Cultural Adaptation and Validation of the Spiritual Coping Strategies Scale (SCSS) for Greece

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Abstract

Introduction: Spirituality constitutes a central element of all health and social care professions. The Spiritual Coping Strategies Scale (SCSS) measures both spiritual and religious coping strategies

Aim: The aim of this study was to provide evidence for the reliability and validity of SCSS for Greece.

Methods: A total of 301 nurses were selected by convenience sampling and required to complete the SCSS and the FACIT-Spiritual Well-Being Scale-12 non-illness scale. Forward-translations and back-translations were conducted by two bilingual translators (English-Greek) grown up in English-speaking countries (USA, Australia) while cross-cultural adaptation followed strictly the recent WHO guidelines. The reliability and validity of the scale were evaluated by correlation analysis, t-test, and exploratory factor analysis.

Results: Convergent validity was investigated in comparison to FACIT-Sp-12. Meaning, peace, faith, and total spirituality were positively correlated to SCSS as expected (r = 0.22 for Meaning, r = 0.34 for Peace, r = 0.70 for Faith, and r = 0.66 for Total Spirituality), implying sufficient convergent validity. The Cronbach's α coefficients of the two subscales were 0.91 and 0.78, respectively. Additionally, the Pearson correlation r for both spiritual and religious strategies showed strong correlations between the two measurements ($p < 0.001$), first administration and three weeks after.

Conclusion: SCSS has good reliability and validity among nurses in Greece.

Keywords

Spiritual Coping Strategies Scale · Spirituality · Nursing · Compassion Satisfaction · Emotional work

Nursing is an art: and if it is to be made an art, it requires an exclusive devotion as hard as preparation, as any painter's or sculptor's work, for what is the having to do with dead canvas or dead marble, compared with having to do with the living body, the temple of God's spirit? It is one of the Fine Arts. I had almost said, the finest of Fine Arts. – Florence Nightingale

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17.1 Introduction

There has been an increase in studies on resilience and spirituality, especially since the coronavirus disease 2019 (COVID-19) pandemic [11, 12]. Spirituality and a connection to God/higher power might give hope in times of crisis and promote emotional wellness and greater life satisfaction. According to the Greek ancient philosopher Plato, man is composed of the psyche, the spirit, and the body [8]. The Greek word "psyche" is derived from the verb ψύχω which means breathe or blow (Liddell & Scott Greek-English Lexicon). Similarly, spirituality comes from the Latin word "spiritus" which means breath and refers to both respiration and wind. Beyond the body/psyche bipartition and the psyche-spirit-body tripartition, the words psyche and spirit are used interchangeably in the Old and New Testament to denote the constituent part of a human being that is invisible but constitutes the organizing element of the person. Psyche is the charioteer reigning in the body and destined to attain andreia (manliness), arête (excellence), and, finally, eudaimonia (full human flourishing) encompassing Beauty, Courage, Justice, Goodness, everlasting Truth, and Absolute Knowledge [19].

Spirituality is a broader term than religiosity [2, 18]. According to Baldacchino and Draper [2], spirituality goes beyond religious affiliation, which strives for inspiration, reverence, awe, meaning, and purpose for both believers and non-believers. It includes personal values, attitudes, rituals, perspectives, and also religious practices. On the contrary, religiosity includes organized systems of faith or religions [2, 18]. Although 84% of the world's population is religiously affiliated and 68% of unaffiliated individuals believe in a higher power spirituality appears to be ignored by academic psychiatry [16]. Koenig [7], in a systematic literature review, reported no significant relationships and/or negative correlations between religiosity and mental health. In the era of secularization, resistance to the inclusion of spirituality/religiosity in health care research is related to the argument that it constitutes a private and personal issue, which could be replaced by psychology [14].

Baldacchino and Buhagiar [1] created a Spiritual Coping Strategies Scale. It includes 20 questions answered on a 4-point Likert-type scale, ranging from 0 (never used) to 3 (often used). The questions aim to measure the frequency of religious and non-religious coping strategies using two subscales. The religious coping strategies include 9 items and the non-religious coping strategies include 11 questions. It has been translated and validated in multiple languages including English (original), Maltese (by the authors of the original scale), Spanish [6], Farsi in Iran [17], Arabic in Saudi Arabia for nursing students [3] and patients undergoing hemodialysis [3], and Filipino [4, 5].

According to Baldacchino and Buhagiar [1], two theories sustain the development of the SCS Scale, that is, the Cognitive Theory of Stress and Coping [9] and the Idea of the Holy, known as the *Numinous* experience [13]. Both theories suggest that various spiritual coping strategies (SCS) may be used to manage life crises, grief, and loss. If the individual endorses a religious belief system, these strategies may also incorporate religious coping strategies (RCS). The possible outcome of these strategies may be stress relief, spiritual well-being, and a harmonious interconnectedness between self, others, nature, and the Ultimate Other, facilitating the process of finding meaning and purpose in life [2]. Apart from being helpful to individuals in the landscape of illness, spirituality could help in the long-term journey of resolving feelings of grief and loss in nurses, who come across pain, loss, disability, chronic illness, and failure to achieve relief as part of their job [10–12].

In Western Europe, a median of 53% of people are "neither religious nor spiritual," but this is not the reality existent in Greece, where the majority say they are both religious and spiritual [15]. Although Greece is a secular state, and its constitution appears to support the separation between the church and the state, the Christian Orthodox religion is dominant in Greece. More people in Greece say religion is at least somewhat important to them (80%) than those in any

other European country [15]. In this article, we describe the validation process of the SCSS for the Greek population, intending to make the understanding and intervention in spiritual coping more accessible in this specific cultural reality.

17.2 Methods

Participants

Questionnaires were distributed to ten registered and assistant nurses who worked full time in three rotating shifts at a public hospital in the greater metropolitan area of Athens, Greece.

Procedure and Ethical Considerations

The Ethical Committee of the University of West Attica approved the study protocol. Additionally, the study was conducted after review and written approval by the Administration and Scientific Society of the hospitals. Two of the researchers informed the head nurses of two units about the purpose of the study and then the head nurses informed the nursing staff. Furthermore, all participants were informed of their rights to refuse or to discontinue their participation, according to the ethical standards of the Helsinki Declaration of 1983. Participation in the study was contingent on individual signed consent. Two of the researchers (VP and EF) distributed questionnaires to nursing care providers (registered and assistant). Data were collected between May 2020 and March 2021.

Process of Translation and Adaptation of the Instrument

According to the guidelines of the WHO (WHO.int) on the achievement of different language versions of an original questionnaire that are conceptually equivalent in each of the target countries/cultures, the translation process should focus on cross-cultural and conceptual and not on linguistic/literal equivalence. Overall, the instrument should be equally natural and acceptable and should practically perform in the same way as the original one (WHO.int). To achieve this goal, we applied forward-translations and back-translations and followed strictly the WHO guidelines for cross-cultural adaptation.

Two bilingual translators (English-Greek) grown up in English-speaking countries (the USA, Australia) translated the original English version of the SCSS. One of the translators was a Native American citizen living permanently in Greece and the other was a second-generation Greek with an Australian and Greek citizenship. Both had a thorough command of the language of the original version of the instrument and were also familiar with the English-speaking culture of the original English version of the SCSS. The translators, both teachers in secondary education, were advised to aim at the conceptual equivalent of a word or phrase, not a word-for-word translation, i.e., not a literal translation, and strive to be simple, clear, and concise in formulating a question.

Then, a bilingual (in English and Greek) five-member expert panel was convened by the first author in order to identify and resolve inadequate expressions/concepts of the forward translation. Four members of the panel held a PhD and one member was a PhD candidate but also held a degree in nursing and social anthropology which was regarded as an important qualification for a panel focusing on the cultural adaptation of an instrument. All panel members were Greek but two of them had studied in the UK. All the panel members had a good command of the English language. Four panel members had been involved in the process of cultural adaptation before and all of them had numerous publications in English. All discrepancies were discussed and resolved in the first expert panel meeting round which lasted two and a half hours.

The SCSS was then translated back into English by the two independent translators. Their translation was compared to the original version of the SCSS in the second panel meeting round (two hours duration). All discrepancies were evaluated thoroughly and consensus was reached for all members of the panel. The research team then proceeded with the pretesting of the instrument to ensure its comprehensibility at an early stage. In other words, terms, words, and expressions which are not understandable or clear for

participants may be identified and discussed by the expert panel.

Functional Assessment of Chronic Illness Therapy Spiritual Well-Being Scale 12

The Functional Assessment of Chronic Illness Therapy-Spiritual Well-Being Scale-12 non-illness (FACIT-Sp-12) was used to assess nurses' spirituality over the last seven-day period. This 12-item scale is used to measure three dimensions of spirituality ("meaning", "peace", and "faith") and provides a total score. Responses are given on a 4-point Likert scale ranging from 0, which corresponds to 'not at all', to 4, which corresponds to 'very much'. Higher scores in the total scale and in the three domains indicate higher spirituality. The Cronbach-α coefficient of the Greek version of FACITsp-12 was 0.77 for the total questionnaire, 0.70 for the "meaning" subscale, 0.73 for the "peace", and 0.87 for the "faith" subscale [19].

Statistics

In order to assess the construct validity of the SCSS, we performed exploratory factor analysis (EFA) and investigated its convergent validity. An exploratory factor analysis was employed to test the two-factor structure of the SCSS. Specifically, we conducted the principal component analysis with eigenvalues above 1.00. Additionally, the item convergent validity of the SCSS was evaluated by examining the correlations between the total score of each subscale and its item scores. Convergent validity was investigated in comparison to FACIT-Sp-12.

The reliability of SCSS-Greek was evaluated by assessing the instrument's internal consistency. Internal consistency was assessed with Cronbach's α coefficient. In addition, the version of Cronbach's α 'if item deleted', was calculated for each item. The Cronbach's α values were characterized as follows: 0.00–0.25, negligible; 0.26–0.49, low; 0.50–0.69, moderate; 0.70–0.89, high; and 0.90–1.00, excellent.

The following categories of Pearson's r values were used for interpretation: 0.00–0.19, very weak correlation; 0.20–0.39, weak correlation; 0.40–0.69, moderate correlation; 0.70–0.89, strong correlation; and 0.90–1.00, very strong correlation.

17.3 Results

Demographic and Work-Related Characteristics

The modal age group was 40 old and almost 22% were male (see Table 17.1). Sixty-one percent were registered nurses and held a degree in nursing. Fifty-four percent of the participants had a postgraduate education (see Table 17.1).

Construct Validity of SCSS

Regarding EFA, the model tested was equivalent to the original factorial structure of the SCSS as proposed by the authors. As suggested in Table 17.2, this model presented a reasonably

Table 17.1 Demographic and professional characteristics of the sample (N = 301)

		N	%
Sex	Male	66	21.9
	Female	235	78.1
	Single	106	35.2
Marital status	Married	170	56.5
	Widowed	5	1.7
	Divorced/separated	20	6.6
Job position	Assistant nurse	117	38.9
	Registered nurse	184	61.1
	Secondary education	117	38.9
Educational level	University education	130	43.2
	Postgraduate education	54	17.9

Table 17.2 Results of exploratory factor analysis (EFA) on the 20-item SCSS for the Greek sample (N = 301)

	Components extracted			
Items	1	2	3	4
Item 15	**0.81**	−0.29	0.00	−0.09
Item 19	**0.79**	−0.27	0.01	−0.08
Item 2	**0.75**	−0.15	−0.29	−0.24
Item 18	**0.74**	−0.23	−0.26	−0.31
Item 1	**0.72**	−0.27	−0.21	−0.32
Item 6	**0.68**	−0.33	0.05	−0.11
Item 10	**0.66**	−0.37	0.19	0.22
Item 8	**0.64**	−0.45	0.28	0.26
Item 17	**0.50**	0.27	−0.24 (0.60)[a]	0.25
Item 4	**0.49**	−0.33	0.26	0.43
Item 13	0.30	**0.60**	0.06	−0.13
Item 20	0.41	**0.60**	0.07	−0.28
Item 12	0.33	**0.58**	−0.24	0.07
Item 7	0.29	**0.58**	−0.28	0.23
Item 3	0.36	**0.55**	0.16	−0.08
Item 11	0.39	**0.53**	−0.05	0.01
Item 9	0.38	**0.41**	−0.19	0.34
Item 14	0.37	0.46 (0.83)[a]	**0.59**	−0.13
Item 5	0.48	0.38 (0.70)[a]	**0.49**	0.02
Item 16	0.40	0.02	−0.22 (0.54)[a]	**0.51**

[a]Rotated component matrix results

good fit to the data. Exploratory factor analysis (EFA) was conducted to correlate the 20 variables of SCSS. Four factors were extracted (method: principal component analysis) with eigenvalues above 1.00, but the first two factors explained 31% and 18% of the variance, respectively, and factors 3 and 4 explained only 6% of the variance. Scree plot output (Fig. 17.1) also indicates that the data have basically two main factors. The first factor is religious coping strategies, and the second factor is non-religious coping strategies. Overall, SCSS-Greek confirmed the two-dimensional structure of SCSS. As depicted, the factor loadings ranged from 0.50 to 0.81 (item 9 loading is 0.41 and item 4 loading is 0.49), meaning that all items were good measures of their respective factors. Items 14 and 5 are loading in factor 2 in the rotated component matrix. Only, items 16 and 17 don't load at the right factor 2.

Convergent validity was investigated in comparison to FACIT-Sp-12, which consists of 12 items assessing three dimensions of Spirituality (Meaning, Peace, Faith), provides a total score, and constitutes a suitable measure to evaluate the convergent validity of SCSS. Meaning, Peace, Faith, and total Spirituality were positively correlated to SCSS as expected (r = 0.22 for Meaning, r = 0.34 for Peace, r = 0.70 for Faith, and r = 0.66 for Total Spirituality), implying sufficient convergent validity (Table 17.3). The correlation of SCSS with Faith and Total Spirituality is strong.

Internal Consistency of SCSS

As regards the internal consistency assessment of the two dimensions of SCSS-Greek, Cronbach's α coefficients for each item of religious coping strategies and non-religious coping strategies point to mostly high internal consistency. The overall Cronbach's α for religious coping strategies was 0.91, ranging from 0.89 to 0.81 with individual items deleted, and for non-religious coping strategies was 0.78, ranging from 0.75 to 0.80 with individual items deleted (Table 17.4).

Test-Retest Reliability

Thirty participants completed the SCSS three weeks after the first administration. No significant differences existed between the two measurements, indicating the stability and reliability of the scale (Table 17.5). Additionally, the Pearson correlation r for both spiritual and religious strategies showed strong correlations between the two measurements ($p < 0.001$).

17.4 Discussion

This study comprises the first published data on the validation of the culturally adapted version of SCSS-Greek. According to the findings, the SCSS-Greek demonstrated reasonable psychometric properties and is a valid tool for the assessment of spiritual coping strategies of health care professionals. The WHO guidelines were followed strictly in order to accomplish the challenging task of linguistic and cultural adaptation of the English version of the instrument into Greek and detailed information on this challenging process was provided. Participants, who agreed to participate in the pretest study, verified

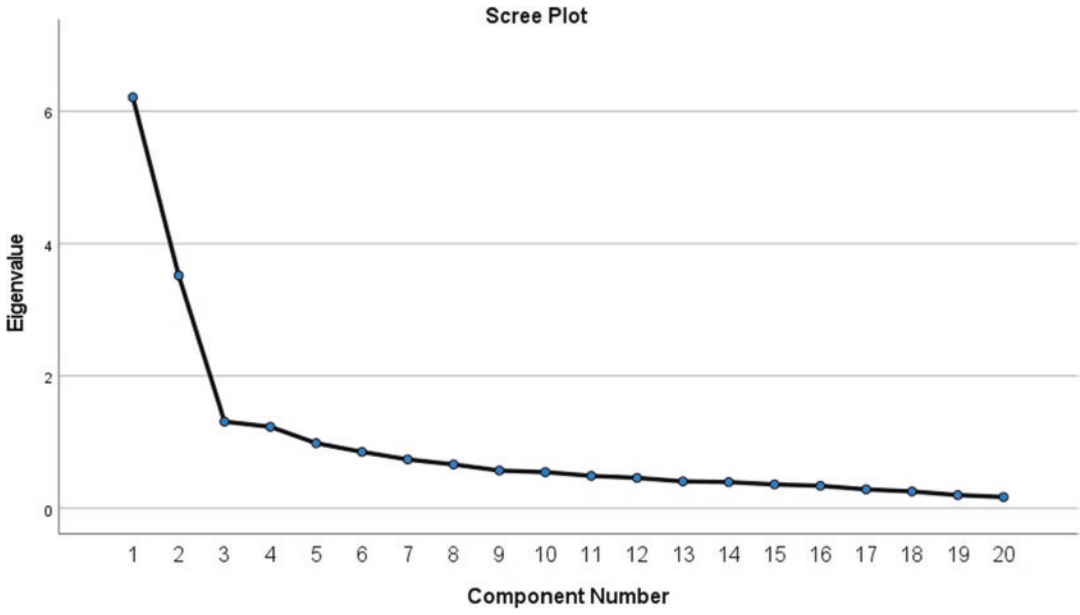

Fig. 17.1 Scree plot output on the 20-item SCSS for the Greek sample (N = 301)

Table 17.3 Convergent validity of the SCSS-Greek

	SCSS *r*	*P* value
Meaning	0.22	<0.001
Peace	0.34	<0.001
Faith	0.70	<0.001
Total spirituality	0.66	<0.001

the readability, comprehensibility, and suitability of the instrument. Our exploratory factor analysis confirmed the two-factor structure of the original questionnaire and is in line with other similar research supporting the two-dimensionality of SCSS. Our results are encouraging in terms of the item convergent validity and the reliability of the scale because all the items were related to the total subscale score and Cronbach's α values were considerably high. Additionally, the Pearson correlation r for spiritual and religious coping strategies showed strong correlations between test–retest measurements. Overall, the findings of this study are indicative of the reliability and validity of SCSS which is available to Greek researchers to compare results with those of other

Table 17.4 Item analysis of the religious coping strategies and non-religious coping strategies of SCSS-Greek

Religious coping strategies	Corrected item-total correlation	Cronbach's Alpha if item deleted
Item 1	0.72	0.90
Item 2	0.69	0.90
Item 4	0.50	0.91
Item 6	0.69	0.90
Item 8	0.67	0.90
Item 10	0.68	0.90
Item 15	0.80	0.89
Item 18	0.71	0.90
Item 19	0.77	0.89
Non-religious coping strategies		
Item 3	0.48	0.76
Item 5	0.51	0.75
Item 7	0.44	0.76
Item 9	0.52	0.75
Item 11	0.54	0.75
Item 12	0.53	0.75
Item 13	0.38	0.77
Item 14	0.21	0.80
Item 16	0.45	0.76
Item 17	0.58	0.74
Item 20	0.48	0.76

Table 17.5 Test retest reliability of SCSS-Greek

	Test (A) Mean St. Dev.	Retest (B) Mean St. Dev.	Pearson's r $^{***}p < 0.001$	Paired t-test (t) $^{*}p > 0.05$
Spiritual coping strategies	25.25 (4.50)	25.33 (4.37)	0.957***	−1000*
Religious coping strategies	10.92 (7.46)	11.03 (7.35)	0.909***	−1800*

countries in which a culturally adapted version of the instrument is available.

Overall, the results of the present study reveal outcomes similar to those of other research [3–6]. These results are indicative of the ability of the instrument to detect spiritual and religious coping strategies among participants. The implications of relevant future research are important in relation to health care management and the support and continuous education of frontline health care workers. In times of an international health care systems crisis due to COVID-19, health care providers should be adequately prepared to face the dynamics of fear and grief generated in the midst of this pandemic. Such preparation may be a valuable tool in promoting collaborative therapeutic encounters and the building of compassionate communities while, at the same time, may help professionals to get satisfaction from spiritual care.

Despite the promising findings of the present study, several limitations should be taken into account. The present study was limited by the lack of a wider variety of professionals. Participants were mainly women, which limits considerably the generalizability of our findings due to the possibility of different coping strategies among men and women. Nonetheless, the proportion of male and female nurses in our sample matches other international and national samples [3–6]. Furthermore, we used a convenience sample of institutions and nurses which may not adequately represent the population by employing a nonprobability sampling method.

Indeed, compassion fatigue constitutes a serious threat to the career of health and social care professionals and may result in a reduced ability to provide spiritual care for patients [10]. Especially in the context of the COVID-19 pandemic, health care workers on the front line who are directly involved in the diagnosis, treatment, and care of patients with COVID-19 are experiencing grief, loss, and psychological distress [11, 12]. The combination of witnessing physical suffering and death along with the immediate threat to one's own safety can induce anxiety, fear, grief, and emotional distancing. Standing by the suffering patient in the context of COVID-19 and facing pain, fear, stigma, and human misery requires moral courage in dealing with internal and external barriers to care and persistence in building resilience to emotional situations. The recent pandemic makes more than ever necessary the assessment of frontline workers' spiritual coping strategies.

The implications of relevant future research are important in relation to health care management and the support and continuous education of frontline health care workers. In times of an international health care systems crisis due to COVID-19, health care providers should be adequately prepared to face the dynamics of fear and grief generated in the midst of this pandemic. Such preparation may be a valuable tool in promoting collaborative therapeutic encounters and the building of compassionate communities while, at the same time, may help professionals to employ spiritual coping strategies and to find meaning in adversity in the landscape of grief and loss.

17.5 Conclusion

This study comprises the first published data on the validation of the culturally adapted version of SCSS-Greek. According to the findings, the SCSS-Greek demonstrated reasonable psychometric properties and is a valid tool for the assessment of the spiritual coping strategies of health care professionals. Our confirmatory factor analysis confirmed the two-factor structure of the

original questionnaire. Our results are encouraging in terms of the item convergent validity and the reliability of the scale because all the items were related to the total subscale score and Cronbach's α values were considerably high. Additionally, the Pearson correlation r for spiritual and religious coping strategies showed strong correlations between test–retest measurements. Overall, the findings of this study are indicative of the reliability and validity of SCSS which is available to Greek researchers to compare results to those of other countries in which a culturally adapted version of the instrument is available. In all, it can be concluded that the SCSS-Greek shows psychometric sufficiency in its culturally adapted Greek version and can be useful for the assessment of spiritual coping strategies.FundingOur project was funded by the University of West Attica.

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