Article

Spirituality and Self-Efficacy in Caregivers of Patients with Neurodegenerative Disorders: An Overview of Spiritual Coping Styles

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Abstract: The objective of this research was to assess the effect of spirituality and self-efficacy in the mental health of caregivers of patients with neurodegenerative disorders. Four styles of spiritual coping were examined to identify which of them can function as protective or risk factors for caregivers of patients with neurodegenerative disorders. Interviews were conducted face-to-face to 116 caregivers of patients diagnosed with some type of neurodegenerative disorder. The results showed that caregivers with a selfless spiritual coping style exhibit significantly higher depression, stress, and perceived overload than those with a collaborative style. No statistically significant differences were found between the means of the other styles of spiritual coping. Simultaneously, it was found that the selfless spiritual coping style is a risk factor for overload, depression, and stress. The study is a first step in understanding how spirituality interacts with self-efficacy to protect the mental health of caregivers of dementia patients in Puerto Rico. Our results theoretically and empirically support the functional compatibility of both psychological resources.

Keywords: dementia caregivers; spirituality; stress process; coping; anxiety; depression

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1. Introduction

Neurodegenerative disorders are one of the most significant public health problems worldwide. In 2015, approximately 46.8 million people with some type of dementia were reported, and it is expected that by the year 2050 the number of cases will increase to 131.5 million (Prince et al. 2016). As the prevalence of neurodegenerative disorders increases, the number of people attending and caring for the affected people will also increase. Most of these caregivers assume this responsibility without receiving financial remuneration and are viewed by the rest of the family as the primary source of responsibility for the patient's care (Roig et al. 1998). Statistics reveal that most of these caregivers are direct family members between the ages of 45 and 70 (Charlesworth et al. 2008). Many times, the primary caregiver takes care of the patient without a close support group or the help of other secondary caregivers, which leads to the increase of psychological disturbances in these caregivers such as, burnout (Peinado and Garcés 2004), stress (Vellone et al. 2008), anxiety (López and Crespo 2007), and depression (Covinsky et al. 2003).

Being a primary caregiver implies meeting the basic needs of the patient's physical and health care, and many times, performing domestic and extra-domestic chores (Zenteno 2015). In most cases, the primary caregiver does not have the resources to cope with this type of work, and therefore, his or her duties becomes stressful and tiring that significantly affects its well-being and quality of

life (Moreno et al. 2010). In recent years, several studies have shown the negative impact that the provision of care can have on the mental health of caregivers, showing a higher frequency of anxiety, stress, and depression (De la Revilla et al. 2009; Gálvez-Mora et al. 2003). The scientific literature shows a consistent and high prevalence of disorders in the state of mind and anxiety among caregivers of patients with neurodegenerative disorders (Alonso et al. 2004; Bademli 2017).

Given this panorama, a significant number of studies have directed their efforts to identify those psychological resources that positively contribute to avoiding or reducing the risk of suffering anxiety, stress, or depression (Cerquera and Pabón 2016; López et al. 2012). Among the protective variables identified in the empirical literature for the role of the caregiver are spirituality and self-efficacy. The preventive impact these two variables have on the emotional well-being of caregivers of patients with neurodegenerative disorders have been poorly studied.

2. Caregiver's Spirituality

González-Rivera (2017) and De Jager Meezenbroek et al. (2012) explains that spirituality is the dimension of search of meaning and significance in the relationships with oneself, other people, nature, or the transcendental (sacred). In certain contexts, spirituality is understood as an element of meaning and connection with a Higher Power, commonly associated with divinity (Fetzer Institute and National Institute on Aging Working Group 1999). This search for meaning and connection involves the use of certain strategies and/or spiritual practices that seek to reinforce the relationship of the individual with other people, nature, or the sacred (González-Rivera 2017). However, the existential aspect of this perspective has been questioned by experts in the fields of spirituality, religion, and health (Koenig 2008; Migdal and MacDonald 2013; MacDonald 2017). Another concern that has been exposed by experts is the inclusion of items associated to positive mental health in measures of spirituality such as, general well-being, optimism, forgiveness, gratitude, meaning, and life purpose (Garssen et al. 2016; Kapuscinski and Masters 2010). For this reason, in our research we chose a perspective oriented to the needs of caregivers of chronic patients, which considers caregiver's spirituality as a set of internal and external spiritual strategies that the caregiver uses to prevent or relieve the negative consequences of stressful events that are part of its role (e.g., trust in God, search for comfort in God, personal prayer, security in religious beliefs, and search for spiritual meaning to suffering).

In terms of caregiver's spirituality, studies are not consistent and reflect discrepancies in their results. On one side, there is research that supports the positive impact of caregiver's spirituality in the management of stress (López et al. 2012; Koerner et al. 2013) and, on the other hand, there are studies that do not confirm any correlation between spirituality and the different forms of emotional discomfort that caregivers exhibit (Hebert et al. 2006; Leblanc et al. 2004). Several authors have suggested that these discrepancies may be due to the instruments used to measure the spirituality construct in those studies (López et al. 2012, 2013). Specifically, they have pointed out that these studies have used instruments that measure spirituality from a general perspective and have not been adapted to the concrete realities of caregivers' spirituality (Hebert et al. 2006; López et al. 2012, 2013). For this reason, for this research an instrument was developed to measure caregivers' spirituality from their situational context, and thus, protect the results of possible validity errors. From this perspective, caregiver's spirituality is defined as the existential beliefs that allow the caregiver to give purpose, significance, and an ultimate sense to their caregiver experience (Farran 1997; Farran et al. 1999).

On the other side, studies have revealed that the perception of the patient as a burden for the caregiver is associated to depressive symptoms, negative acknowledgement of behavior, and poor, or none, spiritual activity (Dyeson 2000). These findings suggest that the practice of spiritual strategies could have a moderator effect over the psychological discomfort of the caregivers and reduce the negative perception of the caregiver over the patient (Leblanc et al. 2004; Dyeson 2000; Hodge and Sun 2012). In this sense, spirituality guides caregivers to think over their care work, favoring a form of personal growth that expands their own limits and guides them towards broader life purposes (Barrera et al. 2010).

3. Caregiver's Self-Efficacy

Bandura (1977) defines self-efficacy as the judgements that the individual makes about his capacities based on which he will organize and execute his acts, so that they allow him to achieve the desired result and performance. In other words, it is referred to a person's belief in their ability to execute a task effectively. In the health field, Haley and Pardo (1999) defined caregiver's self-efficacy as the confidence of this person regarding the management of behavioral problems and disabilities of the person that receives the care. Caregivers' beliefs about their management abilities have an influence over the amount of stress and depression that they develop when faced with threatening or difficult situations (Díaz 2008).

As for self-efficacy, it has been found to correlate inversely with low levels of depression and anxiety (Fortinsky et al. 2002; Díaz 2008) and promotes effective control of negative thoughts (Romero-Moreno 2010). This finding is fundamentally essential since one of the main components of caregiver's self-efficacy is the ability to handle intrusive and disturbing thoughts (Zenteno 2015). However, the research interested in studying the moderating role self-efficacy in the relationship between stress and emotional discomforts is inconsistent and reflects discrepancies (Romero-Moreno 2010). For example, Gilliam and Steffen (2006) did not find that self-efficacy moderated the relationship between stressors and depression in caregivers of patients with dementia. However, other researchers such as, Rabinowitz et al. (2009), López et al. (2012), Márquez et al. (2009), found that self-efficacy moderated the relationship between caregivers' stress and depression, anxiety, anger, and perceived overload. In addition, Romero-Moreno (2010) found that self-efficacy to control negative thoughts reduces levels of depression and anxiety. Although some studies validate the protective role of self-efficacy and spirituality in caregivers, more studies are needed in Latin populations.

4. Spiritual Coping Styles in Caregivers

López et al. (2012) argue that it is necessary to develop research models that integrate spirituality and self-efficacy with a view to postulating better predictions about the emotional well-being of caregivers of patients with neurodegenerative disorders. This idea is consistent with what has been exposed by other authors such as, Frey et al. (2005), who conceptualized spirituality under a two-factor model: The first about self-efficacy and the second referred to the meaning of life. In this sense, connection with God, or the sacred, offers people certain coping tools that facilitates the handling of difficult situations and the regulation of certain negative emotions (Pargament 1997). These spiritual tools or strategies lead people to develop certain religious/spiritual coping styles.

For our research, we will use the spiritual coping and problem-solving styles identified by Kinney et al. (2003): Self-directed, deferring, and collaborative. In their research, coping styles were evaluated in a sample of 64 caregivers of spouses with dementia using a transactional model of stress and coping. The study was conducted over a two-month period to evaluate the coping styles used by caregivers to manage their frustrations in their care work. Contrary to the established hypothesis, the results showed unexpected patterns where caregivers with collaborative styles reported greater depressive symptoms.

In the context of caregivers of patients with neurodegenerative disorders, the self-directed style refers to caregivers who have high confidence in their ability to perform care tasks, reporting high levels of self-efficacy. The deferring style does not exhibit high levels of self-confidence, but it shows an over-confidence in God and his active role in difficult times of care. These individuals often report high levels of spirituality and low levels of self-efficacy. Finally, the collaborative style is characterized by a dynamic of trust shared between the person and God, reflecting in the caregiver high levels of self-efficacy and high levels of spirituality. We added a fourth category to this list that we will call selfless style, where the caregiver is characterized by little or no connection with God (little spirituality) and poor self-confidence in his capacities for the care (little self-efficacy). This last spiritual coping style was also studied by López et al. (2012) under the name of "lack of expectations".

5. Purpose of the Study

There is no enough research analyzing the combined effect of spirituality and self-efficacy in caregivers of patients with neurodegenerative disorders. For this reason, as done by López et al. (2012), in our research, we are interested in analyzing the levels of anxiety, stress, and depression according to the four possible profiles of spiritual coping based on the binomial spirituality-self-efficacy: Self-directed, deferring, collaborative, and selfless. Specifically, the objective of this study is to evaluate the combined effect of spirituality and self-efficacy in the mental health of caregivers of patients with neurodegenerative disorders. At the same time, we will examine the four spiritual coping styles to identify which of them can function as protective or risk factors for caregivers of patients with neurodegenerative disorders.

6. Methods

6.1. Research Design

An ex post facto, non-experimental transverse, descriptive comparative research design was used. This type of study describes the differences that occur naturally among two or more variables (Sousa et al. 2007) and is characterized by the impossibility of manipulating the independent variable (Montero and León 2007).

6.2. Participants

Interviews were conducted face-to-face to 116 caregivers of patients diagnosed with some type of neurodegenerative disorder. To be eligible for the study, caregivers had to meet the following criteria: Be the primary caregiver, be a family member, not receiving economic remuneration for the care, meet a minimum of 3 consecutive months as a primary caregiver, and be 21 years or older. The sociodemographic characteristics of the sample are shown in Table 1. The Institutional Review Board (IRB) of Carlos Albizu University approved this research.

Table 1. Sociodemographic data of the sample.

	N = 116
Sex: f (%)	
Female	98 (84.5%)
Male	18 (15.5%)
Caregiver's Age	
Mean	51.97
Sd	13.09
Range	21–72
Relationship with care recipient: f (%)	
Spouse	51 (18.1%)
Son/Daughter	68 (58.6%)
Others	27 (23.2%)
Hours caring per day	
Mean	15.15
Sd	7.93
Range	3–24
Care-Recipient's age	
Mean	77.73
Sd	9.83
Range	47–95
Care-Recipient's illness: f (%)	
Alzheimer	79 (68.1%)
Parkinson	24 (20.7%)
Dementia with Lewy bodies	5 (4.3%)
Sclerosis Side Amyotrophic	2 (1.7%)
Others	6 (5.2%)

Note. SD = Standard Deviation.

6.3. Measurement

Sociodemographic Data. To identify the sociodemographic characteristics of the sample, we developed a general data questionnaire composed of relevant data such as age, sex, the patient's age, annual income, kinship with the patient, number of hours a day taking care of the patient, and the disease suffered by the patient.

Depression Anxiety Stress Scales (DASS-21). It is a 21-item, self-report questionnaire measuring the presence of depression, anxiety, and stress (Lovibond and Lovibond 1995). It is rated using a 4-point (0 to 3) Likert scale. The higher the score, the more severe emotional distress was. Each of the three scales obtained an internal consistency index of 0.90 in Cronbach's alpha.

Zarit Burden Interview (ZBD). We used a Spanish short version with 10 items of the ZBD (Zarit et al. 1985). The scale measures the degree of a subjective overload of chronic patient caregivers. It is rated using a 5-point (1 to 5) Likert scale. Psychometric analyses showed a one-dimensional structure that explains 57% of the variance. The scale obtained an internal consistency index of 0.91 in Cronbach's alpha. Higher scores mean a greater overload perceived by the caregiver.

Scale for Caregiving Self-Efficacy (SCSE). We used a Spanish short version with 10 items of the SCSE (Steffen et al. 2002). The scale has three factors evaluating different dimensions of care: Responses to disruptive behaviors, self-care, and control of thoughts. It is rated using a 4-point (1 to 4) Likert scale. Psychometric analyses confirmed the presence of three factors explaining 67% of the variance. The scale obtained an internal consistency index of 0.77 in Cronbach's alpha. Higher scores indicate higher levels of self-efficacy in the caregiver.

Caregiver's Spirituality Scale (CSS-10). To measure caregiver's spirituality, we developed an instrument considering the aspects of trust in God and spiritual growth. Several researchers have pointed out the need of developing instruments that measure spirituality construct considering the concrete realities of caregivers (Hebert et al. 2006; López et al. 2012, 2013). For this, we originally developed 15 items that were submitted to the opinion of 8 judges with the objective of identifying if the items of the instruments were pertinent to the spiritual experience of caregivers (Lawshe method). The judges had to meet the following criteria: Have at least one professional publication in the field of spirituality and have basic knowledge in psychometrics. The Content Validity Ratio ($CVR_{critical}$) was used to refuse or withhold the items. To interpret the results, we used the critical values recalculated by Wilson et al. (2012). According to these authors, the minimum value required for 8 judges was 0.693 (level of significance for two-tailed test = 0.05) to accept a value as essential. After making the calculation, we identified five items with values less than 0.693 that were eliminated from the instrument.

The 10 item version was administered to 50 caregivers (Female = 41, Male = 9) of patients with chronic diseases in a pilot study to preliminarily investigate the psychometric properties of the instrument. The average age of the 50 caregivers was 48.58 (SD = 13.35). We performed an exploratory factor analysis using the maximum likelihood extraction method with an oblique rotation (see Table 2). The analyses showed a one-dimensional structure explaining 68% of the variance. The Kaiser-Meyer-Olkin test supported the adequacy of the sample data for the analysis, KMO = 0.847. Bartlett's test of sphericity was meaningful, χ^2 (45) = 468.573, $p < 0.001$, demonstrating that correlations between items were significantly different from zero, being this an additional indicator of adequacy for factor analysis. In the pilot study, the CSS-10 obtained an internal consistency index of 0.95 in Cronbach's alpha.

In the present study, psychometric properties of the instrument were also calculated. Psychometric analyses showed a one-dimensional structure explaining 67% of the variance (see Table 2). The scale obtained an internal consistency index of 0.94 in Cronbach's alpha. The final version of CSS-10 was rated using a 4-point (1 to 4) Likert scale. Higher scores indicate higher levels of spirituality in the caregiver. Both the results of the pilot study and the present research provide evidence of the instrument's validity and reliability. However, we recognize that more studies are needed to analyze the psychometric properties of the CSS-10.

Table 2. Items of the Spanish version of CSS-10 and factorial loadings of the pilot study and the present study.

Items	A	B
1. I believe that God has sustained me in the difficult moments of care work.	0.86	0.86
2. The experience of taking care of a patient has contributed to my spiritual growth.	0.52	0.56
3. The power of prayer has strengthened me during the hard moments of care work.	0.88	0.82
4. My relationship with God helps me to handle the loads of the care work.	0.77	0.90
5. Despite how difficult is to be a caregiver, I'm confident because God is in control.	0.84	0.82
6. Being a caregiver makes me feel more connected to God.	0.79	0.79
7. I think that God has a purpose in all this difficult process as a caregiver.	0.86	0.85
8. God has been a source of inspiration during the tough times of care work.	0.95	0.84
9. My tasks as a caregiver give a spiritual meaning to my life.	0.73	0.72
10. My spirituality has been essential in handling tough situations during care work.	0.76	0.73

Note. A = Factorial loadings of pilot study; B = Factorial loadings of present study.

6.4. Data Analysis

The statistical analyses were carried out in the IBM SPSS Statistics software (version 24). First, we analyzed the psychometric properties of CSS-10, SCSE, and ZBD. Specifically, we performed an exploratory factor analysis using the maximum likelihood extraction method with an oblique rotation and Cronbach's alpha internal consistency index were calculated. Then, we performed group comparison analysis (ANOVA) to determine whether there are significant differences in the levels of overload, depression, stress, and anxiety according to the spiritual coping style of the caregiver.

The spiritual coping styles were classified into four categories: Collaborative style (high spirituality/high self-efficacy), deferring style (high spirituality/low self-efficacy), self-directed style (low spirituality/high self-efficacy), and selfless style (low spirituality/low self-efficacy). To determine what represents high or low levels of spirituality, efficacy, and perceived overload, cut points were calculated using the mean of each variable as a reference point. A high spirituality is represented by scores of 33 or more, a high self-efficacy by scores of 29 or more, and a high perceived overload by scores of 29 or more.

Finally, we perform a Relative Risk analysis to identify if the selfless style is a risk factor for depression, stress, and perceived overload. In this analysis, we use the presence of symptomatology as a dichotomous dependent variable and the selfless style as an independent variable to be able to establish the Relative Risk analysis and confidence intervals. To dichotomize the anxiety, depression, and stress scores of the DASS-21, we use the moderate and severe categories established by the authors in the scale's handbook (Lovibond and Lovibond 1995).

7. Results

First, the descriptive data of the measures was calculated (see Table 3). We performed a multiple analysis of variance (MANOVA) with the purpose of evaluating whether there are statistically significant differences between the means of overload, depression, anxiety, and stress according to the different spiritual coping styles (see Table 4). The Box's M test of equality of covariance matrices was statistically non-significant ($p > 0.05$). Levene's test of equality of error variances was also non-significant for depression, anxiety, and stress ($p > 0.05$), but not for overload ($p < 0.05$). The findings for omnibus F were statistically significant, $F(12, 288.678) = 2.309$, $p < 0.01$, partial $\eta^2 = 0.07$, Wilk's $\lambda = 0.79$. Results indicated differences in the scores of spiritual coping styles in terms of overload, depression, and stress, but did not show significant differences when measuring anxiety (see Table 4). We performed a post hoc analysis to identify where the differences were found. We used the Bonferroni test for depression and stress, and the Games-Howell for overload, since it was the only variable that did not meet the criteria in Levene's test. The Bonferroni's post hoc test showed differences in the spiritual coping styles for depression between the collaborative style (M = 4.44, SD = 4.73) and the selfless style (M = 7.52, SD = 4.51). In terms of stress, the test demonstrated similar results showing

differences between the collaborative style (M = 8.15, SD = 5.43) and the selfless style (M = 11.76, SD = 5.11). The results for overload using the Games-Howell's post hoc test were aligned with the other results showing differences between the collaborative style (M = 24.95, SD = 8.22) and the selfless style (M = 33.03, SD = 8.04). Analyses demonstrated that caregivers with a selfless spiritual coping style exhibit significantly greater symptoms associated with depression, stress, and perceived overload than those with a collaborative style. No statistically significant differences were found between the means of the other spiritual coping styles.

Table 3. Descriptive data of the measures.

	α	M	SD	Minimum Score	Maximum Score	Range
Depression	0.90	5.37	4.56	0	19	19
Anxiety	0.90	5.26	4.82	0	20	20
Stress	0.90	9.42	5.40	0	21	21
ZBD	0.91	28.68	8.89	10	46	36
Self-Efficacy	0.77	29.22	5.04	17	40	23
Spirituality	0.94	32.76	7.09	10	40	30

Note. α = Cronbach's alpha; M = mean; SD = Standard Deviation.

Table 4. Results for the Multiple Analysis of Variance (MANOVA).

	n	M	SD	F	df	p	η^2
Depression							
Collaborative style	41	4.44	4.73	3.15	3, 112	0.03	0.08
Deferring style	18	5.22	4.29				
Self-directed style	28	4.61	3.98				
Selfless style	29	7.52	4.51				
Anxiety							
Collaborative style	41	5.34	5.05	0.46	3, 112	0.71	0.01
Deferring style	18	4.67	3.84				
Self-directed style	28	4.71	5.26				
Selfless style	29	6.03	4.69				
Stress							
Collaborative style	41	8.15	5.43	3.00	3, 112	0.03	0.07
Deferring style	18	9.89	5.29				
Self-directed style	28	8.57	5.13				
Selfless style	29	11.76	5.11				
Perceived overload							
Collaborative style	41	24.95	8.22	5.46	3, 112	0.00	0.13
Deferring style	18	30.17	10.10				
Self-directed style	28	28.68	7.13				
Selfless style	29	33.03	8.02				

An Odds Ratio analysis was carried out to understand the impact of the selfless spiritual coping style over the developing symptomatology associated with depression, stress, and perceived overload (see Tables 5 and 6). The results showed that the odds for developing symptoms of moderate to severe stress in caregivers with a selfless spiritual coping style are 3.34 times higher than those caregivers with another spiritual coping style. The odds for developing symptoms of moderate to severe depression are 3.30 times higher, and the odds of perceiving high levels of overload are 3.15 times higher in caregivers with a selfless spiritual coping style than those caregivers with another spiritual coping style.

Table 5. Crosstab for Selfless Spiritual Coping, Perceived Overload, Depression, and Stress.

	Perceived Overload (High)		Depression (Moderate to Severe)		Stress (Moderate to Severe)	
Selfless Style	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Yes	20	9	8	21	14	15
No	36	51	9	78	19	68

Table 6. Odds Ratio.

Factor	Perceived Overload		Depression		Stress	
	OR	**CI 95%**	**OR**	**CI 95%**	**OR**	**CI 95%**
Selfless style	3.15	1.29, 7.70	3.30	1.14, 9.60	3.34	1.37, 8.12

Note. OR = Odds Ratio; CI = Confidence Interval for Relative Risk.

8. Discussion

The present study expands the knowledge of the scientific community on the role that self-efficacy and spirituality have in the mental health of caregivers of patients with neurodegenerative disorders. Comparative analyses confirmed that caregivers with a collaborative spiritual coping style (high spirituality and high self-efficacy) show less depression, stress, and perceived overload than caregivers with a selfless spiritual coping style (low spirituality/low self-efficacy). As in other studies, differences in anxiety levels were not found (López et al. 2012). Caregivers with a collaborative style hold a healthy set of beliefs about their ability to successfully meet the challenges and demands of the care task and, at the same time, they benefit from certain existential and spiritual beliefs that enable them to resignify their role as a caregiver and strengthen it with an ultimate transcendental meaning. Otherwise, our research showed that having a selfless spiritual style significantly increases the risk of presenting symptoms associated with depression, stress, and overload.

We argue that people with only moderate levels of spirituality, do not possess the necessary psychological and coping resources to successfully counteract the feelings of helplessness, despair, and frustration that caregivers of patients with some type of dementia usually experience. In other words, spiritual beliefs by themselves—working independently—do not have the required strength to weaken the adverse consequences of the caregiver role. It is necessary to contemplate such beliefs and intrinsic resources within more comprehensive models that contemplate the integrated spirituality to pragmatic variables associated to positive mental health such as self-efficacy.

In theoretical terms, given that the perceived overload threatens the physical, psychological, and functional health of caregivers (Etters et al. 2008; Parks and Novielli 2000), results propose that spirituality can provide some sense of protection and divine help that encourages the security and self-confidence of the caregiver. However, without enhancing the capacity to successfully face the obstacles and threatening situations that can arise in its role as a caregiver, its effect would not be significant on mental health. Also, the results confirm the findings of Gilliam and Steffen (2006) about how self-efficacy strengthens coping skills in handling negative situations. According to these authors, these skills assist as a protective factor for depression. Together, the results provide empirical evidence to the findings of López et al. (2012), who found that caregivers of patients with dementia can benefit from their spirituality when it is interconnected with self-efficacy.

In practical terms, given that our results provide evidence for the protective effects of combining spirituality with self-efficacy, when assisting in care processes to caregivers who affirm that spiritual beliefs are important in their lives, mental health professionals might include exploring how those beliefs and spiritual practices encourage a greater sense of self-efficacy and empowerment to face the difficulties in their role as caregivers (Kinney et al. 2003). López et al. (2012) suggested that some religious/spiritual coping strategies such as, the prayer, meditation, and self-compassion, can help

people to sustain and increase self-efficacy and feelings of internal control, as proposed by previous studies (Souza and Hutz 2016; Iskender 2009).

We should note the significant aspects of caregiver spirituality that were considered in this study. It may allow health professionals to recognize those aspects of spirituality that their patients should observe, evaluate, and strengthen. First, the trust in God that caregivers with high spirituality display allows them to experience support, comfort, and strength in their roles coming from spiritual and religious aspects. Second, caregivers with high spirituality interpret their functions as a mechanism for spiritual growth and personal development. And third, they give meaning, purpose, and direction to their life circumstances, as well as their roles as caregivers. These three aspects arm caregivers with an additional tool that can help them to cope, manage, and resolve the vicissitudes they face, without usurping the leading role of self-efficacy.

9. Limitations and Recommendations

Like all research, our study holds some limitations that should be taken into consideration. First, the research has a transverse and descriptive design, which limits causal inferences and it is unknown if the results achieved will be sustained over time. However, the purpose of our study was to conduct a comparative analysis instead of making causal inferences. Second, the sample was selected upon availability, therefore results cannot be generalized. Nevertheless, the sample turned out to be similar to other samples of international studies with caregivers of patients with neurodegenerative disorders. Furthermore, the cross-sectional design of the study precludes any kind of causal inferences about the directionality of the influences of the relationships between spirituality, self-efficacy, and the mental health of caregivers. Despite this, we consider that this research provides relevant information that will be useful for both the scientific community and the community of clinical psychologists in Puerto Rico, in terms of the role of spirituality and self-efficacy in the mental health of caregivers.

Considering these limitations, we recommend conducting longitudinal and experimental studies with the purpose of auscultate possible causal relationships among the variables studied. Those future lines of research would allow us to identify and develop possible prevention and intervention strategies for caregivers of patients with neurodegenerative disorders. Likewise, it would be interesting to develop new studies combining spirituality and self-efficacy of the caregiver with other variables of positive functioning, such as self-compassion. These would allow us to identify other psychological dynamics in the spiritual coping styles of caregivers of patients with neurodegenerative disorders.

10. Conclusions

In conclusion, our research is a first step to understand how spirituality interacts with self-efficacy to protect the mental health of caregivers of patients with dementia in Puerto Rico. Our results theoretically and empirically support the functional compatibility of both psychological resources. In other words, caregivers can maintain their spiritual and religious beliefs about how the sacred elements (God) intervene and control daily life situations and, at the same time, have a sense of control that allows them to rely on their abilities to successfully face obstacles and threatening situations of the daily life (collaborative style). Although, we must point out that in certain cases, religious beliefs could lead the caregiver to develop a passive spirituality (deferring style) where he or she redirects all its responsibilities and expectations to the divine providence. In a worst scenario, the caregiver might develop a selfless coping style, whether he or she neither redirects its concerns to sacred or divine aspects to lighten the perceived overload, nor have a sense of control and efficacy over the events of its own life. This would cause a significant detriment to the mental health of the caregiver.

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