings show, important differences among spiritual appraisals of life events. Appraisals of sacred loss, it appears, are accompanied by feelings of sadness, hopelessness, and rumination about the event. However, in spite of the grief and sadness they bring, losses of the sacred are also tied to perceptions of more personal growth and transformation. Thus, the experience of sacred loss seems to be tied to a process of slowing down and self-reflection that may be painful but ultimately healing and growthful. Interestingly, within the trauma literature, researchers have also reported links between traumatic events (many loss-related) and higher levels of stress-related growth (Brennan 2002; Tedeschi and Calhoun 1996). Perhaps some of these effects are reflective of the sacred nature of the loss.

In contrast, appraisals of desecration seem to be part of a constellation of anger and avoidance. Immersion in school or work may be another part of this pattern as indicated by the ties between desecration and fewer days missed at work/school in the past month. Energized by anger and the sense of deep spiritual violation, people who have experienced a desecration may be strongly motivated to shift their focus from the trauma itself and attempt to regain control over their lives

by investing more in their work or school. While this approach may deflect some of the anger and frustration associated with the violation, it may not lead to more positive change, for unlike appraisals of sacred loss, appraisals of desecration appeared to be inhibitors of posttraumatic growth. Appraisals of spiritual violation could also inhibit growth by shaking or shattering the individual's most fundamental assumptions about the world, grounded as they are in beliefs of benevolence, trust, and fairness (Janoff-Bulman 1989).

Finally, some support was found for the hypothesis that the links between sacred loss and desecration and outcomes are mediated by religious coping. Negative religious coping emerged as the main mediating variable. Specifically, both sacred loss and desecration were associated with higher levels of negative religious coping that, in turn, was tied to greater trauma impact and emotional distress, including intrusive and avoidant thoughts related to the event, depression, state anxiety, and, in the case of desecration, state anger. Thus, negative religious coping appears to be one of the mechanisms through which spiritual appraisals relate to health outcomes. These findings are consistent with research in the religious coping literature, which has shown that negative religious coping predicts poorer mental health and physical health, and higher risk of mortality (Exline, Yali, and Sanderson 2000; Fitchett et al. 1999; Pargament et al. 2001).

Positive religious coping did appear to mediate the relationship between sacred loss and greater spiritual change and posttraumatic growth. These findings help to explain the seemingly contradictory positive correlations that have emerged in the literature between religious coping with both stress and well-being (e.g., Pargament et al. 1999). Our findings suggest that spiritual losses may elicit positive religious forms of coping that, in turn, facilitate growth and change. Religious support, benevolent religious appraisals, spiritual connections, and other forms of positive religious coping may offer distinctive ways to place the most significant of losses in a larger, more meaningful, growth-enhancing perspective (Pargament 1997). With the exception of intrusive symptoms, positive religious coping did not link sacred loss or desecration to the other measures of trauma impact, emotional distress, and physical health. Other potential mediating variables (e.g., forgiveness, humility, social support, gratitude) may play a more prominent role in reducing the impact of these spiritual appraisals on health and well-being. Overall, however, the findings point to the significant role that both spiritual appraisals and religious forms of coping play in the process of adjustment to life stressors.

Implications, Limitations, and Conclusions

In short, we have identified two distinctive modes of spiritual appraisal of negative life events. Are there other modes of spiritual appraisal? Perhaps. Researchers have also assessed appraisals of life events as spiritual challenges (i.e., trials or tests from God, opportunities for spiritual growth) and found that these appraisals are often associated with more positive outcomes of stressful life events (Mickley et al. 1998). Another potentially relevant class of spiritual appraisals might involve spiritual threats—perceptions of events as signs or warnings from God that the individual needs to make important changes in thought or action. Further studies of sacred loss, desecration, and other spiritual appraisals certainly seem warranted.

Overall, these findings underscore the importance of attending to the spiritual dimension of life events, appraisals, and coping. Events that affect aspects of life people hold sacred appear to have significant implications for health and well-being. Why should this be the case? Theoretical writings suggest that people invest more of themselves in caring for and preserving and protecting sacred objects (see Pargament and Mahoney in press). In return, they derive greater satisfaction and reward from the experience of the sacred (Emmons, Cheung, Tehrani 1998; Mahoney et al. 1999). Moreover, sacred aspects of life are likely to be central to individuals' assumptive worlds

and to the stories they live by. The sacred may add greater coherence and unity to personality and greater purpose to life as a whole (Emmons 1999). Sacred objects are, in short, objects of preeminent, transcendent value that help to make life meaningful, enriching, and whole. The loss or violation of sacred objects, in turn, is likely to have powerful consequences. After all, we are talking about sacred matters.

These are, however, only initial findings. Whether these findings generalize to other populations is uncertain. The sample was almost exclusively white and overrepresented women and higher SES persons from the population of residents in the county. Though gender, SES, and other demographic variables did not moderate the effects that were found in this study, additional research is needed to determine the degree to which these results generalize to a more diverse population. Furthermore, this study was cross-sectional and we cannot conclude that perceptions of sacred loss and desecration result in poorer mental health. Nor can we conclude that sacred loss and desecration trigger negative religious coping, which then produces poorer mental health outcomes. Longitudinal studies are needed to determine whether spiritual appraisals have short-term and/or long-term impact on mental and physical health, and to identify those mechanisms that mediate these relationships over time.

In spite of the limitations of this study, we believe the results are promising and begin to shed some light on some of the most puzzling and disturbing phenomena of our day. For example, the constructs of desecration and sacred loss may be helpful in understanding the actions of terrorists who justify their violence as righteous anger; that is, the anger is seen as a legitimate response to sacrilege and perceived violations of the sacred that have been perpetrated against them. The depth and tenacity of the discord between pro-choice and right-to-life groups may also reflect, in part, their conflicting definitions of the sacred, and their perceptions that each group has desecrated the values of the other. Finally, concepts of sacred loss and desecration may also be useful in the clinical realm. Both spiritual appraisals may contribute to long-standing depression, anxiety, posttraumatic stress disorder, and other clinical problems that seem resistant to treatment. When coupled with these appraisals, negative religious coping may increase the risk of serious problems. Conversely, positive religious coping methods may help individuals turn their spiritual trials into opportunities for growth and development. Thus, our work suggests, albeit indirectly, that there may be an important spiritual dimension to significant human problems and their resolution. By making this dimension a more explicit part of the process of assessing people and problems, treatment may be enhanced in turn (e.g., Miller 1999; Richards and Bergin 1997).

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