

# Closeness to God Among Those Doing God's Work

*A Spiritual Well-being Measure for Clergy*

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## Abstract

**M**asuring spiritual well-being among clergy is particularly important given the high relevance of God to their lives, and yet its measurement is prone to problems such as ceiling effects and conflating religious behaviors with spiritual well-being. To create a measure of closeness to God for Christian clergy, we tested survey items at two time points with 1,513 United Methodist Church clergy. The confirmatory factor analysis indicated support for two, six-item factors: Presence and Power of God in Daily Life, and Presence and Power of God in Ministry. The data supported the predictive and concurrent validity of the two factors and evidenced high reliabilities without ceiling effects. This Clergy Spiritual Well-being Scale may be useful to elucidate the relationship among dimensions of health and well-being in clergy populations.

*Keywords: spiritual well-being, measure, clergy, health*

This is an author-produced PDF of an article accepted for publication in the *Journal of Religion and Health* following peer review. The full article citation is: Proeschold-Bell, R.J., Yang, C., Toth, M., Rivers, M., & Carder, K. (2013). Closeness to God among those doing God's work: A spiritual well-being measure for clergy. *Journal of Religion and Health*. The final publication is available at: <http://link.springer.com/article/10.1007/s10943-013-9682-5>.

Rae Jean Proeschold-Bell, PhD  
Duke Global Health Institute  
Duke University, Durham, NC

Chongming Yang, PhD  
College of Family, Home, and Social  
Sciences  
Brigham Young University, Provo,  
UT

Matthew Toth, MSW  
School of Public Health  
University of North Carolina at  
Chapel Hill, Chapel Hill, NC

Monica Rivers, PhD MS  
Behavioral Sciences and Social Work  
Winston-Salem State University,  
Winston-Salem, NC

Kenneth Carder, MDiv, DMin  
Duke Divinity School  
Duke University, Durham, NC

Please direct comments to  
Rae Jean Proeschold-Bell at  
[rae.jean@duke.edu](mailto:rae.jean@duke.edu).

## Introduction

What constitutes a thriving spiritual life, and how is this spiritual dimension measured? For many years, behavioral scientists avoided the scientific study of these questions because of the subjective nature of spirituality and the belief that such concepts were nearly impossible to operationalize (Ellison & Mattila, 1983). During the 1970s and 1980s, however, sociologists and psychologists began to contemplate this question with increasing vigor (Ellison, 1983; Moberg, 1979). The term “spiritual well-being” was adopted in the resulting research literature and several definitions of the concept were put forth. For example, Moberg (1979) posited that spiritual well-being, “pertains to the wellness or ‘health’ of the totality of the inner resources of people, the ultimate concerns around which all other values are focused, the central philosophy of life that guides conduct, and the meaning-giving center of human life which influences all individual and social behavior” (p.12).

We are interested in the measurement of spiritual well-being for Christian clergy. By focusing on a religious population, we are concerned both with spirituality and its companion construct of religiosity. Spirituality has been defined as, “a search for the sacred, a process through which people seek to discover, hold on to, and, when necessary, transform whatever they hold sacred in their lives” (Hill & Pargament, 2003, p. 65). Like spirituality, religiosity involves the search for the sacred but must also occur in the context of a religious organization or institution (Hill & Pargament, 2003). Some researchers have sought to separate the measurement of spirituality from religiosity (Slater, Hall, & Edwards, 2001). However, the two are deeply intertwined in that religions are concerned with the spirit, and highly spiritual people frequently live in a specific religious cultural context (Zinnbauer, Pargament, & Scott, 1999). Thus, any measure of spiritual well-being for clergy that focuses on the sacred and meaning-giving aspects of life must also acknowledge their belief in God or else neglect the cultural context of their spiritual well-being.

There has been some debate as to whether it is best to have a generic spiritual well-being measure that applies to everyone, of every faith, living in any context, versus multiple spiritual well-being measures that apply to certain groups of people. One advantage to a broadly applicable measure is that researchers across study populations can potentially compare spiritual well-being scores across groups, or be more likely to be measuring the same construct across groups. However, broadly applicable measures may less accurately assess spiritual well-being because they lack the words that give meaning to the respondents. For example, devout Christians may be confused or answer differently when terms like “higher power” are used instead of “God.” In contrast, people who consider themselves to be spiritual but not religious will not know how to answer questions that use the word “God,” and yet studying their health and spirituality is also important (de Jager Meezenbroek et al., 2012). In addition, researchers have found it necessary to alter spiritual well-being measures designed for Christian populations in order to use them with Jewish and Muslim populations, because there are theological concepts in some faiths that do not exist in other faiths, requiring changes in both wording and concepts (Berry, Bass, Forawi, Neuman, & Abdallah, 2011). Contextual factors may also matter when assessing spiritual well-being. For example, age and one’s stage of development may indicate more specific and

appropriate ways to measure spiritual well-being, and, in fact, a spiritual well-being measure for older adults has been developed that attends to the developmental stage of despair versus ego integrity (Stranahan, 2008). Thus, numerous researchers have opted to create or adapt measures for their particular population of study in order to enhance validity. Failure to do so can compromise validity, or at minimum neglect important theological and cultural dimensions for a population, as has been shown in the case of measuring spiritual well-being among African Americans (Lewis, 2008).

Our interest is in clergy, and we sought a spiritual well-being measure that would be relevant for them. We thought it entirely possible that a generic or broadly applicable measure of spiritual well-being would work for clergy. We also considered the fact that the work of clergy creates the possibility of an intertwining of their day-to-day ministry experiences and their spiritual well-being. With these two thoughts in mind, we set out to find a spiritual well-being measure appropriate for clergy. We initially looked for clergy-specific measures and did not find any. We discovered that measuring spiritual well-being among clergy has largely been ignored in the literature until recently. It is possible that researchers believe that an enduring and robust sense of spiritual well-being must be present in order for one to choose a career in vocational ministry. They may also believe that the frequent engagement in religious behaviors associated with the professional ministerial role might automatically confer spiritual benefits and help bolster spiritual well-being. While it is easy to understand how such beliefs arise, empirical data present a much more varied picture. For example, Ellison, Roalson, Guillory, Flannelly, and Marcum (2009) found that notable numbers of clergy experience intrapsychic struggle and chronic religious doubting, and they found only limited support for the stress-buffering role of religious resources among clergy. We then reviewed many broadly applicable measures in our search for a spiritual well-being measure to use with clergy, but ultimately rejected each as not being appropriate for clergy. To illustrate why, we review below measures that exemplify several different approaches to measurement and consider how well they would measure spiritual well-being among Christian clergy.

The approaches to measuring spirituality include focusing on: 1) religious practices, 2) the meaning-giving aspects of life, 3) beliefs and values, 4) commitment to a religion, and 5) daily experiences of the transcendent. An example of measuring religious practices is King and Hunt's Multidimensional Religiosity Scale (1972), which consists of 130 items measuring beliefs, knowledge, and practice, including questions regarding church attendance and frequency of prayer. The underlying limitation of religious practice scales is that it is unclear what outward religious practices mean for one's spiritual well-being, because religious practices may be less about one's relationship with God and instead serve as a way to live "healthfully," sustain and develop social networks, or cope with difficulties (Hall, Meador, & Koenig, 2008; Pargament, 1999). Furthermore, spirituality is not explicitly confined to outward religious practices. For clergy, a focus on outward religious practices such as going to church will have ceiling effects and is unlikely to capture true differences in clergy's spiritual well-being, since they may go to church through times of both spiritual renewal and drought.

A popular measure that focuses on the meaning-giving aspects of life is the Spiritual Well-Being Scale, whose items "deal with transcendent concerns, or those aspects of experience which involve meaning, ideals, faith, commitment, purpose in life, and relationship to God" (p. 337). The Spiritual Well-Being Scale (Paloutzian & Ellison, 1982) measures religious and existential well-being with two subscales.

The Religious Well-Being subscale attempts to capture one's sense of well-being with respect to God (e.g., "I have a personally meaningful relationship with God."). The Existential Well-Being subscale refers to a sense of life purpose and life satisfaction (e.g., "Life doesn't have much meaning."). The Spiritual Well-Being Scale has been shown to be a reliable measure of well-being, but measures mostly existential well-being (Slater et al., 2001). Indeed, as Koenig, McCullough, and Larson (2001) and Hall et al. (2008) contend, it is not clear that the Spiritual Well-Being Scale captures anything particularly religious, other than possibly a generic sense of life-purpose, meaning, strength, and comfort. In terms of clergy, fears of ceiling effects seem warranted. In a study of Episcopal priests, Stewart-Sicking (2012) was unable to use the Religious Well-Being subscale due to ceiling effects, although he was able to use the Existential Well-Being subscale. Ceiling effects have also been found in evangelical samples (Bufford, Paloutzian, & Ellison, 1991).

An example of focusing on beliefs, values, and well-being is the Faith Maturity Scale (Benson, Donahue, & Erickson, 1993), which focuses on values and the behavioral manifestations of these commitments as opposed to religious or spiritual feelings or expressions. It includes statements like, "I am concerned that our country is not doing enough to help the poor," and "I feel God's presence in my relationships with other people." We rejected this measure for use with clergy because of possible ceiling effects in populations with high "faith maturity" like clergy (Slater et al., 2001). However, we also agree with Hall et al. (2008) who contend that scales like this are conceptually challenged because the notion of "maturity" is value-laden, suggesting that some religious values are better than others. We were further interested in a spiritual well-being measure for clergy that reflects periods of better and worse spiritual well-being, rather than a measure that indicates if and when someone has reached faith maturity, which implies a more stable state.

A measure of one's commitment to specific religious or spiritual concepts is the 10-item Religious Commitment Inventory (Worthington et al., 2003). Example items include, "My religious beliefs lie behind my whole approach to life," and "It is important to me to spend time in private religious thought and reflection." While measures such as this may help researchers understand how people are investing in their identified religious beliefs (Hill & Maltby, 2009), in the context of clergy, these measures are challenged by potential ceiling effects since clergy are already a population that has a high level of spiritual commitment, as evidenced by their profession (Hill & Maltby, 2009).

Finally, the Daily Spiritual Experience Scale (DSES) (Underwood & Teresi, 2002) is a 16-item scale that focuses on every day experiences of the transcendent. It includes items such as, "Desire to be closer to God," "Feel guided by God," and "Feel God's love directly or through others." As Ellison and Fan (2008) point out, the DSES intentionally adapts themes and concepts from a broad range of different religious and spiritual traditions and has been used in large representative samples (Underwood & Teresi, 2002). In Ellison's review of the instrument, spirituality as measured in the DSES was related to positive affect and not related to overt religious practices, such as going to church. Despite the strengths of the DSES measure, we chose not to use this measure because we agree with Hall's (2008) argument that the degree to which each item is contingent on one's personal definition is a major weakness. For example, feeling "deep inner peace" or feeling "spiritually touched by the beauty of creation" is so personal that respondents must define for themselves the content of the items, for example, what "inner peace"

means, and this subjectivity in the interpretation of items brings into question what the measure itself actually captures (Hall et al., 2008). However, the approach of measuring personal daily experiences seemed potentially fruitful as a way to capture clergy's current experiences with God, allowing those experiences to potentially change over time.

Finding that the existing measures would have limitations for a clergy population, we decided to create a measure of spiritual well-being for clergy. We desired a measure that could assess spiritual well-being as one of several health outcomes for a holistic health intervention for clergy that we planned to design and evaluate. As a health outcome, it was important to us that the measure be able to assess changes in spiritual well-being over time, and not assess a more stable state such as faith maturity. Further, we desired a measure that would be useful in studying the interplay of mental and physical health and spiritual well-being.

Hill and Pargament (2003) have argued that when studying health, it is important to design spiritual well-being measures that are undergirded by spiritual and religious concepts that relate to mental and physical health. One such linkage that they note is the concept of closeness to God. Achieving closeness to God is a key purpose of religious institutions, which serve to help people know and understand God, irrespective of whether closeness to God promotes health. However, closeness to God may well relate to physical and mental health. Psychologically, Hill and Pargament (2003) suggest that attachment theory may be used to explain how greater closeness to God may relate to better mental and physical health. Attachment theory (Bretherton, 1992) proposes that a strong relationship with even one powerful person can give people a sense of security and protection during times of stress, and this comfort leads to decreased physiological stress responses. In writings on attachment theory, this powerful person is generally assumed to be an adult, but it could also be God.

In addition, a close relationship with God may lead to less loneliness. Loneliness or social isolation can cause stress, which can result in poorer affect, feelings of alienation and decreased feelings of control and self-esteem. These may lead to negative psychological states that yield suppressed immune functioning and increased neuroendocrine responses (Brissette, Cohen, & Seeman, 2000; Cohen, 2004). Feelings of loneliness have also been found to be associated with negative health outcomes (Herlitz et al., 1998; Seeman, 2000). For these reasons, we chose to use the theoretical underpinning of closeness to God in designing our measure. Others have also advocated that closeness to God is an important aspect of spiritual well-being (Kass, Friedman, Leserman, Zuttermeister, & Benson, 1991).

When developing the measure's items, we assumed that one's degree of closeness to God can vary over time. We therefore developed items that respondents could answer differently over time even if one's commitment to a religion remains static, which it may for clergy. Having a measure that indicates change over time is important to test interventions designed to promote spiritual well-being, or to test certain hypotheses, such as the hypothesis that a strong relationship with God relates to better mental health. One way to assess changes over time is to ask about frequency of experiences with God, with a preference for meaningful experiences for the respondent, leading us to use the phrase, "feeling the presence and power of God." We assumed that the frequency of experiencing God's power and presence would provide an indication of how close one feels to God. We hoped that assessing the frequency of experiencing God's power and presence would avoid ceiling effects, even for clergy.

Finally, for a clergy population, we assumed that it is important to measure the frequency with which they experience God's presence and power in ministry, separate from their experience of God's presence and power in other parts of their lives. Because clergy feel called by God to their vocation, we believe that clergy place particular importance on ministerial activities and expect to frequently feel the presence and power of God during those activities. Although we hypothesized that there would be a positive correlation between the experience of the presence and power of God in daily life and the experience of the presence and power of God in ministry, we did not expect this to be true for all clergy and therefore thought it important to measure these sets of experiences separately. For example, a clergy person may frequently experience the presence and power of God in daily life, but not in their church environment. We know that church environments differ in the degree of support that they give clergy (Lee, 1999; Rediger, 1997; Trihub, McMinn, Buhrow, & Johnson, 2010), and working in a difficult church environment may make it harder to experience the presence and power of God in ministry, but not in daily life.

In addition to seeking a measure that is appropriate for Christian clergy and that measures the varying degree of closeness to God, we sought to address some of the limitations of the measures reviewed here. Specifically, we sought to create a measure that did not confound religious practices like prayer and church attendance with one's closeness to God. We sought to avoid ceiling effects. We further considered the fact that one can feel close to God while being disheartened or angry with God--what Pargament calls "spiritual struggle," questioning the presence or beneficence of God (Hill & Pargament, 2003). We desired a measure in which low scores signify a diffuse and tenuous relationship with God, and high scores signify a specific and strong relationship with God. Such a measure is likely to be of interest to researchers who study clergy, and, given the limitations of spiritual well-being measures to date, may be of interest to religion researchers more generally.

This paper describes the development and testing of the Clergy Spiritual Well-being Scale. Confirmatory factor analysis was conducted to test whether the items best represent a single versus two constructs, and to examine the reliability, concurrent, and predictive validity of each subscale. In terms of validity analyses, we selected a number of constructs, such as depression and quality of life, with which we expected the spiritual well-being items to correlate. Studies have demonstrated that spiritual well-being negatively relates to depression, anxiety, and stress (Bekelman et al., 2007; McCoubrie & Davies, 2006; Tuck, Alleyne, & Thinganjana, 2006). We included these variables as well as similar ones (i.e., emotional exhaustion and depersonalization, two indicators of burnout [(Maslach & Jackson, 1986)]) in our analyses, hypothesizing that a negative relation would likewise be found with our new measure. Studies have also shown that spiritual well-being positively relates to quality of life (Gioiella, Berkman, & Robinson, 1998). We included quality of life as well as ministry satisfaction and personal accomplishment in our analyses, hypothesizing that a positive relation would similarly be found with the Clergy Spiritual Well-being Scale. Correlations in the hypothesized directions lend credibility to the measure's construct validity.

## **Hypotheses**

Hypothesis 1: Presence and power of God in Daily Life and Presence and Power of God in Ministry, as represented in the survey items, will be two separate constructs, although they will be highly correlated.

Hypothesis 2: Presence and power of God in Daily Life and Presence and Power of God in Ministry will each correlate negatively with depression, anxiety, stress, emotional exhaustion, and depersonalization.

Hypothesis 3: Presence and power of God in Daily Life and Presence and Power of God in Ministry will each correlate positively with quality of life, ministry satisfaction, and personal accomplishment.

## Methods

### Clergy Spiritual Well-being Scale creation

Two of the study authors considered the conceptual breadth of the construct of closeness to God in daily life and generated items. They then selected 10 items that conceptually represented the construct's breadth, from experiencing God in the ordinary, to experiencing God in one's relationship with other people, to experiencing God in the unfolding of events. They repeated the process for the construct of closeness to God in ministry, selecting 10 items to represent experiencing God in aspects such as ministry-related worship, counseling, and conflict. Of this initial set of 20 survey items, 8 items were later excluded because they either had low primary loadings (<0.40) or cross-loadings above 0.40 on the other factor. The 12 retained items are listed in Table 1.

### Data collection

We included these items in a panel survey of United Methodist Church (UMC) clergy in North Carolina (NC). During July-October 2008, ministers, district superintendents, deacons, bishops, extension ministers and previously retired but reappointed clergy serving in the NC or Western NC conferences of the UMC were invited to participate (N = 1,820), and 95% responded (N=1,726). In August-October of 2010, all clergy eligible for the 2008 survey were invited to take a second survey and 87.1% (N=1,671) responded.

For these analyses, we selected participants with survey data at both time points (n=1,513). Participants were 73.6% male, 91.7% White, 6.1% African-American, 0.9% Asian-American, and 0.5% American Indian, and 1.1% additionally identified as Hispanic. Participants were highly educated, with 62.5% holding a master's degree, and an additional 11.6% holding a doctoral degree. Participants ranged in age from 23 to 90, with a mean age of 52.4 years (SD= 10.7). They had an average of 17.6 years in ministry, ranging from less than one year to 71 years (SD=12.3), and 87.2% were currently married.

### Predictive and concurrent validity measures

We measured depression using the well-validated Patient Health Questionnaire-9 (PHQ-9) (Kroenke, Spitzer, & Williams, 2001; Spitzer, Kroenke, & Williams, 1999). The PHQ-9 is a nine-item scale

with a total scale range of 0-27 (Kroenke et al., 2001). We measured anxiety using the anxiety portion of the Hospital Anxiety and Depression Scale (HADS-A) (Zigmond & Snaith, 1983). The HADS-A has seven items, with a total scale range of 0-28. The HADS has strong support for its validity (Bjelland, Dahl, Haug, & Neckelmann, 2002). We measured stress using the 10-item Perceived Stress Scale, a measure ranging from 0-40 that assesses the extent to which respondents feel their lives are unpredictable, uncontrollable, and overloaded (Cohen, Kamarck, & Mermelstein, 1983).

We also included the Maslach Burnout Inventory, which consists of three scales that measure different aspects of burnout (Maslach & Jackson, 1986). The scales are (1) emotional exhaustion (i.e., feeling emotionally taxed by one's work, nine items), (2) depersonalization (i.e., having an impersonal response to people in one's care, five items), for which high scores indicate burnout, and (3) personal accomplishment (i.e., feeling competent and successful, eight items), for which low scores indicate burnout. The Maslach Burnout Inventory has been studied with populations including social workers (Adams, Matto, & Harrington, 2001) and community service workers (Mitchell & Hastings, 2001), as well as clergy (Doolittle, 2007; Evers & Tomic, 2003; Miner, 2007; Rodgers & Piedmont, 1998; Stanon-Rich & Iso-Ahola, 1998; Virginia, 1998; Warner & Carter, 1984). The validity of the three-factor structure model has been supported across seven occupational groups, including clergy (Langballe, Falkum, Innstrand, & Aasland, 2006).

We measured quality of life using the Quality of Life Inventory, which is a 16-item measure of life satisfaction in 16 areas of life, including love, work, learning, and recreation (M. Frisch, 1992). It has demonstrated internal validity (M. B. Frisch, Cornell, Villanueva, & Retzlaff, 1992) and predictive validity (M. B. Frisch et al., 2005). Finally, we measured ministry satisfaction using six items from the Pulpit & Pew study of clergy conducted by Jackson Carroll (2006). These items measure the level of satisfaction with one's current ministry position, spiritual life, opportunities for continuing theological education, relations with fellow clergy, relations with lay leaders in one's congregation, and overall effectiveness as a pastoral leader in one's particular congregation. With the possible exception of the ministry satisfaction measure, each of these measures has been widely used and their reliabilities are reported elsewhere.

## **Analysis**

We conducted a series of confirmatory factor analyses (CFA) using Mplus 6.1 to examine how well the two spiritual well-being constructs, Presence and Power of God in Daily Life and Presence and Power of God in Ministry, can be measured with the items that we created. The first CFA included all of the original items as indicators of the constructs. Based on the modification indices of the model, we excluded items that had low primary loadings (<0.40) or cross-loadings above 0.40 on the other factor. A measurement model with items retained from this step served as a baseline model. With this baseline model, we tested whether the two constructs were actually one at time 1 and time 2, and whether the measurement was invariant over time through model comparisons in terms of  $\chi^2$  difference corresponding to the difference in the degrees of freedom.

To examine concurrent and predictive validity, we conducted additional CFAs by including other outcome constructs and their indicators into the baseline measurement model. In the first model, we



selected constructs from the survey that represent negative outcomes, i.e., depression, anxiety, stress, emotional exhaustion, and depersonalization. In the second model, we selected constructs that represent positive outcomes, i.e., quality of life, ministry satisfaction, and personal accomplishment. These two models included data from two time points. Specifically, for the negative outcome measurement model, we examined the relation between the spiritual well-being items at time 1 and the outcomes at time 2, and also the spiritual well-being items at time 2 and the outcomes at time 2. We did the same for the positive outcome measurement model. These measurement models yielded correlations between the two spiritual well-being constructs and the negative and positive outcome constructs. These correlations are considered the validity indices.

All the indicators of the latent constructs were specified as categorical, as opposed to continuous, in the analyses to reduce underestimation of factor loadings and covariances. This specification invokes item response theory modeling of the observed response probability and the latent variable with probit regression in the Mplus program. In addition, the reliability coefficient ( $\omega_j$ ) for each set of indicators of each construct was calculated by using this formula:  $\omega = (\sum\lambda)^2 / [(\sum\lambda)^2 + \sum\psi^2]$ , where  $(\sum\lambda)^2$  stands for the square of the sum of factor loadings, and  $\sum\psi^2$  represents the sum of unique variances. This formula is particularly appropriate for categorical variables and can overcome the underestimation of the traditional internal consistency coefficient (McDonald, 1999, p. 88). In Table 1, the reliability coefficient ( $\omega$ ) of items of each construct is reported together with factor loadings.

## Results

The results include two parts: the measurement properties of the two factors, Presence and Power of God in Daily Life and Presence and Power of God in Ministry, and their validities. The measurement model of these two factors measured at two times fit the data very well ( $\chi^2=1712.34$ ,  $df=246$ ,  $p<.0001$ ,  $CFI = 0.97$ ,  $TLI = 0.97$ ,  $RMSEA = 0.06$ ). The factor loadings of these constructs at time 1 and time 2 are listed in Table 1. The two factors are correlated at time 1 at 0.83 and at time 2 at 0.78. Because of the high correlation between factor 1 and factor 2 at time 1, we tested whether a one-factor model would fit the data similarly well. The model comparison shows that the one-factor model fits the data significantly worse than the two-factor model ( $\chi^2_{dif} = 315.86$ ,  $df_{dif}=3$ ,  $p<.0001$ ). The one-factor model at time 2 also worsened the fit significantly ( $\chi^2_{dif} = 398.92$ ,  $df_{dif}=3$ ,  $p<.0001$ ). Thus, our first hypothesis that Presence and Power of God in Daily Life and Presence and Power of God in Ministry were two distinct subconstructs of spiritual well-being was supported.

It is important to test for measurement invariance as indicated particularly by the invariance of factor loadings that link the observed responses to the latent constructs in measurement models. To understand this, it is noteworthy that there are two levels of analysis of variables: the observed variables as items and the latent variables that are hypothetical variables (constructs or factors) that cannot be measured directly but rather inferred from observed variables using measurement models. Specific individual's responses to the items can change over time, but to test the change over time in latent variables, we need to identify items that may reflect the latent variables consistently but not be overly

susceptible to situational influences. In sum, we desired a measure that can change over time in the observed variables, but that reflects the latent variables invariantly, so that we could confidently examine changes in the latent constructs in future longitudinal studies.

To examine whether the measurement of these constructs would be invariant over time, a model with factor loadings constrained to be equal over time was compared to the baseline model. Only one item per construct had different loadings across time as indicated by asterisks in Table 1. Since the majority of the items had invariant factor loadings over time, the measurement was essentially invariant over time (Byrne, Shavelson, & Muthén, 1989). This is important because it indicates that the relations of the spirituality constructs with other latent variables over time will not be biased by the measurement (Horn & McArdle, 1992).

The measurement models to estimate the concurrent validities all fit the data very well. For the negative outcomes model, the fit indices were:  $\chi^2=7439.79$ ,  $df=2966$ ,  $p<.0001$ ,  $CFI = 0.95$ ,  $TLI = 0.94$ ,  $RMSEA = 0.03$ . For the positive outcomes model, the fit indices were:  $\chi^2=7293.59$ ,  $df=1311$ ,  $p<.0001$ ,  $CFI = 0.92$ ,  $TLI = 0.92$ ,  $RMSEA = 0.06$ .

The validity indices are shown in Table 2. Concurrent validity is demonstrated when the measure being tested correlates in the expected direction with validated measures, and when the data are collected at the same time point (Miller, McIntire, & Lovler, 2011). Evidence of concurrent validity is displayed in Table 2 by the correlations between the Presence and Power of God in Daily Life and the Presence and Power of God in Ministry measured at Time 2 and related to both negative and positive outcomes also measured at Time 2. Predictive validity is when a measure, such as spiritual well-being, is used at a first time point to predict other measures, such as depression, at a later time point (Miller et al., 2011). Evidence of predictive validity is shown in Table 2 by the correlations between the Presence and Power of God in Daily Life and the Presence and Power of God in Ministry measured at Time 1 and related to both negative and positive outcomes measured at Time 2. Consistent with hypothesis 2, each subscale correlated negatively with depression, anxiety, stress, emotional exhaustion, and depersonalization, and this was true both concurrently and predictively. Consistent with hypothesis 3, each subscale correlated positively with quality of life, ministry satisfaction, and personal accomplishment, and this was also true both concurrently and predictively. The correlations were larger concurrently than predictively.

Table 3 reports the frequency of the response options for each item. Data are reported for Time 2 only because they are so similar for both time points. The reporting of response option frequencies is consistent with our categorical analyses in which each item was examined individually using CFA and not combined into mean scores for each subscale. The data presented in Table 3 reveal the absence of ceiling effects. For 11 of the 12 items, only 11.3% to 38.0% of respondents endorsed the most positive response option. The excepted item is “feeling the presence and power of God when sharing in the sacraments,” to which 50.1% indicated that they “always” experience the presence and power of God. Overall, response options were distributed across four of the five options, providing the variation generally needed for statistical analyses. Additionally, the same respondent did not tend to endorse the most positive response option for every item on a subscale. Specifically, only 2.9% of participants endorsed

“always” for all six Presence and Power of God in Daily Life items, and only 6.8% endorsed “always” for all six Presence and Power of God in Ministry items.

## Discussion

We sought to create a measure of closeness to God for Christian clergy by developing and testing a set of items at two time points with a large sample of United Methodist Church clergy. The data strongly supported two factors, the Presence and Power of God in Daily Life and the Presence and Power of God in Ministry. The factors consist of only six items each and displayed high internal reliability, thereby offering a measure with minimal required survey administration time, while also offering less error in statistical analyses. The factors had high factor loadings and correlated highly with each other. Together, they offer two measures of spiritual well-being for clergy.

We named this measure “the Clergy Spiritual Well-being Scale” in hopes of briefly conveying its intent to measure spiritual well-being among clergy. However, one could instead call this measure “clergy recent experiences of the presence and power of God” or “clergy attentiveness to God’s presence.” Although it is impossible to separate whether feeling God’s presence is a matter of attentiveness or actual lived experience, we believe that both are indicative of feeling close to God.

To our knowledge, no other measure of spiritual well-being has been specifically designed for clergy, and the Clergy Spiritual Well-being Scale provides a good measurement option. The items do not confound religious behaviors with spirituality. In addition, the Presence and Power of God in Ministry items in particular reflect the activities of Christian clergy, helping to overcome the criticisms of context-free measures of spirituality and religiosity that have become fairly prevalent (see Hall, Koenig, & Meador, 2010; Hill & Pargament, 2003; Moberg, 2002). Moreover, the data indicated that the measure does not have the ceiling effects found with other spiritual well-being measures used in clergy populations (Bufford et al., 1991; Stewart-Sicking, 2012). We have confidence in the distribution of the Clergy Spiritual Well-being Scale scores based on our large sample size (1,513) and repeated administration. However, our strong assurances of confidentiality may have helped participants admit to the less socially desirable responses of only “never” or “sometimes” feeling the presence and power of God. If the measure is used with clergy populations without such assurances, it is possible that ceiling effects will be found.

We tested these items only with United Methodist Church clergy, and it is unknown how they will perform with clergy from other Christian denominations. However, there is reason to believe that this measure will work well with other Christian clergy because 1) the items are relatively general in their reference to “God’s power and presence,” and 2) although there are differences in specific religious beliefs and practices between clergy of different Christian denominations, there are also substantial similarities. Studies comparing the work of Christian clergy, for example, reveal that clergy roles, time use, and job demands are similar across United Methodist, Baptist, Pentecostal, Lutheran, Presbyterian, Episcopalian, and United Church of Christ denominations, as well as Catholic priests (Carroll, 2006; Dewe, 1987; Frame & Shehan, 1994; Gleason, 1977; Kay, 2000; Kuhne & Donaldson, 1995; Noller, 1984). These

same studies found such similarities across diverse geographical locations, including throughout the United States, England, Wales, Hong Kong, New Zealand, and Queensland, Australia.

To test the measure's concurrent and predictive validity, we conducted CFA models correlating the two factors with constructs that have known directional correlations as demonstrated in other studies. In each case, the Presence and Power of God in Daily Life and the Presence and Power of God in Ministry correlated in the expected direction, providing support for construct validity. In addition, expected correlations were found not only when the constructs were measured at the same time point, but also when the spiritual well-being items were correlated with negative and positive constructs measured two years later. These findings offer support for the predictive validity of the measures and additionally indicate their usefulness in longitudinal outcome research.

While the data reported here provide strong support for the Clergy Spiritual Well-being Scale, there are a number of limitations. People may disagree with our assumption that experiencing the presence and power of God more frequently indicates closeness to God, in which case our measure is simply one of self-reported experience of the presence and power of God. People may also disagree with this paper's fundamental assumption that the construct of spiritual well-being exists as a form of well-being that is unique from mental well-being or general well-being. One line of thought is that spiritual well-being cannot be empirically separated from general well-being, in other words, that the items typically used in spiritual well-being measures actually capture positive mood (Koenig et al., 2001). This line of thinking also proposes that, rather than capturing general well-being, some spiritual well-being items measure religiosity and religious practices. While we believe our measure is one of closeness to God that is indicative of spiritual well-being, it could be considered another way to measure the religious practice of attending to the presence of God. Such a religious practice measure may be useful with clergy populations because measuring religious practices like church attendance and prayer will provide too little variation in clergy samples.

Our measure is limited to closeness to God and does not purport to measure all of the possible aspects of spiritual well-being, or even all of the possible aspects of closeness to God. We can imagine that readers may have other important items that we have missed, or situations that could be considered in the measure. Other researchers are welcome to combine our items with items of their own and test them to see if the measure is strengthened.

An additional limitation of our study is that we used the same respondents for the two survey administrations, and also the single method of self-report, both of which may have resulted in some shared method variance. Readers may worry that shared method variance may inflate or deflate the relations of these constructs. For future studies, some other methods of measurement may be incorporated, such as reports from clergy spouses or children.

In the measurement of holistic health, it is important to assess not only physical and mental health, but also some form of spiritual well-being. In studies of clergy, measuring spiritual well-being becomes that much more important because of the high importance that clergy themselves give to it (Proeschold-Bell et al., 2009). Because spiritual well-being is a broad concept, it may be that several measures are needed to adequately assess its full range of dimensions. Appropriate and statistically

sound measures of spiritual well-being for clergy are needed. We hope that the measure reported here brings us one step closer by offering a measure of closeness to God designed specifically for clergy.

## **Acknowledgments**

We are deeply indebted to the Rural Program Area of The Duke Endowment for funding the Duke Clergy Health Initiative. We thank the United Methodist Church clergy of North Carolina for taking the time to fill out our panel survey twice. We also thank John James for reviewing early versions of the survey items. We thank Crystal MacAllum, Gail Thomas, and their Westat team for diligent data collection. Finally, we thank David Toole, Principal Investigator of the Duke Clergy Health Initiative, and Mark Chaves for comments on the manuscript.

Table 1.  
*Factor structures of the 12 Clergy Spiritual Well-Being Scale items*

Factor	Survey Time Point	
	Time 1	Time 2
<b>Presence and Power of God in Daily Life</b>		
During the past 6 months, how often have you...		
Experienced the presence and power of God in the ordinary?	0.78	0.86
Observed the presence and power of God in your closest relationships?	0.76	0.85
Consciously practiced discerning the presence and power of God? <sup>a</sup>	0.79	0.80
Felt God's grace and God's love for you as you are, apart from any accomplishments or good works?	0.80	0.84
Felt that events were unfolding according to God's intent?	0.72	0.77
Felt that you have a vital relationship with God?	0.81	0.86
	$\omega=.90$	$\omega=.93$
<b>Presence and Power of God in Ministry</b>		
During the past 6 months, how often have you felt the presence and power of God...		
In planning and leading worship?	0.81	0.86
When conducting pastoral visitations?	0.82	0.88
When participating in church-related events (e.g., Bible study, fellowship time, etc.)? <sup>a</sup>	0.84	0.85
When sharing in crisis intervention and counseling?	0.73	0.84
When sharing in the sacraments?	0.80	0.84
In the midst of serious conflict?	0.78	0.83
	$\omega=.90$	$\omega=.94$

*Note.* Response options were: never, sometimes, often, frequently, and always.

<sup>a</sup>Items that were variant over time.

Table 2.  
*Predictive and concurrent validities of the two spiritual well-being factors*

Factor	Negative Outcomes at Time 2					Positive Outcomes at Time 2		
	Depression	Anxiety	Stress	Emotional Exhaustion	Depersonalization	Quality of Life	Ministry Satisfaction	Personal Accomplishment
Time 1								
Presence and Power of God in Daily Life	-0.17	-0.16	-0.23	-0.30	-0.26	0.31	0.37	0.40
Presence and Power of God in Ministry	-0.11	-0.12	-0.18	-0.27	-0.24	0.26	0.33	0.38
Time 2								
Presence and Power of God in Daily Life	-0.32	-0.25	-0.36	-0.36	-0.37	0.43	0.48	0.50
Presence and Power of God in Ministry	-0.24	-0.21	-0.30	-0.38	-0.40	0.39	0.49	0.50

Table 3.  
*Frequencies of the categories of the 12 Clergy Spiritual Well-Being Scale items at time two*

Factor	Frequency of Responses (%)				
	Never	Sometimes	Often	Frequently	Always
<b>Presence of God in Daily Life</b>					
During the past 6 months, how often have you...					
Experienced the presence and power of God in the ordinary?	0.5	19.0	26.6	42.6	11.3
Observed the presence and power of God in your closest relationships?	0.9	19.4	25.1	42.7	12.0
Consciously practiced discerning the presence and power of God?	2.3	23.1	26.7	36.2	11.6
Felt God's grace and God's love for you as you are, apart from any accomplishments or good works?	0.9	15.5	22.5	35.0	26.1
Felt that events were unfolding according to God's intent?	1.7	20.4	24.2	36.8	16.9
Felt that you have a vital relationship with God?	0.8	11.6	19.0	30.7	38.0
<b>Presence of God in Ministry</b>					
During the past 6 months, how often have you felt the presence and power of God...					
In planning and leading worship?	1.5	11.6	22.9	42.2	21.9
When conducting pastoral visitations?	2.0	13.5	24.5	43.5	16.5
When participating in church-related events (e.g., Bible study, fellowship time, etc.)?	1.2	14.5	25.5	42.1	16.6
When sharing in crisis intervention and counseling?	2.0	12.1	21.8	42.2	21.9
When sharing in the sacraments?	0.9	6.8	14.7	27.5	50.1
In the midst of serious conflict?	4.2	23.9	24.1	30.1	17.7

*Note.* *N* ranges from 1,492-1,504. Variations in sample sizes reflect missing data from clergy respondents who hold positions in which they do not give sacraments or lead worship.



## References

- Adams, K. B., Matto, H. C., & Harrington, D. (2001). The Traumatic Stress Institute Belief Scale as a measure of vicarious trauma in a national sample of clinical social workers. *Families in Society-the Journal of Contemporary Human Services*, 82(4), 363-371.
- Bekelman, D., Dy, S., Becker, D., Wittstein, I., Hendricks, D., Yamashita, T., & Gottlieb, S. (2007). Spiritual well-being and depression in patients with heart failure. *Journal of General Internal Medicine*, 22(4), 470-477. doi: 10.1007/s11606-006-0044-9
- Benson, P., Donahue, M., & Erickson, J. (Eds.). (1993). *The Faith Maturity Scale: Conceptualization, measurement, and empirical validation* (Vol. 5). Greenwich, CT: JAI Press.
- Berry, D. M., Bass, C. P., Forawi, W., Neuman, M., & Abdallah, N. (2011). Measuring religiosity/spirituality in diverse religious groups: A consideration of methods. *Journal of Religion and Health*, 50, 841-851.
- Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the Hospital Anxiety and Depression Scale: An updated literature review. *Journal of Psychosomatic Research*, 52(2), 69-77. doi: 10.1016/s0022-3999(01)00296-3
- Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology*, 28(5).
- Brissette, I., Cohen, S., & Seeman, T. (2000). Measuring social integration and social networks. In S. Cohen, G. Underwood & S. Gottlieb (Eds.), *Social support measurement and interventions: A guide for health and social scientists* (pp. 29-52). New York, NY: Oxford University Press.
- Bufford, R. K., Paloutzian, R. F., & Ellison, C. W. (1991). Norms for the Spiritual Well-Being Scale. *Journal of Psychology and Theology*, 19(1), 56-70.
- Byrne, B. M., Shavelson, R. J., & Muthén, B. (1989). Testing for the equivalence of factor covariance and mean structures: The issue of partial measurement invariance. *Psychological Bulletin*, 105(3), 456-466.
- Carroll, J. W. (2006). *God's potters: Pastoral leadership and the shaping of congregations*. Grand Rapids, MI: William B. Eerdmans Pub.
- Cohen, S. (2004). Social relationships and health. *American Psychologist*, 59(8), 676-684.
- Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior*, 24(4), 385-396.
- de Jager Meezenbroek, E., Garssen, B., van den Berg, M., van Dierendonck, D., Visser, A., & Schaufeli, W. B. (2012). Measuring spirituality as a universal human experience: A review of spirituality questionnaires. *Journal of Religion and Health*, 51, 336-354.

- Dewe, P. J. (1987). New Zealand Ministers of Religion: Identifying sources of stress and coping strategies. *Work and Stress, 1*(4), 351-363. doi: 10.1080/02678378708258526
- Doolittle, B. R. (2007). Burnout and coping among parish-based clergy. *Mental Health Religion and Culture, 10*, 31-38.
- Ellison, C. G. (1983). Spiritual well-being: Conceptualization and measurement. *Journal of Psychology and Theology, 11*(4), 330-340.
- Ellison, C. G., & Fan, D. (2008). Daily spiritual experiences and psychological well-being among US adults. *Social Indicators Research, 88*(2), 247-271.
- Ellison, C. G., & Mattila, W. (1983). The needs of evangelical Christian leaders in the United States. *Journal of Psychology and Theology, 11*(1), 28-35.
- Ellison, C. G., Roalson, L. A., Guillory, J. M., Flannelly, K. J., & Marcum, J. P. (2009). Religious resources, spiritual struggles, and mental health in a nationwide sample of PCUSA clergy. *Pastoral Psychology, 59*(3), 287-304. doi: 10.1007/s11089-009-0239-1
- Evers, W., & Tomic, W. (2003). Burnout among Dutch reformed pastors. *Journal of Psychology and Theology, 31*(4), 329-338.
- Frame, M. W. , & Shehan, C. L. (1994). Work and well-being in the two-person career: Relocation stress and coping among clergy husbands and wives. *Family Relations, 43*(2), 196-205. doi: 10.2307/585323
- Frisch, M. (1992). *Quality of Life Inventory: Manual and treatment guide*. San Antonio, TX: Pearson.
- Frisch, M. B., Clark, M. P., Rouse, S. V., Rudd, M. D., Paweleck, J. K., Greenstone, A., & Kopplin, D. A. (2005). Predictive and treatment validity of life satisfaction and the Quality of Life Inventory. *Assessment, 12*(1), 66-78. doi: 10.1177/1073191104268006
- Frisch, M. B., Cornell, J., Villanueva, M., & Retzlaff, P. J. (1992). Clinical validation of the Quality of Life Inventory: A measure of life satisfaction for use in treatment planning and outcome assessment. *Psychological Assessment, 4*(1), 92-101.
- Gioiella, M. E., Berkman, B., & Robinson, M. (1998). Spirituality and quality of life in gynecologic oncology patients. *Cancer Practice, 6*(6), 333-338.
- Gleason, J. J. (1977). Perception of stress among clergy and their spouses. *The Journal of Pastoral Care, 31*, 448-452.

- Hall, D. E., Koenig, H. G., & Meador, K. G. (2010). Episcopal measure of faith tradition: A context-specific approach to measuring religiousness. *Journal of Religion and Health, 49*, 164-178.
- Hall, D. E., Meador, K. G., & Koenig, H. G. (2008). Measuring religiousness in health research: Review and critique. *Journal of Religion and Health, 47*(2), 134-163.
- Herlitz, J., Wiklund, I., Caidahl, K., Hartford, M., Haglid, M., Karlsson, W., . . . Karlsson, T. (1998). The feeling of loneliness prior to coronary artery bypass grafting might be a predictor of short-and long-term postoperative mortality. *European Journal of Vascular and Endovascular Surgery, 16*, 120-125.
- Hill, P. C., & Maltby, L. (2009). Measuring religiousness and spirituality: Issues, existing measures, and the implications for education and wellbeing. *International Handbook of Education for Spirituality, Care, and Wellbeing* (pp. 33-50). Dordrecht, Netherlands: Springer.
- Hill, P. C., & Pargament, K. I. (2003). Advances in the conceptualization and measurement of religion and spirituality: Implications for physical and mental health research. *American Psychologist, 58*(1), 64-74.
- Horn, J. L., & McArdle, J. J. (1992). A practical and theoretical guide to measurement invariance in aging research. *Experimental Aging Research, 18*, 117-144.
- Kass, J. D., Friedman, R., Leserman, J., Zuttermeister, P. C., & Benson, H. (1991). Health outcomes and a new index of spiritual experience. *Journal of the Scientific Study of Religion, 30*(2), 203-211.
- Kay, W. K. (2000). Role conflict and British Pentecostal ministers. *Journal of Psychology and Theology, 28*, 119 - 124.
- King, M., & Hunt, R. A. (1972). Measuring the religious variable: Replication. *Journal for the Scientific Study of Religion, 11*(3), 240-251.
- Koenig, H. G., McCullough, M. E., & Larson, D. B. (2001). *Handbook of religion and health*. New York, NY: Oxford University Press.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of a brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606-613.
- Kuhne, G. W., & Donaldson, J. F. (1995). Balancing ministry and management: An exploratory study of pastoral work activities. *Review of Religious Research, 37*(2), 147-163.
- Langballe, E. M., Falkum, E., Innstrand, S. T., & Aasland, O. G. (2006). The factorial validity of the Maslach Burnout Inventory–General Survey in representative samples of eight different occupational groups. *Journal of Career Assessment, 14*, 370-384.

- Lee, C. (1999). Specifying intrusive demands and their outcomes in congregational ministry: A report on the Ministry Demands Inventory. *Journal for the Scientific Study of Religion*, 38(4), 477-489.
- Lewis, L. M. (2008). Spiritual assessment in African-Americans: A review of measures of spirituality used in health research. *Journal of Religion and Health*, 47(4), 458-475.
- Maslach, C., & Jackson, S. (1986). *The Maslach Burnout Inventory* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- McCoubrie, R. C., & Davies, A. N. (2006). Is there a correlation between spirituality and anxiety and depression in patients with advanced cancer? *Support Care Cancer*, 14(4), 379-385.
- McDonald, R. P. (1999). *Test theory: A unified treatment*. Mahwah, NJ: Erlbaum.
- Miller, L. A., McIntire, S. A., & Lovler, R. L. (2011). *Foundations of psychological testing: A practical approach* (3rd ed.). Thousand Oaks, CA: Sage Publishing Co.
- Miner, M. H. (2007). Burnout in the first year of ministry: Personality and belief style as important predictors. *Mental Health, Religion & Culture*, 10(1), 17-29.
- Mitchell, G., & Hastings, R. P. (2001). Coping, burnout, and emotion in staff working in community services for people with challenging behaviours. *American Journal on Mental Retardation*, 106(5), 448-459.
- Moberg, D. O. (1979). The development of social indicators for quality of life research. *Sociological Analysis*, 40(1), 11-26.
- Moberg, D. O. (1984). Subjective measures of spiritual well-being. *Review of Religious Research*, 25(4), 351-364.
- Moberg, D. O. (2002). Assessing and measuring spirituality: Confronting dilemmas of universal and particular evaluative criteria. *Journal of Adult Development*, 9(1), 47-60.
- Noller, P. (1984). Clergy marriages: A study of a uniting church sample. *Australian Journal of Sex, Marriage and Family*, 5, 187-197.
- Paloutzian, R. F., & Ellison, C. W. (1982). Loneliness, spiritual well being and quality of life. In L. Peplau & Perlman (Eds.), *Loneliness: A sourcebook for current theory, research, and therapy* (pp. 224-237). New York, NY: Wiley.
- Pargament, K. (1999). Religious/Spiritual Coping. In Fetzer Institute (Ed.), *Multidimensional Measurement of Religiousness/Spirituality for use in Health Research: A report of the Fetzer Institute-National Institute on Aging working group* (pp. 43-56).

- Proeschold-Bell, R. J., LeGrand, S., James, J., Wallace, A., Adams, C., & Toole, D. (2009). A theoretical model of the holistic health of United Methodist clergy. *Journal of Religion and Health*. doi: 10.1007/s10943-009-9250-1
- Rediger, G. L. (1997). *Clergy killers: Guidance for pastors and congregations under attack*. Louisville, KY: Westminster J. Knox Press.
- Rodgers, T. E., & Piedmont, R. L. (1998). Assessing the incremental validity of the Religious Problem-Solving Scale in the prediction of clergy burnout. *Journal for the Scientific Study of Religion*, 37(3), 517-527.
- Seeman, T. (2000). Health promoting effects of friends and family on health outcomes in older adults. *American Journal of Health Promotion*, 14, 362-370.
- Slater, W., Hall, T., & Edwards, K. (2001). Measuring religion and spirituality: Where are we and where are we going? *Journal of Psychology and Theology*, 29, 4-21.
- Spitzer, R. L., Kroenke, K., & Williams, J. B. (1999). Validation and utility of a self-report version of PRIME-MD: The PHQ primary care study. Primary Care Evaluation of Mental Disorders. Patient Health Questionnaire. *JAMA*, 282(18), 1737-1744. doi: joc90770 [pii]
- Stanon-Rich, H. M., & Iso-Ahola, S. E. (1998). Burnout and leisure. *Journal of Applied Social Psychology*, 28, 1931-1950.
- Stewart-Sicking, Joseph A. (2012). Subjective well-being among Episcopal priests: Predictors and comparisons to non-clinical norms. *Journal of Prevention & Intervention in the Community*, 40(3).
- Stranahan, S. (2008). A spiritual screening tool for older adults. *Journal of Religion and Health*, 47(4), 491-503.
- Trihub, B. L., McMinn, M. R., Buhrow, W. C., & Johnson, T. F. (2010). Denominational support for clergy mental health. *Journal of Psychology and Theology*, 38(2), 101-110.
- Tuck, I., Alleyne, R., & Thinganjana, W. (2006). Spirituality and stress management in healthy adults. *Journal of Holistic Nursing*, 24(4), 245-253. doi: 10.1177/0898010106289842
- Underwood, L., & Teresi, J. (2002). The Daily Spiritual Experience Scale: Development, theoretical description, reliability, exploratory factor analysis, and preliminary construct validity using health-related data. *Annals of Behavioral Medicine*, 24(1), 22-33.
- Virginia, S. (1998). Burnout and depression among Roman Catholic secular, religious, and monastic clergy. *Pastoral Psychology*, 47, 49-67.
- Warner, J., & Carter, J. D. (1984). Loneliness, marital adjustment, and burnout in pastoral and lay persons. *Journal of Psychology and Theology*, 12(2), 125-131.

Worthington, E. L., Wade, N. G., Hight, T. L., Ripley, J. S., McCullough, M. E., Berry, J. W., . . . O'Connor, L. (2003). The Religious Commitment Inventory-10: Development, refinement, and validation of a brief scale for research and counseling. *Journal of Counseling Psychology, 50*(1), 84-96. doi: Doi 10.1037//0022-0167.50.1.84

Zigmond, A. S., & Snaith, R. P. . (1983). The Hospital Anxiety and Depression Scale. *Acta Psychiatrica Scandinavica, 67*(6), 361-370.

Zinnbauer, B. J., Pargament, K. I., & Scott, A. B. (1999). The emerging meanings of religiousness and spirituality: Problems and prospects. *Journal of Personality, 67*(6), 889-919. doi: 10.1111/1467-6494.00077