

Article

# The Brief RCOPE: Current Psychometric Status of a Short Measure of Religious Coping

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**Abstract:** The Brief RCOPE is a 14-item measure of religious coping with major life stressors. As the most commonly used measure of religious coping in the literature, it has helped contribute to the growth of knowledge about the roles religion serves in the process of dealing with crisis, trauma, and transition. This paper reports on the development of the Brief RCOPE and its psychometric status. The scale developed out of Pargament's (1997) program of theory and research on religious coping. The items themselves were generated through interviews with people experiencing major life stressors. Two overarching forms of religious coping, positive and negative, were articulated through factor analysis of the full RCOPE. Positive religious coping methods reflect a secure relationship with a transcendent force, a sense of spiritual connectedness with others, and a benevolent world view. Negative religious coping methods reflect underlying spiritual tensions and struggles within oneself, with others, and with the divine. Empirical studies document the internal consistency of the positive and negative subscales of the Brief RCOPE. Moreover, empirical studies provide support for the construct validity, predictive validity, and incremental validity of the subscales. The Negative Religious Coping subscale, in particular, has emerged as a robust predictor of health-related outcomes. Initial evidence suggests that the Brief RCOPE may be useful as an evaluative tool that is sensitive to the effects of psychological interventions. In short, the Brief RCOPE has demonstrated its utility as an instrument for research and practice in the psychology of religion and spirituality.

Keywords: religious coping; spiritual coping; religious struggle; RCOPE; brief RCOPE

#### Introduction

Over the past 15 years, there has been a sharp increase in the number of studies that focus on the role of religion in coping with major life stressors. Empirical studies have demonstrated that many people turn to religion as a resource in their efforts to understand and deal with the most difficult times of their lives [1-3]. Moreover, research has consistently linked indices of religious coping to measures of health and well-being among diverse groups facing diverse critical life events [4,5]. Most recently, health care researchers and practitioners have begun to build on these findings to develop interventions that help people facing crises access their religious resources and address religious problems [6,7]. Hill [8] concluded in his recent review that the domain of religious coping represents one of the most valuable approaches to study in the field.

Because of its demonstrated value, it is important to consider how religious coping is assessed. The Brief RCOPE is the most commonly used measure of religious coping, and has yielded a variety of significant findings. However, relatively little has been written about the development, psychometric qualities, and current status of the instrument. The present paper provides information on the Brief RCOPE and points to further directions in research on the measurement of religious coping.

## **Theoretical Background**

Traditionally, religion has been assessed in one of two ways [9]. The first method measures religiousness using global indices, such as frequency of congregational attendance, frequency of prayer, religious affiliation, and self-rated religiousness. While this efficient approach to measurement may be necessary given limited space for religious items on general health and social surveys, it does not specify what it is about religion that may be responsible for its links to psychological, social, or physical functioning. The second method of assessment examines stable patterns of religious attitudes and beliefs, as illustrated by measures of intrinsic, extrinsic, quest, and fundamentalist religious orientation, attachment to God, and attitudes toward the church. This approach assumes that religion is best understood as a dispositional or trait-like phenomenon. However, it does not capture how religion expresses itself in relationship to critical life situations.

The Brief RCOPE represents a different approach to religious assessment, one that is grounded in theory and research on coping and religion. Coping theory emphasizes the active role individuals play in interpreting and responding to major life stressors [10]. Numerous empirical studies have demonstrated that specific methods of appraisal and coping with negative life events constitute critical determinants of event outcomes [11]. From the perspective of coping theory, behavior is best understood as a dynamic process of transaction between the individual and life situations within a larger socio-cultural context.

Noting that general coping theorists and researchers neglected the religious dimension for the most part, Pargament [12] developed a theory of religious coping. He defined religious coping as efforts to understand and deal with life stressors in ways related to the sacred. The term "sacred" refers not only to traditional notions of God, divinity or higher powers, but also to other aspects of life that are associated with the divine or are imbued with divine-like qualities [13]. Pargament's theory stresses several points: (1) religious coping serves multiple functions, including the search for meaning,

intimacy with others, identity, control, anxiety-reduction, transformation, as well as the search for the sacred or spirituality itself; (2) religious coping is multi-modal: it involves behaviors, emotions, relationships, and cognitions; (3) religious coping is a dynamic process that changes over time, context, and circumstances; (4) religious coping is multi-valent: it is a process leading to helpful or harmful outcomes, and thus, research on religious coping acknowledges both the "bitter and the sweet" of religious life; (5) religious coping may add a distinctive dimension to the coping process by virtue of its unique concern about sacred matters; and (6) because of its distinctive focus on the ways religion expresses itself in particular life situations, religious coping may add vital information to our understanding of religion and its links to health and well-being, especially among people facing critical problems in life.

This theoretical perspective has important implications for the measurement of religious coping. Clearly, global indices or stable dispositional measures of religiousness cannot capture the rich, multi-dimensional, transactional, dynamic, and multi-valent character of religious coping. To that end, a different method of assessment was created.

#### **Initial Efforts to Measure Religious Coping**

Several approaches have been taken to measuring religious coping. Each, however, is limited in some important respects. One approach assesses religious coping using a few items that ask how often the individual turns to prayer or to a religious congregation in times of stress. These items tap into the "religious channels" people use in stressful situations, but they do not provide information about actual methods of religious coping (*i.e.*, the programs playing on the channels). For example, the knowledge that an individual prays frequently in the midst of a crisis does not specify *why* the individual prays, *when* the individual prays, *where* the individual prays, *how* the individual prays, or *what* the individual prays for—questions all potentially vital to an understanding of the coping function of prayer. It is important to add that researchers have begun to examine more specific aspects of prayer in critical life situations [14,15].

A second approach has involved embedding a few religious coping items within more general measures of coping, such as the Ways of Coping Scale by Lazarus and Folkman [10] and the COPE scale by Carver and colleagues [16]. However, this method, at best, covers only a few types of religious coping. This approach can obscure the distinctive contribution that religion makes to the coping process. For example, the item that assesses religious transformational coping in the Ways of Coping Scale ("I found new faith") is subsumed under the larger category of "Positive Reappraisal" [17].

A third approach has focused on studying a few types of religious coping methods in more depth [18]. For example, Pargament and his colleagues [19] conceptualized and measured three ways people can involve religious coping in the search for control: control through oneself (Self-Directing); control through God (Deferring); and control through a relationship with God (Collaborative). Empirical research points to the distinctiveness of these three religious coping styles and supports their discriminant validity in relationship to measures of health and well-being. Again, however, this approach to measurement does not provide a comprehensive picture of religious coping. A related approach has involved identifying various types of religious coping activities (e.g., pleading for a miracle, doing "mitzvot" or good deeds) from the "ground up" through interviews and narrative

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accounts of religious coping [20]. While this approach has greater ecological validity, it can yield measures that are difficult to decipher theoretically or functionally. It is also important to note that most of these methods of measurement have overlooked potentially harmful forms of religious coping.

## The Development of the RCOPE and the Brief RCOPE

The RCOPE and the Brief RCOPE (which grew out of this larger measure) were designed to address many of the limitations associated with these initial approaches to the assessment of religious coping.

#### Development of the RCOPE

The RCOPE was intended to provide researchers with a tool they could use to measure the myriad manifestations of religious coping and to help practitioners better integrate religious and spiritual dimensions into treatment (see [21] for full description). The construction of the RCOPE was guided by the elements of Pargament's [12] theory of religious coping noted above as well as by interviews and reviews of narrative reports of religious coping.

First, the instrument is multi-functional. The specific religious coping items included in the RCOPE were selected and designed to reflect five religious functions—meaning, control, comfort, intimacy, life transformation—and the search for the sacred or spirituality itself. However, it was also recognized that any method of religious coping may be multifunctional. In particular, it was expected that items reflecting the spiritual function of religion would serve other religious functions as well, particularly those of comfort and intimacy. Hence, although the RCOPE scale items were organized conceptually according to these various functions, we did not expect that the analyses would necessarily identify corresponding factors of religious coping.

Second, the RCOPE is multi-modal. Scale items were selected that represent how people employ religious coping methods cognitively through thoughts and attitudes (e.g. "Saw my situation as part of God's plan"; "Thought that the event might bring me closer to God"), behaviorally through actions (e.g. "Prayed for a miracle"; "Confessed my sins"), emotionally through the specific feelings they express (e.g. "Felt my church seemed to be rejecting or ignoring me"; "Sought God's love and care."), and relationally through actions that involve others (e.g. "Offered spiritual support to family or friends."; "Sought a stronger spiritual connection with other people.").

Third, the multi-valent nature of the RCOPE is built on the assumption that religious coping strategies can be adaptive or maladaptive. Hence religious coping items were selected that reflect positive religious coping methods—those that rest on a generally secure relationship with whatever the individual may hold sacred—and negative religious coping methods—those that are reflective of tension, conflict, and struggle with the sacred. However, we did not assume that the positive coping methods would be invariably adaptive or that the negative religious coping methods would be invariably maladaptive. Religious coping theory posits that the efficacy of particular coping methods is determined by the interplay between personal, situational, and social-cultural factors, as well as by the way in which health and well-being are conceptualized and measured [7,12]. Thus, a "positive" religious coping method that might be helpful in one situation or context might very well be more problematic in another, as illustrated by the recent work of Phelps *et al.* [22] who found that positive

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religious coping by end-of-life patients was predictive of the pursuit of expensive and invasive life-prolonging care. Conversely, a "negative" religious coping method might be linked not only to immediate signs of psychological distress, but also to longer term growth and well-being. For this reason, the term "religious struggle" has been used interchangeably with negative religious coping because the notion of struggle embodies the possibility of growth and transformation through the process of coping.

Items for the RCOPE were drawn from previous empirical studies and from existing religious coping scales. Material for the specific items was also gathered from clinical experience and from interviews with individuals who were accessing their religious and spiritual resources to cope with a variety of major stressors. Using this inductive approach, approximately eight items were generated for each of the 21 subscales. Table 1 provides a list of these subscales organized by religious function. Individuals indicate the extent to which they use specific methods of religious coping in dealing with a critical life event using a four-point Likert scale ranging from 0 ("not at all") to 3 ("a great deal").

Feedback on specific items was obtained from ten graduate psychology students. These raters were asked to sort the scale items into the appropriate subscales. Items that were not clearly phrased or that were not reliably classified by 80% of the raters were subsequently dropped. The items which were retained for the final version of RCOPE displayed close to 100% agreement in classification among the raters. The full RCOPE consisted of five items for each of the 21 subscales for a total of 105 items.

The psychometric properties of the RCOPE were analyzed using religious coping data obtained from two samples of individuals experiencing major life stressors: 540 college students who had experienced a serious negative life event; and 551 hospitalized middle- aged and older adults suffering from medical illnesses [21]. Because previous research had found that older individuals as well as people dealing with serious life events/crises displayed higher levels of religious coping, the scores of hospitalized older adults and college students were compared as a test of discriminant validity. As expected, older hospitalized adults generally scored higher on the subscales of the RCOPE than college students. Factor analysis largely validated the conceptualization and the construction of the subscales and provided evidence of high internal consistency and incremental validity. All but two of the RCOPE scales had alpha values of 0.80 or greater confirming generally high reliability estimates. In this study and in subsequent research studies, the RCOPE has performed well in predicting physical and psychological adjustment to life crises when compared to other measures of global religiosity and demographic variables [23,24].

While the full RCOPE is a valuable, theoretically-based comprehensive tool for measuring religious coping, its extensive length limits its utility. It cannot be easily included in a standard battery of assessments that might be used in clinical and counseling situations, nor can it be readily applied to research situations where space for questions is at a premium. Consequently, the RCOPE has not been widely used. The clear need for a condensed version of the RCOPE led to the development of the Brief RCOPE.

**Table 1.** RCOPE Subscales and Definitions of Religious Coping Methods.

Religious Methods of Coping to Fit	nd Meaning
Benevolent Religious Reappraisal	Redefining the stressor through religion as benevolent and potentially beneficial
Punishing God Reappraisal	Redefining the stressor as a punishment from God for the
	individual's sins
Demonic Reappraisal	Redefining the stressor as an act of the Devil
Reappraisal of God's Powers	Redefining God's power to influence the stressful situation
Religious Methods of Coping to Ga	
Collaborative Religious Coping	Seeking control through a problem solving partnership with God
Active Religious Surrender	An active giving up of control to God in coping
Passive Religious Deferral	Passive waiting for God to control the situation
Pleading for Direct Intercession	Seeking control indirectly by pleading to God for a miracle or
	divine intercession
Self-Directing Religious Coping	Seeking control directly through individual initiative rather than
	help from God
Religious Methods of Coping to Ga	in Comfort and Closeness to God
Seeking Spiritual Support	Searching for comfort and reassurance through God's love and
	care
Religious Focus	Engaging in religious activities to shift focus from the stressor
Religious Purification	Searching for spiritual cleansing through religious actions
Spiritual Connection	Experiencing a sense of connectedness with forces that
	transcend the individual
Spiritual Discontent	Expressing confusion and dissatisfaction with God's relationship
	to the individual in the stressful situation
Marking Religious Boundaries	Clearly demarcating acceptable from unacceptable religious
	behavior and remaining within religious boundaries
Religious Methods of Coping to Ga	tin Intimacy with Others and Closeness to God
Seeking Support from Clergy or	Searching for comfort and reassurance through the love and care
Members	of congregation members and clergy
Religious Helping	Attempting to provide spiritual support and comfort to others
Interpersonal Religious Discontent	Expressing confusion and dissatisfaction with the relationship of
	clergy or congregation members to the individual in the stressful
	situation
Religious Methods of Coping to Ac	hieve a Life Transformation
Seeking Religious Direction	Looking to religion for assistance in finding a new direction for
	living when the old one may no longer be viable
Religious Conversion	Looking to religion for a radical change in life
Religious Forgiving	Looking to religion for help in shifting to a state of peace from
	the anger, hurt, and fear associated with an offense

# Development of the Brief RCOPE

The Brief RCOPE was designed to provide researchers and practitioners with an efficient measure of religious coping which retained the theoretical and functional foundation of the RCOPE. An abbreviated 21-item version of the RCOPE was tested using a sample of people who lived near the

1995 Oklahoma City bombing site at the same time that the full 105-item scale was being developed. Factor analysis of that abbreviated scale revealed a twofactor solution which accounted for approximately 33% of the variance [25]. These two factors clearly identified positive and negative coping items.

Encouraged by these findings, it was decided that an even shorter version of the RCOPE was feasible. Working with a sample of college students facing major stressors, a factor analysis of the full RCOPE, constrained to two factors, yielded factors corresponding to positive coping items and negative coping items that accounted for 38% of the variance [25]. The finding that many of the items in the full RCOPE could be clearly categorized as either positive or negative in nature constituted the crucial first step toward creating the Brief RCOPE. A subset of items selected from both factors was used to recreate positive and negative coping scales. Criteria for the selection of these items included large factor-loading, representation of a variety of coping methods, and the need for economy in measurement. This process yielded the final Brief RCOPE which is divided into two subscales, each consisting of seven items, which identify clusters of positive and negative religious coping methods (see Table 2 for the Brief RCOPE).

**Table 2.** The Brief RCOPE: Positive and Negative Coping Subscale Items.

Positi	ve Religious Coping Subscale Items
1.	Looked for a stronger connection with God.
2.	Sought God's love and care.
3.	Sought help from God in letting go of my anger.
4.	Tried to put my plans into action together with God.
5.	Tried to see how God might be trying to strengthen me in this situation.
6.	Asked forgiveness for my sins.
7.	Focused on religion to stop worrying about my problems.
Negati	ive Religious Coping Subscale Items
8.	Wondered whether God had abandoned me.
9.	Felt punished by God for my lack of devotion.
10.	Wondered what I did for God to punish me.
11.	Questioned God's love for me.
12.	Wondered whether my church had abandoned me.
13.	Decided the devil made this happen.
14.	Questioned the power of God.

Confirmatory factor analyses of the Brief RCOPE were conducted with a sample of hospitalized elderly patients and a sample of college students [25]. In both cases, the analyses indicated that the two-factor solution provided a reasonable fit for the data. Moreover, the positive and negative religious coping subscales were differentially related to measures of physical health and mental health. The findings indicated that the use of positive religious coping methods was linked to fewer psychosomatic symptoms and greater spiritual growth after dealing with a stressor. In contrast, negative religious coping was correlated with more signs of psychological distress and symptoms, poorer quality of life and greater callousness toward other people. Individuals also reported considerably more frequent use of positive than negative religious coping methods.

The positive religious coping subscale (PRC) of the Brief RCOPE taps into a sense of connectedness with a transcendent force, a secure relationship with a caring God, and a belief that life has a greater benevolent meaning. The negative religious coping subscale (NRC) of the Brief RCOPE is characterized by signs of spiritual tension, conflict and struggle with God and others, as manifested by negative reappraisals of God's powers (e.g., feeling abandoned or punished by God), demonic reappraisals (*i.e.*, feeling the devil is involved in the stressor), spiritual questioning and doubting, and interpersonal religious discontent.

## **Psychometric Properties of the Brief RCOPE: Current Status**

For this paper, we searched PubMed and PsychINFO databases for articles published between January 2005 and June 2010 containing the phrase "religious coping." Articles reporting data on positive and/or negative subscales of the 14-item Brief RCOPE were selected for review. We were able to find 30 such studies.

The pooled sample consisted of a total of 5,835 participants (studies using the same sample were only counted once). The participants had a mean age of 49 and 52% were female. These statistics were derived by weighting studies according to their sample size. Thirty-two percent of the participants were reported as having a medical disease. Sixty-eight percent of the total sample was reported as white, 12% as black, 3% as Hispanic, and less than 1% were reported as either Asian or Native American (Race was not reported or specified for the remaining 17% of the participants.). Thirty-three percent of the sample was reported as Protestant, 22% as Catholic, 2% as Muslim, 1.5% as Jewish, and 2% as having no religious affiliation. No particular religious affiliation (or lack thereof) was specified for the remaining 39.5% of the sample. All the studies were conducted in the United States with the exception of a study of Pakistani university students [26] and one that used a sample of U.K. adults [27].

# Internal Consistency

The Brief RCOPE has demonstrated good internal consistency in a number of studies across widely differing samples that included patients undergoing cardiac surgery [28], African American women with a history of partner violence [29], cancer patients [30,31], caregivers for cancer patients [32], a community sample of U.K. adults [27], older adults in residential care [33], outpatients with alcohol use disorders [34], HIV patients [35], Catholic middle school students [36], and a sample of residents in Massachusetts and New York City following 9/11 [37]. The median alpha for the PRC scale was 0.92. The lowest alpha values were found among a sample of Nazarene university students returning from a 2-month mission trip (0.67) [38], for whom a sevenpoint rather than fourpoint Likert scale was used, and a sample of Muslim Pakistani University students (0.75) [26], for whom the scale had been translated into Urdu. The highest alpha for PRC was 0.94 (27) [37]. Alphas for the NRC scale were generally lower than those for the PRC scale, ranging from 0.60 among Pakistani undergraduates [26] to 0.90 in a sample of cancer patients [31]. The median alpha reported for the NRC scale was 0.81.

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## Relationship between PRC and NRC Scales

Data from most of the studies reviewed for this article suggested an orthogonal relationship between PRC and NRC. Non-significant associations were found in a variety of populations: adults undergoing cardiac surgery [28], African American women reporting a history of partner violence [29], Jewish and Christian clergy [39], older adults in residential care [33], students attending private Catholic middle schools [36], and undergraduates at a private Catholic university [40]. A significant positive association between PRC and NRC was found in only a handful of studies using the following populations: Christian undergraduates at an urban university (r = 0.25) [41], a community sample of U.K. adults (r = 0.60) [27], caregivers of terminally ill cancer patients (r = 0.20) [32], and advanced cancer patients (for high PRC predicting use of NRC: OR = 3.61) [22].

## Concurrent Validity

The Brief RCOPE has demonstrated good concurrent validity. As would be expected, PRC is most strongly and consistently related to measures of positive psychological constructs and spiritual well-being. Studies have also demonstrated the validity of PRC relative to psychological, physical, and social well-being constructs (see Table 3). PRC is only occasionally related to negative constructs such as depression and ill health. When associations with negative constructs are significant, they tend to be negative. More specifically, 35 tests of the association between PRC and positive constructs yielded 16 positive and significant and 19 non-significant relationships. The 29 instances in which a negative construct was tested for association with PRC yielded one positive and significant, six negative and significant, and 22 non-significant relationships. In sum, while higher PRC is associated with greater well-being, it is not consistently inversely linked to poorer functioning. As an example, in a study of 327 church-going, self-identified trauma victims, PRC was positively related to post-traumatic growth (r = 0.37), but unrelated to PTSD symptoms [45].

NRC generally behaves in the opposite manner. NRC is consistently tied to indicators of poor functioning, such as anxiety, depression, PTSD symptoms, negative affect, and pain (see Table 3). NRC is occasionally associated with constructs representing well-being. However, when such a correlation is significant, it is usually negative. Again, our systematic review of findings illustrates these patterns. The 28 instances in which a negative construct was tested for association with NRC yielded 24 positive and significant, one negative and significant, and three non-significant significant correlations. The 31 instances in which a construct representing well-being was tested for association with NRC yielded two positive and significant, 10 negative and significant, and 19 non-significant correlations. To summarize, while higher NRC is generally associated with signs of poorer mental health and physical health (*i.e.*, depression and ill health), it is only occasionally linked to indices of well-being. As an example, in a primarily Hispanic sample of 76 students at private Catholic middle schools, Van Dyke, Glenwick, Cecero and Kim [36] found that NRC was strongly associated with negative affect (r = 0.61), psychological distress (0.41), depression (0.42), anxiety (0.32), and somatization (0.28), but was not associated with daily spiritual experiences, positive affect, or satisfaction with life.

**Table 3.** Evidence of Concurrent and Incremental Validity (all correlations are significant at least 0.05 level).

Author	Sample=	Denominational	Criteria	Variables assoc	iated with PRC (	r)*	Variables assoc	iated with NRC (r	·)*
(date)		composition		Positively associated	Negatively associated	Not significant	Positively associated	Negatively associated	Not significant
Ai, Seymour, Tice, Kronfol & Bolling (2009) [28]	235 adults undergoing cardiac surgery; Michigan; 89% white	Not reported	-optimism -MCOPE: behavior coping, cognitive coping, anger coping, and avoidant coping -plasma IL-6	-behavior coping (0.24) -cognitive coping (0.31)	none	-optimism -anger coping -avoidance coping -plasma IL-6	-anger coping (0.30) -avoidant coping (0.26) -plasma IL-6 (0.15)	-optimism (-0.38) -cognitive coping (-0.15)	-behavior coping
Ai, Pargament, Kronfol, Tice & Appel (2010) [42]	235 adults undergoing cardiac surgery; Michigan; 89% white (same sample as above)	Not reported	-Religiousness scales: subjective, public, and private -anger coping -pre-op. anxiety -medical comorbidity -bodily pain	-subjective religiousness (0.80) -public religiousness (0.64) -private religiousness (0.77)	none	-anger coping -pre-op anxiety -medical comorbidity -bodily pain	-anger coping (0.33) -pre-op anxiety (0.35) -bodily pain (0.19)	none	-medical comorbidity -subjective religiousness -public religiousness -private religiousness
Bjorck & Kim (2009) [38]	108 Nazarene college students, completed a 2- month mission trip; 96% Caucasian	Nazarene	-trait anger -life satisfaction -modified RSS: received team support, God support, leader support	-team support (0.17) -God support (0.54)	-trait anger (0.18)	-leader support -satisfaction with life==	-trait anger (0.80)	-received God support (-0.26)	-received team support -received leader support -satisfaction with life
Bradley, Schwartz & Kaslow (2005) [29]	134 African American women with a history of intimate partner violence and suicidal behaviors	Not reported	-PTSD -childhood trauma -spouse abuse -self-esteem -social support	-self-esteem (0.21)	none	-PTSD score -spouse abuse -childhood trauma -social support	-PTSD score (0.34) -childhood trauma (0.25)	-self-esteem (0.37) -social support (-0.33)	-spouse abuse

 Table 3. Cont.

Cole (2005) [30]	16 people diagnosed with cancer (100% white)	56% Protestant, 44% Roman Catholic	-depression -anxiety -physical well- being -pain frequency in past week -pain severity in past week -surrendering control to God	-physical well-being (0.56) -surrendering control (0.86)	-depression (- 0.55) -anxiety (-0.49) -pain severity (-0.59)	-pain frequency	-depression (0.65) -anxiety (0.69) -pain frequency (0.62) -pain severity (0.66)	-physical well-being (- 0.54)	-surrendering control
Cotton, Gross- oehme, Rosenthal, McGrady, Roberts <i>et al</i> (2009) [43]	37 adolescents with sickle cell disease (97% African American)	24% Baptist, 19% Other Christian, 11% Protestant, 11% None, 8% Catholic, 8% Adventist (for more see belowM)	HRQOL (Peds-QL 4.0)	none	none	HRQOL	none	none	HRQOL
Cotton, Puchalski, Sherman, Mrus, Peterman et al (2006) [44]	450 HIV outpatients (50% African American, 45% White)	22% Baptist; 14% Roman Catholic; 11.3%; No religious preference; 9% Non- denominational Christian (for more see belowMM)	-overall functioning -depressive symptoms -life satisfaction -self-esteem -social support -optimism	-life satisfaction -optimism	-overall functioning	-depressive symptoms -self-esteem -social support	none	-self-esteem -optimism	-life satisfaction -overall functioning -social support -depressive symptoms
Davis, Hook, & Worthing- ton (2008) [41]	180 Christian college students (60% White, 20% Black)	Christian— denomination not specified	-forgiveness -Attachment to God Scale: anxious and avoidant subscales -sacred desecration	none	-avoidant attachment to God (-0.64)	-forgiveness -anxious attachment to God -sacred desecration	-anxious attachment to God (0.30) -avoidant attachment to God (0.19)	-forgiveness (0.30)	none

 Table 3. Cont.

Freiheit, Sonstegard, Schmitt & Vye (2006) [40]	124 undergrad- uates attending a private Catholic university; 89% Caucasian	Not reported (presumably mostly Catholic)	-revised Spiritual Experience Index (SEI-R): total, support, openness -Religious Background and Behavior Scale (RBB): total, formal practices, God consciousness -positive and negative affect -general	-SEI-R total (0.66) -spiritual support (0.80) -formal practices (0.52) -God consciousness (0.79) -general religiousness (0.77)	none	-spiritual openness -RBB total -positive affect -negative affect	-negative affect (0.26)	none	-SEI-R total -spiritual support -spiritual openness -RBB total -formal practices -God conscious- ness -positive affect
Harris, Erbes, Engdahl, Olson, Winskow- ski, McMahill (2008) [45]	327 church-going, self-identified trauma victims; 87% White	29% Catholic; 17% generic Protestant; 13% Lutheran; 7% Episcopal; 5% Reformed church; 5% Baptist; (several reported multiple affiliations; continued below γ)	religiousness  -number of traumatic experiences -PTSD symptoms -Post-traumatic growth -RCSS: religious comfort, alienation from God, fear and guilt, religious rifts -Prayer Functions Scale (PFS): acceptance, calm and focus, deferring/avoiding, assistance -social support	-post-traumatic growth (0.37) -religious fear and guilt (0.14) -PFS acceptance (0.66) -PFS assistance (0.66) -PFS calm and focus (0.54) -PFS defer/avoid (0.48)	none	-social support -PTSD symptoms -total traumatic events reported -religious alienation -religious rifts	-PTSD symptoms (0.41) -total traumatic events reported (0.32) -religious alienation (0.40) -religious fear and guilt (0.36) -religious rifts (0.19) -PFS defer/avoid (0.22)	-social support (0.26)	-post- traumatic growth -PFS acceptance -PFS assistance -PFS calm and focus

 Table 3. Cont.

Ironson & Kremer (2009) [46]	147 people with HIV; 48% African American; 22% White; 21% Latino	(raised) 38% Catholic; 38% Protestant; 48% Other	-spiritual transformation (ST; presence/absence of past experience of dramatic changes in spiritual beliefs, behaviors)	-ST (correlation not given; effect size of ST on PRC score = 0.055)	none	none	none	none	ST
Jacobsen, Zhang, Block, Maciejew- ski, & Prigerson (2010) [47]	123 patients with advanced cancer (59% White)	Not reported	-diagnosis of Major Depressive Disorder (MDD) -Grief caseness	none	none	-diagnosis of MDD -Grief caseness	-diagnosis of MDD (OR = 1.36; 95% C.I. 1.06-21.41) -Grief caseness (OR = 1.25; 95% C.I., 1.05- 1.49)	none	none
Kudel, Farber, Mrus, Leonard, Sherman, & Tsevat (2006) [48]	450 HIV outpatients (50% African American, 45% White; note γγ)	22% Baptist; 14% Roman Catholic; 11.3% No religious preference; 9% Nondenomination -al Christian (for more see below MM)	-level of functioning: categorization into 6 classes through latent profile analysis of quality of life scores	none	none	-level of functioning	none	-level of functioning (accounted for 13% of the variance in NRC scores)	none
Lewis, Maltby & Day (2005) [27]	138 UK adults from workplaces and community groups	Not reported	-subjective well- being -happiness -I-E scale of religiousness: intrinsic, extrinsic-personal, extrinsic-social	-happiness (0.32) -intrinsic (0.66) -extrinsic personal (0.55) -extrinsic social (0.21)	none	-subjective well-being	-intrinsic (0.33) -extrinsic- personal (0.31) -extrinsic- social (0.19)	none	-subjective well-being -happiness

 Table 3. Cont.

McConnell, Pargament, Ellison, & Flannelly (2006) [49]	National sample of 1629 partici- pants; 90.4% white	32% Catholic; 20% Protestant; 19% Baptist; 25% Other; 5% None	-anxiety -phobic anxiety -depression -paranoid ideation -obsessive- compulsiveness (OC) -somatization	NA	NA	NA	-anxiety ( $\Delta R^2$ = 0.10) -phobic anxiety (0.06) -depression (0.10) -paranoid ideation (0.10) -OC (0.08) -somatization (0.05)	none	none
Pearce, Singer, & Prigerson (2006) [32]	162 caregivers of terminally ill cancer patients; 74% Caucasian	45% Catholic; 27% Protestant; 17% Other; 7% None	-caregiver burden -depressive disorder -anxiety disorder -subjective care- giving competence -caregiver satis- faction -quality of life	-caregiver burden (0.19) -caregiver satisfaction (0.24)	none	-depressive disorder -anxiety disorder -caregiving competence -quality of life	-caregiver burden (0.18) -depressive disorder (0.16) -anxiety disorder (0.18)	-quality of life (-0.17)	-caregiving competence -caregiver satisfaction
Piderman, Schnee- kloth, Pankratz, Maloney & Altchuler (2007) [34]	74 adults in a 3- week outpatient addiction treatment program; 93% Caucasian	Not reported	-spiritual well- being -private religious practices -alcohol abstinence self- efficacy	-spiritual well- being (0.63)** -private religious practices (0.49)	none	-alcohol abstinence self-efficacy	NA	NA	NA
Proffitt, Cann, Calhoun, & Tedeschi (2007) [39]	30 Judeo- Christian clergy; 85% Caucasian, 10% African American	73% Protestant; 13% Catholic; 13% Jewish	-post-traumatic growth -well-being	-post- traumatic growth (0.49)	none	-well-being	-post- traumatic growth (0.50)	none	-well-being
Scandrett & Mitchell (2009) [50]	140 nursing home residents; 97% white	49% Jewish; 42% Catholic; 6% Protestant	-psychological well-being	none	none	-well-being	none	-well-being	none

 Table 3. Cont.

Schanowitz & Nicassio (2006) [33]	100 older adults in residential care; 86% Caucasian	Not reported	-PANAS: positive and negative affect -PWB-short: autonomy, self-acceptance, positive relations with others, positive reappraisal -physical functioning -PMI: active	-positive affect (0.44) -self- acceptance (0.28) -positive reappraisal (0.49) -active coping (0.35)	none	-negative affect -positive relations with others -autonomy -physical functioning -passive coping	-negative affect (0.52) -self- acceptance (0.25)	none	-positive affect -autonomy -positive relations with others -physical functioning -active coping -passive coping -positive reappraisal
Sherman, Simonton, Latif, Spohn, & Tricot (2005) [31]	213 multiple myeloma patients prior to stem cell transplantation; 88.7% White, 7.5% African American	(not for this sample, but historically at study site) 87% Protestants; smaller proportions of Catholics, Jews, Muslims, nonreligious individuals, other affiliations	coping, passive coping  -total distress -depression -SF-12: mental health, physical functioning, energy, pain	none	-pain (-0.14)**	-total distress -depression -mental health -physical functioning -energy	-total distress (0.38) -depression (0.20)	-mental health (0.29) -physical functioning (-0.18) -energy (-0.24) -pain (-0.20)	none
Tarakesh- war, Vander- werker, Paulk, Pearce, Kasl, Prigerson (2006) [51]	170 patients with advanced cancer; 66% White	40% Catholic; 20% Protestant; 4% Jewish; 17% other religion; 7% no religion	-quality of life (McGill QOL Questionnaire)	NA	NA	NA	none	QOL (β = -0.17)	none

Table 3. Cont.

Van Dyke, Glenwick, Cecero & Kim (2009) [36]	76 students at three private catholic middle schools in NYC area; 84% Hispanic	71% Catholic; 21% other Christian; 1% agnostic	-daily spiritual experiences -PANAS-C: positive and negative affect -satisfaction with life -BSI-18: total distress, depression, anxiety, somatization	-daily spiritual experiences (0.78) -positive affect (0.32; males only) -satisfaction with life (0.27; males only)	none	-negative affect -distress -depression -anxiety -somatization	-negative affect (0.61) -distress (0.41) -depression (0.42) -anxiety (0.32) -somatization (0.28)	none	-daily spiritual experiences -positive affect -satisfaction with life
Yi, Mrus, Wade, Ho, Hornung et al (2006) [52]	450 HIV outpatients (50% African American, 45% White; see below) γγ	22% Baptist; 14% Roman Catholic; 11.3%; No religious preference; 9% Nondenomination -al Christian (for more see belowMM)	-presence/absence of significant depressive symptoms (10- item Center for Epidemiological Studies Depression Scale)	none	none	-significant depressive symptoms	-significant depressive symptoms (p < 0.0001, no r provided)	none	none

<sup>=</sup> Racial make-up given when available; == Interaction with God support found: as God support increased, relationship with life satisfaction changed from negative to positive; \* All correlations are significant at least 0.05 level. All are Pearson correlations, unless otherwise specified; \*\* All r's in this row are Spearman correlations.

M continued: 3% Nondenominational, 3% Apostolic, 3% Pentecostal, 3% Presbyterian; MM continued: 9.1% Undesignated; 5% Assembly of God; 5% Methodist; 3% Church of Christ; 3% Presbyterian; 3% Other Protestant; 4% Episcopal; 2% Lutheran; 2% Jewish; 1% Muslim; 1% Evangelical; 0.5% Orthodox Church; 0.5% Mormon; 3% Other specific.

 $\gamma$  continued: 5% Metropolitan; 4% Presbyterian; 4% United Church of Christ; 4% Methodist; 4% Nazarene; 3% other affiliations; 3% Christian Science; 1% Evangelical;  $\gamma\gamma$  same sample as Cotton *et al.*, 2006 [44].

BSI = Brief Symptom Inventory; MCOPE = Multidimensional Coping Scale; NRC = Negative Religious Coping; PANAS = Positive and Negative Affect Scale; PANAS-C = Positive and Negative Affect Scale for Children; IL-6 = Interleukin 6 (an indicator of inflammation: chronic elevation indicates poorer functioning); PMI = Pain Management Inventory; PRC = Positive Religious Coping; PTGI = Post-traumatic growth inventory; PWB-short = Scales of psychological well-being, short form; RSS = Religious Support Scale; SF-12 = Short Form (12-item) Health Survey.

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#### Predictive Validity

We were able to find only two studies examining the predictive validity of the Brief RCOPE (see Table 4). These studies provide initial support for the capacity of PRC and NRC to predict greater well-being and poorer adjustment, respectively, over time. Tsevat, Leonard, Szaflarski, Sherman, Cotton and colleagues [35] examined associations between the Brief RCOPE and quality of life (as measured by a single item, asking participants to compare their lives before an HIV diagnosis to the present) among 347 outpatients with HIV. PRC at baseline was significantly associated with improvement in quality of life from baseline to follow-up 12 to 18 months later and negatively associated with deterioration in quality of life. NRC at baseline was unrelated to improvement or deterioration in quality of life from baseline to follow-up. In the second study, Ai, Seymour, Tice, Kronfol, and Bolling [28] measured PRC and NRC in a sample of 235 adults about to undergo cardiac surgery. They found that PRC prior to surgery did not significantly predict hostility and IL-6 (a biomedical indicator of poor post-surgical adjustment) 1 month post-surgery, but NRC prior to surgery was significantly positively correlated with hostility (r = 0.33) and IL-6 (0.21) one month post-surgery. These findings offer promising initial evidence for the predictive validity of the Brief RCOPE.

## Incremental Validity

Some studies have examined the degree to which the Brief RCOPE predicts various criteria above and beyond the effects of demographic, psychological, social and health-related variables. There is evidence for the incremental validity of PRC in predicting well-being after controlling for age and gender [27] as well as a number of other secular variables, including race, financial worries, having children, and other psychosocial constructs [44]. As an example, Pearce, Singer and Prigerson [32] found that PRC was associated with both greater subjective caregiver burden *and* caregiver satisfaction after controlling for social support, self-efficacy, optimism, age, sex, education and race. However, not all findings indicate PRC has a unique effect on well-being. For instance, Schanowitz and Nicassio [33] found that the relationship between PRC and positive affect became non-significant after controlling for positive reappraisals.

Several studies support the incremental validity of the NRC scale [28,31,32,44,49-51]. In one such study, NRC remained a significant predictor of IL-6 levels among cardiac patients after controlling for a number of other biomedical indicators and mood states. In another study, NRC significantly predicted lower quality of life among advanced cancer patients after controlling for self-efficacy, history of depression and demographic variables [51]. Other studies have demonstrated that NRC can predict outcomes even after controlling for an index of general religiousness—in *addition* to other relevant demographic, biomedical, and psychological variables [31,49,50]. Sherman, Simonton, Latif, Spohn and Tricot [31] found that, among multiple myeloma patients undergoing stem cell transplantation, NRC remained positively associated with total distress and depression after controlling for demographic and medical variables as well as general religiousness. Similarly, using a national sample, McConnell, Pargament, Ellison and Flannelly [49] found that NRC predicted a significant amount of variance in anxiety ( $\Delta R^2 = 0.10$ ), phobic anxiety (0.06), depression (0.10), paranoid ideation (0.10), obsessive-compulsiveness (0.08), and somatization (0.05) after controlling for age, gender,

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education, ethnicity, income, marital status, social support, occurrence of illness or injury, as well as frequency of prayer, frequency of church attendance. These studies suggest that negative religious coping as measured by the Brief RCOPE uniquely predicts outcomes even after controlling for secular variables *and* indicators of general religiousness.

#### Sensitivity to Change

We found two studies reporting data on changes in PRC and NRC prior to and following treatment (see Table 5). Both reported significant increases in PRC from pre to post-treatment, and one reported decreases in NRC after treatment. The first of these studies, by Piderman, Schneekloth, Pankratz, Maloney and Altchuler [34] was an uncontrolled, single-group design examining changes in PRC and NRC among individuals with alcohol use problems after participating in an outpatient treatment program. This study found significant increases in PRC from baseline (at start of treatment) to follow-up, but no significant changes in NRC. The other study was a randomized controlled trial [53]: coronary artery bypass graft patients were randomly assigned to a control group or a treatment group which received five chaplain visits before, during (with family), and just after surgery. Data on PRC and NRC were collected just prior to surgery, one month after surgery, and six months after surgery. While PRC increased in the treatment group relative to the baseline and the control groups, the effect, which was not significant one month post-surgery, became significant at six months. PRC decreased slightly in the control group from baseline to 6-month follow-up. NRC decreased in the treatment group relative to baseline and to the control group, though, again, this effect was not significant until the 6-month follow-up. These data provide initial evidence that scores on the Brief RCOPE may be sensitive to changes engendered during treatment.

#### Validity among Other Religions and Cultures

Nearly all of the studies that used the Brief RCOPE have been conducted in the United States and Western Europe with largely Christian samples. In one notable exception, Khan and Watson [26] translated the Brief RCOPE into Urdu in their study of Muslim Pakistani university students. Alphas for PRC and NRC were 0.75 and 0.60, respectively. Although PRC was significantly positively correlated with an extrinsic-personal religious orientation (r = 0.34) and an intrinsic religious orientation (0.26), it was not significantly associated with an extrinsic-social religious orientation, nor with anxiety, depression or hostility. NRC was significantly positively correlated with anxiety (r = 0.32), depression (0.43), and hostility (0.34), but not with intrinsic, extrinsic-social, or extrinsic-personal religious orientations. Another study focused on the relationship between depression and a ten-item version of the Brief RCOPE among native Dutch, Moroccans, Turks, and Surinamese immigrants living in Amsterdam [54]. The results supported the validity of the PRC subscale, but not the NRC because the alpha for the NRC was so low. These studies represent initial efforts toward validating the Brief RCOPE among diverse cultural and religious groups.

 Table 4. Predictive Validity.

Author	Sample/Time	Denominational	Criterion used	Variables asso	ciated with PRC		Variables ass	ociated with N	NRC
(date)	frame	composition		Positively associated	Negatively associated	No significant	Positively associated	Negatively associated	No significant association
						association	1		
Ai,	-235 adults	Not reported	Measured about a	none	none	-hostility	-hostility	none	none
Seymour,	undergoing		month after			-IL-6	(r* = 0.33)		
Tice,	cardiac surgery		surgery:				-IL-6		
Kronfol,	(89% white)		-plasma IL-6				(r* = 0.21)		
& Bolling	-PRC/NRC		(chronic elevation						
(2009)	was measured		indicates poor						
[28]	just prior to		functioning)						
	surgery		-hostility (subscale						
			of SCL-90-R)						
Tsevat,	-347	79% identified	Data collected 12	-improve-	-deterioration	none	none	none	-improvement
Leonard,	outpatients	with a	to 18 mo. after	ment in	in quality of				in quality of
Szaflarski,	with HIV (46%	particular	baseline (time 2):	quality of life	life from				life from time
Sherman,	African	religion—	-global quality of	from time 1	time 1 to				1 to time 2
Cotton et	American, 50%	mostly Roman	life: one item	to time 2 (p =	time 2 (p =				-deterioration
al. (2009)	White)	Catholic,	asking participants	0.008)	0.03)				in quality of
[35]	-PRC/NRC	Baptist, or	to compare their	ĺ	ĺ				life from time
	assessed at	Southern	life now to their life						1 to time 2
	baseline (time	Baptist	before diagnosis of						
	1)		HIV						

<sup>\*</sup>Pearson *r*.

 Table 5. Sensitivity to Change.

Authors (year)	Sample	Denominational	Design	Treatment(s)	Effect on PRC	Effect on NRC
		Composition				
Bay, Beckman,	166 coronary	75% Protestant;	Randomized	Five chaplain	<i>Increased</i> in treatment	Decreased in
Tripp,	artery bypass	12% Catholic	controlled trial;	visits for	group relative to	treatment group
Gunderman &	graft patients;		follow-ups at 1	treatment group;	baseline and to control	relative to baseline
Terry (2008)	91% Caucasian		month and 6	none for control	(significant only at 6-	and to control
[53]			months post-		mo. follow-up)	(significant only at 6-
			surgery			mo. follow-up)
Piderman,	74 adults with	Not reported	Uncontrolled,	Three week	Increased significantly	No significant change
Schneekloth,	alcoholism in a		single group;	outpatient	from enrollment to	from enrollment to
Pankratz,	three-week		measures	program;	discharge	discharge
Maloney &	outpatient		completed at	included 12-step		
Altchuler (2007)	program		enrollment and	facilitation, CBT,		
[34]			discharge	and motivational		
				enhancement		

## Normative Information

When a 1-to-4 four-point Likert scale is used, mean scores for PRC and NRC can range from a minimum of 7 to a maximum of 28. Among studies reviewed here, actual mean scores ranged from 17 to 21 for PRC and 8 to 14 for NRC. (see Table 6 for details; means from studies using a 0-to-3 scale were adjusted upwards to make them comparable to a 1-to-4 scale.) These means suggest that, on average, respondents tend to endorse "somewhat" or "a great deal" for PRC items, and tend to endorse "not at all" or "somewhat" in reference to NRC items. Standard deviations range between 4 and 6.5 and between 2.5 and 4.5 for the PRC and NRC, respectively.

Table 6. Norms.

Authors (year)*	Sample	Denominational Composition	PRC mean (SD)**	NRC mean (SD)
Bay, Beckman, Tripp, Gunderman & Terry (2008) [53]	170 coronary artery bypass graft patients	75% Protestant; 12% Catholic	Pre-surgery: 20.4 (6.3) 1 mo. post-surgery: 20.3 (5.7) 6 mo. post-surgery: 20.1 (6.0)	Pre-surgery: 8.7 (2.6) 1 mo. post-surgery: 8.7 (2.9) 6 mo. post-surgery: 9.0 (3.0)
Cotton, Grossoehme, Rosenthal, McGrady, Roberts <i>et al</i> . (2008) [43]	37 adolescents with sickle cell disease	24% Baptist, 19% Other Christian, 11% Protestant, 11% None, 8% Catholic, 8% Seventh-Day Adventist, 3% Nondenominational, 3% Apostolic, 3% Pentecostal, 3% Presbyterian	19.9 (5.1)	11.8 (4.4)
Cotton, Puchalski, Sherman, Mrus, Peterman <i>et al</i> . (2006) [44]	450 outpatients at various stages of HIV/AIDS	24% Baptist, 19% Other Christian, 11% Protestant, 11% None, 8% Catholic, 8% Adventist (for more see below M)	17.7 (6.4)	10.7 (4.3)
Phelps, Maciejewski, Nilsson, Balboni, Wright, et al. (2009) [22]	345 advanced cancer patients	38% Catholic; 16% Protestant; 17% Baptist; 24% Other; 5% None	18.1 (6.4)	9.0 (3.5)
Schanowitz & Nicassio (2006) [33]	100 older adults in residential care	Not reported	20.40 (5.82)	25.38 (3.66)
Van Dyke, Glenwick, Cecero, & Kim (2009) [36]	76 students at 3 private Catholic middle schools	71% Catholic; 21% other Christian; 1% agnostic	20.49 (4.29)	13.53 (4.45)

<sup>\*</sup>If multiple studies drew from the same pool of participants, only one study from that pool was included here; \*\*All scores adjusted to (1-4) scale.

M continued: 3% Nondenominational, 3% Apostolic, 3% Pentecostal, 3% Presbyterian

Results from the studies reviewed here suggest that PRC and NRC scores vary across demographic groups. In their study of advanced cancer patients, Phelps, Maciejewski, Nilsson, Balboni, Wright, *et al.* [22] found that those who scored high in PRC were more likely to be black or Hispanic, young, less educated, lacking health insurance, single, and recruited from the Texas sites (the other sites were in Connecticut, Massachusetts, and New Hampshire). Tarakeshwar, Paulk, Pearce, Kasl, and Prigerson [51] found that lower NRC scores were associated with non-white status and less education.

#### **Summary, Future Directions, and Limitations**

To summarize, the Brief RCOPE has received a great deal of research attention. It is the most commonly used measure of religious coping. Although it is possible that the conclusions of the literature review are limited by the "file drawer" problem (i.e., unpublished studies with non-significant findings), this body of research as a whole suggests that the Brief RCOPE is a reliable and valid measure. Both PRC and NRC scales have demonstrated good internal consistency across a range of samples, though these have been largely Christian and American. The majority of studies have found that the PRC and NRC scales are not significantly associated with each other, though a few studies report significant positive correlations between the scales. As for concurrent validity, crosssectional studies have generally found that PRC is significantly and positively correlated with wellbeing constructs and is occasionally inversely related to indicators of poor functioning (e.g., anxiety, depression, pain). In contrast, NRC is generally significantly and positively correlated with indicators of poor functioning and is occasionally inversely related to constructs representing well-being. Furthermore, the studies reviewed for this article provide some support for the incremental validity of the Brief RCOPE; that is, PRC and NRC have been predictive of outcome variables after other relevant demographic and psychosocial variables have been controlled. In addition, the Brief RCOPE is predictive of outcomes after controlling for the effects of global religious variables, such as frequency of church attendance and prayer. These findings suggest that the Brief RCOPE sheds light on a distinctive aspect of the stress and coping process as well as a distinctive aspect of religiousness. We also found initial support for the predictive validity of the Brief RCOPE and its sensitivity to change among the few studies which have examined these properties. Normative data show that respondents on average report relatively low levels of negative religious coping and relatively high levels of positive religious coping. Studies also indicate that non-whites generally tend to have higher PRC scores and lower NRC scores than whites.

In the future, more studies are needed to determine the extent to which the Brief RCOPE is useful in cultures outside of the Western, largely Christian context. Significant alterations of the Brief RCOPE will certainly be needed before it can be applied to nontheistic contexts. Longitudinal studies are also needed to provide more information regarding the predictive validity of the Brief RCOPE and to differentiate stress mobilization effects (*i.e.*, distress that triggers PRC) from the long-term effects of religious coping on health-related outcomes. Furthermore, it is important to examine the degree to which religious coping is stable or variable over time and situations.

The brevity of the Brief RCOPE is its greatest strength—it is also its greatest weakness. The Brief RCOPE does not offer an extensive or intensive look into the many methods of religious coping. For example, although Pargament, Murray-Swank, Magyar, and Ano [56] and Exline and Rose [57]

articulated three types of religious struggle (divine, intrapsychic, interpersonal), the NRC focuses mostly on divine types of struggle. Of course, researchers could use the complete RCOPE or select subscales of the full RCOPE to assess those specific religious coping methods that are most relevant to a particular sample, stressor, and question of interest. They could also select other instruments that assess specific types of religious coping in greater detail, such as Bjorck's [38] religious support measure or the religious problem solving scales [19]. However, in spite of its brevity, Brief RCOPE appears to be a good instrument that does what it was intended to do: assess religious methods of coping in an efficient, psychometrically sound, and theoretically meaningful manner.

#### References

- 1. Greil, A.L.; Porter, K.L; Leitko, T.A; Riscilli, C. Why me? Theodicies of infertile women and men. *Sociol. Health Illness* **1989**, *11*, 213-229.
- 2. Segall, M.; Wykkle, M. The black family's experience with dementia. *J. Appl. Soc. Sci.* **1988**–**1989**, *13*, 170-191.
- 3. Schuster, M.A.; Stein, B.D.; Jaycox, L.H.; Collins, R.L.; Marshall, G.N.; Elliott, M.N.; Zhou, A.J.; Kanouse, D.E.; Morrison, J.L.; Berry, S.H. A national survey of stress reactions after the September 11, 2001, terrorist attacks. *New Engl. J. Med.* **2001**, *345*, 1507-1512.
- 4. Ano, G.A.; Vasconcelles, E.B. Religious coping and psychological adjustment to stress: A meta-analysis. *J. Clin. Psychol.* **2005**, *61*, 1-20.
- 5. Pargament, K.I. Religion and coping: The current state of knowledge. In *Oxford Handbook of Stress and Coping*; Folkman, S., Ed.; Oxford University Press: Oxford, UK, 2010; pp. 269-288.
- 6. Tarakeshwar, N.; Pearce, M.J.; Sikemma, K.J. Development and implementation of a spiritual coping group intervention for adults living with HIV/AIDS: A pilot study. *Ment. Health Relig. Cult.* **2005**, *8*, 179-190.
- 7. Pargament, K.I. Spiritually Integrated Psychotherapy: Understanding and Addressing the Sacred; Guilford Press: New York, NY, USA, 2007.
- 8. Hill, P.C.; Gibson, N.J.S. Whither the roots? Achieving conceptual depth in psychology of religion. *Arch. Psychol. Relig.* **2008**, *30*, 19-35.
- 9. Hill, P.C.; Pargament, K.I. Advances in the conceptualization and measurement of religion and spirituality. *Amer. Psychol.* **2003**, *58*, 64-76.
- 10. Lazarus, R.S.; Folkman, S. *Stress, Appraisal, and Coping*; Springer Press: New York, NY, USA, 1984.
- 11. Folkman, S. Oxford Handbook of Stress and Coping; Oxford University Press: Oxford, UK, 2010.
- 12. Pargament, K.I. *The Psychology of Religion and Coping: Theory, Research, Practice*; Guilford Press: New York, NY, USA, 1997.
- 13. Pargament, K.I.; Mahoney, A. Sacred matters: Sanctification as a vital topic for the psychology of religion. *J. Sci. Study Relig.* **2005**, *15*, 179-198.
- 14. Ai, A.L.; Tice, T.N.; Huang, B.; Rodgers, W.; Bolling, S.F. Types of prayer, optimism, and well-being of middle-aged and older patients undergoing open-heart surgery. *Ment. Health Relig. Cult.* **2008**, *11*, 131-150.

- 15. Bade, M.K.; Cook, S.W. Functions of Christian prayer in the coping process. *J. Sci. Study Relig.* **2008**, *47*, 123-133.
- 16. Carver, C.S.; Scheier, M.F.; Weinbraub, J.K. Assessing coping strategies: A theoretically-based approach. *J. Pers. Soc. Psychol.* **1989**, *56*, 267-283.
- 17. Folkman, S.; Lazarus, R.S.; Dunkel-Schetter, C.; DeLongis, A.; Gruen, R.J. Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *J. Pers. Soc. Psychol.* **1986**, *50*, 992-1003.
- 18. Boudreaux, E; Catz, S.; Ryan, L.; Amaral-Melendez, M.; Brantley, P.J. The ways of religious coping scale: Reliability, validity, and scale development. *Assessment* **1995**, *2*, 233-244.
- 19. Pargament, K.I.; Kennell, J.; Hathaway, W.; Grevengoed, N.; Newman, J.; Jones, W. Religion and the problem-solving process: Three styles of coping. *J. Sci. Study Relig.* **1988**, *27*, 90-104.
- 20. Pargament, K.I.; Ensing, D.S.; Falgout, K.; Olsen, H.; Reilly, B.; Van Haitsma, K.; Warren, R. God help me (I): Religious coping efforts as predictors of the outcomes to significant negative life events. *Amer. J. Comm Psychol.* **1990**, *18*, 798-824.
- 21. Pargament, K.I.; Koenig, H.G.; Perez, L.M. The many methods of religious coping: Development and initial validation of the RCOPE. *J. Clin. Psychol.* **2000**, *56*, 519-543.
- 22. Phelps, A.C.; Maciejewski, P.K.; Nilsson, M.; Balboni, T.A.; Wright, A.A.; Paulk, M.E.; Trice, E.; Schrag, D.; Peteet, J.R.; Block, S.D.; Prigerson, H.G. Religious coping and use of intensive life-prolonging care near death in patients with advanced cancer. *J. Am. Med. Assoc.* **2009**, *301*, 1140-1147.
- 23. Pargament, K.I.; Koenig, H.G.; Tarakeshwar, N.; Hahn, J. Religious struggle as a predictor of mortality among medically ill elderly patients: A two-year longitudinal study. *Arch. Intern. Med.* **2001**, *161*, 1881-1885.
- 24. Pargament, K.I.; Koenig, H.G.; Tarakeshwar, N.; Hahn, J. Religious coping methods as predictors of psychological, physical, and social outcomes among medically ill elderly patients: A two-year longitudinal study. *J. Health Psychol.* **2004**, *9*, 713-730.
- 25. Pargament, K.I.; Smith, B.W.; Koenig, H.G.; Perez, L. Patterns of positive and negative religious coping with major life stressors. *J. Sci. Study Relig.* **1998**, *37*, 710-724.
- 26. Khan, Z.H.; Watson, P.J. Construction of the Pakistani Religious Coping Practices Scale: Correlations with religious coping, religious orientation, and reactions to stress among Muslim university students. *Int. J. Psychol. Rel.* **2006**, *16*, 101-112.
- 27. Lewis, C.A.; Maltby, J.; Day, L. Religious orientation, religious coping and happiness among UK adults. *Pers. Indiv. Differ.* **2005**, *38*, 1193-1202.
- 28. Ai, A.L.; Seymour, E.M.; Tice, T.N.; Kronfol, Z.; Bolling, S.F. Spiritual struggle related to plasma interleukin-6 prior to cardiac surgery. *Psychol. Relig. Spiritual.* **2009**, *1*, 112-128.
- 29. Bradley, R.; Schwartz, A.C.; Kaslow, N.J. Posttraumatic stress disorder symptoms among low-income, African American women with a history of intimate partner violence and suicidal behaviors: Self-esteem, social support, and religious coping. *J. Trauma. Stress* **2005**, *18*, 685-696.
- 30. Cole, B.S. Spiritually-focused psychotherapy for people diagnosed with cancer: A pilot outcome study. *Ment. Health Relig. Cult.* **2005**, *8*, 217-226.

- 31. Sherman, A.C.; Simonton, S.; Latif, U.; Spohn, R.; Tricot, G. Religious struggle and religious comfort in response to illness: Health outcomes among stem cell transplant patients. *J. Behav. Med.* **2005**, 28, 359-367.
- 32. Pearce, M.J.; Singer, J.L.; Prigerson, H.G. Religious coping among caregivers of terminally ill cancer patients: Main effects and psychosocial mediators. *J. Health Psychol.* **2006**, *11*, 743-759.
- 33. Schanowitz, J.Y.; Nicassio, P.M. Predictors of positive psychosocial functioning of older adults in residential care facilities. *J. Behav. Med.* **2006**, *29*, 191-201.
- 34. Piderman, K.M.; Schneekloth, T.D.; Pankratz, V.S.; Maloney, S.D.; Altchuler, S.I. Spirituality in alcoholics during treatment. *Am. J. Addict.* **2007**, *16*, 232-237.
- 35. Tsevat, J.; Leonard, A.C.; Szaflarski, M.; Sherman, S.N.; Cotton, S.; Mrus, J.M.; Feinberg, J. Change in quality of life after being diagnosed with HIV: A multicenter longitudinal study. *AIDS Patient Care ST.* **2009**, *23*, 931-937.
- 36. Van Dyke, C.J.; Glenwick, D.S.; Cecero, J.J.; Kim, S. The relationship of religious coping and spirituality to adjustment and psychological distress in urban early adolescents. *Ment. Health Relig. Cult.* **2009**, *12*, 369-383.
- 37. Meisenhelder, J.B.; Cassem, E.H. Terrorism, posttraumatic stress, spiritual coping, and mental health. *J. Spirial. Ment. Health* **2009**, *11*, 218-230.
- 38. Bjorck, J.P.; Kim, J. Religious coping, religious support, and psychological functioning among short-term missionaries. *Ment. Health Relig. Cult.* **2009**, *12*, 611-626.
- 39. Proffitt, D.; Cann, A.; Calhoun, L.G.; Tedeschi, R.G. Judeo-Christian clergy and personal crisis: Religion, posttraumatic growth and well being. *J. Rel. Health* **2007**, *46*, 219-231.
- 40. Freiheit, S.R.; Sonstegard, K.; Schmitt, A.; Vye, C. Religiosity and spirituality: A psychometric evaluation of the Santa Clara Strength of Religious Faith Questionnaire. *Pastoral Psychol.* **2006**, *55*, 27-33.
- 41. Davis, D.E.; Hook, J.N.; Worthington, E.L. Relational spirituality and forgiveness: The roles of attachment to God, religious coping, and viewing the transgression as a desecration. *J. Psychol. Christ.* **2008**, *27*, 293-301.
- 42. Ai, A.L.; Pargament, K.; Kronfoi, Z.; Tice, T.N.; Appel, H. Pathways to postoperative hostility in cardiac patients. *J. Health Psychol.* **2010**, *15*, 186-195.
- 43. Cotton, S.; Grossoehme, D.; Rosenthal, S.L.; McGrady, M.E.; Roberts, Y.H.; Hines, J.; Yi, M.S.; Tsevat, J. Religious/spiritual coping in adolescents with sickle cell disease. *J. Pediatr. Hematol. Oncol.* **2009**, *31*, 313-318.
- 44. Cotton, S.; Puchalski, C.M.; Sherman, S.N.; Mrus, J.M.; Peterman, A.H.; Feinberg, J.; Pargament, K.I.; Justice, A.C.; Leonard, A.C.; Tsevat, J. Spirituality and religion in patients with HIV/AIDS. *J. Gen. Intern. Med.* **2006**, *21*, S5-S13.
- 45. Harris, J.I.; Erbes, C.R.; Engdahl, B.E.; Olson, R.H.A.; Winskowski, A.M.; McMahill, J. Christian religious functioning and trauma outcomes. *J. Clin. Psychol.* **2008**, *64*, 17-29.
- 46. Ironson, G.; Kremer, H. Spiritual transformation, psychological well-being, health, and survival in people with HIV. *Int. J. Psychiatr. Med.* **2009**, *39*, 263-281.
- 47. Jacobsen, J.C.; Zhang, B.; Block, S.D.; Maciejewski, P.K.; Prigerson, H.G. Distinguishing symptoms of grief and depression in a cohort of advanced cancer patients. *Death Stud.* **2010**, *34*, 257-273.

- 48. Kudel, I.; Farber, L.; Mrus, J.M.; Leonard, A.C.; Sherman, S.N.; Tsevat, J. Patterns of responses on health-related quality of life questionnaires among patients with HIV/AIDS. *J. Gen. Intern. Med.* **2006**, *21*, S48-S55.
- 49. McConnell, K.M.; Pargament, K.I.; Ellison, C.G.; Flannelly, K.J. Examining the links between spiritual struggles and symptoms of psychopathology in a national sample. *J. Clin. Psychol.* **2006**, 62, 1469-1484.
- 50. Scandrett, K.G.; Mitchell, S.L. Religiousness, religious coping, and psychological well-being in nursing home residents. *J. Am. Med. Dir. Assoc.* **2009**, *10*, 581-586.
- 51. Tarakeshwar, N.; Vanderwerker, L.C.; Paulk, E.; Pearce, M.J.; Kasl, S.V.; Prigerson, H.G. Religious coping is associated with the quality of life of patients with advanced cancer. *J. Palliat. Med.* **2006**, *9*, 646-657.
- 52. Yi, M.S.; Mrus, J.M.; Wade, T.J.; Ho, M.L.; Hornung, R.W.; Hornung, R.W.; Cotton, S.; Peterman, A.H.; Puchalski, C.M.; Tsevat, J. Religion, spirituality, and depressive symptoms in patients with HIV/AIDS. *J. Gen. Intern. Med.* **2004**, *21*, S21-S27.
- 53. Bay, P.S.; Beckman, D.; Tripp, J.; Gunderman, R.; Terry, C. The effect of pastoral care services on anxiety, depression, hope, religious coping, and religious problem solving styles: A randomized controlled study. *J. Relig. Health* **2008**, *47*, 57-69.
- 54. Braam, A.W.; Schrier, A.C.; Tuinebreijer, W.C.; Beekman, A.T.F.; Dekker, J.J.M.; de Wit, M.A.S. Religious coping and depression in multicultural Amsterdam: A comparison between native Dutch citizens and Turkish, Moroccan, and Surinamese/Antillean migrants. *J. Affect Disord.* **2010**, *125*, 269-278.
- 55. Loggers, E.T.; Maciejewski, P.K.; Paulk, E.; DeSanto-Madeya, S.; Nilsson, M.; Viswanath, K.; Wright, A.A.; Balboni, T.A.; Temel, J.; Stieglitz, H.; Block, S.; Prigerson, H.G. Racial differences in predictors of intensive end-of-life care in patients with advanced cancer. *J. Clin. Oncol.* **2009**, 27, 5559-5564.
- 56. Pargament, K.I.; Murray-Swank, N.; Magyar, G.; Ano, G. Spiritual struggle: A phenomenon of interest to psychology and religion. In *Judeo-Christian Perspectives on Psychology: Human Nature, Motivation, and Change*; Miller, W.R., Delaney, H., Eds.; APA Press: Washington, DC, USA, 2005; pp. 245-268.
- 57. Exline, J.J.; Rose, E. Religious and spiritual struggles. In *Handbook of Psychology of Religion and Spirituality*; Paloutzian, R., Park, C., Eds.; Guilford Press: New York, NY, USA, 2005; pp. 315-330.
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