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Psychometric Evaluation of the Spanish and English Versions of the Spiritual Coping Strategies Scale

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Abstract

The Spiritual Coping Strategies (SCS) Scale measures how frequently religious and nonreligious (spiritual) coping strategies are used to cope with a stressful experience. This study's purpose is to evaluate the psychometric properties of the newly translated Spanish version of the SCS. A total of 51 bilingual adults completed the SCS in Spanish and English, with 25 completing them again 2–3 weeks later. Internal consistency reliability for the Spanish (r = 0.83) and English (r = 0.82) versions of the SCS in the total sample were good. Test–retest reliability was .84 for the Spanish and .80 for the English version. Spanish and English responses to the SCS items and the resulting score for the subscales and the total scale were not significantly different. Scores on the English and Spanish versions were correlated as expected with time since the stressful event and happiness with family and with spouse or partner, supporting the validity of the Spanish SCS. Study findings support the reliability and validity of the newly translated Spanish SCS.

Keywords

spirituality; Spanish; stressful events; coping strategies

Spiritual coping strategies are often used by adults facing stressful life events that threaten their own physical and mental health or that of loved ones. Spiritual coping strategies can help them adapt to their situation by reducing their psychological distress and improving their ability to cope (Dunn & Shelton, 2007). Spirituality as a coping strategy can help people to achieve a state of wholeness or equilibrium and promote healing (Chiu, Clark, & Daroszewski, 2000; Tuck, McCain, & Elswick, 2001; Woods & Ironson, 1999). If they hold and practice spiritual beliefs, individuals diagnosed with chronic and/ or terminal conditions and those dealing with death of a loved one are better able to cope with these situations, exhibit fewer depressive symptoms, and have a better overall health-related quality of life (Cotton et al., 2006; Meraviglia, 2004; Sowell et al., 2000). Hispanics account for 15.1% (45.5 million) of the U.S. population (U.S. Census Bureau, 2008) and 50.5% of the overall U.S. population growth in the last decade (Pew Hispanic Center, 2008). Despite this rapid increase, measures of spiritual and religious coping strategies in Spanish are limited. Thus, the purpose of this study was to translate the Spiritual Coping Strategies (SCS) Scale into Spanish, test the psychometric properties of the newly translated measure, and compare these properties for the newly translated Spanish version with those of the existing English version.

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BACKGROUND

Spirituality and Spiritual Coping Strategies

Although often used interchangeably, spirituality differs from religiosity. Spirituality incorporates a person's values, attitudes, rituals, and perspectives and includes religious practices; whereas religiosity is embedded in organized systems of faith or religions (Burkhardt & Nagi-Jacobson, 1989; McSherry, Cash, & Ross, 2004). Spirituality involves caring for the human spirit; achieving a state of wholeness; a connection with oneself, others, nature, and God's or life's forces; and an attempt to understand the meaning and purpose of life (O'Brien, 2008; Burkhardt & Nagi-Jacobson, 1989). Spiritual coping strategies are used to obtain comfort, provide security and peace, achieve a state of wholeness or equilibrium, and evoke healing. Meditation and communing with nature, connecting to others who have experienced a similar event in one's social network, communicating one's innermost thoughts in an accepting and trusting environment such as a support group, spiritual guide, and/or a close friend are examples of spiritual coping strategies (Armentrout, 2007; Klass, 1999; Meert, Thurston, & Briller, 2005; Wilson & Miles, 2001). Religious coping strategies, such as prayer and attending religious meetings, are used to develop or maintain a relationship with God and to ask God for forgiveness for any perceived culpability in the stressful event or for help in dealing with the event (Amentrout, 2007; Anderson, Marwit, Vandenberg, & Chibnall, 2005; Kavanaugh & Hershberger, 2005; Van & Meleis, 2003).

Using spiritual or religious practices to cope with a stressful event was a good predictor of higher self-esteem, greater life satisfaction, and psychological well-being (Ekas, Whitman, & Shivers, 2009). Parents of children who are critically or terminally ill may use several coping strategies including spirituality to relieve the emotional and traumatic stressors associated with having a sick and/or dying child (Ekas et al., 2009; Robinson, Thiel, Backus, & Meyer, 2006; Wilson & Miles, 2001). Research on the use of spiritual coping strategies by Hispanic/Latino adults experiencing a stressful and/or traumatic life event is limited. Less is known about the effectiveness of spiritual coping strategies in helping Hispanic/Latino parents to deal with their child's critical illness, terminal condition, or death and their aftermath. Research in this area is hindered by a lack of instruments in Spanish that are appropriate for measuring spiritual coping.

Conceptual Basis of the Scale

The SCS Scale was developed in English to measure the use of religious and spiritual (nonreligious) coping strategies after a stressful event (Baldacchino & Buhagiar, 2003). Its development was based on literature from nursing, psychology, sociology, philosophy, and theology and was guided by the theoretical framework of the idea of the holy (Otto, 1950) and the cognitive theory of stress and coping (Lazarus & Folkman, 1984). The idea of the holy is the investigation of the rational idea of God the divine. According to Otto (1950), all religion lives in a person's inner core as a living force, an awakening of the spirit and a stirring of the consciousness that expresses itself outwardly. The essence of spirituality as a numinous experience with the divine is described as a unique feeling experienced by each person on a cognitive level. This unique feeling is complex and can be evoked when the individual is in a state of incompleteness and longs to connect with a higher power greater that the self.

According to the cognitive theory of stress and coping (Lazarus & Folkman, 1984), a stressful encounter is one that an individual appraises as significant to his or her well-being and that exceeds his or her resources. Coping with the stress requires using cognitive and

behavioral strategies, such as spiritual coping strategies, to manage the demands of the encounter.

Development and Description of the Spiritual Coping Strategies Scale

Consistent with its conceptual framework, the SCS Scale contains two subscales: religious coping strategies and spiritual (nonreligious) coping strategies. The religious coping strategy subscale measures the participants' attitudes toward religion and belief in God, primarily oriented toward the Judeo-Christian faith. The spiritual coping strategy subscale measures humanistic (nonreligious) coping strategies oriented toward the relationship with the self, others, and the environment. Relationship with oneself—for example through reflection, meditation, and reading inspirational literature—allows individuals to connect with their inner selves, acknowledge their strength, and ultimately find peace in the face of adversity. Relationships with others and the environment—for example through maintaining relationships with friends, discussing difficulties with others, appreciating art and/or nature—provide social support and ultimately the ability to go beyond oneself through self-transcendence. Connecting with a higher power/God or the universe can lend credence to finding meaning and purpose in life (Baldacchino & Buhagiar, 2003).

In their development of the SCS, Baldacchino and Buhagiar (2003) created 20 items—9 religious and 11 spiritual coping strategies—each with a 4-point response format ranging from 0 ($never\ used$) to 3 ($often\ used$) to indicate the respondent's frequency of use of each coping strategy. Higher summative subscale and total scale scores indicate greater use of religious and/or spiritual coping strategies. A multidisciplinary panel of experts in spirituality and religion were asked to review the 20 items on the SCS Scale for content validity. Baldacchino and Buhagiar then tested the SCS with a sample of 55 Maltese nursing students. In that sample, factor analysis using oblique rotation supported extraction of two subscales: religious coping strategies and spiritual (nonreligious) coping strategies. Construct validity was supported by a Spearman correlation coefficient of .40 between the SCS Scale score and the established Spiritual Well-Being (SWB) instrument (Bufford, Paloutzian, & Ellison, 1991). Baldacchino and Buhagiar (2003) reported internal consistency reliability of .82 for the religious coping factor and .74 for the spiritual coping factor and test—retest reliability of r = 0.47 after a 3-week interval. Test—retest reliability for the total scale was strong (r = 0.81; Baldacchino & Buhagiar, 2003).

Baldacchino (2002) used the SCS Scale in a study of 46 men and 24 women after their first myocardial infarction to evaluate the impact of spirituality on the patient's mental health and spiritual well-being during hospitalization and through 3 months after discharge. She found that use of spiritual coping strategies increased shortly after discharge and remained stable afterward. Greater use of spiritual coping strategies was related to greater spiritual well-being and less anxiety and depression at 6 weeks postdischarge.

In summary, spiritual coping strategies have been shown to be effective in helping people deal with stressful events. Despite the growing numbers of Hispanics in the United States, research on their use of spiritual coping strategies is limited, hindered by the lack of appropriate instruments in the Spanish language. To address this gap, the SCS was translated into Spanish. Comparability of the Spanish SCS items with the English items and of the reliability and validity of the Spanish SCS total scale and its subscales with the English SCS total scale and its subscales was investigated.

METHOD

Sample

A convenience sample of 51 bilingual (Spanish and English) adults older than the age of 18 who had experienced a stressful event was recruited through the investigators' personal contacts. A subsample of 25 of these bilingual adults completed the same packet of instruments again 2–3 weeks later for test–retest reliability. Comparison of the one-time-only group and the test–retest group indicated no significant differences in their demographic characteristics (see Table 1).

The age of the participants ranged from 18–67 years. All participants were Hispanic; most were employed (80.4%), had completed an associates degree or higher (72.5%), were married or living with a partner (84.3%), and earned greater than \$50,000 annually (66.6%). Most spoke English at work (82.4%) with friends (60.8%) and while thinking (64%) but most spoke Spanish at home (62.7%).

Measures

Stressful Event—Participants were asked to identify a stressful event they had experienced. They indicated how much time in months had passed since the event and rated both the importance of the event and the stressfulness of the event on separate scales ranging from 1 (not very important or not very stressful) to 10 (most important or most stressful), respectively. These items were used to help respondents to focus on a specific event as a referent for completing the SCS.

Happiness With Spouse or Partner and Happiness With Family—Happiness with spouse or partner and happiness with family were measured with two separate items that participants rated from 1 (*very unhappy*) to 6 (*very happy*). Youngblut, Brooten, and Menzies (2006) used these items in their study testing the psychometric properties of their translation of two family scales: the Family Adaptability and Cohesion Evaluation Scale II (FACES II) and the Dyadic Adjustment Scale. Their findings of moderate correlations between the two items and the English version of the FACES II and the Dyadic Adjustment Scale in the expected direction supported the validity of these single item indicators.

Procedures

Translation Process—Translation and back-translation were used to create the Spanish version of the SCS. Each of the items on the SCS Scale was translated into Spanish by a Cuban American Spanish speaker and translated back into English by a different native Spanish speaker who had not seen the original English version. Comparisons were made between the back-translated English version and the original English version by this study's investigators for equivalence of meaning. Where discrepancies between the two English versions occurred, the investigators and the two Spanish speakers discussed the meaning of the original English item. After discussion, the Spanish speakers agreed on the Spanish wording that most closely represented the meaning of the English item.

Approach Data Collection and Analysis—The study was approved by the university's Institutional Review Board (IRB). Potential participants were approached by the first author (DH) who explained the study, answered any questions, and obtained informed consent. Data were collected in a setting chosen by the participants, which was usually in their home or at work. Participants first completed the demographic questionnaire that included the stressful event questions and the two happiness items. Participants then responded to the Spanish version of the SCS Scale followed by the English version. A subsample of 25 participants completed the study questionnaires a second time 2–3 weeks later. Internal

consistency reliability of the English and Spanish versions was assessed with coefficient alpha, and stability reliability for the test–retest subsample was assessed with Pearson product moment correlations. Equivalence of the English and Spanish items, the total scale, and its subscales was examined with a series of paired *t* tests and correlations. To compare the Spanish and English versions of the SCS for construct validity, the relationships of the Spanish and English versions with the happiness items and time since the stressful event were tested with Pearson product moment correlations.

RESULTS

Reliability

Internal consistency reliability of the English and Spanish versions of the total SCS Scale and the religious and spiritual subscales was supported by strong Cronbach's alphas that were similar for the newly translated Spanish version and the original English version (see Table 2). Test–retest correlations after a 2- to 3-week interval were high, ranging from .76–. 84 for the English version and .61–.96 for the Spanish version (Table 2).

Validity Assessment

Validity was first investigated by comparing the ratings for each of the Spanish items, the SCS total score and its subscale scores with the corresponding English items, total scale, and subscales. Scores on the English and Spanish versions of the SCS total scale, its subscales, and individual items were very similar, supported by nonsignificant paired *t* tests for all comparisons at both time points (see Table 3). Indeed, the means and standard deviations of three items were the same for the Spanish and the English versions. Correlations between the English and Spanish versions of the SCS total and subscale scores at both time points were very high, ranging from .98–.99 for the first time point and .64–.96 at the second time point. In the item analysis, correlations between scores on the individual items in English and in Spanish ranged from .76–.99.

Correlations of the English and Spanish versions of the SCS total scale and its subscales with time since the stressful event, happiness with spouse, and happiness with family were compared to further investigate the validity of the newly translated Spanish version. The magnitude and direction of these correlations for the Spanish total SCS Scale and its subscales were similar to the corresponding correlations for the English version (Table 3). Although results were not statistically significant, greater time since the stressful event was correlated with less frequent use of coping strategies overall and the coping strategies on the religious subscale, but more frequent use of the coping strategies on the spiritual subscale. Greater happiness with spouse or partner and greater happiness with the family were correlated with more frequent use of coping strategies overall and with both religious and spiritual coping strategies. Therefore, these results support the validity of the newly translated Spanish SCS items.

DISCUSSION

Psychometric findings for the SCS items, subscales, and total scale in this study supported the equivalence of the newly translated Spanish version with the corresponding items, subscales, and total scale in the English version. Internal consistency was strong with comparable coefficient alphas for the English and Spanish versions. Test—retest correlations after a 2- to 3-week interval were strong for the newly translated Spanish version and similar in magnitude to the English SCS Scale, developed by Baldacchino and Buhagiar (2003).

Results of validity testing also supported the equivalence of the two versions. Scores on the English and Spanish versions of the total SCS, its subscales, and each of its 20 items were

not statistically different. Indeed, the Spanish and English versions of three items had identical means and standard deviations. The Spanish version of the items, subscales, and total SCS Scale was strongly correlated with the English version, providing additional support for the validity of the newly translated scale. Direction and magnitude of the correlations between the Spanish version of the SCS and time since the stressful event, happiness with spouse and happiness with family were similar to those for the English version. As expected, participants decreased their use of religious coping strategies as time since the stressful event increased. Greater use of both religious and spiritual coping strategies was related to greater happiness of the participants with both their spouses or partners and their families.

Our sample participants had relatively more education than might be expected, with the majority holding an associate's degree or higher. Although this may have an effect on their reading of the English items, very few participants have formal education in Spanish, and so their Spanish reading level is relatively low. The Spanish-speaking population in South Florida represents many nations, which allowed us to have Spanish speakers from several different countries involved in the item translation, back-translation, and discussion of the final wording for each item. Testing of the Spanish version with other Spanish-speaking groups, particularly Mexican Americans, is also needed.

In summary, reliability and validity evidence for our newly translated Spanish version of the SCS Scale is acceptable and very similar to the reliability and validity estimates for the English version, suggesting our translation procedures were effective. Availability of a Spanish version of the SCS Scale will facilitate recruitment of a larger and more diverse sample of Hispanic/Latino adults for studies of stressful life events and factors, including the use of spiritual coping strategies, which help to minimize their negative effects.

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TABLE 1
Comparisons of the One-Time-Only and the Test–Retest Groups

	Total Sample	One-Time- Only Group	Test-Retest Group	
Characteristic	(N=51)	(n=26)	(n=25)	Statistic*
Age, M (SD)	37.8 (11.26)	40.1 (15.93)	37.9 (12.04)	t = 0.56
Gender, n (%)				
Male	11 (22%)	5 (19.2%)	6 (25.0%)	$X^2 = 0.24$
Female	39 (78%)	21 (80.8%)	18 (75.0%)	
Education				
High school graduate, some college	14 (27.5%)	5 (19.2%)	9 (36.0%)	$X^2 = 1.80$
College degree	37 (72.5%)	21 (80.8%)	16 (64.0%)	
Income				
<\$30,000	7 (13.7%)	5 (19.2%)	2 (8.0%)	$X^2 = 1.90$
\$30,000-\$59,999	15 (29.4%)	6 (23.1%)	9 (36.0%)	
≥\$60,000	29 (56.9%)	15 (57.7%)	14 (56.0%)	
Employed				
No	10 (19.9%)	6 (23.1%)	4 (16.0%)	$X^2 = 0.41$
Yes	41 (80.4%)	20 (76.9%)	21 (84.0%)	
Partnered				
No	7 (14.0%)	2 (8.0%)	5 (20.0%)	$X^2 = 1.50$
Yes	43 (86.0%)	23 (92.0%)	20 (80.0%)	
Language most often used:				
At work				
Spanish	9 (17.6%)	7 (26.9%)	2 (8.0%)	$X^2 = 3.14$
English	42 (82.4%)	19 (73.1%)	23 (92.0%)	
At home				
Spanish	32 (62.7%)	18 (69.2%)	14 (56.0%)	$X^2 = 0.95$
English	19 (37.3%)	8 (30.8%)	11 (44.0%)	
With friends				
Spanish	20 (39.2%)	13 (50%)	7 (28.0%)	$X^2 = 2.59$
English	31 (60.8%)	13 (50%)	18 (72.0%)	
While thinking				
Spanish	18 (36.0%)	11 (42.3%)	7 (29.2%)	$X^2 = 0.94$
English	32 (64.0%)	15 (57.7%)	17 (70.8%)	

^{*} For all comparisons, p > .05 (nonsignificant).

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TABLE 2Reliability of the Spanish Version of the Spiritual Coping Strategies Scale and Its Subscales

Reliability	Total Scale	Religious Subscale	Spiritual Subscale
T1 internal consistency – Coefficient alpha ($N = 51$)			
English	.82	.74	.79
Spanish	.83	.75	.80
T2 internal consistency – Coefficient alpha ($n = 25$)			
English	.80	.65	.78
Spanish	.84	.72	.86
Test–Retest correlations ($n = 25$)			
English	r = 0.76	r = 0.84	r = 0.78
Spanish	r = 0.61	r = 0.96	r = 0.77

TABLE 3Validity Testing of the Spanish Version of the Spiritual Coping Strategies Scale and Its Subscales

	m . 10 1	Religious	Spiritual
	Total Scale	Subscale	Subscale
Comparison of T1 means $(N = 51)$			
English, M (SD)	44.1 (8.00)	17.8 (4.72)	26.5 (4.70)
Spanish, $M(SD)$	44.2 (7.83)	17.8 (4.68)	26.5 (4.65)
Paired t value ^a	0.27	0.44	0.16
Comparison of T2 means $(n = 25)$			
English, M (SD)	46.6 (8.83)	19.6 (5.03)	27.5 (5.27)
Spanish, $M(SD)$	44.2 (12.10)	18.8 (4.47)	27.6 (5.17)
Paired t value ^{a}	1.28	1.63	.28
Time since stressful event			
English	r = -0.19	r = -0.31	r = 0.11
Spanish	r = -0.19	$r = -0.33^*$	r = 0.13
Happiness with spouse or partner			
English	r = 0.22	r = 0.19	r = 0.14
Spanish	r = 0.24	r = 0.18	r = 0.15
Happiness with family			
English	r = 0.28	r = 0.25	r = 0.23
Spanish	$r = 0.34^*$	r = 0.26	r = 0.27

 $^{^{\}it a}$ All mean comparisons not statistically significant (p > .05).

^{*} p < .05.