

# Understanding the “Interior” Life of Faculty: How Important is Spirituality?

*Jennifer A. Lindholm and Helen S. Astin*

Within American society, the spiritual dimension of our lives has traditionally been regarded as intensely personal, an innermost component of who we are that lies outside the realm of appropriate discussion or concern within business and academic contexts. However, in an era characterized by its spiritual “poverty,” we have seen a growing societal quest for “non-religious, nondenominational” ways of fostering spirituality and an associated hunger for spiritual growth.<sup>1</sup> In 1998, for example, 82 percent of Americans expressed a need to “experience spiritual growth,” up from 54 percent just four years earlier.<sup>2</sup>

Given the broad formative roles that colleges and universities play in our society, higher education represents a critical focal point for responding to the question of how we can balance the “exterior” and “interior” aspects of our lives more effectively. Existing research indicates that developing people’s abilities to access, nurture, and give expression to the spiritual dimension of their lives impacts how they engage with the world and fosters within them a heightened sense of connectedness that promotes empathy, ethical behavior, civic responsibility, passion, and action for social justice.<sup>3</sup> Spirituality has also been positively linked with physical, mental, social, and emotional well-being.<sup>4</sup> This article focuses on the role that spirituality plays in the lives of college and university faculty and examines the extent to which variations exist based on personal demographics, professional and institutional characteristics, and affective experiences.

## Conceptualizing Spirituality

The word “spirituality” originated from a merging of the Latin word for breath, “spiritus,” with the concept of enthusiasm, from the Greek “enthousiasmos,” meaning “the God within.” Todd explains that the resulting word, spirituality, “captures the dynamic process of divine inspiration, or ‘the breath of God within.’”<sup>5</sup> While the semantic interpretation of the word spirituality is clear, its meaning in operational terms is more ambiguous. For many years, the construct of spirituality was closely aligned with religious beliefs and convictions. Current conceptions, however, are much broader.

*Religion & Education*, Vol. 33, No.2 (Spring 2006)  
Copyright © 2006 by the University of Northern Iowa

Although spirituality has traditionally been nurtured within the context of religious faith, we are seeing today a growing number of individuals whose spirituality is either loosely, or not at all, associated with an established religious tradition.<sup>6</sup>

Whereas religion is characterized by “group activity that involves specific behavioral, social, doctrinal, and denominational characteristics,”<sup>7</sup> spirituality points to our interiors, by which we mean our subjective life, as opposed to the objective domain of material objects that one can point to and measure. In other words, the spiritual domain has to do with human consciousness—what we experience privately in our subjective awareness. Spirituality also has more to do with our qualitative or affective experiences than it does with reasoning or logic and relates to the values that we hold most dear, our sense of who we are and where we come from, our beliefs about why we are here—the meaning and purpose that we see in our work and our life—and our sense of connectedness to each other and to the world around us.<sup>8</sup> Others have described spirituality as an energizing force; a source of inner strength; and a way of being in the world.<sup>9</sup> Hindman, for example, conceives of spirituality as a “dynamic expression” of ourselves that gives shape to and is shaped by who we really are.<sup>10</sup>

At its core, spirituality involves the internal process of seeking personal authenticity, genuineness, and wholeness; transcending one’s locus of centrality; developing a greater sense of connectedness to self and others through relationships and community; deriving meaning, purpose, and direction in life; being open to exploring a relationship with a higher power that transcends human existence and human knowing; and valuing the sacred.<sup>11</sup> While religious values may be connected to these key facets, spirituality may well exist apart from religion altogether. Irrespective of the presence or absence of clearly defined linkages between religion and spirituality, to ignore the role of spirituality in personal development and professional behavior is to overlook a potentially powerful avenue through which people construct meaning and knowledge.<sup>12</sup> Indeed, it is the spiritual component of human beings that gives rise to questions about why we do what we do, pushes us to seek fundamentally better ways of doing it, and propels us to make a difference in the world.<sup>13</sup>

### **Spirituality and Higher Education**

Why should we be concerned with the spiritual dimension of college and university faculty members’ lives? First, like many other professionals, academics too often live fragmented and inauthentic lives, where they act either as if they are not spiritual beings, or as if their spiritual side is irrelevant to their vocation. Under these conditions, academic work becomes

disconnected from the faculty's most deeply felt values and they hesitate to discuss issues of meaning, purpose, authenticity, wholeness, and fragmentation with colleagues. Astin explains that the difficulties experienced by faculty in achieving a greater sense of wholeness and spirituality in higher education have been exacerbated by many competing values: the need to secure adequate resources versus the need to preserve institutional autonomy and academic freedom; the commitment to advance frontiers of knowledge versus the commitment to educate students well and to serve the community; the commitment to academic excellence versus the commitment to educational opportunity and equity; and the quest for individual professional achievement and recognition versus the desire to nurture and sustain an intellectual community.<sup>14</sup> In recent years, these conflicts have been intensified by declining resources and public pressures for greater "accountability" and, at a more personal level, by the divisions and tensions that often emerge between personal and professional life. The resulting dynamic has potentially serious implications for the academic community, not only for those faculty and staff whose lives have become increasingly fragmented and disconnected, but also for their students.

Second, faculty attitudes and behaviors are known to have important implications for student development. The actions of faculty both within and outside the classroom impact the learning and development of future teachers, lawyers, physicians and policymakers, not to mention their very own academic successors and the thousands of others whose work affects our daily lives. Interpersonal interaction with faculty enhances a wide variety of student outcomes and, as Terenzini, Pascarella, and Blimling have shown, is one of the most influential sources of undergraduate student learning.<sup>15</sup> As the primary adult agents of socialization within the college environment, faculty have the ability to impact student experiences and outcomes both positively and negatively.<sup>16</sup> Beyond influencing students' intellectual and career development, interacting with faculty has been shown to enhance students' personal identity awareness and moral development.<sup>17</sup> In addition, student outcomes research shows that informal (i.e., out-of-class) interaction between students and faculty increases faculty influence on undergraduate students' values, beliefs, and behaviors<sup>18</sup> and positively affects students' intellectual curiosity, interpersonal skills, and maturational development.<sup>19</sup> Faculty mentoring has also been positively associated with student inclinations toward humanitarian behavior.<sup>20</sup>

To be sure, we are seeing increased attention to issues of spirituality within higher education. However, with few exceptions,<sup>21</sup> the research on spirituality that has been conducted within higher education institutions has focused primarily on students, ignoring completely the experiences, attitudes, expectations, and behaviors of faculty. The result is a critical gap in

our understanding of how we can create educational environments that maximize the personal and professional potential of students and faculty. Indeed, at the heart of higher education's capacity to change are faculty, who play a central role in shaping both the culture and the climate of their institutions. As Astin and Twede have suggested, the values and beliefs of college and university faculty represent the fundamental standards by which institutional decisions are made and priorities are set.<sup>22</sup> Consequently, for spirituality to become an integral part of higher education, and for institutions to respond effectively to students' needs and expectations within this realm, understanding faculty perspectives and related implications for their professional practice is of paramount importance.

Although we have recently witnessed an increased interest in issues of meaning, purpose, and spirituality within the higher education community, to date very little empirical research has been conducted on these topics specifically within the context of college and university campuses.<sup>23</sup> Using data from a recent national study of college and university faculty, we examine here the personal and professional correlates of spirituality and consider related implications both for research and for institutional practice.

## **Methodology**

### **Data Source and Sample**

The data for this study were drawn from the 2004-2005 Triennial National Faculty Survey conducted by UCLA's Higher Education Research Institute (HERI).<sup>24</sup> In fall 2004, a four-page survey questionnaire was distributed to 172,051 faculty at 511 two- and four-year colleges and universities. After a second-wave follow-up to nonrespondents, 65,124 completed questionnaires were received, constituting a 38 percent overall response rate. The analyses presented here are based on the replies of 37,827 full-time undergraduate teaching faculty from the 373 four-year colleges and universities that were included in HERI's nationally representative sample of institutions for 2004-2005. Demographically, the weighted sample was 37.6 percent female; 85.5 percent White/Caucasian; 4.4 percent Asian American/Asian; 3.7 percent Latino; 2.3 percent African American/Black; 1.3 percent American Indian; 0.7 percent Native American/Alaska Native; and 2.1 percent "other."<sup>25</sup> Faculty respondents were employed at public universities (32.7 percent) private universities (12.5 percent); public colleges (31.1 percent); private nonsectarian colleges (11.4 percent); Catholic colleges (4.9 percent); and "other religious" colleges (primarily mainline Protestant-affiliated, Baptist, or Evangelical) (7.4 percent).<sup>26</sup>

### **Analyses and Variables**

Two types of analyses were conducted: (a) cross-tabulations that provide a descriptive profile of faculty and (b) multivariate analyses that facilitate exploration of the relationship between faculty characteristics and self-reported spirituality. In all analyses, weights derived to correct for non-response bias based on gender, rank, and institutional type were used to approximate as closely as possible the results that would have been obtained if all full-time undergraduate teaching faculty within the United States had responded. To keep the degrees of freedom at an appropriate level for purposes of statistical inference, weights were normalized to yield original sample sizes for all multivariate analyses.<sup>27</sup>

The spirituality measure was developed by combining three survey items (i.e., self-identification as a spiritual person; priority placed on seeking opportunities to grow spiritually; and value attributed to integrating spirituality into one's life). The alpha reliability, a measure that indicates the strength of the interrelationships among items included in a factor, was .88. In addition to the spirituality measure, we developed ten other factors through confirmatory factor analysis: *Positive Outlook in Work and Life*, *Healthy Lifestyle*, *Research Orientation*, *Diversity Advocacy*, *Focus on Students' Personal and Spiritual Development*, *Personal Stress*, *Work Stress*, *Student-Centered Pedagogy*, *Civic Minded Values*, and *Civic Minded Practice*. A complete list of the variables included within each of these measures is provided in Appendix A.

To identify the factors that differentiate among faculty with respect to spirituality, we ran five separate regression analyses. SPSS Missing Values Analysis was used to correct for missing data. For all regressions, the dependent variable was the derived factor, "Spirituality." First, we examined how a selected set of independent variables related to the spirituality dependent variable for the total population of faculty at four-year institutions. Since gender was a significant variable ( $p < .0001$ ) in differentiating faculty with respect to self-reported spirituality in the final solution, we subsequently performed separate stepwise regression analyses for men and women. All of the variables that were significant ( $p < .01$ ) for men or women in these separate gender analyses were then force-entered into a second set of analyses by gender. Within that set of analyses, the most important contributors to spirituality for men and women were assessed by comparing standardized regression coefficients (Beta weights). Differences between men and women were determined by comparing the unstandardized (b) coefficients.

T-tests were used to determine statistical significance ( $p < .01$ ). A total of 56 independent variables were used in the first regression for "all" faculty. A complete set of the independent and dependent variables used in the analyses along with their coding is provided in Appendix A.

### **Descriptive Findings**

For the descriptive analyses, we first classified faculty with respect to their level of spirituality, as reflected by their responses to items contained within the composite measure. Overall, 40.6 percent of faculty were classified as high scorers; 42.8 percent as medium scorers ; and 16.6 percent as low scorers.<sup>28</sup>

Comparing men and women, we find that a higher proportion of women (47.3 percent) than men (36.5 percent) were high scorers. Such differences have been reported before and often are attributed to a variety of reasons ranging from biological to sociological to psychological.<sup>29</sup> Other demographic differences in spirituality were also evident (see Table 2). With respect to age, the greatest differences were between the youngest faculty (less than 35 years old) and those 45-54 years and 65 years of age and older. Overall, younger faculty reported lower levels of spirituality compared to these two groups of their older colleagues. With respect to age-based gender differences, two findings are noteworthy. First, the percentages of men who are high scorers on spirituality varied minimally between men of different ages (5 percentage points maximum—between those younger than 35 and those 45-54 years old). The differentials for women of various age groups, however, were more pronounced (18 percentage points maximum, between those younger than 35 and those 65 and older). Second, it appears that gender differences may become more pronounced with age. For example, while there was just a 4 point difference in the percentage of men and women younger than 35 who were high scorers on spirituality, the differentials increase to 12 percentage points between men and women in the 45-54 year age category and to 19 percentage points among those 65 and older.

Variations based on faculty's ethnic/racial identities were also evident, with African Americans/Blacks self-reporting the highest levels of spirituality. Overall, for example, just under two-thirds of African American/Black faculty were high scorers compared to just over one-quarter of Asian Americans/Asians (see Table 2). In earlier research on college students, we observed similar spirituality level patterns based on racial/ethnic identity.<sup>30</sup> In part, we attributed such differences to variations in religious identity among various racial and ethnic groups. That is, we found a high proportion of

Table 1. Gender Differences in Spirituality (Percent Who Score “High”)

Sex	Spirituality		
	High	Medium	Low
<b>All</b>	<b>40.6</b>	<b>42.8</b>	<b>16.6</b>
Male	36.5	44.1	19.4
Female	47.3	40.7	12.0

Weighted N=243,704 (men); 146,422 (women)

Table 2. Demographic Characteristics and Spirituality (Percent Who Score “High”)

Age	All	Men	Women
Younger than 35	<b>35.9</b>	33.8	38.0
35-44	<b>39.0</b>	35.9	43.4
45-54	<b>43.9</b>	38.8	51.1
55-64	<b>39.7</b>	35.3	49.1
65 and older	<b>40.5</b>	36.9	55.9
<b>Race</b>			
African American/Black	<b>62.9</b>	53.9	77.8
American Indian/Alaska Native	<b>49.7</b>	44.4	58.6
Latino <sup>1</sup>	<b>44.2</b>	39.3	50.4
Native Hawaiian/Pacific Islander	<b>41.9</b>	44.1	40.0
White/Caucasian	<b>40.2</b>	36.3	46.7
Asian American/Asian	<b>31.7</b>	28.6	37.6
Other	<b>39.5</b>	35.9	48.9
<b>Marital Status</b>			
Single	<b>42.8</b>	34.5	49.7
Married	<b>40.6</b>	37.2	47.8
Living with Partner	<b>29.3</b>	26.2	31.8
<b>Political Views</b>			
Conservative/Far Right	<b>66.3</b>	62.0	75.5
Middle-of-the-Road	<b>42.6</b>	36.7	54.3
Liberal/Far Left	<b>30.3</b>	25.3	36.9

<sup>1</sup>Includes Mexican American/Chicano, Puerto Rican, and “Other” Latino

Source: Higher Education Research Institute, 2004-2005 Faculty Survey

African American/Black college students to be of the Baptist faith, while higher proportions of Asian American/Asian students indicated no religious affiliation. Also noteworthy is that women of all races tend to be more spiritually inclined than men of the same race. Gender differences, however, are most pronounced among African Americans/Blacks: Whereas more than three-fourths of African American/Black women are high scorers on spirituality, just over half of the men score similarly.

In terms of marital status, those who are single or married show markedly higher levels of spirituality than those who are unmarried but living with a partner. With respect to political views, we find that, overall, two-thirds of politically conservative faculty are high scorers on the spirituality scale relative to just under one-third of politically liberal faculty. Roughly four in ten who categorized their views as "middle-of-the-road" also score high on spirituality. Women within every political views group are more likely than men of that same group to score high on spirituality, with the greatest gender differential (18 percentage points) apparent among faculty who describe their political views as "middle-of-the-road."

Differences in spirituality based on professional characteristics are shown in Table 3. With respect to field of study, we find that larger proportions of faculty in the Health Sciences (which include the medical fields, nursing, and public health), and Education reported high levels of spirituality, particularly as compared to faculty in the Physical Sciences. Gender differences are most pronounced in the Health Sciences (22 percentage points) and Math/Statistics (17 percentage points). Only in the Humanities do more men than women register as high scorers on spirituality. It should also be noted that relative to other colleagues, faculty who have earned Ph.D.s are notably less spiritually inclined. In terms of institutional differences and self-reported spirituality, nearly two-thirds of faculty at "other religious" colleges are high scorers, compared to only one-third of public university faculty. Gender differences in spirituality based on type of employing institution are most pronounced within Roman Catholic colleges and public colleges (13 percentage point differentials each).

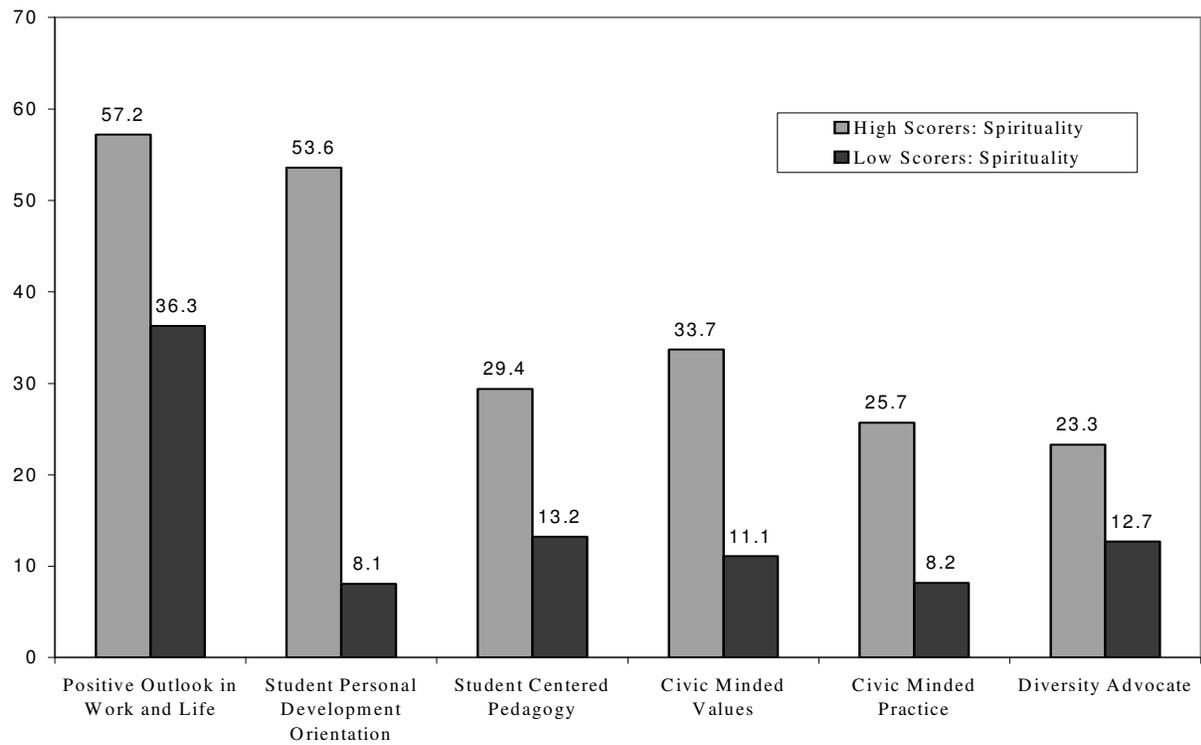
Figure 1 compares faculty with high versus low spirituality scores in terms of their scores on six related qualities. In every instance, highly spiritual faculty are much more likely than their less spiritual counterparts to be high scorers on these other qualities. By far, the largest difference—in both absolute and relative terms—occurs on the scale measuring the extent of the faculty member's Student Personal Development Orientation (53.6% vs. 8.1%). Differences of better than two to one can be found on three other scales: Student-Centered Pedagogy, Civic-Minded Practice, and Civic-Minded Values. Also noteworthy is that Positive Outlook in Work and Life

Table 3. Professional Characteristics and Spirituality  
(Percent Who Score "High")

<b>Discipline/Field of Study</b>	<b>All</b>	<b>Men</b>	<b>Women</b>
Health Sciences	<b>56.4</b>	41.6	63.2
Education	<b>54.8</b>	49.7	59.0
Business	<b>46.6</b>	45.9	48.3
Fine Arts	<b>45.0</b>	41.8	50.5
Agriculture/Forestry	<b>44.6</b>	44.0	49.3
Humanities	<b>43.2</b>	44.7	41.2
English	<b>41.9</b>	37.0	46.8
Math/Statistics	<b>34.6</b>	30.7	47.6
Engineering	<b>32.7</b>	32.2	36.4
Social Sciences	<b>31.5</b>	29.6	35.3
Biological Sciences	<b>28.4</b>	26.8	32.5
Physical Sciences	<b>28.1</b>	27.5	31.2
Other Technical Fields	<b>35.0</b>	33.1	42.1
Other Fields	<b>44.0</b>	39.1	49.9
<b>Type of Employing Institution</b>			
All Four-Year Institutions	<b>40.6</b>	36.5	47.3
Non-Catholic Religious Colleges	<b>64.3</b>	62.4	67.5
Catholic Colleges	<b>50.1</b>	44.2	56.9
Nonsectarian Colleges	<b>43.3</b>	40.6	47.5
Public Colleges	<b>40.5</b>	35.5	48.1
Private Universities	<b>36.0</b>	33.6	41.3
Public Universities	<b>32.7</b>	29.6	39.1
<b>Highest Degree Earned</b>			
BA/BS	<b>51.1</b>	45.7	57.5
MA/MS	<b>51.7</b>	45.8	57.4
PhD	<b>35.0</b>	32.9	39.2
EdD	<b>58.5</b>	53.5	63.6
MD/DDS	<b>43.6</b>	40.4	56.5
LLB/JD	<b>37.7</b>	34.6	43.2
Other Professional	<b>52.8</b>	53.6	51.2

Source: Higher Education Research Institute, 2004-2005 Faculty Survey

**Figure 1. Percentages of High and Low Scorers on Spirituality Who Have High Scores on Each of Six Scales**



produced one of the largest absolute differences (20.9%) between highly spiritual and less spiritual faculty members.

Finally, Table 4 illustrates the religious self-identifications of faculty who scored high on the spirituality scale. Not surprisingly, more than two-thirds of highly spiritual faculty also describe themselves as religious “to a great extent,” and an additional 17 percent say they are religious “to some extent.” However, it is important to realize that more than one in ten among highly spiritual faculty say they are “not at all” religious. Overall, highly spiritual men are more likely than highly spiritual women to self-identify as religious “to a great extent.”

---

Table 4. Self-Described Religiousness Among Faculty  
Who Score “High” On Spirituality (percentages)

<b>Self-Described Religiousness</b>	<b>All</b>	<b>Men</b>	<b>Women</b>
“Not at All”	<b>12.9</b>	11.3	14.8
“To Some Extent”	<b>17.3</b>	14.4	21.1
“To a Great Extent”	<b>69.8</b>	74.2	64.1

Source: Higher Education Research Institute, 2004-2005 Faculty Survey

---

### **Regression Analyses**

Table 5 shows the standardized beta coefficients for the final set of regression analyses in which the common set of variables that remained significant ( $p < .01$ ) for men or women in the first set of regressions were force entered. These coefficients enable us to determine which correlates were the most salient in determining spirituality for men and for women. Unstandardized regression weights, which facilitate direct comparisons between men and women, are shown in Table 6.

In the women’s sample, 21 variables were statistically significant ( $p < .01$ ) in differentiating spiritual women from their less spiritual same gender counterparts. In total, these measures explained 35 percent of the variance in self-reported spirituality. Demographically, we find that White and Asian American/Asian women are less likely to indicate that they are spiritual compared to African American/Black women. Women who are single and women with children are more likely to report that they are spiritual. Adhering to a healthy lifestyle also equates with higher levels of spirituality. Professing a left/liberal political ideology, on the other hand, characterizes women who self-identify as largely non-spiritual. Examining field of study and rank, we observe that women faculty in the Fine Arts are most spiritu-

Table 5. Correlates of Spirituality  
(Simple Correlations and Standardized Coefficients)

Variables	Men		Women	
	r	Final Beta <sup>1</sup>	r	Final Beta <sup>1</sup>
Age	.00	<b>-.03</b>	.09	.01
Race: White	-.01	.00	-.05	<b>-.04</b>
Race: Black	.06	<b>.03</b>	.09	<b>.06</b>
Race: Asian American/Asian	-.04	<b>-.04</b>	-.03	<b>-.05</b>
Marital Status: Single	-.01	.02	.04	<b>.07</b>
Children: Yes	.09	<b>.04</b>	.11	.02
Political View: Liberal	-.32	<b>-.25</b>	-.32	<b>-.23</b>
Healthy Lifestyle	.09	<b>.07</b>	.08	<b>.08</b>
Discipline: Physical Sciences	-.08	<b>-.02</b>	-.06	<b>-.03</b>
Discipline: Fine Arts	.06	<b>.03</b>	.03	.02
Discipline: Humanities	.04	<b>.02</b>	-.04	-.01
Discipline: Biological Sciences	-.07	<b>-.03</b>	-.08	<b>-.03</b>
Discipline: Social Sciences	-.10	-.01	-.14	<b>-.04</b>
Discipline: Math/Statistics	-.03	<b>.02</b>	-.02	-.01
Academic Rank	-.10	<b>-.04</b>	-.11	<b>-.05</b>
Institutional Control: Private	.11	<b>.06</b>	.06	.00
Selectivity: (SATV + SATM)	-.15	<b>-.07</b>	-.15	<b>-.03</b>
Institutional Size (Undergraduates)	-.07	<b>.04</b>	-.08	.01
Institutional Type: University	-.12	.00	-.14	<b>-.04</b>
Focus on Students' Personal/ Spiritual Development	.51	<b>.30</b>	.46	<b>.26</b>
Civic Minded Practice	.25	<b>.06</b>	.24	<b>.07</b>
Personal Stress	.04	<b>.06</b>	.06	<b>.09</b>
Positive Outlook in Work and Life	.21	<b>.12</b>	.18	<b>.10</b>
Personal Goal: Help others in difficulty	.36	<b>.17</b>	.32	<b>.16</b>
Personal Goal: Be very well-off financially	-.02	<b>-.07</b>	.03	<b>-.07</b>
Personal Goal: Have congruence between personal and institutional values	.30	<b>.08</b>	.28	<b>.10</b>
Personal Goal: Obtain recognition from colleagues	-.06	<b>-.03</b>	-.05	<b>-.03</b>
Overall job satisfaction	.06	<b>-.05</b>	.08	<b>-.03</b>

<sup>1</sup>Bolded coefficients are significant (p<.01)

Table 6. Correlates of Spirituality (Unstandardized Coefficients)

Variable	Unstandardized Coefficients <sup>1</sup>		t-value <sup>1</sup>
	Men	Women	
Age	<b>-0.03</b>	0.01	<b>-3.13</b>
Race: White	0.01	<b>-0.30</b>	<b>3.04</b>
Race: Black	<b>0.54</b>	<b>1.01</b>	-2.41
Race: Asian American/Asian	<b>-0.49</b>	<b>-0.70</b>	1.22
Marital Status: Single	0.12	<b>0.38</b>	<b>-3.61</b>
Children: Yes	<b>0.22</b>	0.10	1.86
Political View: Liberal	<b>-0.71</b>	<b>-0.66</b>	-1.59
Healthy Lifestyle	<b>0.11</b>	<b>0.13</b>	-0.90
Discipline: Physical Sciences	<b>-0.16</b>	<b>-0.37</b>	1.47
Discipline: Fine Arts	<b>0.25</b>	0.19	0.64
Discipline: Humanities	<b>0.20</b>	-0.11	<b>3.28</b>
Discipline: Biological Sciences	<b>-0.27</b>	<b>-0.30</b>	0.23
Discipline: Social Sciences	-0.08	<b>-0.23</b>	2.12
Discipline: Math/Statistics	<b>0.22</b>	-0.09	2.18
Academic Rank	<b>-0.09</b>	<b>-0.12</b>	0.78
Institutional Control: Private	<b>0.31</b>	0.01	<b>4.34</b>
Selectivity: (SATV + SATM)	<b>-0.00</b>	<b>-0.00</b>	<b>-3.31</b>
Institutional Size (Undergraduates)	<b>0.00</b>	0.00	1.86
Institutional Type: University	-0.01	<b>-0.18</b>	2.36
Focus on Students' Personal/ Spiritual Development	<b>0.18</b>	<b>0.15</b>	<b>3.69</b>
Civic Minded Practice	<b>0.07</b>	<b>0.07</b>	0.10
Personal Stress	<b>0.05</b>	<b>0.06</b>	-1.48
Positive Outlook in Work and Life	<b>0.14</b>	<b>0.12</b>	1.61
Personal Goal: Help others in difficulty	<b>0.58</b>	<b>0.50</b>	2.14
Personal Goal: Be very well-off financially	<b>-0.23</b>	<b>-0.19</b>	-1.13
Personal Goal: Have congruence between personal and institutional values	<b>0.22</b>	<b>0.27</b>	1.31
Personal Goal: Obtain recognition from colleagues	<b>-0.10</b>	<b>-0.07</b>	-0.89
Overall job satisfaction	<b>-0.17</b>	<b>-0.10</b>	-1.61

<sup>1</sup>Bolded coefficients are significant (p<.01)

ally inclined overall, while those in the Physical Sciences, Biological Sciences, and Social Sciences are least likely to identify as highly spiritual. Finally, the more senior women faculty, as reflected through attained rank, are less likely overall to consider themselves spiritual. With respect to institutional affiliation, we find that women faculty at universities and at selective institutions are less likely to be spiritual compared to their counterparts in four-year colleges and in less selective institutions.

Within the regression analyses, we also included the derived factors described earlier that reflect a number of faculty values and behaviors along with selected additional variables representing values held by faculty. Overall, we find that women faculty who hold a positive outlook in work and life, consider focusing on students' personal and spiritual development a very important goal for undergraduate education, are civically engaged through their teaching and their own community service, prioritize helping others in difficulty, and consider it very important or essential to achieve congruence between their own values and those of their employing institution are more likely to report that they are spiritual. On the other hand, women who consider being financially well-off as a very important or essential life goal are less likely to see themselves as spiritual, as are those who place strong emphasis on obtaining recognition from their colleagues.

Examining the men's sample, we find 24 differentiating correlates. In total, these variables accounted for 40 percent of the variance. With respect to demographics, age tends to play a negative role in men's spiritual identification (i.e., older men are less likely than their younger male colleagues to see themselves as spiritual). Being African American/Black is a strong positive correlate for men's spirituality, while being Asian American/Asian is a negative one. Men who have children are also much more likely to see themselves as being spiritual. As is also true for women, political ideology differentiates men with respect to their professed spirituality, in that those who identify their beliefs as being left/liberal are less spiritual relative to their more politically conservative colleagues. Similar to women faculty, men who are spiritual tend to have a healthy lifestyle compared to those who are less spiritual.

Turning to professional characteristics, we see that men in the Physical Sciences and Biological Sciences tend to be less spiritual, while those in the Fine Arts indicate relatively higher levels of spirituality. As is the case for women, rank seems also to differentiate men with respect to their spirituality, with higher ranked faculty reporting lower levels of spirituality. Finally, men who are employed at private institutions are more spiritual overall, while those working at selective institutions tend to report lower levels of spirituality.

We also observe that, like women, men who score higher on spirituality are also more likely to place high value on students' moral and spiritual development, on helping others in difficulty, and on achieving congruence between their personal and institutional values. They also tend to possess a positive outlook in work and life and are more likely to engage themselves civically, as reflected by their teaching practices and personal activities. Less spiritual men, on the other hand, are inclined to hold more materialistic values, as reflected in the importance they place on being financially very well off. They are also more likely to place high value on obtaining recognition from their colleagues.

Not surprisingly, there are a number of spiritual correlates for which no significant differences were found between men and women. The common positive correlates ( $p < .01$ ) include being of African American/Black race/ethnicity, living a healthy lifestyle, having a positive outlook in work and life, experiencing high levels of personal stress, placing high value on helping others in difficulty, placing high priority on achieving congruence between personal and institutional values, and engaging in civic-minded practice. Uniformly negative correlates ( $p < .01$ ) include being of Asian American/Asian race/ethnicity, having politically liberal values, working in the Physical Sciences or Biological Sciences, having attained more advanced academic rank, desiring to obtain recognition from colleagues, and overall job satisfaction.

In further comparing men and women, however, we observe some interesting differences. For example, while age is an important variable for men, with older men faculty being less spiritual, age does not differentiate significantly among women. On the other hand, we find that being White seems to differentiate negatively among women but, among men, is an inconsequential variable. Being single is also a positive predictor of spirituality for women, but not for men. With respect to disciplinary differences, we find that men in the Humanities are more likely to see themselves as spiritual whereas women in this field generally are not similarly oriented. Overall, institutional characteristics play a more substantial role in how men view themselves with respect to spirituality than is the case with women. Specifically, men in private institutions appear to be more spiritual than those in public institutions. Moreover, institutional selectivity, while negative for both men and women, is a stronger differentiating correlate for men than it is for women. Finally, men who are strongly spiritual are much more likely to value the importance of focusing on students' personal and spiritual development than are spiritual women.

One unanticipated finding that was consistent for both men and women was that spiritual faculty were more likely to report feeling higher levels of

personal stress. It may be that those faculty who are experiencing intensive stress in various aspects of their lives are especially drawn to seeking resolution to those tensions at least, in part, by enriching their lives spiritually. Also surprising was the negative relationship found for both genders between overall satisfaction with one's work and level of spirituality. However, looking at this result more closely, we see that faculty's positive outlook mediates this relationship. That is, work satisfaction is more directly a function of how they view their work and the meaning it has in their lives as depicted in the factor, "Positive Outlook in Work and Life" (e.g., experiencing joy in one's work, feeling that one's work adds meaning to their life, and feeling good about the direction one's life is headed).

### **Discussion**

Recent research illustrates that the degree and quality of people's engagement in the realm of "inwardness" is a critical determinant of overall developmental coherence and resilience.<sup>31</sup> Taken together, our findings show that many college and university faculty today are indeed actively engaged within this realm of "inwardness," as reflected by the degree to which they self-identify as a spiritual person and by the combined emphasis they place on integrating spirituality into their lives and seeking opportunities to grow spiritually. The following discussion highlights several findings that warrant additional consideration and addresses related implications for future research and practice.

In keeping with previous findings, the results of this study indicate that, within the professoriate, women are generally more spiritually inclined than men.<sup>32</sup> As elaborated earlier, the descriptive results showed pronounced gender differences in spirituality based on selected personal and professional characteristics. The inferential analyses that were subsequently conducted provided additional insight regarding the relative importance of these characteristics as determinants of spirituality, in and of themselves, once the effects of other personal and professional variables are taken into account.

Prior research has shown that while the search for meaning and purpose spans generations, the emphasis that people place on engaging in a spiritual quest tends to change throughout different periods of their lives. McLaughlin, for example, credits the rising interest today in expressing one's spirituality at work and striving to lead more integrated and balanced lives to baby boomers.<sup>33</sup> He posits that many members of this very large generation have currently reached a stage in their lives where they have achieved a

level of affluence that frees them to seek avenues for greater self-actualization, authenticity, and wholeness in their lives. This orientation, combined with their increasingly senior status within work organizations enables them to bring a sense of legitimacy to addressing related workplace and professional development issues.

Interestingly, our analyses revealed apparent gender differences in the relationship between age and spirituality. For women, despite the positive simple correlation between these two variables and the readily apparent differences in the percentages of young, middle-aged, and older faculty who score high on spirituality, the relationship between age and spirituality becomes non-significant for women once the effects of other personal and professional characteristics are accounted for. On the other hand, no discernable association between age and spirituality was evident for men prior to controlling for the effects of other variables. However, age was found to have a slightly negative effect on spirituality for men (i.e., older men are less spiritual than younger men) once personal and professional characteristics are taken into account. Based on these demographic findings, one potentially valuable line of future research inquiry involves examining the ways in which faculty members' life stages and related experiences interface with their self-characterized spirituality, and how gender may uniquely impact that relationship.

Additional demographic findings related to the association between race/ethnicity and spirituality also merit further consideration. Why, for example, does being White/Caucasian equate negatively with spirituality for women but not men? Moreover, what cultural conceptions do Asian American/Asian men and women hold that contribute to their relatively pronounced non-identification with the spirituality construct? Finally, how might the generally strong spiritual orientation of African American/Black faculty contribute to uniquely framing their approach to academic work and to shaping their career development trajectories?

The dramatic differences in self-identified spirituality based on political views also raise an intriguing set of questions pertaining to how faculty who have different worldviews and who hold divergent political perspectives conceive of spirituality. For example, how might these conceptions, coupled with a perceived integration (or lack thereof) between spirituality and organized religion affect faculty views? Moreover, to what extent might semantic differences mask potentially significant areas of overlap in faculty members' core beliefs related to spirituality and associated life dimensions? To date, the nature of these relationships has not been examined to any significant extent, particularly within the academic profession.

Toward understanding more fully the interplay between individual and environmental characteristics in shaping faculty members' spiritual proclivities, another potentially promising line of inquiry involves further exploration of disciplinary differences. Clark was among the first to extensively analyze the intellectual and organizational differences associated with academic disciplines as well as the pervasive influence that normative disciplinary perspectives and practices have on their members.<sup>34</sup> In writing about the nature of knowledge and its impact on academic cultures, Becher shows how disciplinary cultures may be affected by social and environmental factors as well as by the relationship between the epistemological characteristics of a particular type of inquiry and the mode of intellectual life associated with that inquiry.<sup>35</sup>

To be sure, the cultural effects of disciplinary differentiation are manifested in both obvious and subtle ways. For example, some fields of intellectual inquiry are seemingly more susceptible than others are to the influence of personal ideology and values. It is reasonable to presume that the personal proclivities of individuals who are attracted to various disciplines and the related effects of the training and socialization they experience will have significant implications for the extent to which faculty value the spiritual dimension of their own lives and their students' lives. Findings from the current study support this notion and shed preliminary insight into how men and women from different academic disciplines are similarly and differentially oriented spiritually. Future research that considers in greater depth the unique and common correlates of spirituality for faculty in various disciplines can further enhance our understanding within this realm.

Somewhat surprisingly, being spiritually inclined does not appear to lessen the degree of stress faculty experience from personal pressures. Nonetheless, we also observe that both men and women faculty who report high levels of personal spirituality tend to have a strong positive outlook in work and life. That is, they are much more likely to feel good about the direction their life is heading, to experience joy in their work, and to say that work adds meaning to their life. Why this should be the case is not entirely clear. However, the content of this scale suggests that highly spiritual faculty feel that they have achieved better integration of their personal and professional lives and better alignment between their academic work and personal values. Certainly, the origins and outcomes of the positive association between spirituality and positive outlook and the negative association between spirituality and personal stress warrant additional consideration. Based on the current findings, however, institutions may want to consider giving greater priority to their faculty members' personal and "spiritual" development. Such a conclusion is consistent with the finding that more than half of four-year

college and university faculty (60%) disagree with the statement that “The spiritual dimension of faculty members’ lives has no place in the academy.”

The seminal research that Astin and Astin conducted on issues of meaning and spirituality in the lives of college and university faculty underscores this sentiment.<sup>36</sup> Most of the faculty who were interviewed as part of that study wanted to engage in conversation about these issues. However, they reported that their institutions provided few, if any, opportunities for such dialogue. Some faculty felt that frank, collegial discussion of such issues was hampered by the inherent cultural and structural constraints imposed both by their profession and their institutional work environments. What Weathersby calls the “rational academic paradigm” may indeed interfere with faculty being spiritually present in their work and, by extension, may make it difficult for them to effectively facilitate student development in this realm.<sup>37</sup> Stockton’s analysis of attitudes toward spirituality among faculty and administrators at public universities revealed a common theme of “curiosity tempered with caution.”<sup>38</sup> While there was an identified need for more open dialogue, faculty and administrators alike were unclear how best to engage in such conversations given issues of terminology, worry about being perceived as proselytizing, concern about first amendment issues, and fear of isolation and labeling.

Certainly, issues related to whether and how the spiritual dimension of faculty should be appropriately acknowledged, embraced, and celebrated within the academy are multifaceted and complex. So too are considerations regarding the role that faculty can and should—or should not—play in students’ spiritual development. Understandably, perspectives vary widely, especially within public institutions. However, as Braskamp found, there are inherent challenges even within religiously-affiliated institutions.<sup>39</sup>

Finally, and perhaps most notably, the study findings suggest that spiritual faculty are more likely than their non-spiritual counterparts to exhibit characteristics that resonate well with the public’s ever evolving expectations for higher education. Specifically, the study findings show that, for both men and women, being highly spiritual is strongly correlated with faculty’s views about the goals of undergraduate education that relate specifically to the importance of students’ personal and spiritual development. Generally speaking, faculty who are spiritual view the importance of students’ personal development to be equal to that of intellectual and career development. In other words, they have a more holistic view of undergraduate education as it pertains to student development. Not surprisingly, spiritual faculty are also much more likely to engage in civic minded practice, such as using their scholarship to address local community needs and engaging in public service or professional consulting without pay. Spiritual-

ity has also been found to be a significant predictor of student-centered pedagogy use, including student-selected course topics, cooperative learning, reflective writing/journaling, and the like.<sup>40</sup> This association reinforces the notion that, in potentially many ways, how faculty approach their work and how they choose to teach inescapably reflects to students and colleagues who they are and what they believe.

Palmer, for example, has written eloquently about the emotional and spiritual dimensions of life and the unique potential educators have to help students develop their capacity for connectedness, responsiveness, and accountability.<sup>41</sup> Similarly, Kazanjian and Laurence maintain that through examining issues of purpose and meaning within the context of the campus environment; acknowledging the multiple aspects of self that operate simultaneously within individuals; and celebrating the diverse experiences that people bring to their encounters with one another, colleges and universities have tremendous potential to shape society positively.<sup>42</sup> One challenge that faculty face in facilitating less well-studied and understood aspects of student development is in identifying the pedagogical tools that are most useful in achieving desired outcomes. A related challenge for faculty is developing the personal expertise to use these potentially new teaching and evaluation methods effectively. Recently, there has been a proliferation of work that addresses considerations related to addressing the spiritual component of student and faculty lives.<sup>43</sup> Additional work that relates empirical research findings to purposeful curricular and institutional change is greatly needed.

To be sure, we are beginning this new century amidst a rapidly changing national and, indeed, international landscape; one that simultaneously presents unprecedented challenges and offers tremendous opportunities for higher education. Historically, higher education has placed its unquestioned trust in colleges and universities, allowing members of the academy considerable freedom to pursue their work. Today, however, society is also voicing more loudly the claim that faculty have a social responsibility to contribute more fully to the wellbeing of their institutions, their students, and the larger community. Amidst enrollment uncertainties, pressures for accountability, financial cutbacks, and the increasing prevalence of part-time and non-tenure track faculty appointments,<sup>44</sup> pressures on the new generation of faculty to be more inclusive, expressive, and responsive are intensifying. At this critical juncture for the professoriate, questions of meaning, purpose, connection, and authenticity are more critical than ever before. And, certainly, the ways in which these questions are addressed have important implications for the long-term wellbeing of higher education and society at large.

Certainly, for reasons highlighted earlier, there is inherent importance in acknowledging and attending to the interior lives of faculty. Additionally, in order to enhance the capacity of colleges and universities with respect to facilitating students' spiritual growth and development, it is essential that we know what faculty think, what they believe, and what they do. It is also important that we go beyond those pursuits to listen to the heart of who they are and what they feel. Only through seeking this type of multifaceted understanding can we ultimately identify the most effective ways to promote the personal development and wellbeing of both students and faculty. While many of the questions and considerations raised here will be most effectively addressed using qualitative modes of inquiry, the foundational national data presented here provide an important context for shaping such inquiries and offer many possibilities for further quantitative inquiry.

#### *Notes*

1. I.I. Mitroff and E.A. Denton, "A Study of Spirituality in the Workplace," *Sloan Management Review* (1999): xvii.
2. G.H. Gallup, Jr., "Remarkable Surge of Interest in Spiritual Growth Noted as Next Century Approaches," *Emerging Trends* 12(1) (1998).
3. A.W. Astin, H.S. Astin, J.A. Lindholm, and A.N. Bryant, *Spirituality in Higher Education: A National Study of College Students' Beliefs and Values* (Los Angeles: Higher Education Research Institute, UCLA, 2005).
- M. DeSouza, "Contemporary Influences on the Spirituality of Young People: Implications for Education," *International Journal of Children's Spirituality* 8(11) (2003): 269-279.
- M. Harris and G. Moran, *Reshaping Religious Education* (Louisville, KY: Westminster John Knox Press, 1998).
4. C.E. Ellison and J.S. Levin, "The Religion-Health Connection: Evidence, Theory, and Future Directions," *Health Education and Behavior* 25 (1998): 700-720.
- P.C. Hill, K.I. Pargament, R.W. Hood, Jr., M.E. McCullough, J.P. Swyers, D.B. Larson, and B.J. Zinnbauer, "Conceptualizing Religion and Spirituality: Points of Commonality, Points of Departure," *Journal for the Theory of Social Behaviour* 30 (2000): 51-77.
5. K.L. Todd, *A Semantic Analysis of the Word Spirituality* (2004), 2. Available online at <http://web.nwe.ufl.edu/~jdouglas/spiritual.pdf>.
6. R.C. Fuller, *Spiritual But Not Religious: Understanding Unchurched America* (Oxford: Oxford University Press, 2001).
7. Fetzer Institute/National Institute on Aging Working Group, *Multidimensional Measurement of Religiousness/Spirituality for Use in Health Research* (Kalamazoo, MI: Fetzer Institute, 2003), 2.

8. A.W. Astin, "Is Spirituality a Legitimate Concern in Higher Education?" Opening keynote address presented at the conference, *Spirituality and Learning*, San Francisco, 18 April 2002.
9. J. Dyson, M. Cobb, and D. Forman, "The Meaning of Spirituality: A Literature Review," *Journal of Advanced Nursing* 26 (1997): 1183-1188.
- N.C. Goddard, "A Response to Dawson's Critical Analysis of 'Spirituality' as Integrative Energy," *Journal of Advanced Nursing* 31 (2000): 968-979.
- R.A. Tanyi, "Towards Clarification of the Meaning of Spirituality," *Journal of Advanced Nursing* 39(5) (2002): 500-509.
10. D.M. Hindman, "From Splintered Lives to Whole Persons: Facilitating Spiritual Development of College Students" *Religious Education* 97(2) (2002): 168.
11. P.G. Love and D. Talbot, "Defining Spiritual Development: A Missing Consideration for Student Affairs," *NASPA Journal* 37(1) (1999): 361-375.
- Hill, et al., 2000. B.J. Zinnbauer, K.I. Pargament, and A.B. Scott, "The Emerging Meanings of Religiousness and Spirituality: Problems and Prospects," *Journal of Personality* 67 (1999): 889-919.
12. E.J. Tisdell, "Spirituality in Adult and Higher Education," In *ERIC Clearinghouse on Adult Career and Vocational Education* (Columbus, OH, 2001), #ED459370.
13. D. Zohar and I. Marshall, *Spiritual Capital: Wealth We Can Live By* (San Francisco, CA: Berrett-Koehler Publishers, Inc, 2004).
14. A.W. Astin, 2002.
15. P.T. Terenzini, E.T. Pascarella, and G.S. Blimling, Students' Out-of-Class Experiences and Their Influence on Learning and Cognitive Development: A Literature Review," *Journal of College Student Development* 37(2) (1996): 149-162.
16. A.W. Chickering, *Education and Identity* (San Francisco, CA: Jossey-Bass, 1969). P.T. Terenzini, C. Theophilides, and W.G. Lorang, "Influences on Students' Perceptions of their Academic Skill Development During College," *The Journal of Higher Education* 55(4) (1984): 621-636.
17. H. Bowen, *Investment in Learning: The Individual and Social Value of American Higher Education* (San Francisco, CA: Jossey-Bass, 1977).
18. E.T. Pascarella and P.T. Terenzini, *How College Affects Students* (San Francisco, CA: Jossey-Bass, 1991).
19. A.W. Astin, *What Matters in College? Four Critical Years Revisited* (San Francisco, CA: Jossey-Bass, 1993). P.T. Terenzini and E.T. Pascarella, "Living with Myths: Undergraduate Education in America," *Change* 26(1) (1994): 28-32.
20. G.D. Kuh, "The Other Curriculum: Out-of-Class Experiences Associated with Student Learning and Personal Development," *The Journal of Higher Education* 66(2) (1995): 123-155.

21. A.W Astin and H.S. Astin, *Meaning and Spirituality in the Lives of College Faculty: A Study of Values, Authenticity, and Stress* (Los Angeles, CA: Higher Education Research Institute, UCLA, 1999). L.A. Braskamp, *Fostering Student Development Through Faculty Development: A National Survey of Chief Academic Officers at Church-Related Colleges* (Chicago, IL: Loyola University Chicago, 2003).
22. H.S. Astin and K. Twede, *Institutional and Personal Correlates of Shared Values in Academe* (Unpublished manuscript, 1989).
23. A.W Astin and H.S. Astin, 1999. A.W. Astin, H.S. Astin, J.A. Lindholm, and A.N. Bryant, 2005. L.A. Braskamp, 2003.
24. J.A. Lindholm, K. Szelényi, S. Hurtado, and W.S. Korn, *The American College Teacher: National Norms for the 2004-2005 HERI Faculty Survey* (Los Angeles, CA: Higher Education Research Institute, UCLA, 2005).
25. Percentages of racial/ethnic identity add to more than 100 because faculty were permitted to mark more than one racial/ethnic category, as applicable
26. Two-year colleges were omitted from the sample upon which the analyses presented here were based because of the many work-related differences between the faculty populating four-year institutions and two-year institutions.
27. The sample for the regression analyses consisted of 15,698 men and 9,099 women.
28. These categories were determined by examining the range of responses to all three items included in the composite measure.
29. S. Kanis, "Theobiology and Gendered Spirituality," *American Behavioral Scientist* 45 (2002): 1866-1874. L.J. Francis, "The Psychology of Gender Differences in Religion: A Review of Empirical Research," *Religion* 27 (1997): 81-96. U. King, ed., *Religion and Gender* (Oxford, UK: Blackwell Publishers, 1995).
30. A.W. Astin, H.S. Astin, and J.A. Lindholm, "College Students' Spirituality and Religiousness Varies by Race and Gender, New Study Shows: African Americans Most Religious Group," Press Release, Higher Education Research Institute, UCLA, 6 October 2005.
31. A.G. Nino, "Spiritual Quest Among Young Adults," In V. Kazanjian and P. Laurence (Eds.), *Education as Transformation: Religious Pluralism, Spirituality, and a New Vision for Higher Education in America* (New York: Peter Lang Publishing, Inc, 2002), 45-57.
32. U. King, 1995.
33. A. McLaughlin, "Seeking Spirituality...At Work," *Christian Science Monitor* 16 (March 1998). Available online at <http://csmonitor.com/durable/1998/03/16/us.2.html>.

34. B.R. Clark, *The Academic Life: Small Worlds, Different Worlds* (Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching, 1987).
35. T. Becher, "The Disciplinary Shaping of the Profession," In B.R. Clark (Ed.), *The Academic Profession: National, Disciplinary, and Institutional Settings* (Berkeley, CA: University of California, 1987), 185.
36. A.W. Astin and H.S. Astin, 1999.
37. R. Weathersby, "Being Spiritually Present at Work in the Academy: Possibilities and Dilemmas," Research session presented at the conference, *Going Public with Spirituality in Work and Higher Education*, Amherst, MA: 5 June 2000.
38. S. Stockton and Associates, "The Private Conversations about Spirituality at a Public University," Research forum presented at the conference *Going Public with Spirituality in Work and Higher Education*, Amherst, MA, 6 June 2000.
39. L.A. Braskamp, 2003.
40. J.A. Lindholm and H.S. Astin, *Spirituality and Student-Centered Pedagogy Use* (Unpublished analyses, 2006).
41. P.J. Palmer, *To Know As We Are Known: Education as a Spiritual Journey* (San Francisco, CA: Jossey-Bass, 1983). P.J. Palmer, *The Courage to Teach: A Guide for Reflection and Renewal* (San Francisco, CA: Jossey-Bass, 1999).
42. V. Kazanjian, and P. Laurence, *Education as Transformation: Religious Pluralism, Spirituality, and a New Vision for Higher Education in America* (New York, NY: Peter Lang, 2000).
43. L.A. Braskamp, L.C. Trautvetter, and K. Ward, *Putting Students First: How Colleges Develop Students Purposefully* (Boston: Anker Publishing, 2006). A.W. Chickering, J.C. Dalton, and L. Stamm, *Encouraging Authenticity and Spirituality in Higher Education* (San Francisco: Jossey-Bass, 2006). E.J. Tisdell, *Exploring Spirituality and Culture in Adult and Higher Education* (San Francisco: Jossey-Bass, 2003).
44. P.G. Altbach, "Harsh Realities: The Professoriate Faces a New Century," In P.G. Altbach, R.O. Berdahl, and P.J. Gumport (Eds.), *American Higher Education in the 21<sup>st</sup> Century: Social, Political, and Economic Challenges* (Baltimore, MD: Johns Hopkins University, 1999).

**Appendix A: Variable Definitions and Coding Schemes****Dependent Variable**

‘Spirituality’	Three-item factor <sup>A</sup> scale ( $\alpha=.88$ )
----------------	---

**Independent Variables**

Sex: Female	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Age	10-point scale: 1=<30 to 10=70+
Race: White/Caucasian	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Race: African American/Black	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Race: Latino/a <sup>B</sup>	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Race: Asian American/Asian	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Race: American Indian/Alaska Native	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Race: Native Hawaiian/Pacific Islander	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Race: Other	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Children	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Marital Status: Single	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Marital Status: Married	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Marital Status: Living with Partner	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Political Orientation	5-point scale: 1= <i>Far Right</i> to 5= <i>Far Left</i>
‘Healthy Lifestyle’	Three-item <sup>C</sup> factor scale ( $\alpha=.67$ )
‘Research Orientation’	Three-item <sup>D</sup> factor scale ( $\alpha=.74$ )
Engage in work spanning multiple disciplines	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Degree earned	4-point scale: 1=None to 4=Doctorate or Professional
Major: Agriculture/Forestry	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Major: Biological Sciences	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Major: Business	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Major: Education	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Major: Engineering	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Major: English	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>
Major: Fine Arts	Dichotomous variable: 1= <i>no</i> , 2= <i>yes</i>

A. Factor includes: Personal Characteristics: ‘Consider yourself a spiritual person’ and ‘Seek opportunities to grow spiritually’; and Personal Objective: ‘Integrate spirituality into my life.’

B. Latino/a includes: Mexican/Chicano, Puerto Rican, and Other Latino.

C. Factor includes: Personal Characteristics: ‘Engage in regular exercise,’ ‘Eat a well-balanced diet,’ and ‘Get adequate amounts of sleep.’

D. Factor includes: Hours per Week: ‘Research and scholarly writing’; Primary Interest: ‘Research’; and Work Activity: ‘Number of professional writings published/accepted for publication in past two years.’

**Appendix A: Variable Definitions and Coding Schemes continued**

**Independent Variables**

Degree earned	4-point scale: 1=None to 4=Doctorate or Professional
Major: Health Sciences	Dichotomous variable: 1=no, 2=yes
Major: Humanities	Dichotomous variable: 1=no, 2=yes
Major: Math/Statistics	Dichotomous variable: 1=no, 2=yes
Major: Physical Sciences	Dichotomous variable: 1=no, 2=yes
Major: Social Sciences	Dichotomous variable: 1=no, 2=yes
Major: Other Technical Field	Dichotomous variable: 1=no, 2=yes
Major: Other Major	Dichotomous variable: 1=no, 2=yes
Academic Rank	4-point scale: 1=Lecturer/Instructor/Other to 4=Full Professor
Held academic administrative position	Dichotomous variable: 1=no, 2=yes
Institutional control: Private	Dichotomous variable: 1=no, 2=yes
Institutional selectivity: Average SATV + SATM	Continuous variable: 820 to 1406
Number of undergraduate students	Continuous variable: 72 to 37,605
Institutional type: University	Dichotomous variable: 1=no, 2=yes
Personal Goal: Help others in difficulty	4-point scale: 1=not important, 4=essential
Personal Goal: Have congruence between personal values and institutional values	4-point scale: 1=not important, 4=essential
Personal Goal: Be very well-off financially	4-point scale: 1=not important, 4=essential
Personal Goal: Obtain recognition from colleagues	4-point scale: 1=not important, 4=essential
Personal Goal: Be a good teacher	4-point scale: 1=not important, 4=essential
Personal Goal: Serve as a role model to students	4-point scale: 1=not important, 4=essential
Personal Goal: Be involved in programs to clean up the environment	4-point scale: 1=not important, 4=essential
'Focus on Personal/Spiritual Development'	Six-item <sup>E</sup> factor scale ( $\alpha=.88$ )
'Civic Minded Values'	Eight-item <sup>F</sup> factor scale ( $\alpha=.80$ )
'Civic Minded Practice'	Seven-item <sup>G</sup> factor scale ( $\alpha=.71$ )

E. Factor includes: Goals for Undergraduates: 'Develop moral character,' 'Provide for emotional development,' 'Help develop personal values,' 'Enhance self-understanding,' 'Enhance spiritual development,' and 'Facilitate search for meaning/purpose in life.'

F. Factor includes: Personal Objectives: 'Influence social values,' 'Influence political values'; Goals for Undergraduates: 'Instill a commitment to community service,' 'Prepare for responsible citizenship'; General Opinions: 'Colleges should be actively involved in solving social problems,' 'Colleges are responsible for working with surrounding communities,' 'Colleges should encourage students to be involved in community service,' 'Community service as part of a course is a poor use of resources' (recoded).

G. Factor includes: General Activities: 'Collaborated with the local community in research/teaching,' 'Used your scholarship to address local community needs,' 'Engaged in public service/professional consulting without pay'; Hours per Week: 'Community/public service'; Teaching Practice: 'Community service as a part of coursework,' 'Taught a service learning course,' 'Advised student groups in community service.'

**Appendix A: Variable Definitions and Coding Schemes continued****Independent Variables**

'Positive Outlook in Work and Life'	Five-item <sup>H</sup> factor scale ( $\alpha=.78$ )
'Use of Student-Centered Pedagogy'	Eight-item <sup>I</sup> factor scale ( $\alpha=.81$ )
'Diversity Advocacy'	Five-item <sup>J</sup> factor scale ( $\alpha=.79$ )
'Personal Stress'	Twelve-item <sup>K</sup> factor scale ( $\alpha=.70$ )
'Work Stress'	Ten-item <sup>L</sup> factor scale ( $\alpha=.72$ )
Overall Job Satisfaction	4-point scale: 1= <i>Not Satisfied</i> to 4 = <i>Very Satisfied</i>

H. Factor includes: Personal Characteristics: 'Experience joy in your work,' 'Feel good about the direction in which your life is headed,' 'Achieve a healthy balance between your personal and professional life,' 'Feel that your work adds meaning to your life,' 'Experience close alignment between your work and personal values.'

I. Factor includes: Teaching Practice: 'Cooperative learning,' 'Group projects,' 'Student presentations,' 'Student evaluations of each other's work,' 'Class discussions,' 'Reflective writing/journaling,' 'Student evaluations of their own work,' 'Student-selected course topics.'

J. Factor includes: Institutional Opinion: 'This institution should reflect diversity more strongly in the curriculum'; General Opinions: 'A racially/ethnically diverse student body enhances the educational experiences of all students,' 'Promoting diversity leads to the admission of too many underprepared students' (recoded); Personal Objective: 'Promote racial understanding;'; Goal for Undergraduates: Enhance knowledge of/appreciation for other racial/ethnic groups.

K. Factor includes: Source of Stress: 'Household responsibilities,' 'Child care,' 'Care of elderly parent,' 'My physical health,' 'Health of spouse/partner,' 'Personal finances,' 'Children's problems,' 'Marital friction,' 'Being part of a dual-career couple,' 'Self-imposed high expectations,' 'Lack of personal time,' 'Subtle discrimination.'

L. Factor includes: Source of Stress: 'Committee work,' 'Faculty meetings,' 'Job security,' 'Change in work responsibilities,' 'Working with underprepared students,' 'Research/publishing demands,' 'Institutional procedures and 'red tape',' 'teaching load,' 'keeping up with information technology,' 'review/promotion process.'