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**DEVELOPMENT AND EVALUATION OF A SPIRITUAL DISTRESS
SCREENER FOR USE IN HEALTHCARE SETTINGS**

A Thesis

Submitted to the Graduate Faculty of the
University of South Alabama
in partial fulfillment of the
requirements for the degree of

Master of Science

in

Clinical and Counseling Psychology

by
Sarah G. Salcone
B.A., Gordon College, 2014
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LIST OF ABBREVIATIONS

EFA	=	Exploratory Factor Analysis
HFA	=	Hierarchical Factor Analysis
RSS	=	Religious and Spiritual Struggles Scale
MDD	=	Major Depressive Disorder
PTSD	=	Posttraumatic Stress Disorder
OCD	=	Obsessive Compulsive Disorder
CORE-10	=	Clinical Outcomes in Routine Evaluation 10
PHQ-8	=	Patient Health Questionnaire-8

ABSTRACT

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Spirituality and religion can play an integral role in physical and mental health outcomes in positive and negative ways (Pargament, 2013; Rosmarin, 2018). While there are established screener items to determine positive utilization of spirituality, there are no existing screener measures for spiritual struggles. The Religious and Spiritual Struggles scale (RSS; Exline et al., 2014) is considered the gold standard for measuring spiritual struggles yet is too lengthy to be used as a screener. The present study sought to develop a brief spiritual distress screener for use in healthcare settings. Phase 1 of the study utilized secondary datasets in which the RSS was implemented across seven samples in inpatient, residential, treatment-seeking, and community-based settings. Exploratory factor analysis (EFA) was conducted on the overall sample to identify items that load highly on factors with low cross-loadings. Phase 2 utilized a community-based outpatient sample to assess internal consistency and concurrent validity of the screener using total scores of the CORE-10 and PHQ-2. Overall, this study provides a clinically relevant and easy to implement screener for use in healthcare settings that will, in turn, improve overall health and treatment outcomes for those who experience spiritual struggles.

CHAPTER I

INTRODUCTION

Spirituality and religion are important aspects of life for many people around the world. Globally, approximately 84% of the world identifies as religious (Pew Research Center, 2017). In the United States, though recent trends indicate that people are becoming less religious, 73% still endorse religion as important in their lives, 87% of the population believe in God or a Higher Power, and 58% engage in prayer frequently (Gallup, 2020; Pew Research Center, 2015).

In such cases, there is substantial evidence of the supportive role of religion and spirituality on mental health and well-being. For example, research has demonstrated that religious and spiritual practices are associated with positive emotions, increased happiness, greater life satisfaction, and a framework for meaning and purpose in life (Koenig, 2012). Additionally, spirituality and religion provide social support and connection, and as well as facilitate adaptive strategies for coping with life adversity (Pargament et al., 2013). Although spirituality can be a positive facet of life, spirituality and religion can also serve as a source of stress or strain (Exline, 2013) and are associated with poorer outcomes if left unaddressed (Bockrath et al., 2021). Due to the potential negative effects of spirituality on recovery, it is important to recognize and screen for the presence of spiritual struggles/distress in healthcare settings. The purpose of the proposed

study was to develop and validate a brief screening measure to identify individuals who experience spiritual struggles that negatively impact overall health and treatment outcomes.

Defining and Understanding Spirituality/Religion

Spirituality and religion are multidimensional constructs that are often conflated; though there is heavy overlap, and terms can be used interchangeably when discussing spiritual/religious content, there are clear differences in definition. Broadly defined, spirituality is generally considered as the search for understanding and connecting with sacredness in life, with sacred referring to anything that is considered divine or transcendent by a given individual (Pargament, 2013). Religion is an organized, culture-bound form of how one relates to the sacred over the course of the life span (Pargament, 2013). In essence, spirituality is the motivation and journey to explore, discover, and connect with the sacred, and religion can be an institutional guide for facilitating the connection to the sacred with the goal to enhance or live out an individual's spirituality. Religion and spirituality both involve private and public engagement with the sacred; private spiritual engagement can include prayer and time reading sacred texts, and public engagement may involve attending religious services, group prayer, and general involvement within religious congregation. Additionally, individuals may identify as spiritual, religious, or both to varying degrees and engage in spiritual or religious practices with different frequencies. People also may not identify as spiritual or religious but still engage in practices of a spiritual or religious nature.

The role of spirituality and religion also serves different purposes and functions in one's life. First, spirituality and religion can be a positive, health-inducing component of one's life, through behavioral practices, providing structure and buffering against maladaptive coping. For example, spiritual and religious practices can promote avoidance of risky scenarios that people can turn to in times of distress, such as substances (McNamara et al., 2010). Behaviorally, spirituality provides a source of comfort within spiritual practices such as prayer, meditation, and reading sacred texts. Religious practices, traditions, and rituals similarly can provide structure as an adaptive form of fostering connection with the sacred, especially in times of distress (Pargament, 2013).

Spirituality and religion can also aid in times of distress through facilitating connection outside of oneself. Specifically, spirituality and religion incorporates social support within communal activities such as attending worship services, in ways that may facilitate a relational connection with God or a Higher Power. How an individual perceives their relationship with the divine and how committed they are to the relationship determines how beneficial this factor is in reducing distress; for example, viewing God or a Higher Power as benevolent has been associated with higher rates of positive mental health outcomes (Silton et al., 2014). Religious commitment has also been shown to buffer the impact of spiritual struggles on depressive symptoms (Abu-Raiya et al., 2016).

Further, spirituality and religion provide a conceptual framework for cultivating meaning and purpose in life (Park, 2013). For example, spirituality can be a source of comfort, hope, and solace (Pargament, 1997, 2007), and provide meaning and purpose during significant life events (Oman & Thorensen, 2005). Additionally, spiritual/religious

practices can promote forgiveness, which can reduce distress due to traumatic events or interpersonal transgressions (Worthington & Scherer, 2004). These strategies of appraising distressing events or experiences through a spiritual orientation have been associated with better outcomes in adjusting to difficult situations (Park, 2013). All of these adaptive methods of utilizing spirituality to cope with distress are considered to be positive spiritual and/or religious coping.

Along these lines, religion and spirituality have been significantly positively associated with managing physical and mental health concerns. Specifically, spirituality and religion have been shown to also be a positive component in coping with physical health conditions (Gonçalves et al., 2017), such as HIV (Ironson et al., 2006), cancer (Messina et al., 2010), mortality (Lucchetti et al., 2011), and chronic pain (Wachholtz & Pearce, 2009). Research has also demonstrated that spirituality and religion have a positive impact in reducing caregiver burden (Hebert et al., 2007). Religion and spirituality have been significant contributors in coping with mental distress such as depression and anxiety (Garssen et al., 2021; Park, 2013). Regarding severe and persistent mental illness, positive spiritual coping has been found to be a positive component to recovery (Mohr et al., 2011; Yangarber-Hicks, 2004; Tepper et al., 2001). Positive spiritual coping has also been shown to be associated with lower drug craving and greater mutual-help participation among patients with severe substance use disorders receiving acute inpatient treatment (Medlock et al., 2017). Positive religious coping has also been associated with reduced depression and anxiety symptoms in patients with psychosis, and was a protective factor against suicidality (Rosmarin et al., 2013).

Considering the inherent benefits and strengths of spirituality in treatment, many interventions have been developed to integrate the positive aspects of spirituality into care. Some examples of these interventions include a group therapy intervention for veterans struggling with posttraumatic stress disorder (PTSD) (Harris et al., 2011, 2018), spiritually integrated therapy for patients with depression and chronic medical illness (Pearce et al., 2015), a self-help workbook for individuals with eating disorders (Richards et al., 2009), and a group therapy for those in acute psychiatric treatment (Rosmarin et al., 2019). Overall, integrating spirituality and religion into mental health treatment for individuals who identify as spiritual or religious has been shown to be valuable and effective component in psychiatric treatment (Moreira-Almeida et al., 2014; Rosmarin et al., 2021).

Defining and Understanding Spiritual Struggles/Distress

Although spirituality can serve as a positive source of strength for individuals, it can also be a source of stress. Spiritual struggles are tensions or conflicts relative to what people hold sacred which can negatively impact and perpetuate distress (Ano & Vasconcelles, 2005; Exline, 2013; Pargament et al., 2005). Specifically, spiritual struggles occur when one's spiritual/religious belief becomes a source of tension within oneself, others, or with the divine (Exline & Rose, 2013). Examples of spiritual struggles can include negative emotions such as guilt, anger, and sadness, or can be internal thoughts that are difficult to reconcile related to aspects of one's faith or spirituality (Exline, 2013). Importantly, doubts and struggles regarding faith can be quite common for religious and/or spiritual people; however, spiritual struggles are different in that they

are functionally distressing compared to normal levels of doubt or stress related to religious and spiritual matters.

There are three general domains in which spiritual struggles can manifest: interpersonal, intrapersonal, and divine (Exline, 2013; Pargament, 2007). Within these general domains, Exline and colleagues (Exline et al., 2014) identified a total of six types of spiritual struggle: divine, demonic, doubt-related, moral, ultimate meaning, and interpersonal. Interpersonal spiritual struggles are tensions with other people of faith, and include situations such as community rejection, betrayal, or feeling unsupported by one's faith community. Intrapersonal spiritual struggles include spiritual tensions within oneself such as religious guilt or feeling like a failure within one's religious standards. Doubt-related, moral, and ultimate meaning struggles are included within intrapersonal spiritual struggles. Doubt-related struggle refers to distress due to doubts or questions about one's spiritual beliefs. Moral struggle is defined by guilt about perceived moral wrongdoings or distress in trying to follow more guidelines. Ultimate meaning struggle pertains to concerns about finding ultimate purpose in life. Lastly, divine struggles refer to negative emotions or beliefs related to God or one's relationship with God. Within the realm of struggle with the supernatural, demonic struggle is defined by concern that the devil or evil spirits are the cause for negative events.

Spiritual struggles arise from a variety of life stressors, such as traumatic events, significant loss, difficulty making meaning of distressing life situations (Exline, 2013). Other interpersonal or societal factors can increase the likelihood for experiencing spiritual struggles, such as identifying as non-White, LGBTQ, and/or experiencing low socioeconomic status (Exline, 2013). In addition, developmental traditions such as

starting college can provide stressors to increase vulnerability for developing spiritual struggles (Pargament, 2007). Other risk factors for spiritual struggles include the quality of spirituality, which Pargament (2007) defines as issues with spiritual pathways or destinations. For example, individuals who may have superficial or limited definitions of spirituality may be more likely to encounter events that challenge or strain their conceptualization of spirituality. There are also individual differences that can influence the likelihood of experiencing spiritual struggles; Ano and Pargament (2013) found that significant predictors for spiritual struggles include insecure attachment to the divine, personality traits (specifically higher levels of neuroticism), and negative appraisal of situations, predict spiritual struggles in times of distress.

Estimating prevalence of these issues varies depending on the specificity of spiritual struggle and sampling method. In general, spiritual struggles exist among various ages, genders, ethnicities, socioeconomic statuses, and religious and/or spiritual affiliations. In nationally-represented samples, spiritual struggles appear to exist at low levels in the population (Ellison & Lee, 2010; McConnell et al., 2006); however, it is unclear whether spiritual struggles have been adequately assessed in the population due to differences in methods and measurement to capture spiritual struggles. Prevalence rates may also vary by type of struggle identified. One study reported 16% of an internet adult sample endorsed moderate levels of struggle (Wilt et al., 2019). Another internet sample reported that over 50% of the sample had experienced struggle, specifically anger towards God (Exline & Grubbs, 2011). Among clinical populations, there appear to be higher rates of struggle. Regarding treatment-seeking older adult samples, nearly 50% of patients receiving care endorsed spiritual struggles in at least two studies (Rosmarin et

al., 2014; Murphy et al., 2016). One adult psychiatric sample reported 57% endorsed spiritual struggles (Currier, Foster, et al., 2019). College students also report high levels of spiritual struggles, with one study finding that about one third of students endorsed some level of spiritual struggles (Johnson & Hayes, 2003). Another study with a nationally representative college student sample reported 18% experiences struggles related to doubt and 40% endorsed anger at God occasionally (Bryant & Astin, 2008). Despite the prevalence of spiritual struggles, many individuals may be unwilling to disclose spiritual struggles as they might perceive these issues to be morally wrong or fear of being judged or shamed by others (Exline et al., 2012; Exline & Grubbs, 2011).

Spiritual struggles are not only present among spiritual and religious individuals; Sedlar and colleagues found that spiritual struggles are also present among atheists (2018). These struggles, when present, have been shown to be additionally distressing for individuals already experiencing mental health distress and highlight the importance of screening for the presence of spiritual struggles in treatment (Exline et al., 2000).

Spiritual Struggles and Mental Health

Spiritual struggles have been shown to contribute to distress symptomatology in clinical samples as well. Across many psychopathologies, including anxiety, depression, obsessive-compulsiveness, and somatization, the presence of spiritual struggles have been significantly linked with greater mental health symptomatology (McConnell et al., 2006) and worse psychological adjustment (Bockrath et al., 2021). Currier, Foster, and colleagues (2019) found that greater levels of spiritual struggles in an inpatient psychiatric treatment program were associated with worse depression symptomatology and

less positive mental health at discharge. Regarding military veterans, spiritual struggles were positively associated with suicidal ideation as well as likelihood of attempting suicide in a sample of veterans with posttraumatic stress disorder (PTSD) and major depressive disorder (MDD) symptomatology (Currier, McDermott, McCormick et al., 2018). In a sample of geriatric outpatients with mood disorders, spiritual struggles predicted greater symptom severity, even after controlling for effects of general religious factors (Rosmarin et al., 2014). Additionally, whereas positive spiritual coping was protective against suicide, the presence of spiritual struggles has been shown to be a risk factor for suicide in patients with psychosis (Rosmarin et al., 2013).

As spiritual struggles may occupy different domains of life, recent efforts have clarified that certain forms of spiritual distress might be more detrimental to severity of mental health symptomatology than others. Currier, Foster, and colleagues (2019) reported that ultimate meaning struggles was the most salient factor among a sample of psychiatric inpatients and was an indicator of mental health status. Similarly, they found ultimate meaning struggles as most prominent within a sample of military veterans with PTSD and MDD symptomatology (Currier McDermott, McCormick et al., 2018). In addition, Raines and colleagues (2017) found that divine struggles and ultimate meaning struggles were significantly associated with higher suicide risk in veterans with PTSD and co-occurring substance use disorder. However, there is a dearth of literature that have explored this finding, and further research is warranted.

Psychiatric symptomatology can also present within an individual's spiritual or religious beliefs and produce spiritual symptoms that overtake or impede one's spiritual life (Rosmarin, 2018). For example, this can present as hyper-religiosity or religious

delusions in schizophrenia, bipolar disorder, and other psychotic disorders. Scrupulosity in obsessive-compulsive disorder (OCD), or religious OCD, is another example (Rosmarin, 2018). These symptoms are typically only present within severe mental illness but are difficult to address in treatment. These patients tend to have healthy baseline religious and spiritual beliefs, demonstrating the challenging nature of spiritual symptoms, as they are a change from the patient's baseline religious beliefs and practices, and a form of spiritual struggle that exacerbates clinical distress (Rosmarin, 2018).

With much evidence connecting spiritual struggles and worse mental health, most research on the topic have been correlational. This begs the question of the casual nature between spiritual struggles and mental health. Three causal models have been proposed by Pargament and Lomax (2013): the first is the primary struggles model, wherein spiritual struggles are the source of psychological symptomatology; the second is the secondary model, wherein spiritual struggles come about as the result of psychological distress; and the third model is the complex or reciprocal model, wherein spiritual struggles are both cause and effect of psychological problems. These models are relevant in the context of mental health treatment to identify how to target spiritual struggles, as not addressing spiritual struggles in treatment may be neglecting a driving factor in overall clinical distress.

A recently published meta-analytic review of 32 longitudinal studies demonstrated support for the primary struggles model in which spiritual struggles were prospectively associated with worsening mental health symptomatology (Bockrath et al., 2021). For example, particularly in studies that simultaneously tested Pargament and Lomax's (2013) three models, longitudinal studies have demonstrated that baseline levels

of spiritual struggle predict increased mental health symptomatology over time rather than vice versa. For example, Currier and colleagues (2015) found that spiritual struggles at baseline were predictive of poorer outcomes in a treatment program for veterans with PTSD, whereas severity of PTSD symptomatology at baseline did not conversely predict spiritual distress. Another study utilizing a sample of Orthodox Jews with depressive symptoms found that spiritual struggles preceded depression symptoms (Pirutinsky et al., 2011). This evidence suggests that screening for and targeting spiritual struggles in treatment could be an avenue to prevent the development of significant psychological symptomatology.

There is also evidence supporting the secondary model of struggles. In a sample of African American homicide survivors with complicated grief, spiritual struggles (or negative religious coping) increased over time in the presence of more complicated grief (Burke et al., 2011). Additionally, Wilt and colleagues (2017) provided support for the secondary struggle model, demonstrating in their study with undergraduates and community members that the presence of anxiety predicted an increase in spiritual struggles over the course of one year, one month, and within two weeks. Considering the secondary model, the presence of mental health symptomatology could negatively impact an individual's spiritual life, and therefore make it more difficult to cope using spiritual/religious resources.

A recent study also provided evidence for the complex model of spiritual struggles and psychological distress. Cowden and colleagues (2021) examined a sample of adults with chronic medical conditions in the U.S. and found positive reciprocal associations between spiritual struggles and distress, measured at three separate time

points. Carrier, McDermott, and colleagues (2018) also found evidence supporting the complex or reciprocal model in military veterans at risk for suicide. While the temporal nature of the relationship between spiritual struggles and psychopathology remains unclear, it appears that spiritual struggles heavily interact with mental health symptomatology and can be a cause and effect of psychological distress.

Measuring Spiritual Struggles

Several measures have been utilized over recent decades to assess spiritual struggles. One of the first scales to measure this construct is the widely-used Brief RCOPE (Pargament et al., 1998), which assesses both positive and negative spiritual coping via two seven-item subscales. Focusing on the negative religious coping subscale, this tool accounts for divine, demonic, and interpersonal struggles in a generalized manner. The Religious Comfort and Strain Scale (Exline et al., 2000) includes 20 items that assess divine, interpersonal, and moral struggles. The Clinically Adaptive Multidimensional Outcome Survey (CAMOS) contains five items that screen for spiritual distress, including concerns about one's spiritual life, loss of spiritual inspiration or direction, distance from God, and spiritual guilt (Sanders et al., 2018). There are also more specific scales that assess maladaptive religious coping within different psychopathologies, such as the Penn Inventory of Scrupulosity (Abramowitz et al., 2002) that assesses for religious obsessions and compulsions, and the Inventory of Complicated Spiritual Grief (Burke et al., 2021) that assesses spiritual struggle in complicated grief. Within palliative care and behavioral medicine, Roze de Ordons and colleagues (2020) also developed a clinical guide for identifying spiritual struggles in family members of patients in intensive care units.

Although these measures have been crucial for research, they are either too specific, too long, or too tailored to their specific populations to screen for all domains of spiritual struggle in healthcare settings.

Notwithstanding the strengths of prior measurement approaches, the Religious and Spiritual Struggles Scale (RSS; Exline et al., 2014) has become the gold standard for assessing spiritual struggles. Research has demonstrated that responses on the RSS are distinct from religiousness and distress (Stauner et al., 2016). The RSS has demonstrated utility with individuals from various religions, including Christians (Exline et al., 2014), Muslims (Abu-Raiya et al., 2015), Jews (Abu-Raiya, Pargament, Weissberger, et al., 2016), as well as atheists and non-religious persons (Sedlar et al., 2018). The 26-item RSS covers divine, demonic, interpersonal, ultimate meaning, and doubt spiritual struggles, with 4-5 items to identify each of the six types of spiritual struggles. The measure has demonstrated predictive validity and has positively correlated with clinical conditions, including depressive symptomatology, anxiety, anger, and loneliness (Exline et al., 2014). In addition to the RSS's ability to differentiate between the six forms of struggle (Exline et al., 2014), a general spiritual struggles factor has been identified within the RSS that supports a unidimensional factor structure for the instrument (Stauner et al., 2016).

The RSS has been used extensively to assess for spiritual struggles in clinical and applied research. However, in its current form, the instrument is seldom used in healthcare practice for various reasons. RSS is lengthy compared to typical self-report measures in clinical practice. There are abbreviated versions of the RSS, including the RSS-14 (Exline et al., in press); however, this version is still lengthy within healthcare

settings and has not been utilized in a clinical or treatment-seeking sample. Ideally, a brief self-report screener to identify spiritual struggles within healthcare settings would address gaps within translating research into clinical practice.

King and colleagues (2017) attempted to validate a spiritual distress screener. Comparing six spiritual distress screeners to the Brief RCOPE Negative Religious Coping Scale, they identified potential screening items such as struggles with loss of meaning/joy, self-identified spiritual struggles, feeling at peace, the importance of religion and/or spirituality and amount of support it is regarding coping. They determined that items assessing struggles in meaning/joy and self-described spiritual struggle were potentially effective screening items; however, specificity was low for these two items. Another potential pair of items they identified were the items regarding peace and self-described struggle; however, they found that this item pairing created more false positives in identifying spiritual struggles. One limitation of the study was that they used the Brief RCOPE as opposed to the RSS, which limited the specificity and range of spiritual struggles they could screen for and assess. Although the screener has not been widely accepted, the study highlights the importance of developing a straightforward, brief self-report for spiritual struggles/distress in healthcare settings.

Study Aims

Spirituality and religion can play an integral role in physical and mental health, in both positive and negative ways (Pargament, 2013; Rosmarin, 2018). Although there are established screener items and measures to determine the positive utilization of spirituality and religious coping (Pargament et al., 1998; Sanders et al., 2018), the

existing measures to assess spiritual struggles are too lengthy to be utilized in applied healthcare settings. Because the presence of spiritual struggles contributes to distress, there is a need for a brief measure that can screen for spiritual struggles across healthcare settings (King et al., 2017). Although spiritual struggles are not a diagnosis within an established nomenclature, they can detrimentally affect peoples' well-being (Exline, 2013). Time limitations, lack of training, discomfort regarding the topic, and other logistical barriers warrant the development of a brief self-administered screener in healthcare settings to efficiently capture spiritual struggles (Fitchett & Risk, 2009). At present, the RSS is considered the gold standard for measuring spiritual struggles, and previous bifactor modeling has identified a general factor capturing items across the six types of spiritual struggles (Stauner et al., 2016). Therefore, a brief spiritual struggles measure is psychometrically possible. Additionally, previous research regarding the development of the RSS was limited to non-clinical samples (Exline et al., 2014; Stauner et al., 2016).

The present study involved two phases to develop a brief spiritual distress screener. First, drawing on adult participants who screened positive for probable major depressive disorder (MDD) from six prior studies that utilized the RSS, Phase 1 focused on adults with probable MDD due to high prevalence rates and co-occurrence of this condition with other psychological and physical health issues (National Institute of Mental Health (NIMH), 2021). Exploratory factor analysis was then utilized to identify 2-4 items from the RSS that load most strongly on a common factor and also demonstrate internal consistency. Second, the factor structure and concurrent validity was tested in an independent sample of adults seeking care in an integrated behavioral health clinic.

Looking ahead, the current study sought to provide a clinically relevant and easy-to-implement screener for use in healthcare settings that will in turn improve overall health and treatment outcomes for those who experience spiritual struggles.

CHAPTER II

PHASE 1

Methods

Participants and Procedures

The first phase of this study utilized previously collected information on the RSS across six samples from inpatient, residential, treatment-seeking, and community-based settings. Subjects with a clinical cutoff score on the PHQ-8 of 10 were included in Phase 1 (Kroenke et al., 2009). See Table 1 for a summary of sample characteristics; these samples are described in more detail below as well.

Sample 1 is an inpatient sample of participants who completed a spiritually integrated inpatient program in the Midwest (Currier, Foster, et al., 2019). This sample presents with a range of clinically severe problems, with 90% of participants meeting criteria for a depressive disorder, and most of the sample were diagnosed with three or more psychiatric conditions. Demographically, the sample includes more females (58%) and is also primarily White (83%).

Sample 2 includes participants who presented for outpatient treatment for PTSD and substance use at a Veterans Affairs (VA) medical center located on the Gulf Coast (Raines et al., 2017). This sample is primarily male (90%), with about 30% of the sample reporting race as White and 65% identifying as Black.

Samples 3 and 4 were collected simultaneously as part of screening procedures for a larger self-forgiveness intervention study (Currier, Fadoir, et al., 2019). Sample 3 was collected via a long-term transitional living program for homeless military veterans wherein mental health services were provided via coordination with community providers. Sample 4 was collected with a residential treatment program for substance use disorders. Both programs reside in the same city on the Gulf Coast. Both samples are only male, with racial breakdown as 50% Black and 43% White.

Sample 5 includes a community sample of student service members and veterans at two universities on the Gulf Coast (Currier, McDermott, McCormick et al., 2018). This sample is 60% male and 90% served active duty. There is some racial diversity, with 68% identifying as White, 16% Black, and about 5% endorsed they were Hispanic/Latino and multiracial. Nearly 30% of participants exceeded clinical cutoff on PHQ-8.

Sample 6 is a college student sample from two universities on the Gulf Coast. Participants were surveyed as part of a project to examine mental health literacy and spiritual struggles that may account for help-seeking behavior (Currier, McDermott, Hawkins, et al., 2018). The sample is primarily female (over 70%) and racially White (about 68%).

Sample 7 is a veteran sample previously collected as part of a broader study on veterans who had completed one or more war-zone deployments, and survey data was collected and distributed online via Qualtrics. The sample is primarily male (82%) and racially White (about 81%).

Measures

The Religious and Spiritual Struggles scale (RSS) is a 26-item self-report measure for identifying the presence of spiritual struggles and identifies six spiritual struggles an individual may be experiencing in the past few months (Exline et al., 2014). This measure includes items to assess for struggles with God or the divine (5 items; e.g., “Felt angry at God”), struggles with demonic or evil spirits (4 items; e.g., “Felt tormented by the devil or evil spirits”), struggles with morality (4 items; e.g., “Worried my actions were morally or spiritually wrong”), struggles with ultimate meaning (4 items; e.g., “Questioned whether life really matters”), interpersonal struggles (5 items; e.g., “Felt hurt, mistreated, or offended by religious/spiritual people”), and struggles with religious doubt (4 items; e.g., “Felt confused about my religious/spiritual beliefs”). The measure asks the subject to what extent they have experienced each of the spiritual struggles using a 5-point Likert scale ranging from “not at all/does not apply” to “a great deal.” In the initial psychometric investigation, the RSS demonstrated excellent internal consistency, fit in a correlated factors Confirmatory Factor Analysis (CFA), model, and acceptable convergent validity coefficients with other measures of spiritual struggles, mental health, and religiousness. Internal consistencies ranged from .87 to .93 across the subscales at two different time points (Exline et al., 2014).

The PHQ-8 is self-report measure that is used to assess for diagnostic criteria for major depressive disorder. In particular, it examines the severity of depression symptoms, such as anhedonia and depressed mood, over the past two weeks. The 8-item scale utilizes a 4-point Likert scale ranging from 0 (not at all) to 3 (nearly every day). PHQ-8 is strongly related to the PHQ-9 and contains the exact same items with the exception of the suicidal ideation item, and the PHQ-8 is comparable to the PHQ-9 in identifying

depression in the general population (Kroenke & Spitzer, 2002; Spangenberg et al., 2012). A clinical cutoff score of 10 is considered to be an indicator for the presence of major depressive disorder (Kroenke et al., 2009).

Analysis plan. First, samples were aggregated and assessed to confirm that all cases exceeded the PHQ-8 clinical cutoff score. In total, the 726 participants who were included in the analytic sample comprised 34% of the overall sample. Next, data was reviewed for missing responses and demographics were calculated for the overall sample.

The Kaiser-Meyer-Olkin measure of sample adequacy was assessed to determine adequate sampling, and Bartlett's test of sphericity was performed to ensure sufficient correlation between variables to proceed with exploratory factor analysis (EFA). Next, an EFA was conducted on the overall sample using principal axis factoring with direct oblimin rotation. Although the aim is to develop a unifactorial tool, principal axis factoring and direct oblimin was utilized as the full-length RSS has been previously identified as unidimensional. Items that load highly on factors ($\lambda \leq .50$) with low cross-loadings ($\lambda \geq .30$) were retained. After EFA is used to identify the retained items for the brief measure, internal consistency and test convergent validity was calculated using scores on the PHQ-8.

Hierarchical factor analysis was additionally performed using the coefficient omega (hierarchical) (ω_h) as an estimate of internal consistency (McDonald, 1999). Specifically, the "omega" function from the psych package for RStudio version 3.4.3 was used to fit hierarchical exploratory factor analysis (HFA) with a minimum residual estimation and oblimin rotation, estimating number of components with eigenvalue ≥ 1 .

Hierarchical factor analysis is used when all items are believed to measure the same latent construct but may also have an underlying second-order structure (Schmid & Leiman, 1957). Based on the prior EFA, the number of group factors was set to 5. χ^2 , RMSEA, and BIC for the hierarchical model with general and group factors were compared with that of a model with only a general factor. Adequacy of the factor solution was also explored by examining ω_h , a measure of the loading of each subfactor on the general factor, and ω_T , reflecting the strength of item loadings onto their subfactors.

Results

Preliminary Analyses

There were no cases with missing values for RSS scores retained in the aggregated sample. Demonic struggles items were missing for all but two samples, and analysis did not include these items. Therefore, total scores for the RSS were calculated without demonic struggle items included (RSS items 6, 11, 18, and 25). Average age of participants was 35.8 years and was primarily male (58.8%) and of the White race/ethnicity (65.7%). Regarding religious affiliation, participants were primarily Christian (55.7%); however, some endorsed their affiliation as Atheist/Agnostic (14.5%), Jewish (0.3%), Muslim (1.0%), Buddhist (0.7%), and other religions (9.4%). Approximately 30% of the sample reported being both spiritual and religious, and about 25% of the sample affiliated as spiritual not religious. Table 2 contains complete demographics of the sample.

Kaiser-Meyer-Olkin measure of sample adequacy indicated that the strength of the relationships among variables was high (KMO= 0.93) and Bartlett's test of sphericity

was significant ($\chi^2(231) = 9120.94, p < 0.001$), indicating it was appropriate to proceed with the EFA.

Primary Analyses

Table 3 provides the results of the EFA. First, EFA demonstrated a 5-factor model for the RSS, with items loading to their respective domains in Exline et al's (2014) framework. Factor 1, pertaining to divine struggles, accounted for 43% of the variance in the data and had an eigenvalue of 9.5. Factor 2 contained items assessing interpersonal struggles and accounted for 9.3% of the variance with an eigenvalue of 2.1. Factor 3 included items assessing moral struggle and yielded an eigenvalue of 1.6, accounting for 7.5% of variance. Factor 4 items consisted of ultimate meaning struggle items, with an eigenvalue of 1.5 and accounted for 6.6% of variance. Factor 5 included doubt-related struggles and accounted for the remaining 5.1% of variance with an eigenvalue of 1.1.

Hierarchical factor analysis using Schmid Leiman Factor loadings demonstrated a general factor. The general factor explained 55% of the variance with an eigenvalue of 7.64. For a hierarchical model with five group factors, $\chi^2(131) = 452.88, \chi^2/df = 0.63$, RMSEA = .06 [.05, .06], and BIC = -410.09, where a solution with only a general factor yielded $\chi^2(209) = 3683.21, \chi^2/df = 5.14, p < 0$, RMSEA = .06 [0.15, 0.16] and BIC=2306.42 $\omega_h = .83$ and $\omega_t = .96$. Divine struggles and doubt struggles items loaded most strongly on the general factor ranging from 0.58 to 0.72. Interpersonal spiritual struggles items did not strongly load on the general factor, with factor loadings ranging from 0.39 to 0.46. See Table 4 for results of this analysis.

Using these results, items were chosen to create the spiritual distress screener measure. Items were chosen based on a balance of the following criteria: high loading onto the general factor, high loading on subscale, and strong face validity. Specifically, general factor loadings were considered first, and items needed to load moderately onto the general factor ($\lambda \leq 0.50$). Items from subscales that loaded more strongly onto the general factor, such as divine struggles and doubt struggles, had higher general factor loadings of at least $\lambda \leq 0.60$, where interpersonal spiritual struggles items loaded on the general factor at least $\lambda \leq 0.55$. Next, items were chosen from each spiritual struggle domain, comparing subscale factor loadings with item wording to ensure both face validity and content validity. Additionally, researchers of the original RSS measure (Exline et al., 2014) were consulted regarding procedures for chosen items. These researchers provided feedback and were in agreement with the final items for the screener.

Items retained for the screener include item 19 (Felt as though God had abandoned me; divine struggle item), item 24 (Felt troubled by doubts or questions about spirituality/religion; doubt struggle item), item 7 (Questioned whether life really matters; ultimate meaning struggle item), item 17 (Felt rejected or misunderstood by religious/spiritual people; interpersonal struggle item), and item 14 (Worried that my actions were morally or spiritually wrong; moral struggle item). See Table 5 for retained items and factor loadings. Item 19 loaded strongly onto the general factor ($\lambda_{\text{general}} = 0.70$) and moderately on the divine subscale ($\lambda_{\text{divine}} = 0.54$). Item 24 also loaded strongly on the general factor ($\lambda_{\text{general}} = 0.72$) and moderately on the doubt subscale ($\lambda_{\text{doubt}} = 0.41$). Item 7 demonstrated strong loading on the general factor ($\lambda_{\text{general}} = 0.62$) and on the

ultimate meaning subscale ($\lambda_{\text{meaning}} = 0.64$). Item 17 loaded moderately on both the general factor ($\lambda_{\text{general}} = 0.55$) and the interpersonal struggles subscale ($\lambda_{\text{interpersonal}} = 0.58$). Lastly, item 14 demonstrated moderate loading on the general factor ($\lambda_{\text{general}} = 0.52$) and strong on the moral subscale ($\lambda_{\text{moral}} = 0.63$). Final items on the spiritual distress screener demonstrated good internal consistency in the sample at 0.77. Additionally, PHQ-8 total scores were significantly positively correlated to the spiritual distress screener total scores ($r(702) = 0.40, p < 0.001$) as well as the total score of the RSS ($r(654) = 0.95, p < 0.001$).

Discussion

Exploratory factor analysis of the sample was consistent with prior research regarding factor structure (Exline et al., 2014). The first factor, divine struggles, accounted for less than half of variance. This demonstrated that the initial RSS is stable, even when assessing for spiritual struggles in a clinically depressed sample. EFA results indicated a need for additional analyses, including bifactor analysis, to determine the best items that may load onto the general spiritual struggles factor from each subscale. Hierarchical factor analysis demonstrated a general spiritual struggles factor, however, it only accounted for 55% of the variance, which is too low to support the creation of a one or two-item screener. These results are comparable to evidence from prior researchers, whose results showed that the general factor accounted for about 46-62% in their samples (Stauner et al., 2016). Instead, the results suggested utilizing one item per domain to account for all spiritual struggles to reduce the number of items necessary to assess for struggles. The five items chosen for the spiritual distress screener capture each type of

spiritual struggle with the exception of the demonic struggle area, and the screener significantly reduces the number of items needed to capture struggle among individuals with probable depression.

CHAPTER III

PHASE II

Methods

Participants and Procedures

The preliminary spiritual distress screener measure from Phase 1 was next utilized in a community-based behavioral health clinic on the Gulf Coast offering primary care, counseling/psychotherapy, and peer support. This clinic's primary mission is to serve veterans, first responders, and family members struggling with addiction, PTSD, and other mental health issues. The clinic has recently expanded to serving community members in need of traditional outpatient and intensive outpatient services. An interdisciplinary, evidence-based, trauma-informed treatment approach is a focus of the clinic structure, and the clinic utilizes measurement-based care for treatment monitoring purposes. Data was collected over a four-month period in intake assessment of new patients as part of routine clinical care. A total of 21 participants completed the screener in this period. Participants were primarily White (76%), male (67%), and endorsed their spiritual/religious affiliation as broadly Christian (81%).

Measures

In addition to the five-item spiritual distress screener developed in Phase 1, the CORE-10, PHQ-2, and two suicidality items were administered:

The CORE-10 (Barkham et al., 2013) is a brief validated measure used to assess common symptoms of psychological distress. Responses are presented on a scale from 0 or “Not at all” to 5, “Most or all the time.” There are two items that are reverse-coded in the CORE-10, and total scores range from 0-40. Higher scores indicate higher levels of general psychological distress, and a total score of 10 or higher is considered to be clinically significant.

The PHQ-2 is an abbreviated version of the PHQ-8 and is composed of the first two items to screen for depression (Kroenke et al., 2003), with a total score of 3 indicating probable major depressive disorder.

Suicidality was specifically assessed using two screener items on a “Never” (0) to “Very Often” (5) response scale; the first item asks about thoughts of suicide in the past 30 days, and the second item asks about attempts in the past 30 days.

Analysis Plan

Internal consistency was assessed within the spiritual distress screener, and concurrent validity was performed using bivariate correlations between total scores of CORE-10, PHQ-2, and suicidality items with the total score of the spiritual distress screener.

Results

Participants in the sample generally reported the presence of mental health symptoms. About 71% of participants scored above 10 on the CORE-10, which indicated

at least mild psychological distress. Of the 21 participants, 62% of the sample scored above 15 on the CORE-10, which indicated at least moderate psychological distress. In total, 28% of participants indicated severe psychological distress, with CORE-10 scores totaling to 25 or higher. On the PHQ-2, 52% of participants scored 3 or higher, which exceeded the cutoff and indicated probable major depressive disorder.

Internal consistency for the spiritual distress screener was high at 0.89 within the sample. Concurrent validity results using CORE-10 total score was significantly positively correlated with the spiritual distress screener total score ($r(19) = 0.65, p < 0.001$). Additionally, PHQ-2 total score was significantly positively correlated to the spiritual distress screener total score as well ($r(19) = 0.83, p < 0.001$). There was no significant correlation between spiritual distress screener total score and endorsed spiritual/religious affiliation ($r(19) = -0.14, p = 0.55$), connection with spiritual community ($r(19) = -0.40, p = 0.07$), endorsement of spirituality contributing to problems ($r(19) = 0.16, p = 0.49$), endorsement of spirituality as a strength in life ($r(19) = -0.08, p = 0.73$), or interest in integrating spirituality in treatment ($r(19) = -0.31, p = 0.17$). Spiritual distress screener total score did not significantly correlate with suicidal ideation ($r(19) = 0.37, p = 0.10$).

Discussion

Results determined a high degree of internal consistency, and bivariate correlations demonstrated convergent validity for the spiritual distress screener with the CORE-10 and PHQ-2. These results were expected and consistent with prior studies that have linked spiritual struggles with mental health symptomatology (Currier, Foster, et al., 2019). Prior research has also supported the link between spiritual struggles and higher

rates of suicidality (Currier, Fadoir, et al., 2019; Currier, McDermott, McCormick et al., 2018; Raines et al., 2017), however, the total score of the spiritual distress screener was not significantly correlated to suicidal ideation in Phase 2. This could be due to the small sample size as well as flooring effects, as none of the participants endorsed suicide attempts. While these results are preliminary, they demonstrate both feasibility and evidence in support of the spiritual distress screener in capturing spiritual struggles as it relates to psychological distress and depressive symptomatology.

CHAPTER IV

GENERAL DISCUSSION

The current study sought to provide a clinically relevant and easy-to-implement screener for use in healthcare settings that may improve overall health and treatment outcomes for those who experience spiritual struggles. Spiritual struggles are relevant contributors of distress within physical and mental health care, which can lead to poorer outcomes if left untreated (Currier, Foster, et al., 2019). This relationship between spiritual struggles and poorer outcomes in treatment illuminate the need to screen for clinically relevant struggles to address in treatment. Researchers have previously attempted to create a screener to capture spiritual struggles, but existing measures have not accounted for all domains of spiritual struggle and have been too lengthy to administer widely in healthcare settings (Exline et al., 2014, in press.; King et al., 2017).

In Phase 1, exploratory factor analysis and hierarchical factor analysis were performed using a sample with probable major depressive disorder. The use of a depressed sample was unique to this study, and results of the EFA and HFA were comparable to prior research. In particular, EFA results demonstrated similar factor structure and item factor loadings that were reported in the original development of the RSS (Exline et al., 2014). This replication demonstrates the utility and factorial reliability of the original RSS measure. Additionally, HFA results were also consistent with prior

evidence for a general spiritual struggles factor (Stauner et al., 2016). Comparable to Stauner et al., (2016), the general factor only accounted for about half of the variance in the sample. Therefore, in order to capture all types of spiritual struggles, a one or two item measure did not appear to be adequate. Based on these results, it was determined that one item from each domain could sufficiently capture each type of struggle to create a spiritual distress screener. The five-item screener additionally demonstrated good internal consistency within the sample, and was strongly correlated with both the PHQ-8 total scores as well as the RSS total scores (without demonic subscale items).

Results of bivariate correlations in Phase 2 were as expected, and were supportive of the spiritual distress screener in capturing clinically relevant spiritual struggles. In particular, the spiritual distress screener total score was positively correlated with total scores of the CORE-10 and PHQ-2, such that higher scores captured on the screener was associated with greater mental health symptomatology (Bockrath et al., 2021). Additionally, the spiritual distress screener total score did not significantly correlate with spiritual/religious demographics, including whether participants described themselves as spiritual and/or religious, belief that spirituality and/or religion contributes to problems, and interest in integrating spirituality and/or religion into care. These results support prior evidence that spiritual background factors often do not predict spiritual struggles (Rosmarin et al., 2014), nor that solely gathering spiritual background information is sufficient to capture spiritual struggles.

Considering these results, the spiritual distress screener is a promising tool to capture spiritual struggles in a variety of healthcare settings. As the measure is a brief

self-report screener, it can be utilized with modest staff training and can provide relevant data for the integration of spiritual care providers such as chaplains into healthcare treatment. In particular, the spiritual distress screener can be utilized through use of the total score, with higher scores indicated higher levels of spiritual struggle, or it can indicate specific types of spiritual struggle an individual may be experiencing via item-level scores. Additional work for the spiritual distress screener includes determining cut scores, assessing the predictive validity of spiritual struggles through longitudinal tracking, establishing convergent validity with diagnostic or structured clinical interview-based assessments, and further validation in more diverse samples.

The current study presented some limitations. First, the study was limited in the diversity of the participant samples and by type of clinical presentation; namely, across Phase 1 and 2, the samples were majority White, male, and Christian. As such, the results may not generalize to other persons from other races, ethnicities, genders, and spiritualities that simultaneously exist. Additionally, the spiritual distress screener was assessed in Phase 2 with a sample of 21 participants, such that further research is needed to further examine the reliability and validity of the measure within a larger, more diversely robust sample. Lastly, the measure is a self-report screener, which presents similar limitations to other measures: the sole use of self-report can produce exaggerated results or be affected by social desirability and underreporting.

In conclusion, the creation and implementation of a spiritual distress screener opens up a number of opportunities both in research and in clinical care in better understanding the relationship between religion, spirituality, and mental health. As religion/spirituality is an important domain of many individuals' lives, the incorporation

of spirituality into care has far reaching impacts into healthcare overall through addressing multiculturalism, incorporating holistic care and addressing treatment through a biopsychosocialspiritual lens, and ultimately improving patient outcomes. Looking ahead, this measure will hopefully continue to aid in the advancement of scientific understanding of spiritual struggles on health and recovery.

APPENDIX

Table 1. Sample Characteristics.

Percentage of sample used all met the clinical cutoff score of 10 on the PHQ-8

Sample Number	Date of Collection	Sample Description	Total Sample	Retained from Sample	Percentage of Sample Included
1	2017-2018	Adults hospitalized in an acute psychiatric stabilization program in behavioral health center in US Midwest	N=240	n=205	85%
2	2017-2020	Adults at a VA medical center in US Gulf Coast	N=75	n=75	100%
3 & 4	2015-2018	Adults in treatment in long-term transitional housing program and residential substance use treatment program in US Gulf Coast	N=159	n=63	40%
5	2015-2017	Student service members and veterans in US Gulf Coast	N=525	n=139	26%
6	2017-2018	College student sample in US Gulf Coast	N=512	n=104	20%
7	2017-2018	War-zone veteran sample	N=616	n=140	23%

Table 2. Demographics of EFA Sample

Descriptives	Mean (SD) or Frequency (%)
Age (years)	35.8 (15.5)
Gender:	
Male	427 (58.8%)
Female	295 (40.6%)
Race/Ethnicity:	
Black	137 (18.9%)
White	477 (65.7%)
Hispanic/Latino(a)	52 (7.2%)
Native American	9 (1.2%)
Asian American	13 (1.8%)
Multi-Racial	25 (3.4%)
Other background	11 (1.5%)
Religious Affiliation:	
Christian	404 (55.7%)
Atheist	105 (14.5%)
Jewish	2 (0.3%)
Muslim	7 (1.0%)
Other Religion	68 (9.4%)
Spiritual and Religious Endorsement:	
Spiritual but not Religious	178 (24.5%)
Religious not Spiritual	42 (5.8%)
Both Spiritual and Religious	230 (31.7%)
Neither Spiritual or Religious	86 (11.8%)
Total PhQ-8 score	16.2 (4.5)
Total RSS (without demonic)	53.7 (20.0)

Table 3. Pattern Matrix for RSS Items

Items	Factor				
	1	2	3	4	5
Felt as though God had abandoned me	0.94				
Felt as though God had let me down	0.86				
Felt angry at God	0.71				
Questioned God's love for me	0.68				
Felt as though God was punishing me	0.67				
Felt hurt, mistreated, or offended by religious/spiritual people		0.79			
Felt angry at organized religion		0.75			
Felt rejected or misunderstood by religious/spiritual people		0.71			
Felt as though others were looking down on me because of my religious/spiritual beliefs		0.70			
Had conflicts with other people about religion/spirituality		0.68			
Worried that my actions were morally or spiritually wrong			0.82		
Wrestled with attempts to follow my moral principles			0.72		
Felt torn between what I wanted and what I knew was morally right			0.71		
Felt guilty for not living up to my moral standards			0.65		
Questioned whether life really matters				-0.85	
Questioned whether my life will really make any difference in the world				-0.78	
Felt as though my life had no deeper meaning				-0.76	
Had concerns about ultimate meaning				-0.61	
Worried about whether my beliefs about religion/spirituality were correct					-0.74
Struggled to figure out what I really believe					-0.71
Felt confused about my spiritual/religious beliefs					-0.71
Felt troubled by doubts or questions about religion or spirituality					-0.64
Percentage of Variance	43.0	9.3	7.5	6.6	5.1
Eigenvalue	9.5	2.1	1.6	1.5	1.1

Table 4. Schmid Leiman Factor Loadings

Items	Approximate item description	Factor					
		g	1	2	3	4	5
RSS1	Felt guilty for not living up to morals	0.45				0.46	
RSS2	Felt angry at God	0.63	0.42				
RSS3	Concerns about ultimate meaning	0.59			0.45		
RSS4	Felt hurt/mistreated/offended by R/S people	0.46		0.62			
RSS5	Struggled to figure out what I really believe	0.69					0.47
RSS7	Questioned whether life really matters	0.62			0.64		
RSS8	Felt torn between what I wanted and morals	0.52				0.55	
RSS9	Questioned God's love for me	0.68	0.41				
RSS10	Had conflicts with others about R/S	0.46		0.55			
RSS12	Felt as though life had no deeper meaning	0.60			0.57		
RSS13	Felt angry at organized religion	0.39		0.58			
RSS14	Worried my actions were morally wrong	0.52				0.63	
RSS15	Felt confused about R/S beliefs	0.71					0.45
RSS16	Felt as though God was punishing me	0.65	0.40				
RSS17	Felt rejected/misunderstood by R/S people	0.55		0.58			
RSS19	Felt as though God had abandoned me	0.70	0.54				
RSS20	Worried whether R/S beliefs were correct	0.58					0.46
RSS21	Wrestled with attempts to follow morals	0.57				0.58	
RSS22	Questioned if life will make any difference	0.61			0.58		
RSS23	Felt as though God had let me down	0.66	0.53				
RSS24	Felt troubled by R/S doubts or questions	0.72					0.41
RSS26	Felt that others were looking down on me	0.44		0.55			
Eigenvalue		7.64	1.11	1.67	1.34	1.27	0.85
ω total		0.96	0.90	0.86	0.90	0.84	0.88
ω general		0.80	0.61	0.33	0.48	0.39	0.61

Table 5. Spiritual Struggle Screener Items

RSS item number	Item Wording	Type of Struggle	Subscale Factor Loading	General Factor Loading	Retained for screener
19	Felt as though God had abandoned me	divine	0.54	0.7	Yes
24	Felt troubled by doubts or questions about religion or spirituality	doubt	0.41	0.72	Yes
7	Questioned whether life really matters	ultimate meaning	0.64	0.62	Yes
17	Felt rejected or misunderstood by religious/spiritual people	interpersonal	0.58	0.55	Yes
14	Worried that my actions were morally or spiritually wrong	moral	0.63	0.52	Yes
15	Felt confused about my spiritual/religious beliefs	doubt	0.45	0.71	No
5	struggled to figure out what I really believe	doubt	0.47	0.69	No
23	Felt as though God had let me down	divine	0.53	0.66	No
22	Questioned whether my life will really make any difference in the world	ultimate meaning	0.58	0.61	No
12	Felt as though my life had no deeper meaning	ultimate meaning	0.57	0.6	No
21	Wrestled with attempts to follow my moral principles	moral	0.58	0.57	No

Table 6. Phase 1 Means and Correlations between RSS, PHQ-8, and Spiritual Distress

Measures	Reliability	M (SD)	Correlation with Spiritual Distress Screener
Spiritual Distress Screener	0.77	12.08 (5.10)	---
PHQ-8 total score	0.74	16.17 (4.50)	0.40**
RSS (without demonic)	0.94	2.76 (2.10)	0.95**

** $p < .001$

Table 7. Demographics of RSS Pilot Sample (N=21)

Descriptives	Mean (SD) or Frequency (%)
Age (years)	38.1 (15.5)
Gender:	
Male	14 (63.6%)
Female	7 (31.8%)
Race/Ethnicity:	
Black	4 (18.2%)
White	16 (72.7%)
Hispanic/Latino(a)	2 (9.1%)
Other	1 (1.2%)
Sexual Orientation:	
Heterosexual	17 (77.3%)
Bisexual	2 (9.1%)
Religious/Spiritual Affiliation:	
Christian	17 (77.2%)
Non-Christian	4 (18.2%)
Religious/Spiritual Demographics	
View self as religious/spiritual	18 (81.8%)
Connected with religious/spiritual community	11 (50.0%)
Religion/spirituality contributed to problems	6 (27.3%)
Religion/spirituality source of strength	16 (72.7%)
Suicide risk:	
Any thoughts of suicide past 30 days	4 (18.1%)
No thoughts of suicide past 30 days	17 (77.3%)
Attempt to suicide past 30 days	0 (95.5%)
CORE-10	18.3 (9.8)
PhQ-2	2.8 (2.1)
Total RSS-SF (without demonic)	11.8 (5.6)

Table 8. Phase 2 Scale Reliability, Means, Correlations (N=21)

	Reliability	M (SD)	Correlation with Spiritual Distress Screener
Clinical Distress Measures			
Spiritual Distress Screener	0.89	11.81 (5.56)	---
CORE-10 total score	0.83	18.29 (9.78)	0.65**
PHQ-2 total score	0.78	2.76 (2.10)	0.63**
Suicidal thoughts past month		0.33 (0.91)	0.37
Suicide attempts past month		0 (0)	N/A
R/S demographics			
R/S affiliation			-0.14
Connection with spiritual community			-0.40
Spirituality contributing to problems			0.16
Spirituality is a strength			-0.08
Interest in integrating spirituality into treatment			-0.31

** $p < .001$

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