

Cross-Cultural Generalizability of the Spiritual Transcendence Scale in India

Spirituality as a Universal Aspect of Human Experience

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Spirituality can be perceived as a universal human experience, as evidenced by recent advances in theobiology and neurotheology. Our aspiration to find meaning within our own mortality is fundamental to human strivings. Spirituality has been found to comprise a unique factor to explain human behavior above and beyond the heritable features that comprise personality. However, little research has been conducted validating spiritual transcendence across diverse religious and cultural groups. The Spiritual Transcendence Scale (STS), along with additional attitude and personality measures, were administered in an Indian sample of Hindus, Christians, and Muslims. Results showed structural validity of the STS and predictive validity independent of personality factors, consistent with U.S. samples. Gender differences between the three religions indicated that religiousness and spirituality are not isomorphic constructs. These results provided support for use of the STS in diverse samples and evidence of the universality of spiritual experience.

There is no doubt that spirituality is receiving much attention in both the mass media and in professional circles (e.g., Paloutzian, 1996; Woodward, 2001). What is particularly exciting, though, is that the current discussions on the topic are creating whole new areas of analysis, such as neurotheology (e.g., Newberg, D'Aquili, & Rause, 2001), which examines the neurological and biological bases to the spiritual experience and theobiology (Rayburn & Richmond, 1998), which seeks to understand spirituality through the fullness and structure of the natural world in which we live. What all these new approaches are beginning to show is that spirituality is a basic element to who we are as human beings. Our

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desire to find meaning within the reality of our own mortality (which is one definition of spirituality; Piedmont, 1999a) is rooted in the very anatomic structures of our brain. Furthermore, our perceptions of the sacred are molded by the objects and patterns that comprise our physical world. One underlying corollary to these organic perspectives is the recognition that spirituality is a universal human experience. Although religious practices, rituals, and views of God may vary across cultures (e.g., Leach, Piedmont, & Monteiro, 2001), human beings' desire to connect with some larger, sacred reality has been a constant force in human societies over time. The purpose of this article is to present empirical evidence for this hypothesis by examining whether a motivationally based measure of spirituality, developed in the United States with mostly Christian participants, can generalize to a non-Western culture and across multiple religions. If so, then cross-cultural research may provide a methodology for documenting the value and salience of spirituality for understanding the human experience (see McCrae & Costa, 1997).

CROSS-CULTURAL ISSUES IN SPIRITUAL ASSESSMENT

The profession of psychology, particularly in the United States, has been accused of being ethnocentric (Leach, 2001; Leach & Sullivan, 2000; Paniagua, 1998; Robinson & Howard-Hamilton, 2000), and one could argue that the majority of existent psychology of religion research also falls under the rubric of being culturally limited. For example, it is not surprising that Christian-based measures of spirituality dominate the field, with little recognition of non-Christian faiths (see Gorsuch, 1984; Hall, Tisdale, & Brokaw, 1994). Two possible reasons for this include the following: (a) The majority of researchers are themselves Christians and are often associated with universities espousing Christian beliefs, and (b) Christian research samples are more easily obtained in the United States than are other faiths. This lack of theological pluralism preempts the field's ability to demonstrate the value of spirituality by capturing its basic, common elements. This, in turn, compromises our ability to develop comprehensive models of spiritual development and experience that have practical significance and ecological validity. Concepts such as theobiology represent refreshing attempts at constructing broad-based models of spirituality that emphasize its universality.

To find a broader paradigm within which to conceptualize spirituality, Piedmont (1999a) took a motivational/trait perspective to construing spirituality. This perspective views spirituality as a nonspecific, affective force that drives, directs, and selects behaviors. As an intrinsic source of motivation, spirituality would be a relatively stable construct over time and would impel individuals toward identifiable goals (Emmons, 1999). Spirituality would operate in ways consistent with other motivational traits, such as power, affiliation, achievement, outgoingness, and orderliness. One of the advantages of this approach is that it would necessitate the development of a nondenominational

construct. As noted above, many current spirituality scales reflect specific religions, primarily those of mainline Protestantism, which restricts their generalizability to other Christian and non-Christian groups (Gorsuch & Miller, 1999). However, there are exceptions, such as the Inventory on Spirituality (Rayburn, 2000; Rayburn & Richmond, 1997).

SPIRITUAL TRANSCENDENCE: DEFINITION AND DEVELOPMENT

With this perspective in mind, Piedmont (2001) defined spirituality as an individual's efforts to construe a broad sense of personal meaning within an eschatological context. This means that as humans, we are intimately aware of our own mortality. As such, we strive to construct some sense of purpose and meaning for the lives we are leading. We question our purpose for existence and the value our lives provide to the world we inhabit. Answers to these existential questions help us to weave the many diverse threads of our lives into a more meaningful coherence that gives us the will to live productively. A spiritual orientation develops when these answers also lead us to develop a sense of spiritual transcendence or

the capacity of individuals to stand outside of their immediate sense of time and place and to view life from a larger, more objective perspective. This transcendent perspective is one in which a person sees a fundamental unity underlying the diverse strivings of nature. (Piedmont, 1999a, p. 988)

In developing the Spiritual Transcendence Scale (STS), a consortium of theological experts from diverse faith traditions, including Buddhism, Hinduism, Quakerism, Lutheranism, Catholicism, and Judaism, was assembled. This focus group identified aspects of spirituality that were common to all of these faiths. The resulting items were analyzed within the context of the Five Factor Model of Personality (FFM, an empirically validated and comprehensive taxonomy of individual differences that has been well accepted cross-culturally; see Digman 1990; McCrae & Costa, 1997) and were shown to constitute an independent individual-differences dimension. The STS manifested a single overall factor composed of three "facet" scales: *Prayer Fulfillment*, a feeling of joy and contentment that results from personal encounters with a transcendent reality (e.g., "I find inner strength and/or peace from my prayers"); *Universality*, a belief in the unitive nature of life (e.g., "I feel that on a higher level, all of us share a common bond"); and *Connectedness*, a belief that one is part of a larger human reality that cuts across generations and across groups (e.g., "I am concerned about those who will come after me in life"). The structure of the STS was stable over several samples, evidencing three correlated first-order factors that all loaded on a single second-order dimension (Piedmont, 2001). Furthermore, the STS evidenced incremental validity by significantly predicting a number of relevant psychological outcomes (e.g., stress experience, social support,

interpersonal style) even after the predictive effects of personality were removed (Piedmont, 1999a).

For the STS to be shown to capture a universal aspect of spirituality, it would be necessary to document that the instrument remains reliable and valid in culturally diverse, religiously heterogeneous samples. The purpose of this article is to take a first step in this direction by examining the psychometric qualities of the STS in a multireligious, Indian sample. The following issues will be addressed: (a) Does the scale remain reliable in this new cultural sample, especially across the different religious faiths? (b) Are there gender and religious affiliation differences in mean level? (c) Does the scale evidence its putative factor structure of three correlated first-order factors subsumed under a global second-order factor? (d) Does the scale correlate significantly with other measures of religious activity, spirituality, and psychological maturity? and (e) Does the STS remain a significant predictor of these outcomes even after the predictive effects of personality are controlled (i.e., the STS shows incremental validity)?

METHOD

PARTICIPANTS

Participants consisted of 273 female and 96 male undergraduate Indian students, ages 17 to 27 ($M = 21$). Of these, 87 were Christian, 218 were Hindu, and 64 were Muslim. These numbers slightly underrepresented the actual percentage of Hindus in India while overrepresenting the Christian and Muslim faiths, a necessity for comparison purposes. Two types of individuals participated in this project, university students and nonstudent adults. Students completing the inventories did so in groups of 15 to 30 in class and comprised 95% of the participants. The remaining 5% of participants were chosen from a convenience sample and completed the instruments individually. Respondents returned the packets directly to the research administrator. All of the participants volunteered to do so and did not receive remuneration or other credit for their participation. Participants spoke English, were multilingual, and were recruited from the Hyderabad region of India.

MEASURES

Spiritual Transcendence Scale (STS). Developed by Piedmont (1999a), this 24-item scale consists of three subscales: Universality (a belief in the unity and purpose of life), Prayer Fulfillment (an experienced feeling of joy and contentment that results from prayer and/or meditation), and Connectedness (a sense of personal responsibility and connection to others). Items are answered on a Likert-type scale ranging from 1 (*strongly agree*) to 5 (*strongly disagree*). A

rater version of this scale was also developed to be completed by peer evaluators. This form contains the same format as the self-report version, with the exception that items are worded in the third person. Piedmont (1999a) has shown these scales to have acceptable reliabilities for both the self-report (.83, .87, and .64 for Universality, Prayer Fulfillment, and Connectedness, respectively) and peer versions (.91, .87, and .72, respectively). Scores on these scales have also been shown to predict a variety of related spiritual constructs and a number of psychologically salient outcomes (e.g., stress experience, well-being, psychological maturity, and attitudes toward sexuality; Piedmont, 1999a, 2001).

Bradburn Affect Balance Scale. Developed by Bradburn (1969), this 20-item True-False scale captures the dimensions of Positive and Negative Affect (PAS and NAS, respectively). Subtracting the NAS from the PAS creates the Affect Balance Scale (ABS). Studies have shown the PAS and NAS scales to represent independent dimensions (Bradburn, 1969; Costa & McCrae, 1980). Scores on these scales have been shown to correlate with ratings of global happiness (Lowenthal, Thurner, & Chiriboga, 1975) and well-being (Costa & McCrae, 1984). Alphas in the current sample for the PAS and NAS scales were .55 and .61, respectively.

Faith Maturity Scale. Developed by Benson, Donahue, and Erickson (1993), this scale assesses the degree to which one's life is energized by a fulfilling faith orientation. The version used in this study was the 12-item short form. There are two subscales; the Horizontal subscale evaluates the degree to which one's faith leads toward commitments to help others, and the Vertical subscale looks at one's sense of closeness to God. Alpha reliabilities in this sample for the Horizontal and Vertical subscales were .62 and .70, respectively. Alpha for the overall total scale was .81.

The Purpose in Life Test. Developed by Crumbaugh (1968), this 20-item scale measures a person's "will to meaning" as construed by Frankl (1959, 1966). Responses are given on a 7-point Likert-type scale, the poles of which vary according to the question. Guttman (1996) reviewed the research literature on this scale, which provides basic validity data, documenting the scale's ability to capture the degree to which an individual has developed a personal sense of meaning in life. Alpha reliability for the scale in this sample was .84. Research has shown this scale to be related to psychological well-being (Zika & Chamberlain, 1992), ability to cope successfully with the death of a significant other (Pfof, Stevens, & Wessels, 1989; Stevens, Pfof, & Wessels, 1987), and successful outcomes from an alcohol dependence treatment program (Waisberg, & Porter, 1994).

Demographic Questionnaire. Developed by the first author, this scale queries participants about their age, gender, and religious affiliation. Also included were

TABLE 1: Alpha Reliabilities for the Spiritual Transcendence Scale (STS) Overall and Separately by Religious Affiliation

STS Scale	Faith Tradition			Overall Sample (N = 365)
	Christian (n = 86)	Muslim (n = 62)	Hindu (n = 217)	
Universality	.69	.71	.64	.67
Prayer Fulfillment	.54	.51	.60	.59
Connectedness	-.11	.19	.34	.23
Total score	.71	.72	.71	.71

several Likert-type items asking participants the frequency with which they read the Bible and other religious literature, their frequency of prayer, the extent to which they have a close relationship with God, and the degree to which they experience a union with God that enables them to grow spiritually.

Bipolar Adjective Rating Scale (BARS). This 80-item scale is designed to capture the five major dimensions of personality: Neuroticism, Extroversion, Openness, Agreeableness, and Conscientiousness. Research has shown this scale to capture stable trait dimensions of personality that exhibit cross-instrument, cross-observer validity. Responses are measured on a 7-point Likert-type scale, and scores for each dimension are found by simply summing responses for each domain. Half of the items are negatively reflected to reduce acquiescence effects. Although initially developed and validated for adults (McCrae & Costa, 1985, 1987), the scale has been shown to be reliable and structurally valid with college students (Piedmont, 1995). Alpha reliabilities for the Neuroticism, Extroversion, Openness, Agreeableness, and Conscientiousness scales in this sample were .59, .73, .55, .80, and .83, respectively.

PROCEDURE

After receiving permission from school administrators, students were approached by a research assistant and informed of the intent of the study. Participants were administered the series of instruments in random order except for the demographic sheet, which came first.

RESULTS

INTERNAL STRUCTURE

Table 1 presents the alpha reliability coefficients for the STS Scale overall and separately by religious faith. In this sample, the alpha reliabilities were

TABLE 2: Spiritual Transcendence Scale (STS) Means by Gender and Religious Affiliation

STS Scale	Christian		Hindu		Muslim	
	Men (n = 39)	Women (n = 48)	Men (n = 31)	Women (n = 183)	Men (n = 26)	Women (n = 38)
Universality	32	36	33	34	29	34
Prayer Fulfillment	31	33	31	30	29	31
Connectedness	21	21	20	21	20	20
Total score	84	90	84	85	78	86

lower than normative values. The Connectedness facet failed to demonstrate a useful level of consistency, suggesting that the concepts in this scale may not carry much meaning in this cultural and religious context.

To determine the degree to which the scale conforms to its putative internal structure, a confirmatory factor analysis (CFA) that specified three correlated first-order factors and a single second-order factor was conducted. The results of this analysis provided some support for the model, overall chi-square ($df = 249$, $N = 365$) = 635.63, $p < .001$; the ratio of chi-square to df was 2.6, the Goodness-of-Fit Index (GFI) was .91, and the standardized root mean square residual (SRMR) was .076, less than the threshold of .10. However, the Comparative Fit Index (CFI) and Incremental Fit Index (IFI) were .80. This indicates that the proposed structure did not efficiently capture the observed variance among the items. When the Connectedness scale and its items were deleted from the analyses, a significantly better fit was noted, overall chi-square ($df = 133$, $N = 365$) = 250.69, $p < .001$; the chi-square to df ratio of 1.89 indicated very good fit; the GFI, CFI, and IFI were all above .90; and the SRMR = .063. All STS items loaded significantly on their intended factors. Thus, there was strong support for two of the STS factors in these data.

INTERFAITH AND GENDER DIFFERENCES

Means for men and women across the three faith groups are presented in Table 2. In comparing these values with those found with American college students (Piedmont, 2001), the current sample was higher on Prayer Fulfillment and total score and about the same on Universality and Connectedness. An examination of the skewness and kurtosis of the distribution of scores for the three facet scales and the overall total score indicated a single effect: The Prayer Fulfillment scale evidenced significant leptokurtosis (z kurtosis = 2.40, $p < .05$). All other scales exhibited relatively normal curves.

A 2 (gender) \times 3 (religious affiliation) ANOVA was conducted on STS total scores. A significant Gender-by-Faith interaction emerged, $F(2, 363) = 5.15$, $p < .05$. Figure 1 plots these means. As can be seen, Christian and Muslim women scored significantly higher than their male counterparts. No gender differences

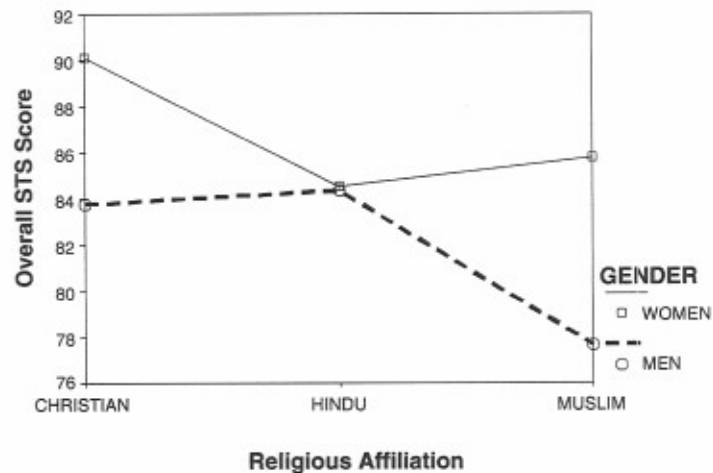


Figure 1: Plot of the Gender-by-Religious Affiliation Interaction Effect

were noted for Hindus. Muslim men scored significantly lower than all other groups, whereas Christian women scored the highest.

To examine more specific effects, a 2×3 MANOVA was performed using the three STS facet scales as the dependent variables. A significant main effect for gender was found, Wilks's lambda = .92, multivariate $F(3, 361) = 11.01, p < .001$. An examination of univariate effects indicated that gender was only relevant with Universality, $F(1, 363) = 33.03, p < .001$, with women scoring significantly higher ($M = 34.5$) than men ($M = 31.2$).

A significant main effect was also found for religious affiliation, Wilks's lambda = .951, multivariate $F(6, 722) = 3.04, p < .01$. Univariate ANOVAs indicated significant effects on Universality, $F(2, 363) = 4.97, p < .01$, and Prayer Fulfillment, $F(2, 363) = 5.46, p < .005$. Post hoc tests indicated that Muslims scored significantly lower on Universality than Christians and Hindus and that Christians scored significantly higher on Prayer Fulfillment than the other faiths.

Finally, an interaction effect was also obtained, Wilks's lambda = .942, multivariate $F(6, 722) = 3.67, p < .001$. An examination of the univariate ANOVAs indicated significant findings for both Prayer Fulfillment and Universality. The pattern of these interactions was very similar to the one presented in Figure 1. The only exception was for Hindu women, who scored higher than Hindu men on Universality but lower than Hindu men on Prayer Fulfillment. These results show that both religion and gender moderate the expression of Spiritual Transcendence.

Some limitations to this study need to be noted. First, the STS was presented in English, which was a second language to the participants in this study. As such, the level of reading fluency and sophistication of the STS items may have been challenging to some respondents, which would explain the failure to recover the Connectedness subscale in this sample. This construct may not have been presented in an understandable way, or the items used to describe Connectedness may not have been adequate exemplars. Perhaps if the scale was translated into a native Indian language, a better result may have been obtained. This is an inherent difficulty for all cross-cultural studies that employ a forced-etic design. Such designs apply measures developed in one culture directly in another. Thus, whatever idiosyncracies of language and behavior that are present in the original culture are imposed on the new one. These cultural styles serve as sources of error variance because they are not relevant in the host culture. A more rigorous approach would be to employ an emic design, where the focus is on finding within a culture constructs that are descriptive of that culture's spiritual experiences. Future research may wish to pursue this line of inquiry.

Second, the participants were mostly college students, who may not have been most representative of the Indian population in general or of the various religious faiths in particular. A more representative sampling may have provided stronger findings. Third, Piedmont (1999a) noted that spiritual transcendence is a quality that matures and develops during the life span. As people age, their desire for creating a broad context for interpreting their life and giving it meaning grows stronger. These relatively young respondents are only at the beginning of their own spiritual journeys and, as such, the relevance of constructs like Connectedness may be limited. Perhaps an older sample would have generated a better replicated factor structure. Finally, much more needs to be done in terms of examining cross-cultural issues (see Church, 2001, for an outline of such issues). The STS was found to have some psychometric strength in this new culture, but it is not known if the scale reflects spiritual transcendence in a manner comparable to American samples. Does the STS generate score distributions in India that are identical to those in the United States? How equivalent are the behavioral exemplars of spiritual transcendence in these two different cultures?

Despite these limitations, psychometric support was found for the STS, supporting the hypothesis that the scale captures broad, spiritual motivations that are relevant to both Christian and non-Christian faiths. As such, the instrument may be a useful pioneering tool to use in cross-cultural and cross-religious research. It can provide a point of reference for both the development of other culture-sensitive instruments and in discussions aimed at creating broad-based models of spirituality. These data underscore the reality that the human drive to create a unified cosmological picture, although diverse in its expression, does represent a singular, pancultural motivational construct that can be assessed scientifically. As such, spirituality needs to be recognized as a universal aspect of human experience not mediated by personality.

TABLE 3: Correlations Between the STS^a Scales and the Religiosity and Spirituality Items, Personality, Faith Maturity, Affect Balance, and Purpose in Life

Outcome Variables	STS Scales			Total Score
	Universality	Prayer Fulfillment	Connectedness	
Frequency: Read scripture	.09	.39***	-.05	.23***
Frequency: Read literature	.11*	.17***	.02	.15**
Frequency of prayer	.22***	.24***	.13*	.28***
Frequency attend services	.15**	.28***	.11*	.26***
Union with God	.23***	.36***	.09	.33***
Relationship with God	.23***	.27***	.09	.29***
Faith Maturity Scale total	.47***	.55***	.27***	.61***
Positive affect	.10*	.13**	.02	.13*
Negative affect	-.17***	-.14**	-.02	-.17***
Purpose in life	.34***	.26***	.09	.34***
Five Factor Model of Personality (FFM) dimensions				
Neuroticism	-.23***	-.22***	-.11	-.27***
Extraversion	.21***	.07	.06	.16**
Openness	.26***	.06	.03	.17**
Agreeableness	.29***	.19***	.14*	.29***
Conscientiousness	.30***	.22***	.11	.30***

NOTE: *N*s range from 291 to 365.

a. STS = Spiritual Transcendence Scale.

p* < .05, two-tailed. *p* < .01, two-tailed. ****p* < .001, two-tailed.**CONSTRUCT AND INCREMENTAL VALIDITY**

Correlations between the STS and the outcome variables are presented in Table 3. As can be seen, the STS scales evidenced significant convergence with the measures of religious behavior and practice, spirituality, and well-being variables. The patterns of these relationships are consistent with findings obtained in normative samples. There were also significant correlations with the FFM personality marker scales. Although the magnitude of these associations were low, they did raise the important question, "Do the STS scales contain any unique predictive power over and above any association these scales have with personality?"

To answer this question, a series of hierarchical multiple regression analyses were conducted, systematically employing the outcome variables in Table 3 as the dependent variables. On Step 1 of the analyses, the five personality marker scales were entered. On Step 2, using a forward entry procedure, the STS subscales were entered and a partial *F* test was performed on those subscales that were entered into the equation. The results of these analyses are presented in Table 4. As can be seen, the STS scales provided significant amounts of additional, predictive variance over and above the contribution of personality to all of

TABLE 4: Incremental Validity of the STS Scales Across Five-Factor Model Marker Scales in Predicting the Religious, Spiritual, and Well-Being Outcome Variables

<i>Criterion Variable</i>	<i>FFM R²</i>	<i>STS Δ R²</i>	<i>STS Subscale</i>	<i>Partial F</i>
Frequency: Read scripture	.02	.16	Fulfill/Connect	27.80***
Frequency: Read literature	.01	.04	Fulfill	10.21**
Frequency of prayer	.07	.04	Fulfill	13.68***
Frequency attend services	.02	.07	Fulfill	21.68***
Union with God	.04	.14	Fulfill	48.40***
Relationship with God	.06	.06	Fulfill	19.78**
Faith Maturity Scale: Total	.11	.33	Fulfill/Connect/Univ	52.32***
Positive affect	.07	.02	Fulfill	5.21*
Negative affect	.17	.02	Univ	6.99**
Purpose in life	.28	.03	Univ	13.01***

NOTE: *Ns* range from 292 to 294. STS = Spiritual Transcendence Scale; FFM = Five-Factor Model Markers Scales; Fulfill = STS Prayer Fulfillment; Connect = STS Connectedness; Univ = STS Universality.

* $p < .05$. ** $p < .01$. *** $p < .001$.

the outcome variables. The Prayer Fulfillment scale was the most robust predictor, being significantly related to 8 of the 10 outcome variables.

DISCUSSION

Overall, these data provide initial support for the usefulness of the STS in an international context with individuals from diverse faiths. Although the Connectedness scale did not evidence acceptable levels of internal consistency, the other two facets, as well as the overall score, proved to be robust. CFA did show some support for the three-factor model hypothesized to underlie the STS, although the two-factor model showed better fit with the data and provided some structural validity to the STS in this sample. The STS also maintained its ability to predict a range of psychosocial, religious, and spiritual outcomes, even after the predictive effects of personality were controlled. As found in American samples, spiritual transcendence represents an aspect of psychological functioning independent of established personality constructs (Piedmont, 1999a, 2001). These findings provide support for two conclusions: the utility of the motivational approach taken to spirituality as represented by the STS and the universality of spiritual experience.

The STS operationalizes spirituality from a motivational perspective. This view conceptualizes spirituality as a quality that originates within the body itself and that propels the organism. This approach is very consistent with neuro-theological and theobiological perspectives, which themselves interpret our experiences of the sacred as originating biologically and being defined by our own physical and mental capacities. However, these views contrast starkly with

more accepted theological notions that often construe spirituality as an end product rather than a process (e.g., for a Christian, spirituality might be "what God is" or "living in the Spirit"; Conn, 1985; Downey, 1997) or more phenomenological definitions that view spirituality as a way of being (Elkins, 1988) or a way of understanding (Wong, 1998). Although these contrasting perspectives are not mutually incompatible, they do vary in terms of their ability to fit into established psychological models of the mind. A value of the motivational approach is that it is empirically based, and results obtained from its studies can be readily integrated into mainstream psychological research (see Piedmont, 1999b). In this study, the STS was found equally reliable across these three different faith groups, suggesting that the constructs underlying the STS are relevant to the spiritual strivings of individuals in a non-Western cultural context from both Christian and non-Christian faiths. This broad applicability underscores the motivational nature of the instrument.

Second, the psychometric and predictive strength of the STS also supports the assumption that spirituality does not arise out of specific religious practices or affiliations but rather represents a singular quality of individuals that transcends culture and context. Spirituality represents the raw psychological material from which religious behaviors arise. Because the form of one's religiousness is determined by specific historical, social, and cultural imperatives, any measure of religiosity must be responsive to these specifics if it intends to be useful. However, spirituality represents more universal aspects of the individual that are as recognizable in India as they are in the United States or quite possibly anywhere else in the world for that matter. Religion and culture do not affect the relevance of transcendence, although they may affect how it comes to be expressed and fulfilled.

The significant gender and religious-affiliation differences that emerged underscore the reality that religiousness and spirituality are not isomorphic constructs. We believe that spirituality represents the underlying motivational matrix from which religious behaviors emerge, although spirituality can motivate other types of endeavors as well (e.g., patriotism, mysticism, nationalism). Religiousness, on the other hand, can channel, direct, and shape how spiritual aspirations come to be expressed and take form in a cultural context. However, religion also gratifies needs of individuals other than their spiritual longings (e.g., need for belonging, social standing, power). Future research may wish to catalogue how various religions address spiritual issues in men and women. Why were Muslim men in this sample so low on Transcendence and Christian women so high? Why did Hindu women score higher than Hindu men on Universality but lower on Prayer Fulfillment? What are the needs men and women are attempting to fulfill by their involvement in religion? These questions underscore the need for research paradigms on spiritual experience and development that move away from the practically singular reliance on Christian-based constructs toward a more ecumenical, multicultural perspective.

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