The Correlates of Spiritual Struggle During the College Years

I have a hard time believing in God or a higher power because you see so much suffering everywhere. You wonder if someone is in charge or why would He or She do this to other people. Why are some people suffering while other people have all the riches in the world?

-A college student's reflection in a focus group, 2003

Spiritual struggle is an experience familiar to many students whose college years are marked by reflections on faith, purpose, and life meaning and by efforts to understand the preponderance of suffering, evil, and death in the world. From a clinical standpoint, there is growing concern regarding the numbers of individuals suffering psychologically from religious or spiritual problems. Increased attention to these maladies led to the creation of a new category in the *Diagnostic and Statistical Manual of Mental Disorders* in 1994. Problems of a religious or spiritual nature have come to include such experiences as losing or questioning one's faith, religious conversion, and questioning spiritual values (Lukoff, Lu, & Turner, 1998).

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The present study defined "spiritual struggle," a scale derived through factor analysis, as intrapsychic concerns about matters of faith, purpose, and meaning in life. The scale was comprised of five items dealing with questioning one's religious/spiritual beliefs; feeling unsettled about spiritual and religious matters; struggling to understand evil, suffering, and death; feeling angry at God; and feeling disillusioned with one's religious upbringing. The study is driven by questions regarding the factors that predispose students to spiritual struggles and the experiences through college that might lead to them. Further, it asks whether there are potential consequences of such struggles for students' self-rated physical well-being, self-esteem, and levels of psychological distress and whether spiritual struggles relate to growth in religiousness, spirituality, and acceptance of people with different religious/spiritual views.¹ In the sections that follow, we review the relevant literature in an attempt to summarize what is currently known about both the causes and consequences of spiritual struggle, identifying as well how this study will add to that body of work. Although the correlational nature of the studies reviewed precludes concluding with absolute confidence that certain variables are precursors to or outcomes of spiritual struggle, all studies were conducted within an implied causal framework, and we have organized the next section to reflect this distinction between causes and consequences.

Background and Conceptual Framework

Causes of Spiritual Struggle

Spiritual struggles may be rooted in numerous causes, but they are most notably linked to difficult life circumstances (Pargament, Murray-Swank, Magyar, & Ano, 2005) and to what Smucker referred to as "breaking the web of life" (1996, p. 84), or encountering events that unexpectedly threaten to shatter one's customary state of being. In a study of nearly 5,550 students attending 39 colleges and universities across the country, Johnson and Hayes (2003) revealed that fully 44% of their sample experienced at least "a little bit" of distress related to religious or spiritual concerns, and approximately one quarter felt considerable distress surrounding these issues. Moreover, the authors reported that the following were significant correlates of religious/spiritual concerns: confusion about beliefs and values, loss of a relationship, sexual assault, homesickness, and suicidal thoughts and feelings. Clearly, it is difficult to determine the direction of causation in these relationships, but at the same time, we can see how each of these experiences is logically connected to spiritual struggle, regardless of whether they occur in tandem with the struggle or precede it.

Personal characteristics and propensities are yet another set of factors that can lead to spiritual struggle. Individuals with weak spiritual orientations may come to a point of disequilibrium when life events are overwhelming (Pargament et al., 2005). Weak spiritual orientations vulnerable to struggle include orientations that fail to acknowledge and accept the troubling aspects of existence (such as evil and suffering), that are insufficiently integrated into an individual's life, and that are based on insecure religious attachments to an unpredictable or distant God (Pargament et al., 2005). Other personal traits such as anger and neuroticism leave people vulnerable to spiritual struggle as well (Pargament et al., 2005). In addition to psychological traits such as these, spiritual or religious struggle can emerge out of stress related to one's identity. As one example of this, Dubow, Pargament, Boxer, and Tarakeshwar (1999) reported that connectedness to religion and culture among Jewish adolescents might increase their likelihood of experiencing stressful situations such as exposure to anti-Semitic comments and peer conflict. These religious stressors, in turn, were associated with spiritual struggle in the form of wondering "whether God can really do everything," "if God cares about me," and "what I did for God to punish me." In light of the challenges that confront women and gay and lesbian individuals in certain religious contexts, one's gender or sexual identity is also grounds for potential spiritual struggle (Bryant, 2003; Chater, 2000; Love, Bock, Jannarone, & Richardson, 2005). Along a similar vein, Becker (1994) identified spiritual struggle with larger political and social movements in which individuals decry the oppressive transgressions of society and call for change. It is in the midst of these external conflicts that internal spiritual struggles are realized.

Outcomes of Spiritual Struggle

As Hill and Pargament (2003) illustrated in their review of research on religious/spiritual implications for health, studies to date have tended uniformly to support the notion that spirituality and religion have beneficial outcomes for physical and mental health (see also Larson & Larson, 2003). The limitations of such studies are that they utilize relatively simplistic measures of religion and spirituality (religious service attendance, denominational affiliation, etc.) (Hill & Pargament, 2003). Moreover, they might fail to identify the unique ramifications for specific groups of individuals. For instance, within certain young adult populations (e.g., college students), religious variables might not relate as clearly to well-being as in studies based on other populations (Schafer, 1997; Schafer & King, 1990). Finally, the focus of research on spirituality/religiousness and well-being often investigates the implications of

positive facets of spiritual and religious life (Pargament, Koenig, & Perez, 2000; see also Adams, Bezner, Drabbs, Zambarano, & Steinhardt, 2000; Baker, 2003): feeling connected to a force or higher power beyond oneself; having a sense of purpose, meaning, and coherence in life; finding security in a supportive religious community; being encouraged to maintain a healthy lifestyle; and experiencing assuredness in having answers to life's perplexing uncertainties. This begs the question: What are the consequences of more negative spiritual and religious experiences? How are individuals affected by spiritual struggle and religious doubt—the feeling that God is distant, unloving, or perhaps nonexistent; the realization that suffering and pain are just as (if not more) common as happiness and joy; the disappointment in a religious family or community that ostracizes or oppresses?

Some indications of the impact of spiritual struggle are available in the current fund of research. To begin, spiritual struggle appears to be negatively associated with psychological health and results in such outcomes as depression, anxiety, negative mood, low self-esteem, and even suicidal thoughts (Hill & Pargament, 2003; Pargament et al., 2005). Pointing to the potentially harmful consequences of religious life, Pargament et al. (2000), in assessing various forms of religious coping, identified negative religious coping methods (i.e., punishing God reappraisals, reappraisals of God's power, and spiritual discontent) as predictive of mental and physical maladjustment among college students. Relatedly, in a sample of college students, Genia (1996) found that high scorers on the dimension "Quest"—defined by their tendency to critically evaluate their spiritual beliefs and values—were more prone to experience lower levels of spiritual well-being and psychological health.

Scholarship in the medical and nursing fields has contributed much to our understanding of the role spiritual struggle plays in health. A review of prior research led Fitchett et al. to conclude, "some types of religious struggle may contribute to poor physical and mental health outcomes for clinical samples" (2004, p. 181). Their work validates the correlation between serious illness and spiritual struggle ("negative religious coping") and between spiritual struggle and emotional distress/depression, noting that close to 15% of medical patients are at risk for poor physical and mental health outcomes due to religious struggle. Other work has linked spiritual distress—particularly feeling abandoned or unloved by God and inflicted by the Devil—to higher rates of earlier mortality (Larson & Larson, 2003). Because patients are often in particularly vulnerable states with respect to both physical and mental well-being, medical practitioners are implored by the extant literature to identify and handle potential spiritual crises among patients with cultural knowledge and sensitivity (Di Meo, 1991; Engebretson, 1996; Fitchett et al., 2004; Sumner, 1998).

Despite the potential for compromised psychological and physical well-being during times of spiritual struggle, other studies recognize the possibility of positive outcomes (Hill & Pargament, 2003). Greater open-mindedness has been observed among individuals who have struggled spiritually (Hill & Pargament, 2003). Regarding the positive consequences of questing, a religious quest orientation is associated with tolerant values, promoting tolerant action, principled moral reasoning, and helping behaviors (Batson, Eidelman, Higley, & Russel, 2001; Batson & Schoenrade, 1991). Likewise, spiritual growth can occur as a result of struggling (Pargament et al., 2005). To be sure, many developmental frameworks assume in fact that "crisis" is both necessary and instrumental in promoting personal growth and maturation (Chickering & Reisser, 1993; Erikson, 1968; Hall, 1986; Perry, 1968; Smucker, 1996). "Crisis" does not imply tragedy or total dissolution of the self; rather, it is a point of transition (Erikson, 1968). Perry has noted the import of "challenge by countervailing forces" in the course of young adult development (1968, p. 58), while Chickering and Reisser have suggested that "significant education and significant development often involve some disruption and disequilibrium. . . . And in a college where powerful forces for student development are at work, turmoil will also be found; temporary dislocation and disorientation is part of the process" (1993, p. 366).

Reporting on the Faithful Change project, a multi-year study of faith development among students attending Evangelical Christian colleges, Holcomb and Nonneman echoed the notion that crisis is a precursor to development. Although crisis may not necessarily involve emotional turmoil, the researchers defined it as "a prolonged period of active engagement with, and exploration of, competing roles and ideologies . . . [including] anything that challenges people to examine what they believe and why" (2004, p. 100). In the Faithful Change study, three general categories of crisis came to light: significant exposure to diverse perspectives (people who think differently), substantial multicultural exposure (people who live differently), and general emotional crisis. All three forms of crisis purportedly encourage movement toward a more complex, reflective faith. Spiritual growth in the wake of crisis cannot be automatically assumed, however. There must be a balance between challenge and support (Holcomb & Nonneman, 2004). Without adequate challenge, growth may stagnate; without adequate support, faith may be lost.

Parks and Fowler, two scholars known for their contributions to tracing the developmental path of faith and spirituality, both have acknowledged the central role of struggle and crisis in spiritual growth. Fowler (1981) affirmed the significance of disequilibrium in spurring changes in patterns of faith and belief. Parks (2000), whose work focuses more directly on traditional-age college students, used the metaphor of "shipwreck" as the initial step in the young adult life toward "gladness," "amazement," and ultimately a more refined sense of meaning and faith. In her words, "the gladness on the other side of shipwreck arises from an embracing, complex kind of knowing that is experienced as a more trustworthy understanding of reality" (2000, p. 30). Moments of shipwreck, Parks suggested, come to bear on the young adult life in varied ways: relational trauma; realization of social injustice, suffering, and death; intellectual challenges to earlier faith; and disruptions in one's understanding of the nature of life and the world. Like Holcomb and Nonneman (2004), Parks proposed that constructive outcomes of crisis and shipwreck do not occur in a vacuum. Instead, the "hearth" serves as the ideal setting for positive change: a place of "equilibrium, offering an exquisite balance of stability and motion" (2000, p. 154). On the college campus, the hearth can take the form of a student organization, a mentoring relationship with a professor, or another supportive community in which students find space for critical reflection, warm conversation, and consolation. There are tangible examples of how growth can come from struggle in supportive "hearth" environments; for instance, Genia found that opportunities to discuss religious struggles (e.g., feelings of meaninglessness, doubts, difficulty with interfaith relationships) in psychospiritual group counseling sessions "enabled the students to begin reconstructing more personally meaningful spiritual values" (1990, p. 279).

Taken together, varied explanations for spiritual struggle offered in the limited knowledge base include personal hardship, a spiritual orientation that cannot accommodate life's difficulties, negative attributions of God, and an identity that leaves one vulnerable to prejudicial treatment and social inequity. Moreover, despite indications that spiritual struggle and poor psychological/physical health are inextricably linked, other scholars are convinced of the long-range benefits of struggle for other forms of personal growth. Nonetheless, more work remains to be done to understand the complex and *specific* dynamics of spiritual struggle in non-clinical, representative samples. Although the college years clearly hold considerable potential for students to experience "crisis" or "shipwreck" as they encounter perspectives and ideologies that differ from their own, very little research has examined this phenomenon and its implications for students representing a wide range of demographic, regional, and religious backgrounds. Thus, this study serves to address these important, yet understudied questions in a national and diverse sample:

What are the personal characteristics, orientations, and beliefs; environmental influences; and college experiences that predispose students to spiritual struggles?

What are the potential consequences of spiritual struggles for students' selfrated physical well-being, self-esteem, psychological distress, growth in religious/spiritual tolerance, and growth in religiousness and spirituality?

To address these questions, we designed a set of multivariate analyses to identify variables associated with students' spiritual struggles and to examine how students' struggles influence their well-being and overall development. Based on the available research, we entertained six key hypotheses: First, it was hypothesized that identity factors related to discrimination and maltreatment (i.e., being female, a person of color, a religious minority, or a person from a low socioeconomic background) would be associated with an increased incidence of spiritual struggle. Second, we expected that religiously engaged students (i.e., those who attended religious services, joined religious organizations on campus, read sacred religious texts, etc.) and those attending private religious colleges would be less likely to experience struggles because of the support systems and sense of security garnered from affiliation with religious communities. Third, we anticipated that certain experiences in college, particularly those involving personal vulnerability and high levels of exposure to diverse ideologies and ways of life, would be associated with struggling spiritually; such experiences include majoring in certain disciplines that cast a critical perspective on religious frameworks (e.g., science, psychology, and sociology), conversion to another religion, spiritual questing, and discussions on religion and politics. Fourth, we also tested the extent to which individuals with compassionate self-perceptions and orientations toward social activism and charitable involvement struggle spiritually. Individuals who serve those in need come face-to-face with the transgressions of society and social structures that oppress, and they might struggle to make sense of the stark contrasts between goodness and malevolence in the world-and how it is that the two exist simultaneously. Fifth, with one of our more exploratory hypotheses, based on Pargament et al.'s (2000) suggestion that spiritual struggle is connected to pessimistic attributions of God's nature and will, we predicted that certain conceptions of God-as mysterious, unknowable, and less benevolent-would positively correlate with struggle. Sixth, we predicted that spiritual struggle would correlate with

lower levels of self-esteem and declines in psychological and physical well-being but that struggles would relate to self-perceived development in other areas—namely, religious and spiritual growth and greater acceptance of others with differing religious beliefs.

Methods

Data Source and Sample

This study utilized two national college student surveys developed by the Higher Education Research Institute at the University of California, Los Angeles. The 2000 Cooperative Institutional Research Program (CIRP) Freshman Survey was administered to a representative sample of entering college students at 434 baccalaureate colleges and universities across the country. The CIRP questionnaire measures a wide range of constructs associated with students' behaviors, attitudes, values, self-assessments, and expectations as entering first-year students. A subset of students who had participated in the 2000 CIRP administration was surveyed three years later with the 2003 College Students' Beliefs and Values (CSBV) Survey, a new questionnaire that explores issues of meaning, purpose, and spirituality. The Spirituality in Higher Education project, the major multi-year program of research through which the CSBV survey was formulated, was initiated in 2003 with funding from the John Templeton Foundation.² The project seeks to explore the "inner" lives of college students: the values and beliefs that guide them, the meaning they derive from their education and the world around them, and the patterns of spiritual development that characterize their college years. In conjunction with the goal to understand these complex spiritual realities of students' experience, the project raises the equally critical question of the extent to which colleges and universities are equipped to support and facilitate students' quest for meaning and spiritual growth.

In 2003 the research team invited a diverse sample of institutions to participate in the pilot study. Forty-six institutions agreed to participate. From each of these 46 institutions the team randomly selected a sample of 250 students who had participated in the CIRP Freshmen Survey. Thus a total of 12,030 students received the CSBV questionnaire. Of the 11,547 students in the pilot study whose survey envelopes were not returned as being undeliverable, 3,680 usable questionnaires were returned, representing a 32% response rate. While the response rate is a modest one, we were fortunate in knowing a great deal about the nonrespondents, by virtue of the fact that they had completed a lengthy freshman survey three years earlier. We were thus able to correct for nonre-

sponse bias by employing an appropriate weighting system. Using the entire mailed sample of 11,547, we regressed their 2003 response status (response/nonresponse) on all of the 2000 freshman item responses. The corrective weight, which consisted of the reciprocal of the weighted regression composite, in effect gives the greatest weight to those respondents whose freshman characteristics most resemble the nonrespondents. To keep the degrees of freedom at a more valid level for purposes of statistical analyses, the final weights were "normalized" such that their sum equaled the actual number of respondents (i.e., N = 3,680). Individual respondents who skipped more than 17 items on the survey were omitted from the analyses. Missing data on independent variables (but not dependent variables) were replaced using the Missing Values Analysis procedure with the expectation-maximization (EM) method supported by SPSS 12.0. As a result, the sample used in the analysis included 3,493 students.

The weighted sample was 53% female and was comprised of students representing six racial/ethnic groups broken down as follows: 84% White, 5% Black, 4% Asian, 4% Latino/a, 2% American Indian, and 2% other. Regarding religious preference, students were grouped in the following traditions: 1% Islamic, 2% Jewish, 31% Roman Catholic, 48% Protestant Christian, 4% other, and 12% indicated having no religious preference (the remaining 2% of the sample did not select one of these categories). The 46 institutions were diverse with respect to type (university vs. four-year college), control (public, private nonsectarian, or religious), selectivity, and size.

Analyses and Variables

Multivariate regression was the primary method used to address the study's operative questions. Corresponding to the first research question and hypotheses 1 through 5, one of the regressions examined the extent to which various student characteristics/perceptions and forms of college involvement related to spiritual struggle, a factor scale comprised of five items administered to students as part of the follow-up CSBV survey they received as college juniors (see further details about the reliability and validity of the scale below). Using spiritual struggle as the dependent variable, five blocks of variables were submitted to the regression in accordance with the Input-Environment-Outcome (I-E-O) model developed by Astin (1993). The I-E-O approach blocks variables chronologically such that pre-college characteristics and exposure to certain environmental contexts are accounted for statistically prior to considering the implications of student involvement on college outcomes.

Corresponding to hypothesis 1 (student identities associated with discrimination and maltreatment will be related to an increased incidence of spiritual struggle), the first block included such demographic information as sex, race (White, Black/African American, American Indian, Asian American, Latino/a), religious preference (Eastern Orthodox, Evangelical, Jewish, Mainline Protestant, Mormon, Roman Catholic, other religion, and none), family income, and mother's and father's educational level.³

The second block contained distal college environmental influences (Astin, 1993) to test one part of hypothesis 2 (attendance at religious colleges will minimize spiritual struggle). These included institution-level measures of the college's religious affiliation (public, private nonsectarian, Evangelical, Roman Catholic, and other Christian church-affiliated).

Block 3 was comprised of environmental factors that were more proximal to students' daily experience: their college major (fine arts, biological science, business, computer science, education, engineering, health professional, history/political science, humanities, journalism, physical science, psychology, and sociology). This block was constructed with hypothesis 3 in mind: Certain disciplines that cast a critical perspective on religious frameworks will induce struggling.

The fourth block consisted of a range of college involvement variables and other behavioral measures, including (a) religious engagement (to test the assumption of hypothesis two that religious activities minimize struggling); (b) events during college that provoke disequilibrium: discussing politics, discussing religion/spirituality with friends or in class, and converting to another religion (hypothesis 3); and (c) charitable involvement (to test hypothesis 4, which suggests that students oriented toward charitable involvement will be prone to struggle spiritually).

Finally, block 5 consisted of personal orientations and beliefs students reported at the end of their third year of college, including spiritual questing (hypothesis 3), compassionate self-perceptions and inclinations toward social activism (hypothesis 4), and conceptions of God (to test hypothesis 5, which anticipates more pronounced struggling for individuals who perceive God as mysterious and questionably benevolent).

To evaluate the validity of hypothesis 6, which anticipated that spiritual struggle would associate negatively with self-esteem and psychological and physical well-being and positively with self-perceived growth in religious tolerance, religiousness, and spirituality, a separate series of six regressions explored the connections between spiritual struggle and these six outcomes. Two of these outcomes were factor scales (psychological distress and self-esteem; see below), while the remaining four measures were single items on the CSBV follow-up questionnaire administered to students in their third year of college (self-rated physical health and self-perceived changes in acceptance of others with different religious/spiritual views, spirituality, and religiousness).⁴

Following the chronological blocking procedure suggested by the I-E-O framework (Astin, 1993), six blocks of variables were submitted to each regression (or five, if the dependent variable did not have a corresponding pre-test on the CIRP Freshman Survey). Pre-tests from the initial survey administration at college entry were available for self-esteem, psychological distress, and self-rated physical health, and these were force-entered into the respective regressions in the first block to control for students' pre-existing propensities. The second block contained demographic variables, the third included distal environmental measures (i.e., institutional characteristics), and the fourth consisted of proximal environmental measures (i.e., college major). Blocks 2 through 4 replicated blocks 1 through 3 described earlier for regression 1, which used spiritual struggle as the dependent variable. The fifth block differed for each of the six regressions and served the purpose of accounting for relevant measures explaining the variance in the dependent variable. (For example, in the physical health regression, we controlled for college activities such as hours per week spent exercising and frequency of beer drinking.) Spiritual struggle was entered alone in the sixth block. It was entered last in order to estimate its relationship to the outcome measure independent of other confounding variables. This last block was of central interest in interpreting regressions 2 through 7; the other blocks merely served the purpose of rigorous controls in each model, whereas the ultimate goal was to identify the relationships between spiritual struggle and the six outcomes. (Lists of all independent variables employed in the seven regressions are available from the authors.) In all regressions, the tolerance level was set to .30 to avoid deleterious multicollinearity in the final model.

Factor Scales

Seven factor scales used as independent variables—charitable involvement ($\alpha = .68$), social activism ($\alpha = .81$), compassionate self-concept ($\alpha = .78$), religious engagement ($\alpha = .87$), and spiritual quest ($\alpha = .83$)—and dependent variables—self-esteem ($\alpha = .79$) and psychological distress ($\alpha = .66$)—in the regressions were derived through principal components factor extraction with Varimax rotation and were part of a larger set of 19 constructs that emerged in the analysis of the CSBV survey data. The process, carried out in conjunction with the research team, entailed detecting clusters of items with coherent content and a high degree of statistical internal consistency.

"Spiritual struggle," used both as an independent and dependent measure in this study, represents a construct that reflects intrapsychic concerns about matters of faith, purpose, and meaning in life. It is comprised of five items administered to respondents as part of the CSBV questionnaire they received as juniors in 2003: questioned my religious/spiritual beliefs; felt unsettled about spiritual/religious matters; struggled to understand evil, suffering, and death; felt angry with God; and felt disillusioned with my religious upbringing. The reliability of this scale (Cronbach's alpha) was .65 with the largest corrected item total scale correlation (.55) involving "questioned my religious and spiritual beliefs." While the alpha is not as high as we would have wished it, it still represents a better measure of the construct than using one or two items as other studies have done in the past.

As to the construct validity of the scale, we identified a correlation of .35 with "spiritual quest," a measure that parallels religious/spiritual struggle according to Batson and Schoenrade (1991). Moreover, when we replicated the factor analysis with a nationally representative sample of entering first-year students in 2004, the same five items in the spiritual struggle scale clustered again as factors. In this second analysis, we were able to add two new items not available on the 2003 survey of college juniors (felt distant from God; disagreed with family about religious matters), which increased the alpha reliability to .75. The other scales used in this study were similarly validated in the national sample of first-year students. Further details regarding these factor scales can be obtained from the authors.

Results

On a descriptive level, it is evident that spiritual struggles are not uncommon aspects of college students' lives. Upwards of one fifth of students (21%) reported that they *frequently* "struggled to understand evil, suffering, and death," while nearly the same number (18%) had *frequently* questioned their religious/spiritual beliefs. Sixteen percent of the sample described "feeling unsettled about spiritual/religious matters" to "a great extent," and one student in ten perceived him- or herself (also "to a great extent") as "feeling disillusioned with my religious upbringing." Lower numbers had *frequently* experienced anger toward God (6%), but 40% had experienced such emotions *occasionally*.

The results for each of the seven regressions are presented below. The first section details the measures associated with spiritual struggle, while the second underscores the ways in which spiritual struggle relates to a range of key outcomes for college students. With a few exceptions, only relationships significant at p < .01 are discussed.

Correlates of Spiritual Struggle

Spiritual struggle is associated with a plethora of student characteristics, perspectives, and experiences (see Table 1). Beginning with religious preference, students classified in the "other" religion category (i.e., those identifying as Islamic, Buddhist, Unitarian, or Hindu) or as Eastern Orthodox adherents are more likely to experience spiritual struggle than their counterparts who affiliate with different faiths or who have no religious preference. As expected with the first hypothesis, being a member of a minority religious group might present challenges that those identifying with majority traditions do not typically face. Another demographic characteristic (gender) is associated with spiritual struggle. That is, women have a greater propensity to experience spiritual struggle than do men.

Four types of environments to which students may be exposed during the college years relate to higher levels of spiritual struggle. Counter to the expectations of the second hypothesis, students who attend Evangelical, Roman Catholic, or other Christian church-affiliated institutions

Variable	Simple r	Final Beta
Student's religious preference: Other	0.11	0.10
Student's religious preference: Eastern Orthodox	0.07	0.04
Student's gender (female)	0.06	0.05
Student's religious preference: Catholic	0.04	0.01
Evangelical institution	0.06	0.09
Catholic institution	0.08	0.06
Other Christian church-affiliated institution	0.05	0.07
College major: Psychology	0.08	0.06
Converted to another religion	0.13	0.11
Discussed religion/spirituality with friends	0.14	0.08
Discussed politics	0.09	0.01
Religious Engagement	0.03	-0.13
Charitable Involvement	0.13	0.02
Spiritual Quest	0.35	0.34
Perception of God: Divine Mystery	0.12	0.08
Perception of God: Beloved	-0.05	-0.09
Perception of God: Teacher	0.05	0.13
Compassionate Self-Concept	0.05	-0.06
Perception of God: Universal Spirit	0.06	0.05
Perception of God: Protector	-0.07	-0.08
Perception of God: None of the above	-0.07	-0.06
Perception of God: Part of Me	-0.01	-0.06

Predictors of Spiritual Struggle

TABLE 1

 $R^2 = 0.21$

NOTE: All coefficients are significant at p < .01 with the exception of those in italics.

are more inclined to struggle spiritually than are students attending public or private nonsectarian institutions. Perhaps this finding is grounded in the religious emphases of such institutions: If students are encouraged to deal with difficult spiritual issues and questions (e.g., regarding the accuracy of their faith's truth claims, the implications of their religious beliefs for their aspirations and life goals) in their classes or in interactions with religious peers, some may find the experience perplexing. Alternatively, the possibility that students may disagree with the normative religious doctrine of their campus is another potential explanation for the association between faith-based institutions and spiritual struggle. Majoring in psychology is the fourth "environmental" variable related to struggles of a spiritual nature. In support of hypothesis 3, because psychology is a discipline that pushes students to probe the inner workings of the human psyche, these students might indeed become introspective and ask fundamental questions regarding their assumptions about the dynamic interplay of mind, body, and spirit.

A range of activities and experiences that students engage in and encounter over the college years evidence a connection to spiritual struggle as well, as the third hypothesis speculated. Associated with more pronounced struggling are such behaviors/experiences as converting to another religion; being on a spiritual quest (i.e., desiring to find answers to the mysteries of life, attain inner harmony, develop a meaningful philosophy of life, etc.); discussing religion/spirituality with friends; and discussing politics. (Discussing politics loses significance by the last step due to the positive relationship between spiritual quest and discussing politics. Once accounting for the questing behavior of students who regularly discuss politics, the relationship between political dialogue and struggling is substantially reduced.) The point of connection among these varied experiences is their proclivity to induce vulnerability, deep reflection, and/or consideration of ideas and philosophies with which the individual is unfamiliar. Conversely, students demonstrating marked levels of religious engagement (i.e., attending religious services, reading sacred texts, joining a religious organization on campus, etc.) show lower levels of spiritual struggle than do students who are less engaged, reflecting the expectation of hypothesis 2. Although religious engagement exhibits a slight positive association with spiritual struggle before other variables are controlled, the relationship becomes negative (signifying less struggle for the religiously engaged) when the regression accounts for the fact that many religious students are engaged in conversations on religion/spirituality with their friends and in spiritual questing, both of which, as we observed, are linked to struggling.

Two additional measures, students' compassionate self-concept and charitable involvement, did not relate to higher levels of struggle in the ways anticipated under hypothesis 4. Charitable involvement had a nonsignificant (though positive) relationship to struggle after controls for all other variables, whereas compassionate self-concept was predictive of lower levels of struggle. Regarding the latter finding, once charitable involvement entered the regression model, the beta for compassionate self-concept underwent a sign-reversal (i.e., it became a negative predictor of struggle), suggesting that compassionate self-concept is correlated with struggle only among individuals who are actually behaving in compassionate ways—through charitable activities.

Students' perceptions of God relate to spiritual struggle in distinctive ways, supporting hypothesis 5. Individuals who perceive God as "teacher," "divine mystery," or "universal spirit" (implying a more elusive, unknowable God) are more inclined to struggle, whereas students who identify God as "beloved," "protector," or "part of me" (indicating a close and secure relationship to the divine) or whose perceptions of God do not fit with those indicated on the survey ("none of the above," suggesting little interest in God) experience less struggle.

Potential Consequences of Spiritual Struggle

Our examination of the potential consequences of spiritual struggle, per hypothesis 6, involved analyzing the relationships between spiritual struggle and six measures of students' well-being, tolerance, and spiritual/religious growth. Although each regression involved key independent variables that were expected to relate to the outcomes, the focus of this discussion is on the association between spiritual struggle and the outcomes and how they changed as other independent variables entered the regressions. The process entailed tracing changes in the beta coefficient for the spiritual struggle variable across all steps in the regression.⁵ Depending on the direction and magnitude of such changes, we can interpret how the independent variables relate to one another and to the outcomes of interest.

As expected, spiritual struggle is positively associated with psychological distress (i.e., feeling overwhelmed, depressed, and stressed or anxious). Even following controls for other independent measures (i.e., certain student demographic characteristics, several institutional and college major variables, seeking personal counseling, and hours per week spent studying and doing homework), the variable spiritual struggle has the largest final beta coefficient of any other variable (see Table 2). The most notable beta change, from .35 to .27, occurred when the pre-test items (felt depressed and felt overwhelmed) entered the regression.

sion at step 1, indicating that one of the reasons students with spiritual struggles experience psychological distress has to do with their propensity for psychological problems before coming to college. From that point in the regression to the final step, only small beta changes were observed as other variables entered the regression equation.

In a similar manner, Table 3 shows that spiritual struggle relates to poorer physical health—an association that held its significance even in the final regression equation when controls had been employed for certain student characteristics (gender, mother's level of education, race: Asian/Asian American, and religious preference: Protestant), majoring in fine arts, and hours per week spent exercising and playing sports. Analogous to the psychological distress findings, the most notable beta change for spiritual struggle (-.11 to -.07) was observed when the physical health pre-test variable entered the regression, which again suggests that the negative implications of spiritual struggle for physical health are partially explained by strugglers' propensity to see themselves in poor physical health at the time of college entry.

Given the apparent negative consequences of spiritual struggle for psychological and physical health, it comes as no surprise that students who experience spiritual struggles exhibit less confidence in their per-

TABLE 2

Predictors of Psychological Distress

Variable	Simple r	Final Beta	Beta changes for Spiritual Struggle
			0.35ª
Felt depressed (pre-test)	0.32	0.21	0.27
Felt overwhelmed by all I had to do (pre-test)	0.36	0.21	0.27
Gender (female)	0.19	0.08	0.26
Student's religious preference: Other	0.07	0.06	0.26
Father's educational level	-0.10	-0.08	0.26
Student's religious preference: Catholic	0.06	0.05	0.25
Nonsectarian institution	-0.04	-0.03	0.25
College major: Fine arts	-0.10	-0.10	0.25
College major: Journalism/communications	-0.05	-0.04	0.24
Sought personal counseling	0.17	0.10	0.23
Hours per week: Studying/homework	0.15	0.11	0.23
Spiritual Struggle	0.35	0.23	0.23

 $R^2 = 0.30$

NOTE: All coefficients are significant at p < .01 with the exception of those in italics.

^a Simple r between Spiritual Struggle and Psychological Distress.

Variable	Simple <i>r</i>	Final Beta	Beta changes for Spiritual Struggle
			-0.11 ^a
Self-rated: Physical health (pre-test)	0.48	0.37	-0.07
Mother's educational level	0.11	0.05	-0.07
Gender (female)	-0.18	-0.06	-0.07
Race: Asian/Asian American	-0.07	-0.04	-0.06
Student's religious preference: Protestant	0.09	0.06	-0.06
College major: Fine arts	0.04	0.08	-0.06
Hours per week: Exercise/sports	0.44	0.31	-0.05
Spiritual Struggle	-0.11	-0.05	-0.05

TABLE 3	
Predictors of Physical Health	

 $R^2 = 0.34$

^a Simple *r* between Spiritual Struggle and physical health.

sonal, social, and intellectual competencies. In fact, as Table 4 depicts, with the exception of a moderate decline in the spiritual struggle beta coefficient when the pre-test variables were introduced into the model, the negative relationship between struggling and self-esteem (i.e., self-rated intellectual and social self-confidence, self-rated leadership ability, and so on) remained essentially constant across all steps of the regression. Thus, even when we account for several student background characteristics, various college majors, feeling respected by one's professors, and participating in leadership training, students who struggle spiritually are less inclined to feel assured of their skills and abilities than those who are not struggling.

Indicative of students' openness to "the other" in the face of existential difficulties, we see that spiritual struggle is positively associated with students reporting that their "acceptance of people with different religious/spiritual views" has grown "much stronger" since entering college (see Table 5). Even when we account for such variables as race, religious preference, college major, the extent to which faculty provide encouragement to discuss religious/spiritual matters, and discussing religion/spirituality with friends, spiritual struggle still plays a significant role as one of the strongest positive correlates of students' growth in tolerance.

At first glance, the relationship between spiritual struggle and spiritual growth is nonexistent: The simple correlation involving these two measures equals 0 (see Table 6). When additional variables are taken into consideration, however, the association gradually becomes negative

TABLE 4 Predictors of Self-Esteem

Variable	Simple r	Final Beta	Beta changes for Spiritual Struggle
			-0.12 ^a
Self-rated: Self-confidence (intellectual) (pre-test)	0.38	0.10	-0.08
Self-rated: Self-understanding (pre-test)	0.35	0.06	-0.08
Self-rated: Emotional health (pre-test)	0.34	0.11	-0.08
Self-rated: Self-confidence (social) (pre-test)	0.43	0.20	-0.08
Self-rated: Leadership ability (pre-test)	0.38	0.15	-0.08
Student's religious preference: Catholic	-0.09	-0.07	-0.08
Gender (female)	-0.16	-0.09	-0.08
Mother's educational level	0.12	0.05	-0.08
College major: History or political science	0.17	0.09	-0.08
College major: Computer science	-0.05	-0.07	-0.08
College major: Fine arts	0.05	0.06	-0.08
Faculty provided: Respect	0.16	0.13	-0.08
Participated in leadership training	0.19	0.08	-0.08
Spiritual Struggle	-0.12	-0.08	-0.08

 $R^2 = 0.33$

Note: All coefficients are significant at p < .01 with the exception of those in italics. ^a Simple *r* between Spiritual Struggle and Self-Esteem.

TABLE 5

Predictors of Growth in Religious Tolerance

Variable	Simple r	Final Beta	Beta changes for Spiritual Struggle
			0.14ª
Race: White/Caucasian	-0.09	-0.11	0.14
Student's religious preference: Jewish	-0.08	-0.06	0.14
College major: History or political science	0.12	0.11	0.14
College major: Fine arts	0.11	0.10	0.14
College major: Business	-0.12	-0.07	0.13
College major: Engineering	-0.06	-0.06	0.13
College major: Computer science	-0.05	-0.04	0.13
Faculty provided: Encouragement to discuss			
religion/spirituality	0.13	0.07	0.12
Discussed religion/spirituality with friends	0.13	0.07	0.11
Spiritual Struggle	0.14	0.11	0.11

 $R^2 = 0.08$

Note: All coefficients are significant at p < .01 with the exception of those in italics. ^a Simple *r* between Spiritual Struggle and Growth in Religious Tolerance.

over the course of the regression. More specifically, introducing into the analysis students' religious preference ("none"), institutional affiliation variables (Evangelical and Catholic), spiritual practices (meditation, prayer, and self-reflection), and the extent to which faculty provided encouragement to discuss religious/spiritual matters changes the spiritual struggle beta coefficient from 0 to -.05 by the final step. Such "suppressor variables" (see Astin, 1993), until they are accounted for statistically, mask the true negative relationship between struggling and spiritual growth. In short, students who struggle spiritually in college often have some meaningful connection to spirituality or religion—through their own religious tradition, the religious affiliation of their campus, contemplative spiritual practice, or faculty support of spirituality. In the absence of these factors, such students would likely experience spiritual decline as a result of their struggling.

When asked about the extent to which their "religiousness" has grown "much stronger" since entering college, students who have undergone periods of spiritual struggle seem less inclined to report they have grown (see Table 7). When we employ controls for pertinent variables—student demographics, institutional characteristics, being religiously engaged,

Variable	Simple r	Final Beta	Beta changes for Spiritual Struggle
			0.00ª
Student's religious preference: Evangelical Christian	0.21	0.00	0.01
Student's religious preference: None	-0.21	-0.01	-0.01
Student's race: White/Caucasian	-0.11	-0.09	-0.01
Gender (female)	0.08	0.02	-0.01
Father's educational level	0.00	0.03	-0.01
Parental income	-0.09	-0.03	-0.01
Evangelical institution	0.19	-0.04	-0.02
Catholic institution	0.06	0.01	-0.03
Religious engagement	0.51	0.34	-0.02
Self-reflection	0.22	0.09	-0.04
Prayer	0.40	0.12	-0.04
Meditation	0.29	0.09	-0.04
Faculty provided encouragement to discuss			
religious/spiritual issues	0.27	0.09	-0.05
Spiritual Struggle	0.00	-0.05	-0.05

TABLE 6 Predictors of Spiritual Growth

 $R^2 = 0.30$

NOTE: All coefficients are significant at p < .01 with the exception of those in italics.

^a Simple *r* between Spiritual Struggle and Spiritual Growth.

praying, discussing religion/spirituality with friends, and having professors who provide encouragement to discuss religious/spiritual matters the negative relationship between spiritual struggle and religious growth changes very little and remains significant by the final step in the regression.

Discussion and Conclusion

In summary, it is clear that spiritual struggle—a phenomenon affecting a sizable proportion of college students—is associated with a number of student characteristics and perceptions, college environments and experiences. Key correlates of such struggles include certain religious preferences (primarily minority religious preferences, such as Buddhism, Hinduism, Islam, and Unitarian Universalism), being female, attending a religious college (whether Catholic, Protestant, or Evangelical), majoring in psychology, and experiences in college that challenge, disorient, and introduce students to new and unfamiliar worldviews. Other correlates include the extent of the student's religious involvement, perceptions of God, and compassionate self-concept. Importantly, these correlates of struggle are not mutually exclusive but might exist in combination within a person's life, influencing their propensity to struggle spiritually in myriad ways. Whereas multiple positive correlates of

TABLE 7

Predictors of Religious Growth

Variable	Simple r	Final Beta	Beta changes for Spiritual Struggle
			-0.10 ^a
Student's religious preference: None	-0.28	-0.07	-0.12
Student's religious preference: Evangelical Christian	0.19	-0.04	-0.12
Race: White/Caucasian	-0.10	-0.08	-0.12
Evangelical institution	0.15	-0.07	-0.13
Other Christian church-affiliated institution	-0.07	-0.09	-0.12
Religious Engagement	0.50	0.41	-0.12
Prayer	0.44	0.16	-0.12
Discussed religion/spirituality with friends	0.13	-0.05	-0.11
Faculty provided encouragement to discuss			
religion/spirituality with friends	0.21	0.07	-0.12
Spiritual Struggle	-0.10	-0.12	-0.12

 $R^2 = .31$

NOTE: All coefficients are significant at p < .01 with the exception of those in italics.

^a Simple r between Spiritual Struggle and Religious Growth.

struggle would suggest a greater propensity to struggle, multiple negative correlates would lead us to predict the opposite. A balance of positive and negative correlates, on the other hand, may serve to "cancel" one another and minimize struggling. When considering the potential consequences of spiritual struggle, we observed that immediate negative implications are likely with respect to students' psychological wellbeing, physical health, self-esteem, spiritual growth, and religious growth. Yet, struggling spiritually bodes well for students' perceptions that their acceptance of others of different faiths has grown stronger during college.

Relating these findings to the six hypotheses we set out to examine and, in turn, to the body of research on which we based these hypotheses, it is apparent that some of our findings are indeed expected, while others bear some surprises. The first hypothesis—that students identifying with groups that are underrepresented or at risk of mistreatment in society would face higher levels of spiritual struggle—holds some merit in that women report struggling spiritually more often than men. Along the same lines, students affiliating with non-majority faiths (i.e., Buddhism, Hinduism, Islam, and Unitarian Universalism) demonstrate greater spiritual struggle than do students of majority faiths, providing additional evidence to support the hypothesis and coinciding with past research (Becker, 1994; Bryant, 2003; Dubow et al., 1999).

In accordance with the second hypothesis, students who are religiously engaged experience less spiritual struggle than the average student does. Other scholars have inferred that religious practice and community have positive implications for general well-being (Hill & Pargament, 2003; Larson & Larson, 2003; Pargament et al., 2000), including stability in one's spiritual life. One way in which the findings do not mesh with our initial expectations lies in the positive association between attending a religious college (Protestant, Catholic, or Evangelical) and struggling spiritually. Presumably, if students are in an environment that encourages religious engagement, we would anticipate that these contexts would not be associated with spiritual struggle as in fact they are. Nonetheless, as suggested earlier, such schools may prompt spiritual questioning if they indeed treat religious issues as academic subject matter to be debated, investigated, and perhaps even critiqued. In addition, being the dissenting voice in a relatively homogeneous religious environment may lead to spiritual struggles for some students attending religious colleges.

Evaluating the role of disequilibrium and/or crisis in spiritual struggle identified as significant in other studies (Holcomb & Nonneman, 2004; Johnson & Hayes, 2003; Pargament et al., 2005), hypothesis 3 antici-

pated that these sorts of destabilizing experiences would lead to more pronounced struggling. To be sure, numerous examples of crisis points, destabilizing forces, or moments of vulnerability and deep reflection have a place in what Parks (2000) calls "shipwreck" and what we define as spiritual struggle: converting to another religion, being on a spiritual quest, and discussing religion/spirituality with friends. While the direction of effect is ambiguous in this particular study, the relationships we have identified corroborate and add further definition to prior work, namely that quest, and behaviors associated with questing, are intricately tied to spiritual struggle.

We also examined whether individuals with compassionate and social justice orientations (hypothesis 4) would be more prone to struggle spiritually because of the enhanced social consciousness that might accompany compassionate sensitivities and action. We found minimal evidence for this hypothesis in that, after we controlled for other variables, having a compassionate self-concept and engaging in charitable efforts did not relate in expected ways to struggling spiritually.

The fifth hypothesis—that varying perceptions of God would relate to spiritual struggle-appears to have merit. That is, students whose conception of God is "teacher," "divine mystery," or "universal spirit" are more likely to struggle, while those perceiving God as "beloved," "protector," "part of me," or "none of the above" experience less struggle. "Teacher," "universal spirit," and especially "divine mystery" imply a God whose wisdom, identity, and intentions are not readily apparent and must be sought after. Struggles might emerge from the desire to comprehend a God whose lessons and image are more elusive than not. "Beloved," "protector," and "part of me," on the other hand, connote an unconditionally loving, secure, and intimate relationship with a divine force that is known and dependable. Persons who perceive God in this way might be more likely to trust that God's purposes are good-that God indeed loves them—and therefore might be free of struggle given feelings of safety in the relationship. The data suggest that students who respond "none of the above" to the question of how one perceives God are primarily individuals with no religious preference. It makes sense that such students, whose lives are less attuned to the varieties of religious and spiritual questioning, would have a low propensity to struggle spiritually. Although there are only tangentially similar results reported in the literature (Pargament et al., 2000), the findings presented here are worth noting as a new area to explore further in the future.

The sixth and final hypothesis anticipated connections between spiritual struggle and important college outcomes. As hypothesized in conjunction with other empirical evidence (Hill & Pargament, 2003; Pargament et al., 2000, 2005), spiritual struggle relates to lower levels of psychological well-being, physical health, and self-esteem. More surprising, however, is the fact that spiritual struggle does not associate with self-perceived religious and spiritual growth in the expected positive direction (Chickering & Reisser, 1993; Erikson, 1968; Fowler, 1981; Hall, 1986; Holcomb & Nonneman, 2004; Pargament et al., 2005; Parks, 2000; Perry, 1968). In fact, the only positive relationship uncovered is that which exists between struggling and acceptance of others in different religious faiths. Why might students perceive their struggles as detrimental to spiritual and religious growth? Because this study covers a relatively short time frame of just three years, perhaps students cannot, in the immediacy of their experience, perceive the growth that they have undergone. Students may not interpret their heightened sense of questioning, critical reflection, and questing as ultimately beneficial for growth as they have come to define it. Another possibility: spiritual struggle might not, in the end, result in growth; rather, it might hinder development if one is locked into maladaptive ways of conceiving of and responding to the existential questions life poses.

Given these findings and their varied interpretations, what are the implications for higher education? First, it is evident from this study that struggles of a spiritual nature are a reality for college students. The spiritual realm and the deeper life questions it brings to light *do* play a role in the young adult journey, making attention to these issues on the part of practitioners, administrators, and faculty a clear necessity. Indeed, there are critical implications of struggling spiritually that are intimately tied to students' sense of well-being and adjustment to the adult world. Failure to recognize the seriousness of these facets of students' lives is to leave them quite alone on their quest to understand central issues of meaning. Thus, the initial step for higher education is to take note of and seek to appreciate the varieties of spiritual struggling and their significance.

Secondly, this study calls those of us in the higher education arena to ask difficult questions regarding our role in supporting students whose lives are complicated by existential dilemmas. That the findings point to poorer outcomes for students who struggle spiritually may implicate the college environment as a site that is not entirely conducive to resolution and character development. Are students lacking resources in college and as a result becoming chronically "stuck" in the midst of their struggle? Pargament, Koenig, Tarakeshwar, and Hahn (2004) have suggested that chronic struggling is inexorably linked to declines in physical and mental health. Interventions to curb prolonged struggling are thus in order. Perhaps the most critical first response to a student who seeks guidance or mentorship in the midst of spiritual difficulty is one that

communicates legitimacy. Students need reassurance that their struggles are justified and a legitimate part of their developmental process. So often these personal battles are waged alone, divorced from daily routines, classes, and work schedules. For fear of being misunderstood or stigmatized, students might attempt to conceal their troubled feelings a practice that might overwhelm them even more. Regrettably, the pain of struggling might be amplified in environments that either refuse to acknowledge the existence of struggles or that call for premature and unsatisfactory resolutions to struggling for the sake of establishing commitment to one's faith tradition. Ironically, students might experience these types of environments in both secular college contexts (which might be guilty of the former) *and* in devoutly religious college cultures or subcultures (which might be guilty of the latter).

As mentors, counselors, and professors, then, we can be supportive by listening, conceding the significance of the issue, and providing space for contemplation. Establishing a climate that validates and encourages self-expression begins with willingness on our part to be candid and open about our own struggles while we invite students to share theirs. Religious colleges or campus religious organizations are the most obvious contexts for generating an authentic approach to spiritual struggles because they already serve as spiritual bellwethers for students. Yet, an openness to existential and spiritual concerns should exist more globally across the campus—in residence life, in counseling and student health centers, and in advising relationships that students form with mentors and faculty, just to name a few examples—so that students do not have to artificially compartmentalize their struggle from other aspects of their lives. Surely, there is a delicate balance between support and interference—a tension in allowing the struggle to persist without pushing for resolution. In the end, students define spiritual struggles for themselves and must therefore construct the answers they seek and come to accept that which is unanswerable. We make available the "hearth" Parks (2000) illustrates so vividly—a place to find solace and reflective pause in times of shipwreck and storm.

This study marks one of the first attempts to understand the intricacies of spiritual struggle in the lives of college students. Using a diverse set of measures that probed varied aspects of students' religious, spiritual, and emotional experiences, we were able to shed light on an underexplored area of student development. Nonetheless, this study has its share of limitations to be remedied in future research. First and foremost, pretests at time one were not available for some of the regression analyses—namely, the regressions predicting spiritual struggle and selfassessed changes in religious tolerance, spirituality, and religiousnessleaving ambiguous the direction of effect. For instance, do students become more tolerant as a result of spiritual struggle, or does increased tolerance precede the struggle itself? Future studies should employ more rigorous controls to assess the predictors and outcomes of spiritual struggle more clearly. Secondly, because the outcomes of spiritual struggle might not be readily apparent to students initially, additional time points in the research design might also be necessary to identify a clear pattern of effects. Third, further in-depth interviews are needed to chronicle in a more detailed fashion students' stories and experiences with spiritual struggle—the life events that preceded and followed times of spiritual distress, points of resolution, and perceptions about the larger implications for personal growth. Such research would add considerable dimension to the quantitative relationships enumerated in this study, affording greater insight into the ways to effectively support students while they struggle with spiritual questions.

Endnotes

¹Throughout this article, we use the terms "religious" and "spiritual" together, sometimes interchangeably, because the "spiritual struggle" scale included items that related to students' religious and spiritual beliefs simultaneously. Definitions of "spirituality" are distinguishable from the meaning of "religious" in that spirituality is conceptually a broader term that may or may not incorporate religious practices or doctrinal beliefs. Spirituality has been defined in the research literature as the internal process of seeking personal authenticity, genuineness, and wholeness; transcending one's current locus of centricity (i.e., recognizing concerns beyond oneself); developing a greater connectedness to self and others through relationships and community; deriving meaning, purpose, and direction in life; and openness to exploring a relationship with a higher power or powers that transcend human existence and human knowing (Love & Talbot, 1999). Nonetheless, given that spiritual struggle incorporates both spiritual and religious elements and that the data suggest a sizeable correlation between our measure of "spirituality" and two other scales, "religious commitment" (r = .78) and "religious engagement" (r = .66), we often use them interchangeably in this study.

²The study's co-principal investigators are Alexander W. Astin and Helen S. Astin, and the project is directed by Jennifer A. Lindholm.

³The race/ethnicity and religious preference variables were submitted to the regression in block 1 using the forward-entry method. Those exhibiting significant correlations with the dependent variable entered the model. Thus, the comparison groups are those that did *not* enter the model. For instance, if "Roman Catholic" and "Jewish" entered the regression as positive predictors of struggle, the finding would be interpreted to mean that Catholic and Jewish students have a greater propensity to struggle spiritually compared to all other religious groups not in the regression equation.

⁴Students were asked to report how they would describe their "acceptance of people with different religious/spiritual views," "spirituality," and "religiousness" compared with when they first started college. They had five response options to select from: "much stronger," "stronger," "no change," "weaker," or "much weaker."

⁵Betas are standardized regression coefficients that measure the strength of the relationship between an independent variable and a dependent variable given controls for other independent variables. Unlike unstandardized regression coefficients, they can be used to evaluate the predictive strength of one independent variable relative to others. Like correlation coefficients, betas range from 0 to 1, and can be either positive or negative depending on the direction of the relationship.

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