RESEARCH ONLINE

University of Wollongong
Research Online

Faculty of Commerce - Papers (Archive)

Faculty of Business

2009

The utility of the assessment of spirituality and religious sentiments (aspires) scale with Christians and Buddhists in Sri Lanka

R. Piedmont
Loyola College in Maryland

M. B. Werdel
Loyola College in Maryland

Mario Fernando
University of Wollongong, mariof@uow.edu.au

Publication Details

Piedmont, R. L., Werdel, M. & Fernando, M. (2009). The utility of the assessment of spirituality and religious sentiments (aspires) scale with Christians and Buddhists in Sri Lanka. Research in the Social Scientific Study of Religion, 20, 131-143.

Research Online is the open access institutional repository for the University of Wollongong. For further information contact the UOW Library: research-pubs@uow.edu.au

RESEARCH ONLINE

The utility of the assessment of spirituality and religious sentiments (aspires) scale with Christians and Buddhists in Sri Lanka

Abstract
The Assessment of Spirituality and Religious Sentiments (ASPIRES) Scale represents spirituality as a universal source of motivation. Psychometric evidence for this argument is demonstrated when scores on the scale remain reliable and structurally valid across cultures and religious contexts. The psychometric qualities of the ASPIRES was examined with in a diverse religious sample from Sri Lanka. The results demonstrated the structural validity and applicability of the measure within this ethnic group. The data provided further support for cross-cultural applicability of the instrument and for the assumption of spirituality as a universal aspect of the human experience.

Keywords
ASPIRES, Spiritual Transcendence Scale, Religiosity Index, cross-cultural, reliability, factor structure

Disciplines
Business | Social and Behavioral Sciences

Publication Details
Piedmont, R. L., Werdel, M. & Fernando, M. (2009). The utility of the assessment of spirituality and religious sentiments (aspires) scale with Christians and Buddhists in Sri Lanka. Research in the Social Scientific Study of Religion, 20, 131-143.

This journal article is available at Research Online: http://ro.uow.edu.au/commpapers/570

RUNNING HEAD: The ASPIRES in Sri Lanka

The Utility of the Assessment of Spirituality and Religious Sentiments (ASPIRES) Scale with Christians and Buddhists in Sri Lanka

Ralph L. Piedmont Mary Beth Werdel

Loyola College in Maryland

Mario Fernando

University of Wollongong

Australia

Author's note: Direct all correspondence regarding this article to Ralph L. Piedmont, Ph.D., Department of Pastoral Counseling, Loyola College in Maryland, 8890 McGaw Road, Suite 380, Columbia, MD 21045, USA. Or via e-mail at rpiedmont@loyola.edu.

Abstract

The Assessment of Spirituality and Religious Sentiments (ASPIRES) Scale represents spirituality as a universal source of motivation. Psychometric evidence for this argument is demonstrated when scores on the scale remain reliable and structurally valid across cultures and religious contexts. The psychometric qualities of the ASPIRES was examined with in a diverse religious sample from Sri Lanka. The results demonstrated the structural validity and applicability of the measure within this ethnic group. The data provided further support for cross-cultural applicability of the instrument and for the assumption of spirituality as a universal aspect of the human experience.

Key Words: ASPIRES, Spiritual Transcendence Scale, Religiosity Index, cross-cultural, reliability, factor structure

The Utility of the Assessment of Spirituality and Religious Sentiments (ASPIRES) Scale with Christians and Buddhists in Sri Lanka

It has long been noted that most scales that measure spiritual and religious constructs reflect a mostly Christian-based theological perspective (Gorsuch, 1984; Hall, Tisdale, & Brokaw, 1994). As Piedmont and Leach (2002) have noted, the lack of theological pluralism negatively impacts the field in two ways. First, it restricts the field's ability to identify the full value of spiritual/religious constructs by identifying their core, universal elements. Second, such narrowly defined constructs compromise our ability to develop comprehensive models of spiritual development and experience that have both practical significance and ecological validity. One way to counter this conceptual myopia is to actively include other cultures and religious traditions in the research process. There are two ways that this can be done.

The first approach is to use "emic" techniques to develop new measures of spirituality that are reflective of specific cultural and religious contexts. Moberg (2002) has argued that spirituality is best measured through religion and ideology-specific assessments. The result is a family of measures that each captures the specific (unique) aspects of each culture and faith tradition. Although this approach may provide great specificity within very circumscribed contexts, it does not address the more important issue of identifying those universal elements of spirituality that underlie all numinous experiences. It also forces researchers to develop scales for each new context encountered. This can be a time consuming endeavor that may not always allow for the development of a cumulative information base.

The second approach to creating theological pluralism is to use "etic" approaches in the examination of spiritual constructs. The etic approach attempts to determine the extent to which the constructs of one culture or religious tradition can be fruitfully applied to understanding behavior in another context. The value of this approach is that it attempts to identify universal qualities that motivate human behavior. Rather than focusing on what is unique, the etic approach instead seeks to identify what is common. Examining spiritual and religious constructs originating from Western and/or Christian perspectives across diverse cultures and religious contexts helps to determine the ultimate value of these measures. Demonstrating the constructs from a Judeo-Christian approach have relevance and predictive value for understanding the experiences and behaviors of those from other religious groups helps to enhance conceptual diversity and pluralism in current measures of spirituality.

The *Assessment of Spirituality and Religious Sentiments* (ASPIRES) scale (Piedmont, 2004a) was developed explicitly to identify those fundamental, motivational aspects of spirituality that underlie all religious traditions. The ASPIRES provides very specific operationalizations for the constructs of religiosity and spirituality. The former is defined as a sentiment, an emotional tendency that develops out of social traditions and educational experiences. Thus, the extent to which one is involved in the rituals and practices associated with a particular faith tradition is a function of what has been learned and valued in a social context. The ASPIRES has two scales that capture these religious sentiments: *Religious Involvement,* an 8-item measure that queries the extent to which an individual is involved in ritual practices and feels that these values are important in his or her life; and *Religious Crisis,* a 4-item scale that measures the extent to which someone

feels they are isolated from the God of their understanding and their religious community. The Spiritual Transcendence Scale (STS) was designed to capture the universal, motivational basis to spirituality. Spiritual Transcendence reflects the ability of an individual to stand outside of his or her immediate sense of time and place and to view life from a more unitive, broader perspective. It reflects a realization that there is a larger meaning and purpose to life that includes a relationship to some eternal, transcendent being. There are three subscales to the STS: *Universality*, which assesses the belief in a larger meaning and purpose to life; *Prayer Fulfillment*, which reflects the ability to create a personal space that enables one to feel a positive connection to some larger reality; and *Connectedness*, a measure of the feelings of belonging and responsibility one has to a larger human reality that cuts across generations and groups.

Cross-cultural and cross-faith research has supported the utility and generalizability of the ASPIRES scales. Piedmont and Leach (2002) provided evidence for the structural and predictive validity of the STS in an Indian sample that included people of Hindu, Muslim, and Christian faith traditions. Piedmont (2007) evidenced support for the structural and predictive validity of a translated version of the Spiritual Transcendence Scale (STS) in Tagalog, a native language of the Philippines. Goodman, Britton, Shama-Davis, and Jencius (2005) provided psychometric support for the ASPIRES scales across various Jewish faith traditions. Wilson (2004) gave the STS in English to a sample of aboriginal Canadians who were receiving inpatient treatment for alcoholism. All of these studies demonstrated that the constructs underlying the ASPIRES are of value for understanding the religious and spiritual strivings of people

from different religious faiths and cultures (see Piedmont, 2004a for a review of other studies).

The Current Study

The current study continues the process of assessing the universality of the ASPIRES constructs through another examination of its cross-cultural relevance. In this instance, the psychometric value of the ASPIRES will be examined in a largely Buddhist sample in Sri Lanka. With a 2500 year recorded history, Sri Lanka is a multiethnic, multilingual and multi-religious country. Its 20 million people are affiliated to four major religions of the world: Buddhism (69%), Hinduism (15%), Christianity (8%) and Islam (8%). What is interesting about examining a Buddhist sample is that Buddhism is very different from Western Christian faiths, on which the ASPIRES was originally developed. Buddhists involve themselves in specific religious practices and rituals that are not the same as those frequently found in the Judeo-Christian traditions as well as not necessarily believing in the existence of any particular Transcendent Being (Richards & Bergin, 2005). As such, it will be very informative to see if the ASPIRES remains reliable and structurally valid with this religious tradition. We can anticipate that Buddhists should score significantly lower than Christians and Hindus on the Religiosity Index. However, given that the motivation to seek broad answers to existential questions is seen to be an intrinsic human capacity, no differences between Christians and Buddhists is expected on the Spiritual Transcendence scales. It is also hypothesized that: a) alpha reliability will be comparable with the normative sample data, b) the putative structure of the Religious Sentiments scale will recover a unidimensional, 2 factors instrument, c) is the putative structure of the STS will recover a unidimensional, three

faceted instrument, d) there will be no significant mean level score difference between gender or faith traditions on the STS, and, e) there will be no significant mean level score differences between the sample data and the normative Western data.

Method

Participants

Participants consisted of 87 people (40 males, 38 females, 9 unreported gender) working and living in a major city and its suburbs in Sri Lanka. Although English was not the native language of the participants, they were expected to be competent in written and spoken English. Participants' ages ranged from 13 to 82 (M = 37.09). Of these, 40 were Buddhist, 21 were Catholic, 9 were Methodist, 8 were Hindu, 4 were Muslim, 3 were of another Christian denomination, 1 indicated "other" and 1 did not respond. As well, 79 were Asian, 2 were Black, 2 indicated "other", and 4 did not respond to the demographic question of ethnicity. The sample was recruited through personal contacts and word of mouth.

Instruments

Assessment of Spirituality and Religious Sentiments (*ASPIRES*). Developed by Piedmont (2004a) this scale consists of two dimensions of numinous functioning: Religious Sentiments (RS) and Spiritual Transcendence (ST). The RS domain consists of two scales: the Religiosity Index and the Religious Crisis scales. Piedmont (2004a) has shown acceptable reliabilities for scores on these two scales (.89 and .75 for the Religiosity Index and Religious Crisis scale, respectively).

The Spiritual Transcendence Scale is a 23 item scale that 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). The items are answered on a Likert-type scale from 1 (Strongly Agree) to 5 (Strongly Disagree). Piedmont (2004a) has shown that scores on the STS have acceptable reliabilities for self report scales (.94, .78, .49, and .89 for Universality, Prayer Fulfillment, Connectedness, and overall Total Score, respectively). Scores on these scales have also been shown to predict a variety of related spiritual constructs and a number of psychologically salient constructs (Piedmont, 2004a).

Procedures

Participants were recruited from a variety of contexts representing a cross section of people living in the capital of Colombo and its suburbs. Recruitment employed a snowball technique, where individuals were asked to identify other potential participants. Each participant was given an ASPIRES form to be filled individually, with a request to mail the completed forms to the researchers.

Results

Descriptive Statistics

Table 1 presents the descriptive statistics and alpha reliabilities for all the ASPIRES scales. As can be seen, alphas are adequate for all scales except Connectedness. Although this scale does have a very low value normatively (i.e., α = .49), the current value is even lower. In a sample of Christians, Hindus, and Muslims from India, Piedmont and Leach (2002) found a similar low value for this scale (i.e., α = .23). Thus, this scale may not be as well understood in this south Asian country as in the US. Table 1 also compares mean level scores in the current sample with normative data presented by Piedmont (2004a). As can be seen, the current sample scores significantly

lower than the US sample on Universality and Connectedness and significantly higher on Religious Crisis. This study is not able to determine whether these differences reflect substantive differences on the constructs being measures or cultural differences in mean level.

Correlating age and gender with each of the ASPIRES scales yielded only a single effect, age and Connectedness were positively correlated ($r(85) = .28$, $p < .01$). Older participants appeared to have higher levels of Connectedness. This may be a Type 1 error given both the low reliability of the Connectedness scale and that only 1 of 12 correlations were significant. Thus, unlike the US normative sample, Sri Lankans do not evidence any age or gender effects on these scales.

Structural Validity

In order to determine whether the two factors of the Religious Sentiments section of the ASPIRES (Religiosity and Religious Crisis) could be recovered in this data set, a principal components analysis was conducted. Two factors were extracted and obliquely rotated. The two factors explained 48% of the total variance. The pattern loadings are presented in Table 2. As can be seen, the two factors to emerge represent the Religiosity and Religious Crisis scales, respectively. Congruence coefficients (Gorsuch, 1983) were calculated for both factors by comparing the obtained solution to normative values (Piedmont, 2004a), and these values are presented in Table 2. As can be seen, both values are above .90 and are statistically significant. [In order to test the statistical significance of the congruence coefficients, null distributions of congruence coefficients were obtained by randomly generating 10,000 sets of factor loadings and then assessing their fit to the normative values. The 95th and 99th percentile scores for these congruence

coefficients then serve as the cut-off values for the .05 and .01, respectively, alpha levels of significance.] Clearly, the Religious Sentiments scale evidence structural comparability in this new culture.

Items on the Spiritual Transcendence Scale were also subjected to a principal components analysis, and three factors were extracted and rotated obliquely. These factors explained 45% of the total variance, and the obtained pattern loadings are presented in Table 3. As can be seen, the factor structure does not appear to reflect clearly the putative structure of the scale. Although Prayer Fulfillment appears to be adequately recovered, neither of the other two dimensions is reasonably found. Congruence coefficients compare the obtained structure with normative values reflect this outcome. The Connectedness scale appears the least well recovered. This is consistent with data by Piedmont and Leach (2002) who noted a similar issue in their Indian sample.

Two possible interpretations emerge. First, the commingling of items across all three factors may represent a culture-specific phenomenon. Given Gombrich and Obeyesekere's (1988) observation of a unique cultural system in Sri Lanka that has been formed through a process of syncretic fusion embedding various religious elements, the dimensions of Spiritual Transcendence may represent something psychologically different in this south Asian group. A second interpretation would be to see this varying structure as merely representing a rotational shift in the data due to sample-specific error. To evaluate this latter perspective, these data were analyzed using a principal components analysis, and three factors were extracted. These factors were then subjected to an orthogonal procrustes rotation (Schönemann, 1966) using normative data as the target. These results are presented in Table 4.

Congruence coefficients were calculated for each factor. These values determine the extent to which the rotated solution matches the target matrix. As can be seen, the expected three factor solution emerges more clearly and congruence coefficients are all significant (significance values were calculated in a manner similar to above). Clearly, much of the misspecification found in the original factor analysis was due to sample specific error. Nonetheless, there are some indications that the Connectedness scale is not as clearly recovered as the other two. There may be some cultural influences operating here making, at least, the Connectedness scale appear to represent something different in this cultural/religious context. Overall, though, the data do provide support for the structural robustness of the ASPIRES scales. The Religious Sentiments scales were most clearly obtained, while the Prayer Fulfillment and Universality scales were also recovered.

Interfaith Comparison

The data do allow for a comparison between Christians and Buddhists on all ASPIRES Scales. It is interesting to note that alpha reliabilities for the ASPIRES scales are comparable between the two religious denominations. A series of independent samples t-tests were performed and the results are presented in Table 5. As can be seen, only a single significant difference emerged on the Religiosity Index, with Buddhists scoring lower than Christians. No other differences were noted. Clearly, Buddhists have much less involvement in reading religious literatures and attending services than do Christians. This does make sense theologically, where Buddhists are much more contemplative than Christians, where involvement in rituals and practices is greatly stressed. These findings are consistent with a study by Nelson (2008), where a

comparison of US samples of Buddhists and Christians found no differences in scores between the two groups.

Discussion

The purpose of this study was to examine the psychometric qualities of the ASPIRES scale in a sample of Sri Lankan adults. Given that the author of the ASPIRES has explicitly argued that spirituality represents a universal source of motivation, it needs to be shown that scores on the scale remain reliable and structurally valid across cultures and religious contexts. This study is another in a series of studies that have already demonstrated the utility of the ASPIRES across religious faiths (e.g., Goodman, Britton, Shama-Davis, and Jencius, 2005; Nelson, 2008) and cultural contexts (Piedmont, 2007; Piedmont & Leach, 2002; Wilson, 2004). The current findings provide support for using the ASPIRES in this cultural context. Scores on all scales, save the Connectedness scale, indicated appropriate levels of reliability and structural validity. The Connectedness scale has always had the weakest levels of reliability, especially with samples from the Indian subcontinent, and the results here were no exception. Without any construct validity information, it is difficult to determine the predictive and interpretive value of this scale. However, a qualitative study examining workplace spirituality of 13 multi-faith business leaders in Sri Lanka found the primacy of Connectedness in their experience of spirituality (Fernando & Jackson, 2006). Thus, for now, those interested in using the ASPIRES would do well to either only employ the overall total Spiritual Transcendence Scale score or to omit including Connectedness. The two Religious Sentiments scales were both clearly captured in this sample.

It is difficult to interpret the mean level differences noted between this sample and normative values. Similarly, the lack of any age or gender effects is also noteworthy. There are four possible interpretations. First, the sample may not have been sufficiently representative of the population and therefore individuals with higher levels of spirituality were not included. Second, the sample size may be too small to adequately provide useful estimates of population values. Third, the normative sample did not contain as high a percentage of Buddhists as found in this sample, thus these differences may be due to the denominational differences in the expression of spirituality. However, given that only one significant difference in ASPIRES scores was observed between Christians and Buddhists, this option can be ruled out. Finally, given that the instruments were completed in English, which is not the native language of respondents, these differences may reflect local language and cultural effects. Future research will need to examine these issues more closely by applying methodologies that will test these various possibilities (e.g., Piedmont, 2007).

Although the results of this study support the cross-cultural and cross-denominational value of the ASPIRES, there are some limitations to this study that need to be mentioned. First, the sample size was relatively small, making it difficult to examine the structural validity of the scale. Second, the representativeness of the sample is unknown. As such, it cannot be determined the extent to which the observed mean level differences, reliability estimates, and inter-scale correlations are being distorted by these sample specific factors. Finally, without extensive validity criteria, the true utility of the ASPIRES scales cannot be evaluated. Ultimately, the value of a scale rests in what it is able to predict. For example, although Connectedness scores routinely evidence low

internal consistency, the scale remains a significant predictor of important outcomes, such as therapeutic response in an outpatient substance abuse program (Piedmont, 2004b). Future research should be encouraged to employ the ASPIRES in this, and other, cultural contexts.

It was interesting to note that the ASPIRES scales did remain internally consistent across the two different faith groups. This underscores the reality that scores on the Spiritual Transcendence scales capture a universal aspect of spirituality and are not denominationally linked. The Religiosity Index (RI) did pick up differences between the Christian and Buddhist groups, indicating that the latter spend much less time reading religious literature and becoming involved in rituals. This difference does provide some validity support for this scale. Overall Religiosity represents a sentiment, a learned attitude or value. Different denominations accrue different values and prefer different tasks and structure. These differences can be picked up by the RI, as was the case here. Christians and Buddhists do have different ritual sensibilities and value different avenues to expressing their faith. Clearly, according to the data here, Buddhists tend to be less interested in reading religious materials and certainly do not need to have a relationship with some transcendent being.

In conclusion, these data add to a growing international database on the ASPIRES. Research continues to demonstrate the utility and applicability of this measure with diverse religious and ethnic groups. Hopefully these data will encourage more cross-cultural and cross-denominational research and use of the ASPIRES.

References

Fernando, M., & Jackson, B. (2006). The Influence of Religion on Business Leaders' Decision-Making: An Inter-Faith study. *Journal of Management and Organization, 12*(1), 23-39.

Gombrich, R. F., & Obeyesekere, G. (1988). *Buddhism transformed:Religious change in Sri Lanka*. Princeton, N.J.: Princeton University Press.

Goodman, J. M., Britton, P. J., Shama-Davis, D., & Jencius, M. J. (2005). An exploration of spirituality and psychological well-being in a community of Orthodox, Conservative, and Reform Jews. *Research in the Social Scientific Study of Religion, 16,* 63-82.

Gorsuch, R. (1983). *Factor analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum.

Gorsuch, R. (1984). Measurement: the boon and bane of investigating religion. *American Psychologist,* 39, 228-236.

Hall, T.W., Tisdale, T. C., & Brokaw, B.F. (1994). Assessment of religious dimension in Christian clients: A review of select instruments for research and clinical use. *Journal of Psychology and Theology, 22*, 395-421.

Moberg, D (2002). Assessing and Measuring Spirituality: Confronting Dilemmas of Universal and Particular Evaluative Criteria. *Journal of Adult Development 9,* 47-60.

Nelson, R. (2008). *A psychometric evaluation of the ASPIRES.* Unpublished doctoral dissertation, Loyola College in Maryland.

Piedmont, R. L. (1999). Does spirituality represent that sixth factor of personality? Spiritual transcendence and the five factor model. *Journal of Personality, 67,* 985-1013.

Piedmont, R.L. (2001). Spiritual transcendence and the scientific study of spirituality. *Journal of Rehabilitation, 67*, 4-14.

Piedmont, R. L. (2004a). *Assessment of Spirituality and Religious Sentiments, technical manual.* Baltimore, Author.

Piedmont, R. L. (2004b). Spiritual Transcendence as a predictor of psychosocial outcome from an outpatient substance abuse program. *Psychology of Addictive Behaviors, 18,* 213-222.

Piedmont, R. L. (2007). Cross-cultural generalizability of the Spiritual Transcendence Scale to the Philippines: Spirituality as a human universal. *Mental Health, Religion, & Culture, 10,* 89-107.

Piedmont, R. L., & Leach, M. M. (2002). Cross-cultural generalizability of the Spiritual Transcendence Scale in India: Spirituality as a universal aspect of human experience. *American Behavioral Scientist,45,* 1888-1901.

Richards, P. S., & Bergin, A. E. (2005). *Handbook of psychotherapy in religious diversity.* Washington, DC: American Psychological Association.

Schönemann, P. H. (1966). A generalized solution of the orthogonal procrustes problem. *Psychometrica, 31,* 1-10.

Wilson, T. (2004). *Ethnic identity and spirituality in the recovery from alcoholism among aboriginal Canadians.* Unpublished Masters Thesis, University of Windsor.

Table 1

Comparison of Mean Level Raw Scores between the Current Sample and Normative Data on all ASPIRES Scales.

	Sample Data *N* **= 87**			**Normative Data** *N* **= 411**		
ASPIRES Scale	**Mean**	**SD**	**α**	**Mean**	**SD**	**t**
Prayer Fulfillment	36.38	6.84	.87	35.48	8.80	0.89
Universality	24.30	3.54	.60	25.32	4.25	-2.08***
Connectedness	19.38	2.74	.14	22.56	3.45	-8.02***
Total Transcendence	80.06	10.08	.81	79.37	12.50	0.48
Religiosity Index[a]	0.00	4.98	.77	-0.05	6.04	0.07
Religious Crisis	9.78	3.55	.73	7.67	2.92	5.85***

[a] raw values on the Religiosity Index are z-scores.
*** $p < .001$.

Table 2

Principal Components Analysis Using an Oblique Rotation of the Religious Sentiments Scales Items.

	Component	
Religious Sentiments Item	**1.**	**2.**
Union with God[a]	**.83**	.07
Relationship with God	**.81**	.05
Frequency Read Bible	**.68**	.08
Frequency of Prayer	**.66**	.20
How Important Beliefs	**.61**	-.13
Frequency Attend Services	**.51**	-.20
Frequency Read Religious Literature	**.43**	-.04
Interests in God	**.34**	-.09
God is Punishing[b]	**.40**	**.83**
Abandoned by God	-.10	**.80**
Isolated from Faith Group	-.11	**.76**
Does not Involve God	-.29	**.53**
Factor Congruence	.94**	**.97****

[a] Religiosity Index items. [b] Religious Crisis Items.
Note. Items loading above .30 are in bold.
** $p < .01$.

Table 3

Pattern Loadings from a Principal Components Analysis Using an Oblique Rotation of the Spiritual Transcendence Scale Items.

	Component		
STS Item	**1.**	**2.**	**3.**
PF1	.09	**.65**	.06
PF2	.29	**.68**	-.00
PF3	**.68**	-.02	.21
PF4	**.74**	.27	-.12
PF5	.28	**.67**	-.08
PF6	**.68**	.20	.12
PF7	**.65**	.10	-.25
PF8	.21	**.59**	.01
PF9	**.72**	**.37**	-.07
PF10	**.61**	.18	-.26
UN1	.21	**.37**	**.38**
UN2	**.40**	-.17	**.53**
UN3	**.58**	-.21	-.15
UN4	.05	**.33**	.63
UN5	-.18	**.57**	-.04
UN6	**.73**	-.05	.16
UN7	**.69**	.20	**.32**
CN1	.03	-.04	**.55**
CN2	.13	**-.46**	**-.46**
CN3	.26	-.13	**-.57**
CN4	.07	.20	-.17
CN5	**.43**	.05	-.05
CN6	-.21	**.45**	.16
Factor Congruency	.80**	.22	-.28

Note. STS – Spiritual Transcendence Scale, PF – Prayer Fulfillment, UN – Universality, CN – Connectedness. Items loading above .30 are in bold.
** $p < .01$.

Table 4

Factor Loadings from a Principal Components Analysis Using an Orthogonal Procrustes Rotation of the Spiritual Transcendence Scale Items.

	Component		
STS Item	**1.**	**2.**	**3.**
PF1	**.49**	-.03	**-.44**
PF2	**.66**	-.01	**-.32**
PF3	**.43**	**.48**	**.31**
PF4	**.73**	.16	.27
PF5	**.67**	-.08	-.29
PF6	**.60**	.36	.19
PF7	**.58**	.04	**.40**
PF8	**.55**	-.01	**-.31**
PF9	**.78**	.17	.17
PF10	**.61**	-.01	**.32**
UN1	**.32**	**.35**	**-.31**
UN2	.07	**.67**	.12
UN3	.30	.15	**.54**
UN4	.14	**.51**	**-.47**
UN5	.26	-.22	**-.49**
UN6	.45	**.46**	**.37**
UN7	.29	**.61**	**.39**
CN1	-.11	**.51**	-.19
CN2	-.13	-.26	**.60**
CN3	.21	**-.37**	**.48**
CN4	.22	-.16	-.03
CN5	.35	.13	.23
CN6	.12	-.03	**.51**
Factor Congruence	.94**	.62**	.31**

Note. STS – Spiritual Transcendence Scale, PF – Prayer Fulfillment, UN – Universality, CN – Connectedness. Items loading above .30 are in bold.
** $p < .01$.

Table 5

Comparison of Mean Level Raw Scores between Christian and Buddhist Participants on all ASPIRES Scales.

	Christians ***n* = 33**			**Buddhists** ***n* = 40**			
ASPIRES Scale	**Mean**	**SD**	**α**	**Mean**	**SD**	**α**	**t**
Prayer Fulfillment	38.03	7.55	.92	35.13	5.89	.78	1.84
Universality	24.04	3.55	.64	24.44	3.98	.74	-0.45
Connectedness	19.54	2.45	.02	19.58	2.81	.16	-0.05
Total Transcendence	81.61	9.97	.82	79.14	9.95	.82	1.05
Religiosity Index	2.52	4.47	.76	-2.09	4.48	.76	4.37***
Religious Crisis	9.88	3.89	.80	9.58	3.10	.80	0.37

* $p < .05$; ** $p < .01$; *** $p < .001$, two-tailed.