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Reliability and Validity of the Perspectives of Support From God Scale

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Abstract

Background—Existing spiritual support scales for use with cancer survivors focus on the support believed to come from a religious community, clergy, or health care providers.

Objective—The objective of this study was to evaluate the reliability and validity of a new measure of spiritual support believed to come from God in older Christian African American cancer survivors.

Methods—The Perceived Support From God Scale was administered to 317 African American cancer survivors aged 55–89 years. Psychometric evaluation involved identifying underlying factors, conducting item analysis and estimating reliability, and obtaining evidence on the relationship to other variables or the extent to which the Perceived Support From God Scale correlates with religious involvement and depression.

Results—The Perceived Support From God Scale consists of 15 items in two subscales (Support From God and God's Purpose for Me). The two subscales explained 59% of the variance. Cronbach's α coefficients were .94 and .86 for the Support From God and God's Purpose for Me subscales, respectively. Test–retest correlations were strong, supporting the temporal stability of the instrument. Pearson's correlations to an existing religious involvement and beliefs scale were moderate to strong. Subscale scores on Support From God were negatively correlated to depression.

Discussion—Initial support for reliability and validity was demonstrated for the Perceived Support From God Scale. The scale captures a facet of spirituality not emphasized in other measures. Further research is needed to evaluate the scale with persons of other racial/ethnic groups and to explore the relationship of spirituality to other outcome measures.

Keywords

African Americans; cancer; spiritual support

Increasingly, researchers are including the concept of spirituality in explanatory models of health outcomes. Conceptualizations of spirituality include beliefs in and connectedness to a higher power (Boscaglia, Clarke, Jobling, & Quinn, 2005; Schulz et al., 2008) and faith and

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meaning derived from experience (Krupski et al., 2006; Meraviglia, 2004). Spirituality has been associated with quality of life (Tarakeshwar et al., 2006) and has been shown to mediate the relationship between optimism and depression (Boscaglia et al., 2005; Mofidi et al., 2007). A variety of concepts, ranging from faith and meaning to religious beliefs and well-being, are reflected in measures of spirituality (Koenig, 2008). However, these measures are broad, abstract indices of religiousness, and specifics of a spirituality that may be applicable to highly religious persons are ignored (Hall, Koenig, & Meador, 2008). Moreover, existing measures have not fully captured the perspectives of spirituality from persons who refer to a Higher Power as a Christian God with whom they have a personal relationship and from whom they derive support, particularly during a life-threatening illness such as cancer.

Conceptual Framework

Within the health sciences discipline, researchers are attempting to make distinctions between religion and spirituality. According to a statement put forth by the National Cancer Institute (NCI, 2009), these distinctions are necessary for a conceptual understanding of the role of these constructs in coping with cancer. Religion is defined typically as a set of beliefs and practices associated with a religion or religious denomination (Hill & Pargament, 2003; NCI, 2009). Religious involvement, a construct used interchangeably with religion, is adherence to a set a beliefs and values and participation in activities of organized religious institutions (NCI, 2009). Definitions of spirituality are complex and ambiguous. However, one widely used conceptualization of spirituality stems from the theoretical work of Reed (1992), who postulated that spirituality is a sense of making meaning through dimensions of connectedness (a) transpersonally to God or a higher power, (b) interpersonally to others or environment, and (c) intrapersonally within oneself. Empirical work among Christian African Americans conveys that spirituality is a concept whereby transcendence or connectedness to God or a higher power is a critical component (Lawson & Thomas, 2007). Thus, the centrality of spirituality among Christian African Americans as a personal relationship with God (Hamilton, Powe, Pollard, Lee, & Felton, 2007) drives the values, the derived meanings from daily experiences, and the expressions of connectedness to others and to self (Reed, 1992).

Religion and Spirituality Among African Americans

Although spirituality is a global construct, experience shapes the religious expressions and consciousness of various racial and ethnic groups (Cone, 2002; Pinn, 1999). This is particularly evident in how Christian African Americans have conceptualized and practiced both their religion and spirituality. In accordance to recent scholarship in the fields of theology, cultural studies, ethnic studies, and religion, scholars have noted that religion must be understood not just at the conceptual level or related to epistemology (Carter, 2008; Dubuisson, 2003). Rather, religion must be understood in a more pragmatic sense and interpreted within the context of a lived, material existence (Carter, 2008; Dubuisson, 2003). Moreover, religion is tied to a form of life and must be interpreted inside this form of life apart from its abstractness. That is, religion displays itself in the complex matrices of lived existence and, in some sense, is identified with lived material existence. Therefore, when referencing immaterial matters, such as spirituality, religion is a way of negotiating this lived, material existence (Carter, 2008).

The manner in which religion has been used to negotiate the lived, material existence of Christian African Americans can be traced to antebellum times (Cone, 2002: Raboteau, 2004). In response to the cruelties of slavery, a belief in a higher power (God, the immaterial) who could provide for and liberate them from the evils of the world was emphasized in religious doctrine among Christian African Americans (Cone, 2002). In a strange and hostile land, separated from family and friends, Christian African American slaves were encouraged to embrace the religious thought that they were children of God and that God would ultimately

reward them for their suffering (Pinn, 1999). Slaves were encouraged to pray to God for strength to endure their daily struggles, which were often life-threatening (Raboteau, 2004). This religious perspective gave slaves hope and inspiration to survive (Raboteau, 2004).

Religious thought among Christian African Americans continues to be shaped by daily experiences, including those of racial discrimination and oppression (Cone, 2002; Pinn, 1999). According to Pinn (1999), a scholar of Black theology, God's objective for His children may not always be liberation but rather survival. As such, religious teachings within the Christian African American church emphasize that life's hardships are to be expected. However, God will provide the support necessary to sustain His children (Pinn, 1999). Thus, when faced with adversity, many Christian African Americans turn to God, who is always present and able to help in situations where mortals cannot (Mbiti, 1999). Thus, both historical and modern influences of racial oppression have shaped and continue to shape religious thought among Christian African Americans of a spirituality whereby God is perceived in realistic, tangible terms, as an all-powerful father figure in control of humans at all times and in all situations (Pinn, 1999).

Connectedness to God Through a Personal Relationship

Although spirituality is conceptualized among various racial and ethnic groups as a personal relationship with God, this conceptualization is particularly common among African American populations (Douglas, Jimenez, Lin, & Frisman, 2008; True et al., 2005) and especially among Christian African American cancer survivors (Hamilton et al., 2007). This personal relationship, similar to that of a watchful parent, is characterized by a pattern of reciprocal communication with a faith and trust that the actions of this all-powerful higher power will result in ultimate good (Mofidi et al., 2007).

A connectedness to God is evident in research with Christian African American cancer survivors who report having a personal relationship with God to whom they pray, trusting Him to intercede with their worries, and consulting Him to help with treatment-related decisions (Hamilton et al., 2007). Christian African American cancer survivors have reported posttreatment that God provides support through healing the cancer, taking away worries, and sending others to help when needed (Hamilton et al., 2007). A close personal relationship with God and reliance on God for support, guidance, and strength during difficult times (Konkle-Parker, Erlen, & Dubbert, 2008; Taylor, Chatters, & Jackson, 2007) are essential to the spirituality of African Americans, who are more likely than other ethnic groups to turn to God and find His support comforting (Levine, Yoo, Aviv, Ewing, & Au, 2007) and stress reducing (Konkle-Parker et al., 2008).

Connectedness to Others and Self

Dimensions of spirituality related to connectedness to others and self are influenced strongly by a personal relationship with God (Reed, 1992). Given the emphasis that Christian African Americans place on God as central to and in control of daily experiences (Raboteau, 2004), the image of who God is and what He does likely influences a consciousness among Christian African Americans as to how they should relate to others and how they view their inner selves in relationship to God and others. Thus, believers who embrace teachings of a life after death with God as a reward for being an obedient and faithful servant likely value altruism and giving in their relationships with others (Daugherty et al., 2005). Similarly, when a religious perspective of God as a father—gracious, loving, and caring to His children—is embraced, believers are likely to find positive meaning even in bad life circumstances (Lawson & Thomas, 2007) and to believe that life's hardships occur according to God's plans (Pinn, 1999).

Summary of Religion and Spirituality Measures

Measures used to assess the components of spirituality in health care are increasing. In a comprehensive review of measures of religiousness most commonly used in health and religious literature, Hall, Meador, and Koenig (2008) found several approaches to measuring spirituality. Most common among these are religious attendance and participation (organizational religiousness), private religiousness (nonorganizational religiousness), religious motivation, religious well-being, and religious coping.

In spirituality scales focused on spiritual well-being and religious coping, there are references to God or a personal relationship with God (Hall, Meador, & Koenig, 2008). However, items in these scales are worded generally and not germane to the cancer experience. In cancer research, the most commonly used spirituality questionnaires are focused on spiritual well-being (Moreira-Almeida & Koenig, 2008; Whitford, Olver, & Peterson, 2008), religious involvement and spiritual beliefs (Mystakidou et al., 2008), and religious coping (Balboni et al., 2007; Hampton, Hollis, Lloyd, Taylor, & McMillan, 2007). The limited number of questionnaires available to address the support believed to come from faith and spirituality tends to emphasize the support that comes from relationships with religious communities and health care providers (Balboni et al., 2007; Tarakeshwar et al., 2006), while ignoring the specific types of support believed to come directly from a personal relationship with God.

In our review, we found no published instruments designed to assess the support derived through a dynamic, communicative exchange between individuals and God and none to capture the support that comes from God during struggles with cancer. Thus, in this research study, the psychometric properties of a new measure, the Perceived Support From God Scale (PGS), were evaluated, including variability, reliability, and construct validity in older Christian African American cancer survivors. Also examined, as an indicator of construct validity, were two hypotheses: (a) Scores on the PGS will correlate positively to dimensions of religious involvement and (b) scores on the PGS will correlate negatively to depression.

Methods

Psychometric evaluation of the PGS involved identifying the underlying factors, computing subscale scores and examining score distributions, conducting item analysis and estimating reliability, and obtaining evidence on the relationship of the PGS scores with other variables. The focus of this report is on the dimensions of a personal relationship with God and the support derived from this relationship among Christian African American cancer survivors and on evidence of theoretical relationship to other variables, or the extent to which the PGS subscale scores correlate with dimensions of religious involvement and depression. Selection of measures to be used in the assessment of construct validity was based on research with Christian African Americans, which showed low and negative correlations of spirituality to depression (Mystakidou et al., 2008). Also examined were relationships of PGS subscales with the subscales of an established religious involvement measure to see if any subscales on the two measures correlated highly, thus indicating that similar factors were measured.

Sample

Participants were recruited from outpatient oncology clinics located in a large metropolitan area in the southeastern United States. Approval for the study was obtained from the institutional review boards of Emory University and the University of North Carolina at Chapel Hill. Eligibility requirements were a diagnosis of cancer, self-report as African American, without severe cognitive impairment, and 50 to 89 years of age. Written informed consent for interviews was obtained after participants were screened for cognitive impairment with the Short-Form Mini Mental State Exam (Paveza, Cohen, Blazer, & Hapogian, 1990).

Psychometric evaluation of the PGS was conducted with a convenience sample of 317 African American cancer survivors having a mean age of 64 years (*SD* = 8.3 years). They were primarily female and typically retired or unemployed and had an annual household income of less than $20,000. Most of the participants were women with breast cancer, and approximately 40% had been diagnosed within 1 year of their interview. Nearly all of the participants had lived most of their lives in southern states and were affiliated with Baptist churches. They were primarily unskilled laborers (37%), machine operators (21%), and skilled manual laborers (15%). Most of the survivors were not working, many for reasons related to their health. Detailed demographic information is provided in Table 1.

Data Collection Procedures

Questionnaires were administered in a face-to-face interview format, either in a private consultation room while the patient was waiting for a health-related appointment or, if participants preferred, in their home. Participants responded positively to the interviews and were able to complete the questionnaires in 1 hour or less. No participants had severe cognitive impairment.

Instruments

The PGS was developed to capture spirituality among Christian African Americans, conceptualized as a personal relationship with God. The scale was used to capture the support derived from this relationship and associated religious beliefs invoked when coping with life-threatening illness. Items were derived from qualitative studies in which 28 Christian African American cancer survivors described spirituality as a personal relationship with God and the specific types of support and strategies used to help them survive the illness (Hamilton et al., 2007). A total of 15 items were generated and a 5-point response format was chosen (0 = *not at all/does not apply*, 1 = *a little*, 2 = *some*, 3 = *a lot*, and 4 = *all the time*). Readability of the instrument was estimated at seventh grade using the SMOG formula (Lynn, 1989).

To obtain feedback on the clarity of the directions, the items, and the layout of the questionnaire, the PGS was administered to a small sample (*n* = 34) of community-dwelling Christian African American cancer survivors. Approval for the pilot study was obtained from the Oregon Health & Science University Institutional Review Board, and consent was obtained prior to interviews. The average participant was 65 years old, female, diagnosed with breast cancer, college educated, and privately insured, with an annual income of at least $20,000. Participants were currently living in the Pacific Northwest but had been born in the southern United States.

All interviews were conducted by the first author in participants' homes. Cognitive interviewing techniques of concurrent thinking out loud were used to determine how questions were understood, whether questions were relevant, and whether aspects of the participants' spirituality were missing from the instrument (Elasy et al., 2000; Knafl et al., 2007). Open-ended questions were placed at the end of the questionnaire to elicit feedback as to whether the questionnaire was boring, too time-consuming, or emotionally upsetting. All participants reported understanding the directions, and all were able to complete the PGS easily. They provided feedback on the clarity of directions, appropriate wording of items, and layout of the questionnaire.

Content validity of the 15 items was evaluated using the quantification stage and the Content Validity Index (CVI) described by Lynn (1986). A panel of four experts was chosen based on their expertise in research on coping, oncology, or African American elders. One panel member was also an African American cancer survivor. Panel members were provided with general information about the scale and instructions for conducting the content validity evaluation. The rating form contained theoretical definitions, critical attributes, and the 15 items to rate on a

5-point scale for relevance and clarity. Panel members were asked to provide feedback on items needing revision or deletion and to identify any missing content. On the basis of the experts' evaluation, the CVI was determined to be .97. All 15 items were retained. It is possible that the CVI may have been inflated by the use of four instead of five experts and a 5-point scale that provided a midpoint (Lynn, 1986). However, even with such inflation, the CVI was viewed as strong enough to support content validity.

Religious Involvement—The 12-item Religious Involvement Scale was developed to measure three dimensions of religious involvement: organized religious participation, nonorganizational religious participation, and subjective religiosity. Organizational religiosity consists of five behavioral items used to reflect participation in formal institutional religious activities, such as official membership in a church, church attendance, participation in church activities and clubs, and holding church offices. Nonorganizational religiosity consists of four behaviors that occur outside of religious institutions, such as prayer, reading religious materials, or watching religious media. The third dimension, subjective religiosity, consists of three indicators of religiousness: an evaluation of selfreligiousness, the importance of religion in the home when growing up, and the importance of religious practices for children. Scoring for the three subscales varies and is reported elsewhere (Chatters, Levin, & Taylor, 1992).

Validity for the Religious Involvement Scale has been evaluated with a nationally representative sample of older Christian African American adults (n = 581, age 55 years and older) through evaluations of the internal structure and relationships with exogenous variables (Chatters et al., 1992). Model testing with confirmatory factor analysis confirmed that a three-dimensional scale and exogenous variables (age, gender, education, marital status, income, region, and urbanicity) predicted religiosity (Chatters et al.). In this study, the internal consistency (Cronbach's α) reliabilities for the organizational, nonorganizational, and subjective religiosity subscales were .80, .66, and .52, respectively.

Geriatric Depression Scale-Short Form—The Geriatric Depression Scale-Short Form (GDS-SF15) is a 15-item scale designed to screen for depression with elderly, medically ill populations (Yesavage et al., 1982), including African Americans (Kurlowicz, Outlaw, Ratcliffe, & Evans, 2005). The scale consists of 15 yes–no questions, and a score greater than 5 indicates the possibility of depression. In a sample of 147 geriatric outpatients, internal consistency reliability was .86 (Brown & Schinka, 2005). Construct validity was supported through correlations with demographic and personality variables (Brown & Schinka, 2005). In this study, internal consistency (Cronbach's α) reliability was .79.

Results

The psychometric evaluation of the PGS is presented in terms of its internal structure, variability, reliability (internal consistency), and construct validity (theoretical relationship to other measures).

Factor Analysis

Of the 317 participants who received the 15-item spirituality scale, complete data were available for 308 participants. The sample size recommended for exploratory factor analysis is a minimum of 5 (Hatcher, 1994), or 10–15 subjects per item (Pett, Lackey, & Sullivan, 2003). The sample size of 308 was well within these guidelines, at about 20 subjects per item.

Exploratory factor analysis of the PGS was conducted using SPSS 16.0.2. The appropriateness of factor analysis was examined first for the 15 items. The Kaiser–Meyer–Olkin measure was 0.89, supporting the adequacy of the sample for these items (Tabachnick & Fidell, 2007). Bartlett's test of sphericity, χ^2 (105, n = 317) = 3,392, $p < .01$, allowed the conclusion that all

the items were not uncorrelated, and therefore, the correlation matrix might be factorable (Pett et al., 2003). The first two Eigenvalues of the unrotated model were greater than 1 (7.35, 2.37), suggesting a potential two-factor solution according to the Kaiser criterion. In addition, examination of the *elbow* of the scree plot indicated that the optimal number of factors was two. To avoid missing potentially important information in a third factor, both two- and three-factor models were selected, and results were compared. Each model was fit using principal axis factoring with oblique rotation. The pattern matrix for the two-factor model is presented in Table 2.

The two-factor model had high primary loadings for all 15 items, suggesting that 9 items measure one factor and 6 items measure the other (Table 2). The very low cross-loadings suggest the existence of two well-separated factors, and retention of all 15 items to measure these factors is supported. In the three-factor model, the 9 items loading heavily on the first factor are the same ones that loaded on the first factor in the twofactor model. Four of the remaining items loaded heavily on the second factor, and two loaded heavily on the third factor. The primary loadings in the three-factor model were high, but the cross-loadings were not as low as in the two-factor model. In addition, the third factor was supported primarily by only two items, and there was general agreement that a scale should have at least three items loading on any given factor (Tabachnick & Fidell, 2007). Thus, the two-factor model was chosen. The two factors explained 59.4% of the total variance.

The first factor, Support From God, reflects the perspective of a direct connectedness to God. The emphasis of this subscale is on looking beyond self and less on the illness to the powerfulness of God. Thus, survivors have a personal relationship with God, are drawn to God through the illness, and take comfort in knowing that God is in control. The second factor, God's Purpose for Me, reflects strategies used to cope with the earthly realities of illness. The emphasis of this scale is more on the illness and how God is working through the illness to build character within the self. In summary, in the first factor, attention is cast on God, and in the second factor, attention is cast on how the self is being reformed by God through the illness.

Subscales and Descriptive Statistics

The two subscale scores were computed by averaging responses on items with primary loadings on each factor. To allow computation of scores for participants with small amounts of missing data, subscale scores were computed if a participant was missing no more than one item on a factor, yielding 317 participants with a score for Support From God and 316 participants with a score for God's Purpose for Me.

Descriptive statistics for the two PGS subscales, each with a possible range of 0 to 4, are shown in Table 2. The mean score for the factor Support From God was 3.58 ($SD = 0.76$), with a range of 0 to 4. The second factor, God's Purpose for Me, had a mean score of 2.57 ($SD = 1.19$). The median scores for the two subscales were 4.00 and 2.73, respectively. The average scores for the factor Support From God were highly negatively skewed (−2.6) and had low variability; more than half of the participants scored at the upper limit of the subscale. Scores for the second factor, God's Purpose for Me, had a slight negative skew of −.58, and the variability was higher. The correlation between the two factors was .48.

Item Analysis and Internal Consistency

Both PGS subscales had mean interitem correlations above .30. Within a subscale, no interitem correlation fell below .30. Most corrected item-total correlations fell within the recommended .30 to .70 range (Nunnally & Bernstein, 1994). Cronbach's α coefficients were strong, .94 for the Support From God factor and .86 for the God's Purpose for Me factor, both well above the .70 cutoff suggested by Nunnally and Bernstein (1994).

To evaluate test–retest reliability, the scale was administered to a convenient subsample of 19 participants 2–3 weeks later. Test–retest reliability obtained with Pearson's correlations was .94 for the first factor, Support From God, and .88 for the second factor, God's Purpose for Me. Even though the test–retest was based on only 19 participants, the reliabilities were quite high, supporting the temporal stability of the instrument.

Construct Validity

Of the 317 Christian African American cancer survivors who completed the PGS, a subsample of 137 participants were administered the Religious Involvement Scale and 274 were administered the GDS-SF15. The average score on the GDS-SF15 was 3.3 (SD = 2.84), with 17% (n = 53) scoring above the cutoff, indicating possible depression. On the Religious Involvement Scale, the average score was 8.4 (SD = 3.75) on the organizational religiosity subscale, 15.8 (SD = 3.4) on the nonorganizational religiosity subscale, and 11.3 (SD = 1.19) on the subjective religiosity subscale. The construct validity of the PGS was calculated by computing correlation coefficients with the Religious Involvement Scale and the GDS-SF15 (Table 3). The demographic characteristics of these subsamples were very similar to those of the larger sample summarized in Table 1, so they are not reported separately.

Validity evidence based on relations of the PGS to the three dimensions of religious involvement was moderate to strong, lending support for the first hypothesis. The subscale scores on Support From God and God's Purpose for Me were correlated positively with all the Religious Involvement subscales (r = .34 to .62 for Support From God; r = .20 to .41 for God's Purpose for Me). The PGS subscale that correlated most highly with religious involvement was the Support From God subscale, although the correlations with organizational religiosity were lower than for nonorganizational and subjective religiosity.

Support for the second hypothesis, that spirituality would correlate negatively to depression, was mixed. High scores on the PGS subscale Support From God was correlated negatively with depression ($r = -.23$, $p < .01$). However, the subscale scores on God's Purpose for Me were not correlated significantly with depression.

Discussion

Christian African Americans perceive God in realistic terms, as an all-powerful father figure in control of all situations (Cone, 2002). This perception includes faith in a higher power who, even during illness, provides what is needed for survival and brings about ultimate good (Pinn, 1999). The PGS was developed from qualitative research designed to capture those coping strategies that contribute to the psychological well-being of Christian African American cancer survivors. The PGS is designed for use with Christian African Americans with any type of cancer and during any phase of their cancer trajectory. The cancer survivors in this study varied widely in their demographics. Men and women were represented equally, and there was diversity in the survivors' ages, educational levels, history of employment, and marital status. The average income reported was low but consistent with the median income of other older Americans (U.S. Department of Health and Human Services, 2005). Moreover, the religious affiliation of the African American cancer survivors in this study is consistent with that of most African Americans (86%) in the United States who are affiliated with and identify themselves as Christians (American Religious Identification Survey, 2008). The sample for this 15-item scale was more than adequate for exploratory factor analysis, with 20 cases per item.

The findings from this study show initial support for the reliability and validity of the PGS. Exploratory factor analysis supported a scale with two subscales: Support From God and God's Purpose for Me. On average, the Christian African American cancer survivors in the study reported high mean scores on the Support From God subscale. Survivors with high scores on

this subscale also reported high levels on two dimensions of religious involvement (nonorganizational and subjective religiosity) and low scores on organizational religiosity and depression. The ceiling effect on this subscale is consistent with that of other studies that have measured aspects of spirituality among Christian African Americans (Newlin, Melkus, Tappen, Chyun, & Koenig, 2008). However, this ceiling effect may be attributable also to the proportion of participants in the study reporting affiliations with evangelical churches in the South. Nonetheless, despite the skewed distribution of scores on this subscale, the correlations with depression suggest that the perception of having a personal relationship with God during phases of a cancer diagnosis is a useful coping strategy.

The mean scores and standard deviations on the second subscale, God's Purpose for Me, reflected more individual variability in the meanings that these Christian African Americans expressed through their spirituality. The association of higher scores on this subscale with higher scores on religious involvement supports the findings of qualitative research among Christian African American cancer survivors that highly religious persons use their spirituality to seek out meaning in and purpose for their illness (Mellon, 2002). However, the lack of significant correlations between scores on this subscale and depression was surprising. There is the possibility that the items captured in this second subscale were not relevant to this sample of primarily nondepressed survivors. Perhaps, the strategies reflected by this subscale that keep the survivor focused on the illness and self are not as effective as the strategies focused outward —toward God. That is, items in the God's Purpose for Me subscale likely capture interpersonal struggles known to contribute to rather than protect against depression (Hill & Pargament, 2003). However, the ability to determine the relevance of these items to survivors with depression was limited by the small sample size of individuals with depression in this study. In any event, this is an area in need of more exploration.

The findings from this study suggest that there is another aspect of spirituality, reflected in a personal relationship with God, that is beneficial at least among this population of cancer survivors. The multidimensional PGS shows adequate evidence of reliability and validity. Although the scores on the Support From God subscale were skewed negatively with limited variability, this may reflect the homogeneity of this sample of primarily evangelical Christians. Further research is needed to evaluate the scale with persons of other racial and ethnic groups with a strong religious orientation and connectedness to God. Research is needed also to explore the relationship of this aspect of spirituality to other outcome measures.

The PGS is a new measure that shows promise as a measure of spirituality for Christian African American cancer survivors and initial reliability and validity. It captures a facet of spirituality not emphasized in other measures. This scale should prove useful in research that seeks to advance understandings of whether and how spirituality influences health outcomes and in clinical settings, where it can be used to better inform health care practitioners of the spiritual needs of Christian African American cancer survivors.

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TABLE 1
Demographic Characteristics of the Sample (*n* = 317)

Variable	*n*	%
Gender		
Female	193	60.9
Male	124	39.1
Marital status		
Married/Partnered	71	22.4
Widowed	75	23.7
Divorced/Separated	90	28.4
Never married	42	13.2
Education		
6th grade or less	13	4.1
7th–11th grade	111	35.0
High school diploma/GED	104	32.8
Some college	55	17.4
Completed college	23	7.3
Graduate/professional school	10	3.2
Employment		
Full-time	15	4.7
Part-time	18	5.7
Retired	108	34.1
Unemployed	176	55.5
Income		
<$10,000	170	53.6
$10,000–$19,999	81	26.0
$20,000–$29,999	19	6.0
$30,000–$39,999	9	2.8
$40,000–$49,999	6	1.9
>$50,000	21	6.6
Type of cancer		
Breast	102	32.2
Colon	37	11.7
Head and neck	22	6.9
Lung	62	19.6
Prostate	27	8.5
Other	66	20.8
Time since diagnosis		
0–6 months	82	25.9
6–12 months	40	12.6
1–2 years	38	12.0
2–3 years	25	7.9

Variable	*n*	%
≥3 years	71	22.4

Note. Some percentages total less than 100% due to missing data.

TABLE 2
Pattern Matrix for the Two-Factor Model and Factor Properties (*n* = 317)

	Factor	
Item	**Support from God**	**Meaning through a divine purpose**
Talk to God	.81	−.04
Turn over to God	.79	−.02
God helps not worry	.82	−.00
God in control—illness	.88	−.05
God keeps me here	.83	−.03
God allows suffering to get attention	.83	−.001
God allowed illness—to help others	.74	.10
Talk God first	.68	.15
Pray God answers	.79	−.04
God can heal	−.03	.64
God helps to accept	−.02	.75
God allows to suffer	−.04	.73
Illness made me a better person	.07	.62
Illness made me stronger	.06	.75
God allowed illness—to be example	−.02	.79
Number of items	9	6
Mean (*SD*) score	3.58 (0.76)	2.57 (1.19)
Median scores	4.00	2.73
Range of scores	0–4	0–4
Initial Eigenvalue	7.35	2.37
Percentage variance explained	46.5	12.9
Interitem correlation, mean (range)	.65 (.54–.84)[a]	.51 (.31–.80)[a]
Cronbach's α	.94[a]	.86[a]
Test–retest reliability	.94	.88

[a]Based only on the 308 participants who completed all 15 items.

TABLE 3

Pearson Correlation Coefficients Relating the Factors of the Perspectives of Support From God Scale to Existing Scales

	GDS-SF	Organizational religiosity	Nonorganizational religiosity	Subjective religiosity
Support From God	−.23**	.34**	.62**	.60**
	n = 274	*n* = 133	*n* = 137	*n* = 136
God's Purpose for Me	−.06	.20*	.39**	.41**
	n = 274	*n* = 132	*n* = 136	*n* = 135

Note. Sample size varies for the Religious Involvement Scale due to small amounts of missing data. GDS-SF = Geriatric Depression Scale-Short Form.

* $p < .05$.

** $p < .01$.