Brazilian Validation of the Brief Scale for Spiritual/Religious Coping—SRCOPE-14

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Abstract: The concept of spiritual-religious coping gained attention in Brazil with the adaptation and validation of the RCOPE Scale (Panzini 2004; long version: 87 items and brief version: 49 items). The Brief RCOPE still contains a large number of items, so attempts to further reduce the size of the measure are relevant. This study presents the validation process of the Brief SRCOPE scale (14 items) for use in the Brazilian context. Data were collected from the general population (N = 525) and subjected to exploratory factor analysis (EFA; n = 249) and confirmatory factor analysis (CFA; n = 276). The EFA resulted in a two-factor solution: Positive Religious Coping (PRC) and Negative Religious Coping (NRC). All 14 items of the original scale were retained and correlated with the same factor as the original scale (KMO = 0.852; 58.15% of total variance explained; PRC Cronbach’s alpha = 0.884 and NRC Cronbach’s alpha = 0.845). The model tested through CFA showed adequate adjustment indices ($\chi^2 = 146.809$, DF = 70, $\chi^2$/DF = 2.097, NFI = 0.93, CFI = 0.962, GFI = 0.930, AGFI = 0.895, RMSEA = 0.063, PCLOSE = 0.065 and SRMR = 0.0735). The Brief SRCOPE Scale-14 has shown reliability for the studied sample and might be applicable to other contexts. It may ultimately prove useful to professionals and researchers interested in better knowing how people make use of religious coping to face stress and suffering.

Keywords: spiritual religious coping; Brief SRCOPE Scale 14; Brazil; spirituality/religiosity

1. Introduction

The concept of religious coping was introduced by Pargament (1997), as an expansion of the coping theory of Lazarus and Folkman (1984). Cummings and Pargament (2010, p. 30) state that “religious coping occurs when a stressor related to a sacred goal arises or when people call upon a coping method they view as sacred in response to a stressor”. The literature has demonstrated significant links between religious coping and a variety of criteria of mental health (Cummings and Pargament 2010; Pargament et al. 2013). A large number of researchers have developed numerous studies of religious coping. However, research on this subject remains sparse outside the United States and Europe.

In Brazil, studies relating spiritual/religious coping began in 2004, with the validation of Pargament’s SRCOPE Scale by Panzini (2004). Her efforts resulted in a long Scale, with 87 items, and a brief Scale, with 49 items. However, Brazilian studies about religious coping are still in an early stage. Between 2004 and 2011 only five studies were published. However, since 2011, there has been a
growing interest in this subject. From 2011 until now, a total of 31 studies using those two scales have been published. Studies of spiritual/religious coping in Brazil have shown promising results in terms of predicting criteria of health and well-being as indicated in the following section.

With this background, this article presents the process of adaptation and preliminary validation of the brief (14 item) version of the SRCOPE Scale for the Brazilian context. Such a short version might be particularly useful for both research and clinical contexts where time constraints make the use of the long scale less feasible.

2. Theoretical Background and Literature Review on Spiritual/Religious Coping in Brazil

2.1. Theoretical Background

Pargament et al. (2000, p. 521) observed that “Religion serves a variety of purposes in day-to-day living and in crisis”. The authors identified five keys religion function: Meaning, Control, Comfort, Intimacy and Life Transformation.

In another study, Pargament (2011, p. 31) also noted that “the most critical function of religion is spiritual in nature”. Hence, “the new focus on spirituality, though, could remind us that spirituality is a critical part of life that cannot and should not be explained away”. Therefore, spirituality should be understood as “a higher dimension of human potential” (Pargament 2011, p. 31).

Pargament et al. (2011, p. 53) stated that religious coping serves multiple functions (search for meaning, intimacy with others, identity, control, anxiety-reduction, transformation, as well as the search for the sacred or spirituality itself). From this perspective, it seems better to name religious coping as “spiritual/religious coping”. Spiritual/religious coping is: multi-modal (“it involves behaviors, emotions, relationships, and cognitions”); a dynamic process that changes over time, context, and circumstances; multi-valent (“a process leading to helpful or harmful outcomes”); it may add a distinctive dimension to the coping process by virtue of its unique concern about sacred matters; “it also may add vital information to our understanding of religion and its links to health and well-being, especially among people facing critical problems in life” (Pargament et al. 2011, p. 53).

Pargament et al. (2000) pointed out that although the concept of religious coping has a positive connotation, coping could be ineffective as well as effective. The authors noted that religious coping methods could be positive or negative. Positive religious coping methods “reflect a secure relationship with a transcendent force, a sense of spiritual connectedness with others, and a benevolent world view.

Negative religious coping methods reflect underlying spiritual tensions and struggles within oneself, with others, and with the divine” (Pargament et al. 2011, p. 51).

For the purpose of measuring religious coping, Pargament et al. (2000) developed the Religious Cope Scale with 105 items, intended to represent the five theoretical functions of religious coping. Later on, a brief version with 14 items was developed by Pargament et al. (2011). The authors noted that the full RCOPE could be clearly categorized as either positive or negative in nature. “The positive religious coping subscale (PRC) of the Brief RCOPE taps into a sense of connectedness with a transcendent force, a secure relationship with a caring God, and a belief that life has a greater benevolent meaning. The negative religious coping subscale (NRC) of the Brief RCOPE is characterized by signs of spiritual tension, conflict and struggle with God and others, as manifested by negative reappraisals of God’s powers” (Pargament et al. 2011, p. 58).

As the study validation of the Brief RCOPE indicated, the scale demonstrated “good internal consistency in a number of studies across widely differing samples” (Pargament et al. 2011, p. 58). Such studies included patients undergoing cardiac surgery (Ai et al. 2009), cancer patients (Cole 2005; Sherman et al. 2005); caregivers for cancer patients (Pearce et al. 2006), outpatients with alcohol use disorders (Piderman et al. 2007), HIV patients (Tsevat et al. 2009). These promising results and the relevance to have a shorter scale to measure spiritual religious coping encouraged us to validate the Brief RCOPE to be used in the Brazilian context.
2.2. Literature Review: Empirical Studies on Spiritual/Religious Coping in Brazil

To identify the empirical studies relating to the SRCOPE Scale in Brazil, a literature search was performed in Portuguese and English, with the following key-words: “Coping Religioso Espiritual” (Spiritual Religious Coping), “Enfrentamento Religioso” (Religious Coping) and “Escala de Coping Religioso” (Religious Coping Scale). The search was done in three main databases: Scientific Electronic Library Online—SciElo; Virtual Health Library—BVS and CAPES Periodicals Portal, and a total of 402 studies, in Portuguese were found, and 682 studies in English. From those studies, 44 were selected for a more in depth analysis.

After reading the abstracts, qualitative studies, non Brazilian studies and duplicate papers were discarded. Two studies published in English were rejected for not employing a valid Brazilian SRCOPE scale, leaving 31 studies in Portuguese and 5 studies in English to be categorized: 17 articles, 14 Master’s theses and 5 Doctoral dissertations. Among these studies, 16 applied the long version of the SRCOPE scale (87 items), 16 applied the Brief version (49 items) and 4 studies used the SRCOPE Scale-14 items. Regarding the areas of study, 17 research were developed in psychology, 8 in nursing, 7 in medicine, 2 in theology, 1 in Public Health and 1 in sciences of religion.

The majority of these studies (29) were performed in healthcare contexts, especially with patients under treatment for chronic diseases such as: kidney failure (Valcanti et al. 2012; Pilger 2015; Santos et al. 2017), hepatitis C (Reis 2012), multiple sclerosis (Amoroso 2009), liver diseases (Martins et al. 2012), epilepsy (Tedrus et al. 2013); drug abuse (Correa 2016), cancer (Matos et al. 2017; Gobatto 2012; Mesquita et al. 2013; Borges 2015; Veit and de Castro 2013; Marucci 2012; Tarabay 2014) HIV AIDS (Faria and Seidl 2006; Pilger 2015; Pinhol et al. 2017), and also among informal caregivers of elderly inpatients (Vitorino et al. 2017). All of them highlight the more frequent use of positive than negative religious coping. In addition, some of the studies show a positive correlation between the use of religious coping strategies and spiritual well-being (Reis 2012; Faria and Seidl 2006; Pilger 2015), better quality of life (Amoroso 2009; Panzini et al. 2011; Marucci 2012; Marcelino 2013; Pilger 2015; Brito 2016; Vitorino et al. 2015, 2016; Matos et al. 2017); less anxiety (Correa 2016) and less depression (Marucci 2012; Vitorino et al. 2017).

Studies performed among people diagnosed with cancer in chemotherapy and/or palliative care show the importance of integrating spirituality and religion during the treatment, including the relevance of offering a good spiritual care service (Borges 2015). In one of the studies performed with 120 women diagnosed with breast or gynecologic cancer (Marucci 2012) the author found that the use of a positive spiritual/religious coping strategy was significantly related to the absence of anxious and depressive symptoms, greater perception of social support and better quality of life. Four studies were performed among families who had one of their members hospitalized (Santos-Silva 2014; Schleder et al. 2012; Foch et al. 2016; Marcelino 2013), showing that people tend to use religious coping methods to help them overcome suffering associated with life-threatening illness.

Seven studies were conducted outside the healthcare context. Three of them compared the use of spiritual/religious coping in different religions and cultures (Huang 2014; Mizumoto 2012; Mellagi 2009); one focused on elderly people in long-term institutions (Vitorino and Vianna 2012); one study examined pastors and priests (Silva 2012; Baptista 2014) and one addressed soldiers on duty (Mellagi 2016).

Regarding the validation of the SRCOPE Scale, only the study of Panzini and Bandeira (2005) was found. Although four studies using the brief SRCOPE—14 items were found, none of them were about its validation process. The first study, published by Faria and Seidl (2006), investigated the correlation between coping strategies (including religious coping), level of education, health condition, and the subjective well-being of people living with HIV Aids. In order to use the scale in that study, the authors performed a reverse path, semantic analysis, pilot trial and analysis of the factorial structure. This study had a sample of 110 Brazilian adults living with HIV-AIDS. All participants were recruited from two health services. The authors reported that participants made significantly more use of positive religious coping strategies (M = 3.33; SD = 0.71) than negative strategies (M = 1.53; SD = 0.56).
(Faria and Seidl 2006, p. 160). The researchers further investigated the association between Positive and Negative SRC and showed that there was no significant correlation between them ($r = 0.15$; $p = 0.11$). This suggests that the participants employed the positive SRC independently of the Negative SRC (Faria and Seidl 2006, p. 160).

The authors also noted significant differences between the average use of Positive SRC ($F = 4.36$; $p \leq 0.05$) among Evangelicals as compared to those whose beliefs were not connected to a specific religion (Faria and Seidl 2006, p. 160). Interestingly, the two groups did not significantly differ in their use of Negative religious coping ($F = 2.36$; $p = 0.07$).

The other studies included 2 master’s theses (Gobatto 2012; Gryschek 2013) and 1 doctoral dissertation (Brito 2016). Gobatto (2012) developed a study with 85 healthcare professionals (social workers, biologists, doctors, nutritionists, dentists, nurses, psychologists, nurse technicians) to evaluate the comprehension of healthcare professionals (oncology area) regarding the association of health, religiosity and spirituality. The results showed greater use of positive strategies rather than negative ones, without a relevant distinction between professional categories. The author highlights that these professionals do not receive specific training in order to deal with spiritual/religious matters of their patients in clinical work. In addition, religious leaders assisted the patients in an isolated manner from the multidisciplinary team.

Gryschek (2013) used the 14 items scale in an investigation about the prevalence of anxious and depressive symptoms in patients under palliative care in a hospital in São Paulo—Brazil. The author said that the Brief SRCOPE Scale showed a higher score for positive aspects ($3.62 \pm 0.27$) than for negative aspects ($1.38 \pm 0.58$) and that there was an association between negative coping and depressive symptoms, suggesting the importance of dealing with spiritual/religious matters with patients in palliative care.

Brito (2016) investigated associations among religious coping, resilience and quality of life in patients with HIV/AIDS. The sample was collected in the city of Goiânia, where 200 people with HIV/AIDS took part in the study. The author reports that the results showed good internal consistency both for positive (0.83) and negative (0.74) SRC (Brito 2016, p. 54). Considering the data presented, it is possible to understand the usefulness of the SRCOPE-14 for the population with a diagnosis of HIV/AIDS. However, for its use within the general population, the SRC-14 scale still needs validation, which is the purpose of the present study.

The variety of empirical studies on spiritual/religious coping developed in Brazil has yielded promising findings. The scales showed reliability and point to the fact that there might be a lot of similarities between the Americans and the Brazilians regarding the utilization of coping methods and religious behavior. In both countries, it is possible to see that there is a bigger use of positive coping methods than of negative coping methods.

The Brazilian scales in their long version (87 items) and brief version (49 items) are valuable, comprehensive and theoretically grounded tools to measure the religious/spiritual coping, as it was demonstrated in the literature review. However, the size of this scales ends up limiting their utilization, especially because the majority of studies have been conducted with vulnerable people dealing with life-threatening situations.

In this regard, the high number of items on the scale is a limiting factor for its use in health research context and to be included in a standard battery of assessment in clinical and counseling situations. Aside from that, there is also the fact that although Brazilian people are considered highly religious ($M = 4.18; SD = 0.70$) as it is shown in Huber and Huber (2012) study, inquiries regarding religiosity are, in general, overlooked by health professionals in Brazil. Even the religious affiliation of the patients is often underreported in hospital records and is hardly ever integrated into the clinical settings.

So, given the importance and necessity of a reliable, brief and easy to apply instrument, it becomes evident how relevant the SRCOPE with 14 items validation is. The availability of this tool in Brazil will be very useful, both in the clinical settings and for researchers on the subject.
3. Method

3.1. Translation and Adaptation

The Brief RCOPE Scale is a 14-item measure of religious coping with stress created by Pargament et al. (2011), and it is divided into two subscales, each consisting of seven items, which identify clusters of positive and negative religious coping methods (Table 1).

The process of translation, adaptation and validation of the Brief SRCOPE Scale for its use in the Brazilian context went through a number of phases. Initially, a Portuguese translated version of the Scale was prepared and sent to three English specialists with knowledge of the subject. They analyzed the scale’s clarity and comprehensibility, along with the general presentation of the tool and the suitableness of the original meanings in both English and Portuguese. The specialists read the tool in English and then used a specific assessment sheet to record suggestions and improvements for the translation.

After the incorporation of those observations, researchers constructed a first Portuguese version of the 14-item scale. Following the pattern of the long Scale (87 items) and of the Brief Scale (49 items) of Panzini and Bandeira (2005), the tool shows the concepts of spiritual/religious coping and stress, and requests that the participant describe in a few words one of the most stressful situations experienced in the past three years. With the reported situation in mind, the participant is then requested to indicate how much he/she did or did not do what is written in each item. The response options are recorded using a Likert scale of five points (1 = not even a little/not applicable; 5 = a lot/very applicable).

This first version of the scale was administered to 42 academic students in a pilot study. They served as a focus group to discuss the semantic clarity of the scale and to evaluate whether the religious expressions could be understood by the population in general, independently of their religion and beliefs. The equivalence of the translation was pursued from the original version, with the mandatory adaptations to the Portuguese (Brazilian) language.

After this phase, the reverse translation was performed by a native speaker of the English language, then the main author of the original scale to verify the equivalence of meaning. This meaning-equivalence process resulted in a small adjustment in two items (7 and 13), to make them better understood for Brazilians and only then the final version was deemed ready for use with to the general Brazilian population. Items 7 and 13 were initially translated as: 7—“I concentrated myself on religion to stop me from worrying about my problems”/“Concentrei-me na religião para parar de me preocupar com meus problemas.”; 13—“I convinced myself that evil forces had made this happen”/“Convenci-me de que forças do mal atuaram para isso acontecer.”

Regarding item 7, the author suggested keeping the English expression “focused”, so the equivalent Portuguese term chosen was “foquei”, thus remaining very similar to the term used in the original scale.

On item 13, “I convinced myself that evil forces had made this happen.”/“Convenci-me de que forças do mal atuaram para isso acontecer”, the expression “devil” was traduced as “evil forces”, considering that in Brazilian culture, this is more appropriate. Regarding the expression “decided”, it was initially translated as “convenci-me”. After the author appreciation and observations, it was agreed that the sentence “Cheguei à conclusão de que forças do mal atuaram para isso acontecer” represents well the idea expressed on the original scale.

The final phase included an Exploratory Factor Analysis followed by a Confirmatory Factor Analysis.

3.2. Sample

All participants gave their informed consent for inclusion before participated in the study. The study was conducted in accordance with the declaration of Helsinki, and the protocol was approved by PUCPR Research Ethics Committee (Process 1.354.361).
An electronic inquiry was made available through Qualtrics and a link was distributed broadly in social media inviting people to participate in the study. The prevalence of women in Brazilian population, convenience sampling and the possibility of women being more prone to cooperate might be an explanation for having a more women than men participating. The total sample of this study consisted of 525 participants from several different states from Brazil, which was then randomly split into two different samples. The Exploratory Factor Analysis (EFA) sample (Sample 1) was composed of 249 participants, with a majority female (62.7%) and the Confirmatory Factor Analysis (CFA) sample (Sample 2) consisted of 276 individuals, also having females as a majority (65.9%) and a t-test was conducted, differences in coping scores weren’t found between males and females ($p > 0.10$).

The average age for Sample 1 was 37.73 years (SD = 13.43) and 39.01 years for Sample 2 (SD = 13.77 years). A t-test was conducted to check for age differences in both samples and there was no statistical significant difference between groups ($p = 0.934$).

Regarding marital status Sample 1 was composed of 47.8% singles and 40.2% singles in Sample 2. In the two samples, the married respondents represented 43.3% and 52.6%, separated/divorced 7.6% and 6.2%, widowers 2.4% and 1.1% respectively.

Both samples included participants from different religions, with Catholics as the largest group in both samples (38.2% and 36.2% respectively) and Evangelicals as the second largest group (26.5% and 28.6% respectively. We also had smaller percentages of participants that did not report a specific religion or other religions such as: African-Brazilian, Spiritism, Pentecostal, Buddhism and combinations of different religions.

4. Results and Discussion

4.1. Exploratory Analysis

Pargament et al. (2011) reviewed several studies that had utilized the SRCOPE scale and the majority suggested that there is an orthogonal relationship between the PRC and NRC scales. Therefore, we chose a principal axis factoring extraction method and a varimax rotation for the exploratory analysis.

Sample size, according to Hair et al. (2010) for an Exploratory Factor Analysis should not be smaller than 50 and preferably should be above 100 observations. Although recommendations for sample size vary considerably between authors, in this study we opted to keep at least a 15:1 ratio of subject-to-variable since it seems to comply with the majority of the recommendations in the literature and also respects the minimum of 200 cases for any EFA. (MacCallum et al. 1999; Guilford 1954).

The exploratory factor analysis (EFA) was conducted with the 14 items of the scale on a sample of 249 participants. The Kaiser-Meyer-Olkin measure showed that the sample was adequate for a factor analysis (KMO = 0.852) and Bartlett’s test of sphericity showed adequate results, $\chi^2 (91) = 1777.152$, $p < 0.001$.

The number of factors extracted followed the K1 method proposed by Kaiser (1960) retaining any factor with an Eigenvalue above 1, and employing Cattell’s scree plot method that suggests a visual analysis of the graph and the search for a significant drop in eigenvalues (Cattell 1966). The extraction revealed a two-factor solution, with 58.15% of total variance explained. The solution found in this EFA is consistent with the solution and item distribution on the original scale. All positive coping items had significant loadings on Factor 1 (PRC), while all negative coping items had significant loadings on Factor 2 (NRC).

As seen in Table 1, all loadings were above 0.35, the magnitude considered as minimum for a sample of around 250 participants (Hair et al. 2010). The lowest loading in this solution was 0.474 and none of the items cross-loaded on the other factor.

Internal consistency, measured through Cronbach’s alpha, were good for both factors. Factor 1 (PRC) showed an alpha of = 0.884 and Factor 2 (NRC) = 0.845 (Hair et al. 2010).
Table 1. Correlation between factors and scale items.

<table>
<thead>
<tr>
<th>Original Item/Translation</th>
<th>Factor 1</th>
<th>Factor 2</th>
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</thead>
<tbody>
<tr>
<td><strong>Positive Religious Coping Subscale Items</strong></td>
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</tbody>
</table>
| 1. Looked for a stronger connection with God  
(Procurei uma ligação maior com Deus) | 0.822 | −0.018 |
| 2. Sought God’s love and care.  
(Procurei o amor e a proteção de Deus) | 0.844 | 0.001 |
| 3. Sought help from God in letting go of my anger.  
(Busquei ajuda de Deus para livrar-me da minha raiva) | 0.734 | 0.222 |
| 4. Tried to put my plans into action together with God.  
(Tentei colocar meus planos em ação com a ajuda de Deus) | 0.795 | 0.079 |
| 5. Tried to see how God might be trying to strengthen me in this situation.  
(Tentei ver como Deus poderia me fortalecer nesta situação) | 0.836 | 0.010 |
| 6. Asked forgiveness for my sins.  
(Pedi perdão pelos meus erros ou pecados) | 0.546 | 0.283 |
| 7. Focused on religion to stop worrying about my problems.  
(Foquei na religião para parar de me preocupar com meus problemas) | 0.574 | 0.126 |
| **Negative Religious Coping Subscale Items** | | |
| 8. Wondered whether God had abandoned me.  
(Fiquei imaginando se Deus tinha me abandonado) | 0.136 | 0.787 |
| 9. Felt punished by God for my lack of devotion.  
(Senti-me punido por Deus pela minha falta de fé) | 0.059 | 0.805 |
| 10. Wondered what I did for God to punish me.  
(Fiquei imaginando o que eu fiz para Deus me castigar) | 0.106 | 0.821 |
| 11. Questioned God’s love for me.  
(Questionei o amor de Deus por mim) | 0.141 | 0.724 |
| 12. Wondered whether my church had abandoned me.  
(Fiquei imaginando se meu grupo religioso tinha me abandonado) | 0.109 | 0.479 |
| 13. Decided the devil made this happen.  
(Cheguei à conclusão de que forças do mal atuaram para isso acontecer) | 0.099 | 0.474 |
| 14. Questioned the power of God.  
(Questionei o poder de Deus) | −0.049 | 0.597 |
| **Alpha’s Cronbach** | 0.884 | 0.845 |

Source: Data study analysis.

4.2. Confirmatory Analysis

Having shown that every item proposed on the original scale was also loading on its respective factor in the adapted version through the EFA, a CFA analysis was conducted using the remaining half of the data. As with an EFA, a CFA can be used to reduce the overall number of observed variables into latent factors based on their commonalities, but reducing measurement error and adding a level of statistical precision that is useful to scale validation (McArdle 1996).

The two-factor solution that emerged from the Exploratory Factor Analysis (EFA) was verified using a Confirmatory Factor Analysis (CFA) on a sample of 276 participants. The CFA showed the following adjustment rates: \( \chi^2 = 146.809, \text{DF} = 70, \chi^2 / \text{DF} = 2.097, \text{NFI} = 0.93, \text{CFI} = 0.962, \text{GFI} = 0.930, \text{AGFI} = 0.895, \text{RMSEA} = 0.063, \text{PCLOSE} = 0.065 \) and \( \text{SRMR} = 0.0735 \).

Goodness of fit in this study was calculated through \( \chi^2 / \text{DF} \) which should be < than 3 (\( \chi^2 / \text{DF} = 2.097 \)), CFI was considered very good if >0.95 (CFI = 0.962), AGFI should be >0.80 (AGFI = 0.895), SRMS should be <0.09 (SRMR = 0.0735), RMSEA was considered moderate (0.063) and PCLOSE was close to acceptable (0.065). Reliability of the model was calculated through Composite Reliability (CR) which should be above 0.7 (0.87 for PRC and 0.84 for NRC) and convergent validity was accessed through Average Variance Extracted (AVE) that should be >0.05 (both scales showed an AVE of 0.5). (Hair et al. 2010; Hu and Bentler 1999).
Table 2 presents the regression weights of each item in the analysis as well as the reliability (measured by Composite Reliability) and the convergent validity (measured by Average Variance Extracted—AVE).

<table>
<thead>
<tr>
<th>Original Item/Translation</th>
<th>Positive Coping</th>
<th>Negative Coping</th>
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<tbody>
<tr>
<td>1. Looked for a stronger connection with God</td>
<td>0.763</td>
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<tr>
<td>(Procurei uma ligação maior com Deus)</td>
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<tr>
<td>2. Sought God’s love and care.</td>
<td>0.775</td>
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<tr>
<td>(Procurei o amor e a proteção de Deus)</td>
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<td>3. Sought help from God in letting go of my anger.</td>
<td>0.676</td>
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<tr>
<td>(Busquei ajuda de Deus para livrar-me da minha raiva)</td>
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<td>4. Tried to put my plans into action together with God.</td>
<td>0.842</td>
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<tr>
<td>(Tentei colocar meus planos em ação com a ajuda de Deus)</td>
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<td>5. Tried to see how God might be trying to strengthen me in this situation.</td>
<td>0.862</td>
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<tr>
<td>(Tentei ver como Deus poderia me fortalecer nesta situação)</td>
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<td>6. Asked forgiveness for my sins.</td>
<td>0.573</td>
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<tr>
<td>(Pedir perdão pelos meus erros (ou pecados))</td>
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<td>7. Focused on religion to stop worrying about my problems.</td>
<td>0.489</td>
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<tr>
<td>(Focsei na religião para parar de me preocupar com meus problemas)</td>
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<tr>
<td>8. Wondered whether God had abandoned me.</td>
<td>0.754</td>
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<tr>
<td>(Fiquei imaginando se Deus tinha me abandonado)</td>
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<td>9. Felt punished by God for my lack of devotion.</td>
<td>0.830</td>
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<td>(Senti-me punido por Deus pela minha falta de fé)</td>
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<td>10. Wondered what I did for God to punish me.</td>
<td>0.889</td>
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<tr>
<td>(Fiquei imaginando o que eu fiz para Deus me castigar)</td>
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<tr>
<td>11. Questioned God’s love for me.</td>
<td>0.777</td>
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<tr>
<td>(Questionei o amor de Deus por mim)</td>
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<tr>
<td>12. Wondered whether my church had abandoned me.</td>
<td>0.510</td>
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<tr>
<td>(Fiquei imaginando se meu grupo religioso tinha me abandonado)</td>
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<tr>
<td>13. Decided the devil made this happen.</td>
<td>0.443</td>
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<tr>
<td>(Cheguei à conclusão de que forças do mal atuaram para isso acontecer)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Questioned the power of God.</td>
<td>0.489</td>
<td></td>
</tr>
<tr>
<td>(Questionei o poder de Deus)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Composite Reliability</td>
<td>0.870</td>
<td>0.840</td>
</tr>
<tr>
<td>Average Variance Extracted</td>
<td>0.500</td>
<td>0.500</td>
</tr>
</tbody>
</table>

Source: Data study analysis.

The CFA model showed good adjustment rates and indicate that the translated and adapted version of scale shows a good fit for the sample and could be a useful model for measuring positive and negative religious coping for the studied population.

5. Conclusions

Based on the results, we can state that the Brief SRCOPE Scale—14, version in Brazilian Portuguese, shows promising psychometric qualities for its use in the Brazilian cultural context. The samples were collected in several states of the country and showed acceptable indexes suggesting that the scale might be valid for application throughout the Brazilian territory, despite cultural differences between regions.

Strategies of spiritual/religious coping are largely implemented by people who face situations in which their health and continuity of living are being threatened. In these contexts, a brief scale represents a significant contribution for both researchers and clinicians because it may be quickly
administered. It is useful, above all, as an instrument to evaluate methods of religious/spiritual coping in an efficient, psychometrically reliable and theoretically meaningful way.

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Author Contributions: K.I.P. designed the scale, followed the validation process and contributed to manuscript. All the authors contributed equally to the manuscript.

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References


Borges, Mariana Lopes. 2015. A Utilização do Coping Religioso/Espiritual por Mulheres Submetidas ao Tratamento do Câncer de Mama. Master’s dissertation, Escola de Enfermagem de Ribeirão Preto, Ribeirão Preto, Brasil. (In Portuguese)


Huber, Stefan, and Odilo W. Huber. 2012. The Centrality of Religiosity Scale (CRS). *Religions* 3: 710–24. [CrossRef]


Pilger, Caliope. 2015. Estudo Correlacional Entre bem-Estar Espiritual, Religiosidade, Enfrentamento Religioso e Espiritual e Qualidade de Vida de Idosos em Tratamento Hemodialítico (Correlational Study between Spiritual Well-Being, Religiosity, Religion and Spiritual Coping and Quality of Life of Elderly in Hemodialysis Treatment). Ph.D. dissertation, Escola de Enfermagem de Ribeirão Preto, Ribeirão Preto, Brasil. (In Portuguese) [CrossRef]


Santos-Silva, Clayton dos. 2014. O Coping Religioso-Espiritual em Pacientes de Hospital Escola: Uma Compreensão Biopsicossocial. Master’s dissertation, Instituto de Psicologia, Universidade de São Paulo, São Paulo, Brasil. (In Portuguese) [CrossRef]


Vitorino, Luciano Magalhães, Gail Low, and Luciana Amaral Carneiro Vianna. 2016. Linking Spiritual and Religious Coping with the Quality of Life of Community-Dwelling Older Adults and Nursing Home Residents. *Gerontology & Geriatric Medicine* 2: 1–9. [CrossRef]


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