Image of God: Effect on Coping and Psychospiritual Outcomes in Early Breast Cancer Survivors

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Purpose/Objectives: To examine the effect of breast cancer survivors' views of God on religious coping strategies, depression, anxiety, stress, concerns about recurrence, and psychological well-being.

Design: Exploratory, cross-sectional, comparative survey.

Setting: Outpatients from community and university oncology practices in the southeastern United States.

Sample: 130 early breast cancer survivors (6–30 months postdiagnosis).

Methods: Self-report written survey packets were mailed to practice-identified survivors.

Main Research Variables: Image of God, religious coping strategies, depression, anxiety, stress, concerns about recurrence, and psychological well-being.

Findings: Women who viewed God as highly engaged used more coping strategies to promote spiritual conservation in proportion to coping strategies that reflect spiritual struggle. Women who viewed God as highly engaged maintained psychological well-being when either spiritual conservation or spiritual struggle coping styles were used. No differences in variables were noted for women who viewed God as more or less angry.

Conclusions: The belief in an engaged God is significantly related to increased psychological well-being, decreased psychological distress, and decreased concern about recurrence.

Implications for Nursing: Addressing survivors' issues related to psychological adjustment and concern about recurrence within their world view would allow for more personalized and effective interventions. Future research should be conducted to establish how the view that God is engaged affects coping and psychological adjustment across diverse groups of cancer survivors and groups with monotheistic, polytheistic, and naturalistic world views. This could lead to a practical method for examining the influence of these world views on individuals' responses to cancer diagnosis, treatment, and survivorship.

Breast cancer is the most common type of cancer diagnosed in women in the United States, with a five-year survival rate of 89% (Jemal, Siegel, Xu, & Ward, 2010). As a result, breast cancer survivors represent 23% of the American cancer survivor population (Rowland & Bellizzi, 2008). Cancer can negatively affect a survivor's life in relation to his or her physical, social, existential or religious, and psychological well-being. Since 1990, a number of studies have focused on breast cancer survivors, with the majority addressing issues related to longer-term survivors (five or more years) (Bower et al., 2005; Carver et al., 2005; Carver, Smith, Petronis, & Antoni, 2006; Deimling, Bowman, Sterns, Wagner, & Kahana, 2006; Ferrell, Dow, Leigh, Ly, & Gulasekaram, 1995; Gall & Cornblat, 2002; Meraviglia, 2006; Stanton, Danoff-Burg, & Huggins, 2002). The transition for a survivor from active treatment to post-treatment is a critical time when chosen behaviors and coping mechanisms, including religious coping, predict longer-term adjustment (Jim, Richardson, Golden-Kreutz, & Andersen, 2006; Lauver, Connolly-Nelson, & Vang, 2007; McMillen, 1999; Stanton et al., 2002).

How an individual views the character and behavior of God can be a foundation for one's world view. An individual's view of God is believed to influence core strivings and life principles (Emmons, Cheung, & Tehrani, 1998; Maynard, Gorsuch, & Bjorck, 2001; Pargament, Magyar-Russell, & Murray-Swank, 2005). For this reason, one's view of God may be a key component in understanding how people diagnosed with cancer respond psychologically and specifically to the coping mechanisms they employ. The Baylor Institute for Studies of Religion completed a general population survey on the perceived importance of religion in the lives of Americans (Bader et al., 2006). Belief that denominational affiliation does not significantly contribute to the understanding of an individual's behavior led to the development of the Image of God Scale (IGS) from questions regarding the character of God included in the general population survey. The IGS has two significant and distinct dimensions of belief in God: God's level of engagement and God's level of anger. Based on the two dimensions, four views of God were identified: benevolent, authoritarian, critical, and distant (Bader & Froese, 2005). In the general population survey, images of God were able to predict a variety of factors: moral issues, political opinions, civic engagement, religious consumption, and the paranormal

(Bader & Froese, 2005; Froese & Bader, 2007). Belief in God or not, belief in an engaged God, or belief in an angry God can be used to classify and describe individuals' perspectives on existential issues that transcend religions, denominations, or sects.

The variables selected for the current study were religious coping, anxiety, depression, stress, psychological well-being, and fear of recurrence. Selection was based on literature that demonstrated a relationship between those variables and quality of life among breast cancer survivors. Religious coping strategies have been used by breast cancer survivors to cope with stress as reported in qualitative (Gall & Cornblat, 2002; Landmark, Strandmark, & Wahl, 2001) as well as quantitative studies (Boehmke & Dickerson, 2006; Morgan, Gaston-Johansson, & Mock, 2006; Zwingmann, Wirtz, Müller, Körber, & Murken, 2006). Anxiety, depression, and stress have long been associated with psychological adjustment among patients with cancer (Deimling et al., 2006; Montgomery et al., 2003; Nordin, Berglund, Glimelius, & Sjoden, 2001). Psychological well-being (Andrykowski, Lykins, & Floyd, 2008; Carver et al., 2005; Urcuyo, Boyers, Carver, & Antoni, 2005) and its association with spirituality (Cotton, Levine, Fitzpatrick, Dold, & Targ, 1999; Manning-Walsh, 2005; Meraviglia, 2006) have been linked to positive, long-term survivorship. Concerns about recurrence are found frequently among both short-term (Stanton et al., 2002; Wonghongkul, Dechaprom, Phumivichuvate, & Losawatkul, 2006) and long-term (Deimling et al., 2006; Ferrell et al., 1995; Wonghongkul et al., 2006) breast cancer survivors.

The purpose of the current study was to examine whether a breast cancer survivor's religious coping strategies, depression, anxiety, stress, psychological well-being, and concerns about recurrence differ based on her image of God. Specific aims were to (a) identify religious coping strategies common to each of the four views of God, (b) examine the relationship between psychological well-being and religious coping strategies, and (c) examine differences in depression, anxiety, stress, concerns about recurrence, and psychological well-being among women holding various views of God.

Theoretical Framework

World views are groups of beliefs and assumptions that describe the world and life within it (Koltko-Rivera, 2004; Vidal, 2008). An essential core belief for most individuals reflects their description of God. An ultimate concern for many human beings is the search for transcendent meaning or the striving to answer fundamental questions such as, "Why am I here?" or, "What is my purpose in life?" (Archer, Collier, & Porpora, 2004; Frankl, 1978; Reker & Chamberlain, 2000). Whether the individual believes in a God that created the world, a God created to explain the world, or a world without God, each person has a view of fundamental truth and expresses commitment to it. For most, fundamental truth is God in some form; for others, it is mankind and reason (Baldacchino & Draper, 2001; Chan, Ng, Ho, & Chow, 2006; Emmons, 2000). The individual's world view, whether religious, spiritual, existential, or naturalistic, is the primary driver directing behaviors (Koltko-Rivera, 2004; Vidal, 2008).

World views are ways to explain one's very existence and the central questions of why humans are on Earth and how we got here. Answering those questions starts with believing in the existence of some creative force or being or believing in some manner of random but constructive development of life and the world. Understandings of God's form and function in the western world are based on the philosophic underpinnings of Baruch Spinoza and Gottfried Leibniz. In the mid-17th century, Spinoza and Leibniz engaged in a debate regarding the nature of God. Spinoza posited a God who is nature (Waller, 2009), whereas Leibniz described a God existing independent of the laws of nature who thinks, feels, judges, and interacts with His creation (Burnham, 2005). Current views of God's autonomy or engagement with the world are grounded in this debate. As a result, the current study examined breast cancer survivors' image of God and its relation to use of specific coping mechanisms, psychological distress, and psychological well-being.

Methods

A cross-sectional, comparative design was used to examine whether use of religious coping strategies associated with spiritual conservation and spiritual struggle, depression, anxiety, stress, psychological well-being, and concerns about recurrence differed among breast cancer survivors based on their image of God. The sample consisted of recently diagnosed female breast cancer survivors (6–30 months postdiagnosis) who completed treatment and were transitioning from the treatment stage to early survivorship. Women were recruited from two practices: a university breast cancer clinic and a community oncology practice.

Data Collection

The current study was approved by the university institutional review board, with an addendum covering the community oncology practice. A list of women meeting the inclusion criteria was obtained from both the university breast cancer clinic and the community-based oncology practice. Inclusion criteria were being a female breast cancer survivor not currently receiving chemotherapy or radiation therapy with the exception of oral antiestrogens or aromatase inhibitors, aged 21 years or older, and able to read and write English.

Exclusion criteria were any diagnosis of psychosis or breast cancer as a second primary diagnosis. The study had 300–500 potential participants; the needed accrual based on a power analysis was 128. Four hundred and forty surveys were mailed and 130 were returned for a response rate of 30%. The *n* for this analysis was 129 because one respondent did not complete the View of God Questionnaire. She identified herself as an atheist who could not answer the questions. The survey mailing included a cover letter explaining the study as well as the components of informed consent and an additional letter from the appropriate physician noting his or her support of the study. Informed consent was confirmed by the completion and return of the packet of study instruments. On completion of the study, participants received a $10 gift card.

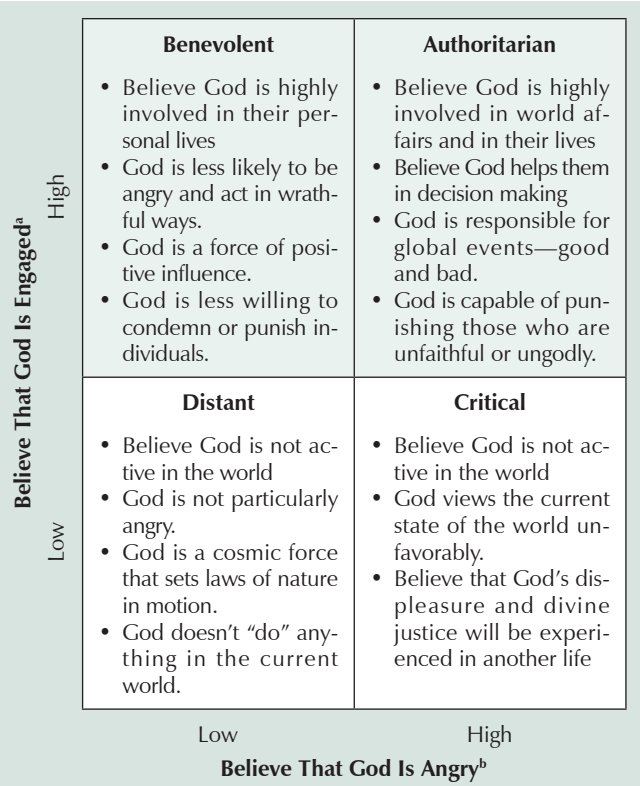
Study Measures and Instruments

Study measures were selected based on psychometric properties and appropriateness to assess view of God, religious coping, depression, anxiety, stress, psychological well-being, and concerns about recurrence. All measures and demographic information were completed at one time point. Demographic data collected included age, marital status, education, socioeconomic status, university or community practice, and religious affiliation.

The **IGS** is a 14-item instrument developed to identify how individuals view who God is and what He does in the world (Bader et al., 2006). It consists of two scales that together determine the four types of believers: (a) belief in God's engagement (eight items, alpha = 0.91), with scores ranging from 8–40; and (b) belief in God's anger (six items, alpha = 0.85), with scores ranging from 6–30. Higher scores indicate greater belief. Responses are based on a five-point Likert-type scale that ranges from 1 (strongly disagree or not at all) to 5 (strongly agree or very well), with three engagement items reverse scored. The mean scores of the two scales were used to divide the sample into four groups: authoritarian, distant, benevolent, and critical (C. Bader, personal communication, December 12, 2007) (see Figure 1).

The **Religious/Spiritual Coping Short Form (RCOPE)** is a theoretically based, 63-item measure that assesses the array of religious coping methods, including those perceived as helpful or harmful (Pargament, Koenig, & Perez, 2000). The RCOPE has 17 specific subscales that are combined into two main subscales: spiritual conservation and spiritual struggle (Pargament et al., 2000; Pargament, Koenig, Tarkeshwar, & Hahn, 2004). Spiritual conservation (positive) and spiritual struggle (negative) describe strategies employed when the individual is in a stressful situation (Pargament, 2007; Pargament et al., 2000). Spiritual conservation encompasses the idea that individuals cope in ways that maintain or strengthen their beliefs, whereas spiritual struggle reflects questioning or changing their beliefs (Pargament, 2007). All items are rated on a four-point Likert-type scale, ranging from 1 (not at all) to 4 (a great deal). Cronbach alphas for the 21 subscales have been reported to be higher than 0.8 for all scales except for Reappraisal of God's Power (alpha = 0.78) and Marking Religious Boundaries (alpha = 0.61).

The **Depression Anxiety Stress Scale (DASS)** is a set of three self-report scales designed to measure depression, anxiety, and stress (Lovibond & Lovibond, 1995). The DASS-21, the version used in this study, is a short version of the original 42-item scale, in which each of the three scales contains seven items for a total sum score. Responses for the past week are reported on a four-point Likert-type scale ranging from 0 (did not apply) to 3 (applied to me very much). The total score for each scale



Atheists: certain that God does not exist and have no place for the supernatural in their world view

[a] The extent to which individuals believe that God is directly involved in worldly and personal affairs

[b] The extent to which individuals believe that God is angered by human sins and tends toward punishing, severe, and wrathful characteristics

Figure 1. Image of God Categories

Note. From *American Piety in the 21st Century: New Insights to the Depth and Complexity of Religion in the U.S.* (pp. 26–27), by C. Bader, K. Dogherty, P. Froese, B. Johnson, F.C. Mencken, J.Z. Park, & R. Stark, 2006, Waco, TX: Baylor Institute for Studies of Religion. Copyright 2006 by Baylor Institute for Studies of Religion. Adapted with permission.

ranges from 0 (no symptoms) to 21 (severe symptoms). Cronbach alpha has been reported to range from 0.94–0.97 for depression, from 0.87–0.92 for anxiety, and from 0.91–0.96 for stress (Antony, Bieling, Cox, Enns, & Swinson, 1998; Brown, Chorpita, Korotitsch, & Barlow, 1997; Crawford & Henry, 2003). Reliability of the three scales is considered adequate; test-retest reliability is likewise considered adequate with 0.71 for depression, 0.79 for anxiety, and 0.81 for stress (Brown et al., 1997). Categories have been described for each scale as normal, mild, moderate, severe, and extremely severe in comparison to the general population (Lovibond & Lovibond, 1995).

The **overall fear subscale of the Concerns About Recurrence Scale (CARS)** (Vickberg, 2003) was used in the current study. The primary purpose was to identify the presence of the fear of recurrence for breast cancer survivors and whether that fear varied based on survivors' image of God. The full questionnaire is a 30-item instrument devised to assess women's fears about breast cancer recurrence. The subscales are divided into two main parts: overall fear (four items) and the nature of the woman's fears (26 items). Only the overall fear index was used in the current study. It has a high internal consistency (alpha = 0.87) and is significantly correlated with all four CARS subscales. Higher scores indicate a higher sense of worry. Responses range from 1 (I don't think about it at all) to 6 (I think about it all the time) for the overall fear subscale. Convergent validity was substantiated with the Impact of Events Scales and the Mental Health Inventory. The overall fear subscale was correlated with the intrusive thoughts ($r = 0.64$, $p < 0.0001$) and avoidance ($r = -0.5$, $p < 0.001$) subscales of the Impact of Events Scales and the distress ($r = 0.54$, $p < 0.001$) and well-being ($r = -0.44$, $p < 0.001$) subscales of the Mental Health Inventory.

The **Scales of Psychological Well-Being (SPWB)** (Ryff, 1989) is an 84-item instrument devised to measure the causes and consequences of positive psychological functioning. The SPWB consists of six 14-item scales: autonomy, environmental mastery, personal growth, positive relations with others, purpose in life, and self-acceptance. Higher scores indicate a higher level of psychological well-being. Responses range from 1 (strongly disagree) to 6 (strongly agree), and half of the items are reverse scored. Alpha coefficients range from 0.83–0.91 for each scale; correlations between the scales and the 20-item parent scales range from 0.97–0.99.

Data Analysis

Demographic data summarized participant characteristics (see Table 1). Data analysis was conducted using SPSS® for Windows, and an alpha level of 0.05 was used throughout.

Religious coping strategies: The first aim of the current study was to identify religious coping strategies common to each view of God. Descriptive statistics were used to report mean scores for the RCOPE spiritual conservation and spiritual struggle subscales for each of the four views of God and for the two subscales (belief in God's engagement and belief in God's anger).

Psychological well-being: The second aim of the study was to examine the relationship between psychological well-being (measured by the SPWB) and religious coping strategies. Pearson product moment correlations were calculated to determine the relationship between psychological well-being and the spiritual conservation and spiritual struggle subscales of the RCOPE.

Table 1. Sample Characteristics

Characteristic	$\bar{X}$	Range
Age (years)	56	36–90
Characteristic	**n**	**%**
Caucasian	128	99
Married or partnered	104	81
Educational status		
High school or less	44	34
College or university	51	40
Graduate school	34	26
Household income ($)		
Less than 20,000	9	7
20,000–40,000	19	15
40,001–80,000	47	36
80,001 or more	49	38
Did not report	5	4
Physician practice		
University	52	40
Community	77	60
Location		
Non-Appalachia	73	57
Appalachia	56	43
Religious affiliation		
Jewish	2	2
Catholic	9	7
Protestant	112	87
Other or atheist	6	5
View of God		
Authoritarian	29	22
Benevolent	29	22
Critical	35	27
Distant	36	28
Belief that God is engaged		
Low	71	55
High	58	45
Belief that God is angry		
Low	66	51
High	63	49
Stress level		
Normal	98	76
Mild to extremely severe	31	24
Anxiety level		
Normal	92	71
Mild to extremely severe	37	29
Depression level		
Normal	105	81
Mild to extremely severe	24	19

N = 129

Note. Because of rounding, not all percentages total 100.

Differences among women with various views of God: The third aim of the study was to examine differences in depression, anxiety, stress, concerns about recurrence, and psychological well-being among women holding various views of God. Analysis of variance (ANOVA) was used to test differences in the dependent variables within and across the two IGS subscales: belief in God's engagement and belief in God's anger.

The power of the ANOVA to detect a significant difference between the four groups is about 80%, with an alpha level of 0.05 if the critical F value is 2.68 or higher for 128 participants. Cohen (1988) considers a ratio of this magnitude to constitute a medium effect size. Power estimates were obtained using nQuery Advisor®, version 6.0 (Elashoff, 2005).

Results

Religious Coping Strategies

Mean scores for the spiritual conservation and spiritual struggle subscales of the RCOPE for the four views of God and for the IGS subscales were converted to scores corresponding to the standard RCOPE answers of 1 (not at all) to 4 (a great deal) (see Figure 2). The scores were converted by dividing the mean score for each group by the number of questions in the spiritual conservation and spiritual struggle subscales. This conversion allows for easier interpretation of the raw data within RCOPE terminology. The hypothesis that differences existed in the use of religious or spiritual coping strategies based on a woman's view of God was supported.

Use of coping strategies associated with conserving spiritual beliefs varied across views of God and views that God is engaged or angry, whereas the use of coping strategies associated with spiritual struggles did not vary substantially across groups. Women who viewed God as authoritarian or benevolent had the lowest reported level of spiritual struggle behaviors in relation to spiritual conservation behaviors (2:1), whereas those who view God as critical or distant had the highest reported level of spiritual struggle behaviors in relation to spiritual conservation behaviors (3:2). The ratio of spiritual conservation behaviors to spiritual struggle behaviors remained the same when authoritarian and benevolent groups were combined as highly engaged and critical and distant were combined as less engaged. Variations in the belief that God is angry did not demonstrate any differences in the use of coping strategies associated with spiritual conservation versus spiritual struggle.

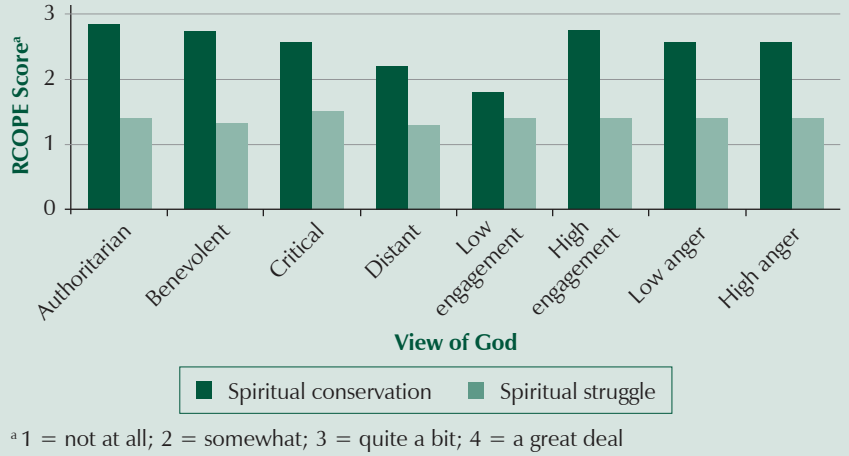
Psychological Well-Being

Pearson's product moment correlations were performed on the SPWB and the RCOPE. The hypothesis that a positive relationship would exist between the SPWB and the RCOPE spiritual conservation subscale was not supported. No significant correlations were found between the two measures. However, moderately strong negative correlations were found between the SPWB and the RCOPE spiritual struggle subscale for the total score and all subscales with the exception of autonomy (–0.31 to –0.43; p = 0.01) (see Table 2).

Differences Among Women With Various Views of God

Differences in psychological well-being, concern about recurrence, depression, anxiety, and stress in women with different views of God were examined through ANOVA tests. Both hypotheses related to the view of God's engagement were supported. Women who believed that God is highly engaged reported higher scores on the SPWB and lower scores on the CARS and the DASS depression, anxiety, and stress subscales. The differences were significant for the SPWB, the CARS, and the DASS stress subscale (see Table 3).

The hypothesis that women who viewed God as highly angry would score higher on scales measuring depression, anxiety, stress, and concerns about recurrence and lower on psychological well-being was not supported. Women who believed that God is highly angry did not significantly vary on scores of psychological well-being (high: $\bar{X}$ = 400; low: $\bar{X}$ = 405) and concerns about recurrence (high: $\bar{X}$ = 11.4; low: $\bar{X}$ = 11.1), depression (high: $\bar{X}$ = 5.8; low: $\bar{X}$ = 6.1), anxiety (high: $\bar{X}$ = 4.4; low: $\bar{X}$ = 6.1), and stress (high: $\bar{X}$ = 11.6; low: $\bar{X}$ = 9.8). The ANOVA test did not identify any significant differences



[a] 1 = not at all; 2 = somewhat; 3 = quite a bit; 4 = a great deal

Figure 2. Religious/Spiritual Coping Short Form (RCOPE) Scores Based on View of God

Table 2. Pearson's Correlations for the Scales of Psychological Well-Being and the Religious/Spiritual Coping Short Form Situational Subscales

Scale and Subscales	Total	Autonomy	Environmental Mastery	Positive Relations	Personal Growth	Purpose in Life	Self-Acceptance
Spiritual conservation	0.05	0.06	0.01	0.06	0.05	0.05	−0.01
Low engagement	−0.1	0.01	−0.18	0.01	−0.07	−0.14	−0.1
High engagement	0.17	0.13	0.27*	0.07	0.05	0.1	−0.01
Low anger	0.2	0.21	0.05	0.2	0.17	0.15	0.09
High anger	−0.03	0.06	−0.01	−0.01	−0.08	−0.08	−0.03
Spiritual struggle	−0.42**	−0.17	−0.43**	−0.31**	−0.37	−0.38**	−0.4**
Low engagement	−0.58**	−0.24*	−0.01**	−0.37**	−0.5**	−0.53**	−0.52**
High engagement	−0.16	0.03	−0.14	−0.13	−0.18	−0.26	−0.13
Low anger	−0.45**	−0.14	−0.43**	−0.28*	−0.42**	−0.52**	−0.48**
High anger	−0.32*	−0.08	−0.42**	−0.26*	−0.3*	−0.3*	−0.21

* p = 0.05 (two-tailed); ** p = 0.01 (two-tailed)

for psychological well-being, concerns about recurrence, depression, anxiety, or stress.

Discussion

The current study was designed to examine differences in spiritual coping strategies, depression, anxiety, stress, psychological well-being, and concerns about recurrence for breast cancer survivors grouped by their image of God. The findings support the idea that when a breast cancer survivor's image of God is used as a method of classification, differences in spiritual coping strategies, psychological well-being, and concerns about recurrence are identifiable. Demographic data for self-identified religious affiliation were divided into four religions with 15 divisions or denominations and an open category. Participants identified themselves within three of four religions and 10 of 15 divisions or denominations, with 11 other denominations added. Analysis of the data on a more traditional measure such as religious affiliation would have been cumbersome or necessitated arbitrary divisions to have groupings that were statistically comparable. Classifying the women into groups based on the two IGS subscales or by the four views of God allowed comparisons between women with similar views independent of their specified religious affiliation.

Differences in the spiritual conservation subscale of the RCOPE were found between the low- and high-engagement groups, the authoritarian and benevolent groups (high engagement), and the critical and distant groups (low engagement); however, few differences were found in groups focused on God's anger. No significant differences were found between any of the groups and the spiritual struggle subscale. However, the magnitude of difference between spiritual struggle and spiritual conservation coping strategies did vary in each group. Those who believed God to be the least engaged used more spiritual struggle coping strategies as a percentage of the spiritual conservation coping strategies used.

Previous studies have found religious coping strategies to be predictors of psychological well-being (Bjorck & Thurman, 2007; Pargament et al., 1988, 2004; Tarakeshwar et al., 2006; Zwingmann et al., 2006). In the current study, no significant relationship was found between the psychological well-being total and subscale scores and spiritual-conservation coping strategies. Moderate-to-strong inverse relationships were found between psychological well-being and spiritual-struggle coping strategies, with the exception of the group that viewed God as highly engaged. For women who viewed God as highly engaged, no significant correlations were found between spiritual-struggle coping strategies and psychological well-being. Psychological well-being was not diminished by spiritual struggles for women who viewed God as highly engaged. Spiritual struggle can lead to transformation and growth or to disengagement (Pargament, 2007). The results suggest that breast cancer survivors who view God as

Table 3. Analysis of Variance for Low and High Views of God's Engagement

Measure	Low Engagement $\bar{X}$	Low Engagement SD	High Engagement $\bar{X}$	High Engagement SD	F	p
SPWB total	393.07	50.15	415.52	46.11	F(1, 127) = 2.26	0.01
Concerns about recurrence	12.2	6.08	9.95	4.67	F(1, 127) = 5.7	0.02
DASS stress	12.23	9.63	8.66	6.89	F(1, 126) = 8.2	0.02
DASS anxiety	5.49	6.88	4.86	4.62	F(1, 126) = 8	0.56
DASS depression	6.97	9.01	4.66	7	F(1, 126) = 7.09	0.11

DASS—Depression Anxiety Stress Scale; SPWB—Scales of Psychological Well-Being

highly engaged maintained their psychological well-being when either spiritual conservation or spiritual struggle coping strategies were used. In the current study, the factor primarily associated with psychological well-being was women's view of God as engaged rather than the type of coping strategy employed. Believing that God is engaged may be a significant factor in determining or predicting the outcome of spiritual struggle when transitioning to the survivorship stage for women with breast cancer.

Differences in psychological well-being, concern about recurrence, depression, anxiety, and stress did vary for beliefs about God's engagement but did not vary by beliefs about God's anger. The findings are consistent with the differences described between the belief in God's anger and belief in God's engagement subscales and the four views of God in the current study. The depression and anxiety subscales did not demonstrate significant differences based on God's engagement or God's anger. Consistent with multiple studies, a modest group of women reported stress (25%), anxiety (29%), or depression (19%) (Kissane et al., 2004; Montazeri et al., 2000; Nordin et al., 2001; van't Spijker, Trijsburg, & Duivenvoorden, 1997). Women who viewed God as highly engaged had higher psychological well-being and lower fear of recurrence and stress. This is consistent with findings associating spirituality and faith with psychological outcomes and concern about recurrence in studies of early-stage breast cancer survivors (Jim et al., 2006; Johnson Vickberg, 2001; Stanton et al., 2002). Spirituality and faith do affect psychological well-being, psychological distress, and concern about recurrence.

Limitations

The current study was exploratory, cross-sectional, and comparative and, therefore, had some inherent limitations. Its generalizability to other cancer survivors is limited because the study was conducted in a homogenous group of female breast cancer survivors. The study was conducted via mailed survey, where a response rate of 25%–40% is common. The author had no way to determine why an individual decided whether or not to respond. Potential reasons for nonresponse are that the individual was either too stressed or depressed or he or she had no strong feelings regarding the subject of the study.

Another limitation may be that 87% of the participants were Protestant. However, few studies have analyzed data based on denomination, thereby establishing a known difference between denominational affiliations and subgroups. Another complicating factor is the decrease in formal religious affiliation and adherence to the stated beliefs of the group with which an individual affiliates themselves (Bader et al., 2006; Bader & Froese, 2005; Bader, Mencken, & Froese, 2007). One study found a higher authoritarianism view for conservative Protestants than for those identified as mainline Protestants, Catholics, and nondenominational (Wink, Dillon, & Prettyman, 2007). Another study that reported on development of a measure of the degree of belief in God did note differences between Muslims, Catholics, and Protestants from various cultures, but that study was not designed to determine whether culture, religion, or both were associated with the differences (Maiello, 2005).

Implications for Nursing Research

Future research should be conducted to examine the influence of breast cancer survivors' view of God and their response to or choice of interventions that have been associated with improved psychological well-being, such as journaling, support groups, relaxation, and meditation. Addressing survivors' issues related to psychological adjustment and concern about recurrence within their world view would allow for more personalized and effective interventions. Support groups, educational groups, and cognitive behavioral therapies are frequently used methods for addressing psychological adjustment to a cancer diagnosis. Reports of the effectiveness of these interventions vary based on type and population studied (Helgeson, Cohen, Schulz, & Yasko, 2001; Schou, Ekeberg, Karesen, & Sorensen, 2008; Vos, Garssen, Visser, Duivenvoorden, & de Haes, 2004). Tailored interventions based on common world views may result in greater psychological well-being and increased acceptance and participation in support groups, educational groups, and cognitive behavioral therapies. Another direction for future research is to establish how the view that God is engaged effects coping and psychological adjustment across diverse groups of cancer survivors.

Identification of the role that belief in God's engagement and in God's anger among a larger population of monotheistic, polytheistic, and naturalistic world views could lead to a practical method for examining the influence of these world views on individuals' responses to cancer diagnosis, treatment, and survivorship. Commonalities or differences in behaviors can be better determined when comparing consistently defined world views. Perceptions of the interaction between God and man, our world view, are consciously or unconsciously expressed in daily actions and behaviors (Koltko-Rivera, 2004).

Conclusions

The IGS is a compelling measure that can be used in practice to evaluate the function of spirituality across diverse religions and denominational divisions. Behaviors emanate from a world view in response to particular events or experiences. Understanding the patient's world view allows the nurse to facilitate the patient in accessing religious or spiritual resources and psychosocial resources that resonate with them. Patients continue to

access resources and participate in activities that they perceive to be helpful and in alignment with their beliefs.

In this study and in the original work of the Baylor Institute for Studies of Religion, the belief that God is engaged had a greater relationship to psychological well-being, psychological distress, and concern about recurrence than the belief that God is not engaged. As posited by Froese and Bader (2007), "Religion may most successfully motivate individuals through what it can offer them in spiritual intimacy rather than through demands backed by threats of punishment" (p. 479). The IGS could be used in any of the three main monotheistic religions (Judaism, Christianity, and Islam). How the term "God" in the scale would translate for those with a polytheistic or naturalistic world view has yet to be determined.

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