

The Association between Religious Coping and Depressive Symptomatology in Puerto Rico: A Cross-Sectional Study

Orlando M. Pagán-Torres¹, Juan Aníbal González-Rivera^{1,*}

¹Ponce Health Sciences University

Juan A. González Rivera, PsyD., M.S., M.A, Assistant Professor, Psychology Department, Ponce Health Sciences University, San Juan Center, Puerto Rico.

***Corresponding Author:** Orlando M. Pagán Torres, Doctoral Student, Clinical Psychology Program (PhD.), Ponce Health Sciences University, Ponce, Puerto Rico. orlando.m.pagan.torres@gmail.com

ABSTRACT

Religious coping (RC) is a situation management strategy that uses religious and behaviors belief to prevent and alleviate negative consequences of stressful events. The objective of this research was to assess whether high levels of RC are negatively associated with the risk of suffering depressive symptoms in a sample of Puerto Rican adults. To this end, we conducted a cross-sectional study to examine whether people with high levels of RC exhibit significantly less symptoms associated with depression than those with low levels of RC. The results showed that people with higher levels of RC reported less depressive symptomatology than people with low levels of RC. On the other hand, it was evidenced a negative association between high levels of RC and the risk of suffer symptoms of depression. The results suggest the importance of considering RC to cope stressful events and emotional problems in people's lives.

Keywords: Coping, Depression, Religion, Religious Coping, Depressive Symptomatology, Puerto Rico.

INTRODUCTION

Numerous narrative and systematic literature reviews confirm that vast of the empiric research about religion/spirituality (R/S) reports a positive correlation between these constructs and mental health (Borelli & Koenig 2013; Green & Elliott 2010; Koenig, 2012; 2015). However, it has also been documented that under certain conditions, the R/S can have a negative effect in the quality of life of people (Juergensmeyer, Kitts & Jerry son, 2013; Sloan, 2006). Considering the cost benefit relationship of R/S, a growing number of health professionals has argued in favor of the integration of R/S within psychological and psychiatrist services (Gonzalez-Rivera 2015; Pearce et al. 2015; Richard & Bergin 2014).

At the same time, over the last decades, several religious/spiritual techniques have been developed to be integrated within the psychotherapeutic methods, such as prayer, yoga practice, meditation, sacred text readings, and religious coping (RC), the principal object of our study (Gonzalez-Rivera 2015; Richards & Bergin 2014). According to Gonzalez-Rivera and Pagan-Torres (2018), RC is referred to the type of coping where internal religious strategies (beliefs) and external (practices) are used to prevent and calm the

negative consequences that arise from stressful events with the purpose of facilitating problem resolution.

These authors explain that internal RC strategies relate to the activities and elements associated to the subjective experience of the individual (e.g., trust in God, search for solace in God, personal prayer, assurance on religious beliefs, and finding a religious sense to the suffering).

On the other hand, external RC strategies are linked to the activities where the individual seeks support around its environment (e.g., support in a faith community, attend church, religious books reading, and receive counseling/spiritual path). As a result, the main objective of the present study is to examine if high levels of RC are negatively associated with the risk of presenting depressive symptomatology. To such effects, is RC a protective factor for depressive symptomatology in Puerto Rican adult population? Do people with high levels of RC show significantly less symptoms associated with depression than those with low levels of RC? In order to answer these questions, we conducted an empirical study with an ex post Facto, non-experimental transverse, descriptive comparative research design.

Depression Statistics in Puerto Rico

During the decade of 1980-90, the prevalence of major depression in Puerto Rico was about 4.9% (Camino et al. 1987). According to Aviles, Camino & Rubio-de-Stapes (1990), a prevalence of 4.5% of adults with a diagnosis of major depression and 3.0% for the general population was projected for the year 2000. According to the Behavioral Risk Factor Surveillance System (BRFSS, 2014) the prevalence rate of depression in the island is 18.8% for all the population. On the other hand, epidemiological studies with Puerto Rican adult population expose that women possess a major risk of suffering depressive symptomatology than men, considering variables such as marital status, employment, and health (Camino, Bird, Rubio-Stripe & Bravo, 2000).

According to González-Tejera et al. (2005), depression is a major health issue that affects more than 9% of the young population in Puerto Rico between the ages of 11 and 17 years. It was even found in a sample of Puerto Rican adolescents that 13.4% of them had significant symptoms of depressive disorder (Moscoso-Álvarez, Rodríguez-Figueroa, Reyes-Plaza & Colón, 2016).

Likewise, other studies in Puerto Rico reveal that the rates of these symptoms among young people with Type 2 Diabetes Mellitus fluctuate between 36.7% to 45.5% (Rivera, Gonzalez-Nieves, Velez & Colón de Marti, 2007; Rosella & Jiménez-Chafey, 2007). Despite the documented findings through epidemiological research about psychiatric disorders in Puerto Rico, it is argued that Puerto Rican population is not under a major risk of suffering psychiatric disorders compared to another foreign population (Yoffe (2007)).

Religion and Psychological Practice in Puerto Rico

Religion in Puerto Rico is an institutional phenomenon that owns relevance given that 97% of Puerto Ricans call themselves Christians (Pew Research Center's Forum on Religion and Public Life, 2012). Also, according to The Association of Religion Data Archives (ARDA, 2003), around 93% Puerto Ricans consider religion as an important aspect in their lives. Those numbers can be explained when considering that, throughout the five centuries of Puerto Rico's history, religion has had a fundamental role in its development as a country at a political, economic, and cultural level (Agosto-Cintrón, 1996; Scarano, 2008).

On the other hand, a growing interest for the integration of R/S in the clinical context has been documented. For example, with a sample of 223 participants from various specialties, Valencia-Miranda (2001) developed a measure to rank the opinions of psychologists and psychiatrists in Puerto Rico about the use of religious and/or spiritual techniques in psychotherapy. The results of that study revealed that most psychologists and psychiatrists in Puerto Rico had a favorable opinion regarding the use of religious and/or spiritual techniques in psychotherapy. Similarly, Gonzalez-Rivera, Veray-Alicea and Rosario-Rodriguez (2016). Found that 96% of the participants in their study showed a satisfactory attitude towards the integration of spirituality in psychotherapy and counseling.

Religious Coping and Mental Health

Offer (2007) made a literature review about the positive effects of R/S for coping with pain, indicating that religious creeds encourage the overcoming of the losses of loved ones through faith, prayer, meditation, rituals, beliefs about life and death; seeking to help those who suffer to overcome their pain, raise their positive feelings, as well as their psychological, affective, and spiritual well-being. Similarly, Quicken and Vinci (2009) establish that RC strategies improve the quality of life, can aid to raise psychological well-being, happiness, positive emotions, decrease anxiety levels, depression, and addictive and suicidal behaviors, as it has been established in numerous studies. Otherwise, Koenig (2012) analyzed 3,300 quantitative studies published in academic journals, with peer review until 2010 that confirms the positive effects of RC strategies over mental health.

Those studies are consistent with a systematic revision based on the evidence collected by Borelli and Koenig (2013), were 43 empirical studies published in the 25 most prestigious journals of psychiatry and neurology until that date where documented. The findings revealed that religious involvement is related to a good mental health, in terms of less depression and suicidal ideation.

Purpose of the Study

To the best of our knowledge, no study has examined RC strategies as a possible protective factor for depressive symptomatology in Puerto Rico (Pagan-Torres, Sanchez-Galarza, Tollinchi-Natali & Gonzalez-Rivera, 2017). Thus, the purpose of this research was to evaluate if high

The Association between Religious Coping and Depressive Symptomatology in Puerto Rico: A Cross-Sectional Study

levels of RC are negatively associated with the risk of suffering depressive symptomatology. To this end, we conducted a risk analysis to confirm if RC is a protective factor for depression (H1) and examined if people with high levels of RC show significantly less symptomatology associated with depression than those with low levels of RC (H2).

METHOD

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, Driessnack & Mendes, 2007) and is characterized by the impossibility of manipulating the independent variable (Montero & León, 2007).

Table 1. Sociodemographic data of the sample.

Variables	<i>f</i>	%
Sex		
Men	202	59.6
Women	137	40.4
Academic Background		
High School or less	25	7.4
Associate or	49	14.5
Technical	156	46.0
Bachelor's	86	25.4
Degree	23	6.8
Master's Degree		
Doctoral Degree		
Religion		
Catholic	106	31.3
Protestant	157	46.3
Christian	4	1.2
Buddhist	15	4.4
Atheist/Agnostic	30	8.8
None	27	8.0
Other		
Civil Status		
Single	134	31.3
Married	127	46.3
Divorced	45	1.2
Widowed	8	4.4
Cohabiting	25	8.8
		8.0

Note: *N* = 339, *f* = frequency.

Participants

We used a non-probabilistic sample of 339 adults, selected upon availability. The average age of the participants was 43.08 (*SD* = 14.02). The sociodemographic data of the sample is presented in Table 1. The following inclusive criteria were established for participating in the

study: (1) to be of 21 years or more (2) may have the ability to read in Spanish, and (3) be a Puerto Rican resident.

MEASURES

Sociodemographic Data

To identify the sociodemographic characteristics of the sample, we developed a general data questionnaire composed of relevant data such as age, sex, religion, socioeconomic level, and academic background.

It also contained two dichotomous questions concerning the religious/spiritual self-perception: Do you consider yourself a religious person? (Yes = 45%); Do you consider yourself a spiritual person? (Yes = 91%).

Religious Coping

We used the Religious Coping Strategies Inventory from González-Rivera and Pagán-Torres (2018) to measure this variable. This inventory measures internal and external religious coping strategies. The instructions incite the participant to think about the negative effects and stressful situations that has experimented during the last month. Then, a list of 12 RC strategies is presented (e.g., Continue trusting in God; Find the strength in prayer; Believe that God has a purpose with this situation; Seeking for support in a faith community; Receive counseling or follow a spiritual path) and the participant is being asked to indicate in a 5-point scale the grade in which each one of them was realized: 0 (Not at all), 1 (Somewhat), 2 (Moderately), 3 (Very Much), and 4 (Totally). The possible range goes from 0 to 48 points. Higher scores indicate that the person is using more RC strategies in its life. In our study, the scale obtained an internal consistency index of .95 in Cronbach's Alpha.

Depressive Symptomatology

To evaluate depressive symptomatology, the short form of the Depression Anxiety Stress Scales (DASS-21; Lovibond and Lovibond 1995) was used. This scale assesses the presence and intensity of affective states of depression (e.g., I couldn't seem to experience any positive feeling at all; I felt that I had nothing to look forward to; I was unable to become enthusiastic about anything). The scale has 7 items that responds based on the presence and intensity of each symptom over the last week. The answers are rated on a 4-point Likert scale: 0 (Never), 1 (Sometimes), 2 (Often), and 3 (Almost always). The total score of the scale is calculated adding

The Association between Religious Coping and Depressive Symptomatology in Puerto Rico: A Cross-Sectional Study

up the items and the range goes from 0 to 21 points; higher scores indicate that the participant is presenting higher depressive symptomatology. In our study, the scale obtained an internal consistency index of .87 in Cronbach's Alpha.

PROCEDURES

Participant recruitment stage was carried out electronically and face-to-face during the month of November 2017. To protect and guarantee the rights of the participants, an informed consent sheet was used to notify the following: (a) purpose of the study, (b) voluntary nature of the study, (c) possible risks and benefits, (d) as well as its right to withdraw from the study at any time. Also, the length of its participation and the right to obtain the results of the study was informed.

Face-to-face data Recruitment

People were recruited in a group and individual way in two university centers in the metropolitan area and in various churches located in the south and central area of Puerto Rico. In both forms (group and individual), participants were offered with basic information about the purpose of the research and were informed about the inclusive criteria.

Once they accepted the voluntary participation in the research, they were provided with the consent sheet, which they had to read and sign to receive the other documents.

When the participants completed the research instruments, they handed them in a sealed envelope separated from the consent sheet. 30% ($n = 95$) of the sample was recruited in person.

Electronic Recruitment

Participant electronic compilation started with a paid advertisement circulated in Facebook. Administrators of this social network were asked to promote the ad among adults over 21 years, residents of Puerto Rico. The ad reached 40,564 people and was shared by 110 people in Facebook, which resulted in a snowball effect throughout the social networks.

This ad redirected the participants to an online survey available in PsychData platform, which remained active for one month (November 2017). This platform generated a database that was integrated into one with the questionnaires collected in person. 70% ($n = 244$) of the sample was obtained through this process.

Data Analysis

The computer software IBM SPSS Statistics (version 24) was used for the data analysis. We

performed descriptive analyses in this application to identify the sociodemographic characteristics of the sample, the reliability of the instrument, and a comparative t-test was used to determine if people with high levels of RC exhibit significantly less symptomatology associated with depression than those with low levels of RC.

A logistic regression was conducted to determine if high levels of RC were associated with the severity of the depression in the study's participants.

For this analysis, mild and moderate to severe depressive symptomatology were used as dichotomous dependent variables and the level of religious coping (high and low) as independent variable, to be able to establish the associations using Odds ratios and confidence intervals.

The statistical significance of these results was examined through Fisher's exact test. The categories established by the authors in the Depression Scale manual were used to dichotomize the scores of the scale (Lovibond & Lovibond, 1995).

Consequently, we established the following variables: (1) absence of depression, (2) presence of mild depression, and (3) presence of moderate to severe depression. We categorized the scores of the Religious Coping Strategies Inventory based on previous studies using Odds ratios that indicate a difference on individuals with a high level of religiosity compared to the rest of the sample, using the mean as cut-point (Miller et al. 2012; Portnoff et al. 2017).

This risk analysis allowed us to examine RC as a possible protective factor for mild and moderate to severe depressive symptomatology.

RESULTS

Descriptive Analysis

First, descriptive analyses were conducted to identify the levels of depression of the participants according to the categories of the Depression Anxiety Stress Scales (DASS-21; Lovebird & Lovebird, 1995). Results shown that 65% ($n = 220$) of the participants do not present symptomatology associated with depression, while 11% ($n = 38$) showed mild depressive symptomatology, 16% ($n = 55$) moderate levels, and 8% ($n = 26$) severe levels of depression.

Regarding the level of RC, 58% ($n = 196$) of the sample showed a high level of RC and 42% ($n = 143$) a low level of RC. We also examined the

The Association between Religious Coping and Depressive Symptomatology in Puerto Rico: A Cross-Sectional Study

average levels of depression described by the participants according to their level of RC. The results showed that the mean of depressive symptomatology in people with a high level of RC was 3.60 ($SD = 3.591$) and in people with low levels of RC was 4.88 ($SD = 4.361$).

Comparative Analysis

A comparative t-test was conducted to assess if people with high levels of RC show significantly less symptomatology associated with depression than those with low levels of RC (H2). The results of the t-test proved that, with a significant level of .05, there are statistically significant differences among the groups, $t(269.269) = -2.880$, $p < .01$, $d = .320$. It is concluded that there are differences in depressive symptomatology between people with high and low RC.

Logistic Regression Analysis

To recognize the association between RC strategies concerning the risk of developing symptomatology associated with depression, a vicariate logistic regression analysis was conducted (see Table 2).

The results demonstrated that a high level of RC are negatively associated with the risk of presenting moderate to severe depression symptoms ($\chi^2 = .52$, $p < .01$), as well as the risk of presenting mild depression symptoms ($\chi^2 = .58$, $p < .05$). These results confirmed that RC is a protective factor for depression (H1).

Table2. Logistic Regression Model for Depression.

Factor	Mild Depression		Moderate to Severe Depression	
	OR	C.I. 95%	OR	C.I. 95%
High Religious Coping	0.58*	0.40, 0.96	0.52**	0.31, 0.87

Note. * = $p < .05$; ** = $p < .01$.

DISCUSSION

The purpose of this research was to evaluate if religious coping (RC) is a protective factor for symptomatology associated with depression and to examine if there are significant differences in the levels of depressive symptomatology among people with high and low levels of RC.

The findings of the study exposed that people with high levels of RC showed statistically less depressive symptomatology than people with

low levels of RC. Otherwise, it was evidenced that high levels of RC significantly lessen the risk of presenting symptoms associated with depression. These findings are consistent with the results reported by most empirical research on RC and its relationship with depression (Koenig 2009; 2012). Among the theoretical implications of the study, the results provide evidence about the impact that internal and external RC strategies have on human psyche. From the internal AR strategies standpoint, people tend to feel support, comfort, and strength in their lives coming from spiritual and religious aspects, which are linked to their subjective experience. In this case, when people are identified with elements associated to the existence of God or a Higher Power that gives them purpose and meaning during stressful situations and emotional pain, they interpret their reality and life experiences from a different perspective compared to a person that does not give the same importance to religious and spiritual aspects. Therefore, people with high levels of RC have an additional instrument that assist them handling their life situations (Goudarzian et al. 2017). This is an important aspect considering that most Puerto Ricans have some type of religious/spiritual belief, as previously documented.

On the other hand, from the external AR strategies standpoint, people that score high on this construct feel the support, comfort, and strength coming from their own religious and spiritual beliefs, but they also count on the members of the faith community where they belong. Due to this reason, these people would receive emotional and spiritual support from family and close friends, in case of going through emotional situations where they might develop some type of symptomatology associated with depression. This finding is relevant and congruent with other findings, where the importance of interpersonal relationships for Latinos, particularly for Puerto Ricans, has been documented (Bernal et al. 2006) as a coping skill to decrease the risks of suffering from psychiatric disorders (Camino 2007). Likewise, RC strategies offer cognitive resources such as, increase in positive thoughts and emotions that can facilitate the management of maladaptive

The Association between Religious Coping and Depressive Symptomatology in Puerto Rico: A Cross-Sectional Study

thoughts that might contribute to the development of some type of depression disorder (Pearce et al. 2015). Our results also provide empirical evidence to the theoretical assumption concerning the ability that RC has on providing meaning and purpose to life situations experienced by people (Gonzalez-Rivera & Pagan-Torres 2018).

In this context, religious beliefs offer answers to life's existential questions such as: What is the purpose of my life?, Why am I suffering?, What is the purpose of my suffering?, Does life have a significance?, Is there life after death?, among others. In that manner, RC strategies can work as coping styles capable of cognitively restructure the meaning of current circumstances that will allow the flourishing of positive emotions as hope, optimism, and sense of control, happiness/well I being, and self-esteem (Tax & Frazier, 1998). Those emotions will allow people to adaptively face stressful events and/or the emotional pain that they go through. According to Koenig (2012), religion can provide security and confidence to people through the belief in God, a Higher Power that provides care, protection, and safety during adverse events. Nevertheless, religious beliefs and RC strategies have the potential to be an adequate style for people to cope with their lives, as they facilitate the modification of dysfunctional thoughts. These aspects could cause a significant impact on people's mood. However, we also consider that religious beliefs and RC strategies might have a negative effect in well-being, as people can consider God as a punisher, feel uncertainty regarding God's love and faithfulness, doubts about God's existence and the world's suffering condition. This type of negative RC can negatively affect personal well-being and the way they project themselves towards others (Argument, 2011).

Another significant aspect that should be highlighted in our study is the distinction among depressive symptomatology and a diagnosis of depression.

There are people with symptomatology associated with depression, but their symptoms are not enough to meet the criteria for a diagnosis of depression. The emphasis of our research was to examine depressive symptomatology instead of a diagnosis of depression. Thus, the scope of our findings is limited to identifying the effect of RC as a protective factor for depressive symptomatology, but we can't conclude that RC is a direct protective factor for a diagnosis of

depression. Still, our findings allow us to conclude that RC can be considered an indirect protective factor for this type of diagnosis, due to the preventive function that it has against depressive symptomatology.

Signs of depression should be treated early to prevent it from evolving into a depression disorder with a worst prognosis in the future. Regarding the practice implications of our study, the relevance of R/S and the internal and external RC as a clinical resource to encourage mental health among Puerto Ricans are proved. Considering the prevalence of depression statistics in Puerto Rico and the influence of religion on its culture, it is critical for health professionals to assume a pluralistic and integrative vision related to the integration of psychotherapeutic religious and spiritual models. Pagan-Torres, Reyes-Estrada and Cumba-Avilés (2017) outline some advantages of integrating R/S among psychotherapy such as, form stronger bonds with patients interested in discussing religious and spiritual aspects. Also, for people for whom these aspects are important, they might feel more willing and confident to discuss the difficulties they have in their lives when they attend therapy (Pagan-Torres et al. 2017).

Some of the reasons why it is indispensable to integrate R/S, as well as RC strategies in the treatment of people for whom these aspects are important are: (1) research reports positive evidence regarding R/S and mental health (Gonzalez-Rivera 2015; 2016b; Koenig and Larson 2001), (2) spiritual aspects might be areas of struggle, stress, and concern for clients (Richards & Bergin 2005), (3) most clients prefer to receive services from professionals that integrate spirituality into therapeutic processes (Sperry, 2012), (4) R/S is a significant source for coping and inner strength (Gonzalez-Rivera and Pagan-Torres, 2018), and (5) most clients want to discuss religious and spiritual matters in their therapeutic processes (Post & Wade, 2009). This movement has been sustained by the Association of Spiritual, Ethical, and Religious Values in Counseling (ASERVIC 2009), as well as by the APA Division 36 titled Society for the Psychology of Religion and Spirituality. This research reinforces the posture of RC as a protective factor for depressive symptomatology and, similarly, highlights the importance of an integrative vision of RC inside psychological work. This fact constitutes a critical aspect for providing quality services to a greater number of people, including those that mainly present

The Association between Religious Coping and Depressive Symptomatology in Puerto Rico: A Cross-Sectional Study

problems of religious and spiritual nature (American Psychiatric Association, 2013).

Although it has been documented that R/S are aspects that have an important influence on the mental health of the Puerto Rican population, education on psychology of religion and spirituality in Puerto Rico is very limited (Gonzalez-Rivera, 2016a). Thus, it's critical to create consciousness on Puerto Rican academic institutions about the importance of including academic courses related to psychology of religion and spirituality. This will allow future health professionals to have a broader vision of psychotherapeutic intervention strategies (Gonzalez-Rivera 2016a). Nor should be ignored the possibility of developing guidelines, conferences, and certifications on such topics through continuing education.

Limitations and Recommendations

Like all research, our study holds some limitations that should be taken into consideration. First, it is related to the electronic compilation of data, which was made through self-administered instruments. Quantitative empiric research has the risk of being affected by social demand or subjective reaction to the instruments used.

Though, this research offers knowledge and a preliminary view of the relationship between religious coping and depressive symptomatology in Puerto Rico. Second, 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 inferences. Third, the sample was selected upon availability, therefore results cannot be generalized. Fourth, among the inclusive criteria it was not specified that the participants had to suffer a diagnosis of depression. 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, since the early detection and treatment of depressive symptoms can prevent the subsequent development of an episode of depression (Shaddock, Shaddock & Ruiz, 2015).

Future Research

Despite of the importance of religion within the sociocultural context in Puerto Rico, studies that measure RC construct and its impact on mental health were not found. Therefore, this work constitutes the first empirical work in Puerto

Rico whose main objective is to conduct a comparative analysis concerning the level of depressive symptomatology based on the level of RC. This study serves as a preview for future studies that measure RC and its impact on a variety of mental disorders, such as anxiety, psychotic, personality, eating disorders, among others. Likewise, RC construct should be studied in populations that suffer chronic health conditions, so that future research with this variable could be integrated with aspects related to the field of health psychology. For that reason, it is recommended to conduct experimental and random studies that allow the extension of results. On the other hand, it is suggested to include a social demand scale to increase the reliability of the results informed by the participants and perform discussions considering RC construct. We also recommend performing research measuring RC within the field of health psychology, particularly with people suffering chronic conditions such as, diabetes, cancer, HIV, and cardiovascular conditions, among others.

CONCLUSIONS

This research states that high RC levels decrease the risk of suffering depression in Puerto Rican adults. The findings of this study suggest that people with higher levels of RC displayed less depressive symptomatology than people with lower levels of religious coping. This suggests that RC is a protective factor for depression among Puerto Ricans. The results prove the importance of RC to face stressful events and emotional difficulties in Puerto Ricans lives. In spite of the limitations of the study, the results of our research establish a solid basis that supports what has been postured by other authors concerning the association between religion and health (Koenig & Larson, 2001). This empirical research demonstrates the need to create new efforts to conduct studies focused on the field of psychology of religion and spirituality in Puerto Rico.

Author Contributions

The authors developed the concepts, designed the study and opened the discussion for the research. The first author drafted the literature review and the second author analyzed the data and interpreted the results

Funding

This research received no external funding.

Conflicts of Interest

The authors declare no conflict of interest.

REFERENCES

- [1] Agosto-Cintrón, N. (1996). *Religion y cambio social en Puerto Rico*. Colombia: Ediciones Huracán.
- [2] American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders: DSM-5*. Washington, DC.
- [3] American Psychiatric Association. Association of Spiritual, Ethical, and Religious Values in Counseling. (2009). *Spirituality: A white paper of the Association of Spiritual, Ethical, and Religious Values in Counseling*. Recuperado de <http://www.njcounseling.org/subpage/aservic/Whitpaper1.html>
- [4] Avilés, L. A., Canino, G., & Rubio-de-Stipec, M. (1990). Proyecciones de diagnósticos psiquiátricos: Puerto Rico, Año 2000.
- [5] Bernal, G., Cumba-Avilés, E., & Sáez-Santiago, E. (2006). Cultural and relational processes in depressed Latino adolescents. In S.R.H. Beach et al. (Eds.), *Relational processes and DSM-V: Neuroscience, Assessment, Prevention and Intervention*. (pp. 211-224). Washington, DC: American Psychiatric Publishing, Inc.
- [6] Bonelli, R.M. & Koenig, H.G. (2013). Mental Disorders, Religion and Spirituality 1990 to 2010: A Systematic Evidence-Based Review. *Journal of Religion and Health*, 52(2), 657-673. doi: 10.1007/s10943-0139691-4
- [7] Canino, G. (2007). 25 years of child and adult psychiatric epidemiology studies in Puerto Rico. *Puerto Rico Health Science Journal*, 26(4), 385-394.
- [8] Canino, G. J., Bird, H. R., Shrout, P., Rubio-Stipec, M., Bravo, M., Martínez, R., & Guevara, L.M. (1987). The prevalence of specific psychiatry disorders in Puerto Rico. *Archives of General Psychiatry*, 44(8), 727-735.
- [9] Canino, G., Bird, H., Rubio-Stipec, M., & Bravo, M. (2000). The epidemiology of mental disorders in the adult population of Puerto Rico. *Revista Interamericana de Psicología*, 34(1), 29-46.
- [10] CDC. (2014). Sistema de vigilancia de factores de riesgo Del comportamiento (BRFSS). Center Disease Control.
- [11] González-Rivera, J. A., & Pagán-Torres, O. M. (2018). Desarrollo y Validación de UN instrument Para medir afrontamiento religioso. *Revista Evaluar*, 18(1), 70-86. Recuperado de <https://revistas.unc.edu.ar/index.php/revaluar>
- [12] González-Rivera, J.A. (2015). *Espiritualidad en la Clínica: Integrando la espiritualidad en la psicoterapia y la consejería*. San Juan, P.R.: Ediciones Psicoespiritualidad.
- [13] González-Rivera, J.A. (2016a). *Espiritualidad en el adiestramiento clínico de los profesionales de ayuda*. En J.A. González-Rivera (Ed.), *Espiritualidad en las profesiones de ayuda: Del debate a la integración* (pp. 211-225). San Juan: Psicoespiritualidad.
- [14] González-Rivera, J.A. (2016b). *Espiritualidad, psicoterapia y consejería*. En J.A. González-Rivera (Ed.), *Espiritualidad en las profesiones de ayuda: Del debate a la integración* (pp. 7-18). San Juan: Psicoespiritualidad.
- [15] González-Rivera, J.A., Veray-Alicea, J., & Rosario-Rodríguez, A. (2016). Actitudes hacia la integración de la espiritualidad en las profesiones de ayuda: Estudio exploratorio. *Revista Griot*, 9(1), 57-67.
- [16] Gonzalez-Tejera, G., Canino, G., Ramirez, R., Chavez, L., Shrout, P., Bird, H., ...Bauermeister, J. (2005). Examining minor and major depression in adolescents. *Journal of Child Psychology and Psychiatry*, 46(8), 888-899. doi:10.1111/j.1469-7610.2005.00370.x
- [17] Green, M. & Elliott, M. (2010). Religion, health and psychological well-being. *Journal of Religion and Health*, 49(2), 149-163. doi:10.1007/s10943-009-9242-1
- [18] Juergensmeyer, M., Kitts, M. & Jerryson, M. (2013).
- [19] *The Oxford Handbook of Religion and Violence*. Oxford: Oxford University Press.
- [20] Koenig, H.G. (2012). Religion, spirituality, and health: The research and clinical implications. *International Scholarly Research Network*, 1, 1-33. doi:10.5402/2012/278730
- [21] Koenig, H.G. (2015). Religion, spirituality, and health: A review and update. *Advances in Mind-Body Medicine*, 29(3), 19-26.
- [22] Koenig, H. G., & Larson, D. B. (2001). Religion and mental health: Evidence for an association. *International Review of Psychiatry*, 13(2), 67-78. doi:10.1080/09540260124661
- [23] Lovibond, S.H., & Lovibond, P.F. (1995). *Manual for the Depression Anxiety Stress Scales* (2nd. Ed.). Sydney: Psychology Foundation.
- [24] Miller, L., Wickramaratne, P., Gameroff, M. J., Sage, M., Tenke, C. E., & Weissman, M. M. (2012). Religiosity and major depression in adults at high risk: A ten-year prospective study. *American Journal of Psychiatry*, 169(1), 89-94. doi: 10.1176/appi.ajp.2011.10121823
- [25] Montero, I., & León, O. (2007). A guide for naming research studies in Psychology. *International Journal of Clinical and Health Psychology*, 7(3), 847-862.
- [26] Moscoso-Álvarez, M. R., Rodríguez-Figueroa, L., Reyes-Pulliza, J. C., & Colón, H. M. (2016). Adolescentes de Puerto Rico: Una mirada a su salud mental y su asociación con el entorno familiar y escolar. *Revista Puertorriqueña de Psicología*, 27(2), 320-332.
- [27] Pagan-Torres, O.M., Reyes-Estrada, M. & Cumba-Avilés, E. (2017). *Religión, Espiritualidad y Terapia Cognitivo Conductual: Una Reseña*

The Association between Religious Coping and Depressive Symptomatology in Puerto Rico: A Cross-Sectional Study

- Actualizada. Salud y Conducta humana, 4(1), 13-34. Recuperado de <http://rsych.com/blog/>
- [28] Pagán-Torres, O.M. Sánchez-Galarza, A., Tollinchi-Natali, N., & González-Rivera, J.A. (2017). Evaluando la Relación Entre la Religiosidad y la Salud Mental en Puerto Rico: Una Revisión Sistemática. Manuscript accepted para publicación.
- [29] Pargament, K.I. (1997). The Psychology of Religion and Coping. Theory, Research and Practice. New York: The Guilford Press.
- [30] Pargament K.I., Feuille M., Burdzy D. (2011) the brief RCOPE: Current psychometric status of a short measure of religious coping. Religions, 2(1), 51-76. doi:10.3390/rel2010051
- [31] Pearce, M., Koenig, H. G., Robins, C. J, Bruce, N., Shaw, S. F., Cohen, H. V., & King, M. B. (2015). Religiously Integrated Cognitive Behavioral Therapy: A new method of treatment for major depression in patients with chronic medical illness. Psychotherapy, 52(1), 56-66. Doi: 10.1037/a0036448.
- [32] Pew Research Center's Forum on Religion & Public Life (2012). The global religious landscape: A report on the size and distribution of the world's major religious groups as of 2010. Recuperado de <http://www.pewforum.org/2012/12/18/global-religious-landscape-exec/>
- [33] Portnoff, L., McClintock, C., Lau, E., Choi, S., & Miller, L. (2017). Spirituality cuts in half the relative risk for depression: Findings from the United States, China, and India. Spirituality in Clinical Practice, 4(1), 22-31. doi:10.1037/scp0000127
- [34] Post, B.C., & Wade, N.G. (2009). Religion and spirituality in psychotherapy: A practice-friendly review of research. Journal of Clinical Psychology 65(2), 131-146.
- [35] Quiceno, J.M., & Vinaccia, S. (2009). La salud en el marco de la psicología de la religión y la espiritualidad. Diversas perspectivas en Psicología, 5 (2), 321-336.
- [36] Richards, P. S., & Bergin, A. E. (2005). A spiritual strategy for counseling and psychotherapy. Washington, DC: American Psychological Association.
- [37] Richards, P. S., & Bergin, A. E. (2014). Handbook of psychotherapy and religious diversity (2nd ed). Washington, DC, US: American Psychological Association. doi:10.1037/14371-000
- [38] Rivera, A., González-Nieves, M. I., Vélez, N., & Colón de Martí, L. N. (2007). Indicadores de síntomas depresivos en una muestra de jóvenes de 12 a 17 años de edad con diabetes mellitus tipo 1. Puerto Rico Health Science Journal, 26(1), 51-56.
- [39] Rosselló, J., & Jiménez-Chafey, M. I. (2007). Depressive and anxious symptomatology in Puerto Rican youth with Type 1 Diabetes Mellitus and their relationship to glycemic control. Ciencias de la Conduct, 22(1), 103-126.
- [40] Sadock, J.E., Sadock, V.A., & Ruiz, P. (2014). Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry (11th ed). Wolters Kluwer Health: Kaplan & Sadock's.
- [41] Scarano, F.A. (2008). Puerto Rico: Cinco siglos de historia. China: McGraw-Hill Interamericana Editores.
- [42] Sloan, R.P. (2006). Blind faith: The unholy alliance of religion and medicine. St. Martin's Griffin: New York.
- [43] Sousa, V., Driessnack, M., & Mendes, I. (2007). An overview of research designs relevant to nursing: Part 1: Quantitative research designs. Revista Latino-americana de Enfermagem, 15(3), 502-507. doi:10.1590/S0104-11692007003000022
- [44] Sperry, L. (2012). Spirituality and clinical practice: Theory and practice of spiritually oriented psychotherapy (2nd Ed.). New York, NY: Routledge.
- [45] The Association of Religion Data Archives. (2003). Puerto Rico public opinion. En Religious Affiliation/Identification. Disponible en http://www.thearda.com/internationalData/countries/Country_182_5.asp
- [46] Tix, A.P., & Frazier, P.A. (1998). The use of religious coping during stressful life events: Main effects, moderation, and mediation. Journal of Consulting and Clinical Psychology, 66(2), 411-22. 10.1037//0022-006X.66.2.411.
- [47] Valencia-Miranda, M. I. (2001). Opiniones de los psicólogos en Puerto Rico en relación al uso de técnicas espirituales y/o religiosas en la psicoterapia. Tesis no publicada. San Juan: Universidad Interamericana de Puerto Rico Recinto Metropolitano.
- [48] Yoffe, L. (2007). Efectos positivos de la religión y la espiritualidad en el afrontamiento de duelos. Psicodebate, 7(1), 193-205.

Citation: Orlando M. Pagán-Torres, "The Association between Religious Coping and Depressive Symptomatology in Puerto Rico: A Cross-Sectional Study", *Journal of Religion and Theology*, vol.3, no. 1, pp. 1-9, 2019.

Copyright: © 2019 Orlando M. Pagán-Torres, This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.