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Positive and Negative Religious Coping Styles as Prospective Predictors of Well-Being in African Americans

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Abstract

Research on religious coping has proliferated in recent years, but many key questions remain, including the independent effects of positive and negative religious coping styles on well-being over time. Further, little research on religious coping styles has been conducted with African Americans in spite of their documented importance in this population. The present study examined the independent prospective effects on well-being of positive and negative religious coping styles over the subsequent 2.5 years in a national sample of African American community-dwelling adults. Well-being indicators included depressive symptoms and positive and negative affect as well as self-esteem and meaning in life. Results indicated that when considering positive and negative religious coping styles together, baseline positive religious coping consistently and positively predicted the well-being indicators 2.5 years later, while negative religious coping consistently and negatively predicted the well-being indicators 2.5 years later. These effects remained when examining change in well-being levels over time, although they attenuated in magnitude. Finally, negative religious coping more strongly predicted the negative aspects of well-being (e.g., depressive symptoms, negative affect) 2.5 years later than did positive religious coping, an effect that also remained but was attenuated when controlling for baseline levels of well-being. These results highlight the nuanced relationships between both positive and negative religious coping styles and positive and negative aspects of well-being over time among African Americans. Future research might usefully examine how to minimize negative effects and capitalize on the salutary effects of positive religious coping.

Keywords

religious coping; African Americans; well-being; mental health; meaning in life

Introduction

Proliferating research on how people bring religious resources to bear in their efforts to deal with stressful situations (i.e., *religious coping*; Pargament, Smith, Koenig, & Perez, 1998) has greatly expanded our understanding of the effects of this type of coping. Religious coping has been associated with individuals' adjustment to major life stressors such as cancer or major trauma as well as their management of less severe stresses (e.g., Pargament, Koenig, & Perez, 2000). Importantly, researchers have distinguished among different types of religious coping and described their potential for different outcomes (Pargament, Feuille, & Burdzy, 2011).

Most contemporary research conceptualizes religious coping as comprising two distinct dimensions, positive and negative, and often assesses these dimensions with the RCOPE or Brief RCOPE (Pargament, 2013). Positive religious coping reflects a confident and trusting connection with God (Hebert, Zdaniuk, Schulz, & Scheier, 2009) and includes strategies such as seeking religious support and making benevolent religious reappraisals. Negative religious coping reflects a less secure relationship with God (Hebert et al., 2009) and includes strategies such as religious discontent and making punitive religious reappraisals.

Using positive religious coping to deal with specific stressors is sometimes related to higher levels of well-being (e.g., Pargament et al., 1998b), but null or even inverse associations between positive religious coping and adjustment often are reported (e.g., Gerber, Boals, & Schuettler, 2011; Sherman, Simonton, Latif, Spohn, & Tricot, 2005; Sherman, Plante, Simonton, Latif, & Anaissie, 2009). More consistent findings have been reported for negative religious coping, which tends to be used much less frequently but is generally found to be strongly related to poorer mental and physical health (see Exline & Rose, 2013, for a review).

However, key questions remain about positive and negative religious coping. In particular, although studies that have assessed both positive and negative religious coping generally show that associations of negative religious coping are stronger and more consistent than are those of positive religious coping (e.g., Pargament et al., 2000; Pargament, Koenig, Tarakeshwar, & Hahn, 2001; see Ano & Vasconcelles, 2005), studies often examine the associations of positive and negative religious coping with well-being separately (e.g., Amadi et al., 2016; Parenteau, 2016; Tarakeshwar et al., 2006) rather than conjointly. Thus, it is not well established whether positive religious coping may be independently associated with well-being when also taking negative religious coping into account.

In addition, although positive and negative religious coping are sometimes studied as a general style of dealing with important life problems (e.g., Bjorck & Thurman, 2007; Park, Smith, Lee, Mazure, McKee, & Hoff, in press), religious coping is usually studied in reference to a specific stressor such as bereavement (Lord & Gramling, 2014) or cancer

(e.g., Hebert et al., 2009) or other illnesses (e.g., Amadi et al., 2016). A separate line of research has examined *religious problem-solving styles*, which refer to individuals' general approach to life problems vis-à-vis God. However, research on religious problem-solving styles focuses on a framework of three styles with which individuals share control of their problems with God: collaborative (working with God as partners), deferring (working through God), and self-directed (working without God) modes, typically measured with the Religious Problem-Solving Styles Scale (Pargament et al., 1988). Studies using this framework have found that these religious coping or problem-solving styles are associated with individuals' well-being in a variety of contexts (e.g., Phillips et al., 2004). Thus, religious coping as a problem-solving style appears to be related to general levels of health and well-being. However, studies taking this religious problem-solving style perspective have not included negative religious coping. Assessing negative as well as positive religious coping as a *style* is essential, because both styles of religious coping may have cumulative effects on well-being over time and across problems. Thus, relatively little is known about how positive and negative religious coping *styles* are associated with well-being.

Further, relatively little of the research on religious coping with major problems has been conducted with African Americans. This lack of attention is surprising, given that religion plays a particularly important role in handling stress for African Americans (Ellison & Taylor, 1996; Taylor, Chatters, & Levin, 2003). A study of adults recovering from sexual assault found that African Americans used both more positive and more negative religious coping than did other ethnicities in the study (Ahrens, Abeling, Ahmad, & Hinman, 2009), while a survey of undergraduates found that although African Americans reported higher levels of positive religious coping than did European Americans, they reported lower levels of negative religious coping (Chapman & Steger, 2010).

The goal of the present study was to determine the independent associations of positive religious coping and negative religious coping, assessed as general styles of dealing with major problems, with a variety of indicators of well-being among a national sample of community-dwelling African Americans over a 2.5-year period. To examine the possibility of different effects of religious coping on mental health and general well-being, we included a range of well-being indicators, including depressive symptoms and positive and negative affect, as general indicators of mental health. We also included self-esteem, a reflection of individuals' general self-regard. Finally, we examined individuals' sense of meaning in life, an outcome increasingly considered to be a highly important indicator of eudaimonic well-being (Steger, 2012). Because we were interested in the potential cumulative impact of positive and negative religious coping styles, we examined their prediction of subsequent well-being two-and-a-half years later. Although we anticipated that these well-being variables would remain relatively stable across this time period at the group level, fluctuations at the individual level were likely, given the vicissitudes of life across several years. In addition, using more conservative prospective analyses, we examined religious coping as predicting subsequent levels of each well-being indicator controlling for baseline levels of that indicator, effectively examining the extent to which religious coping predicted change in well-being over time. We anticipated that across all of the well-being indicators, positive religious coping would be associated with better subsequent well-being and negative religious coping with poorer subsequent well-being. We also expected that these

relationships would remain statistically significant when predicting *change* in the well-being indicators over time. Further, based on previous literature hinting at the stronger relationships of negative religious coping over positive religious coping (Ano & Vasconcelles, 2005), we anticipated that, when examined together in these longitudinal and prospective analyses, negative religious coping would show stronger effects on mental health and well-being over time than would positive religious coping in our sample of African American adults drawn from across the US.

Method

We conducted a secondary data analysis from the Religion and Health In African Americans (RHIAA) initiative, which involved telephone surveys of African American households across the US. The RHIAA baseline sample comprises 2,370 participants who completed a 45-minute interview assessing psychosocial constructs including but not limited to self-esteem, self-efficacy, affect, social support, religious involvement, and health-related behaviors.

Procedure

Data collection methods for RHIAA have been reported in detail elsewhere (Debnam, Holt, Clark, Roth, & Southward, 2012). Using probability-based methods, a subcontracted professional sampling firm, OpinionAmerica, generated a list of households within the United States. Trained interviewers telephoned potential participants from this list. The interviewers asked to speak to an adult who lived at the household and introduced the project. If contacted adults expressed interest, they completed a short eligibility screener to determine whether they self-identified as African American and were at least 21 years old. Individuals were screened for cancer history and excluded if they reported it due to assessments of cancer screening behaviors in the interview. Those eligible following screening provided verbal assent following an informed consent script. Participants who completed the interview received a \$25 gift card by mail.

Two and a half years later, participants were re-contacted and asked to complete a second interview including all of the same measures (Wave 2). Participants again received a \$25 gift card for participation. The RHIAA Study was not originally designed for participant re-contact, thus the retention rate from baseline to wave 2 was modest at 39.5% (Holt et al., 2015). Higher retention was found among older participants and women but was not associated with religious involvement. After adjusting for age and gender, participants who were retained tended to be more educated, single, and in better health than those not retained. Findings from our adjusted analyses showed no difference in religious involvement by demographic variables or health status (Holt et al., 2015).

Measures

Demographics—A standard demographic module assessed participant characteristics including sex, age, relationship status, educational attainment, work status, and household income before taxes.

Depressive symptoms—Depressive symptoms were assessed with the Centers for Epidemiological Studies-Depression Scale (CES-D) (Radloff, 1977). Participants rated how frequently they experienced each of 20 symptoms (e.g., “I had crying spells.”, “I felt that everything I did was an effort.”) in the previous week from 1 (“rarely/less than 1 day”) to 4 (“all of the time/5–7 days”). High internal consistency has been reported in both normal and patient populations (Radloff, 1977), as well as in the present sample ($\alpha = .90$ at Wave 1 and $.89$ at Wave 2). The CES-D has previously shown to be valid in African American samples (Makambi, Williams, Taylor, Rosenberg, & Adams-Campbell, 2009; Roth, Ackerman, Okonkwo, & Burgio, 2008).

Positive and negative affect—Positive and negative affect were assessed with the Positive and Negative Affect Schedule (PANAS) (Watson, Clark, & Tellegen, 1988). The widely-used PANAS consists of 20 adjectives [10 positive (e.g., interested, excited) and 10 negative (e.g., distressed, upset)]. Participants indicate the extent to which they have felt that way in the past week from 1 (“very slightly or not at”) to 5 (“extremely”). The scale has demonstrated factorial, convergent, and discriminant validity in previous research (Watson et al., 1988). Internal reliability was high in the present study ($\alpha = .85$ and $.88$ for negative affect and $.88$ and $.88$ for positive affect at Waves 1 and 2, respectively).

Self-esteem—Self-esteem was assessed with the Rosenberg Self-Esteem Scale, (Rosenberg, 1965), 10 items (e.g., “I feel that I have a number of good qualities.”) rated by participants from 1 (“strongly disagree”) to 4 (“strongly agree”). The instrument demonstrated good psychometrics in previous research (e.g., McCarthy & Hoge, 1982). Internal consistency reliability in the present sample was $.86$ at Wave 1 and $.89$ at Wave 2.

Sense of meaning—Sense of meaning was assessed using a 14-item instrument (Krause, 2004). Items (e.g., “I have a philosophy of life that helps me understand who I am.”; “I feel good when I think of what I have done in the past.”) are assessed using a 4-point Likert-type scale. Participants rate how much they agree with each item from 1 (“not at all”) to 4 (“a great deal”). The instrument evidenced factorial validity in previous work, as evidenced by a measurement model (Krause, 2004). In the present sample, internal consistency reliability was $.91$ at Wave 1 and $.93$ at Wave 2.

Religious coping—As noted, the Brief RCOPE is commonly used to assess religious coping (Fetzer/NIA, 1999; Pargament et al., 2013). The three items that loaded most high on their respective factors were selected to create the current short form, for a total of 6 items (NIA/Fetzer, 1999). Previous studies have indicated that the Brief RCOPE yields two factors, with high internal consistency, and evidence of discriminant and criterion-related validity (Pargament et al., 2000). Positive and negative coping were each assessed with 3 items (e.g., “I work together with God as partners to get through hard times.”, “I wonder whether God has abandoned me.”, respectively). Participants rated how much they used each item from 1 (“not at all”) to 4 (“a great deal”) to “try to understand and deal with major problems in your life”. Given its brevity (Nunnally & Bernstein, 1994), reliability of the Brief RCOPE was reasonable in the present sample, ($\alpha = .75$ for positive religious coping; $\alpha = .52$ for negative religious coping). Each scale is summed, yielding a range of 3 to 12.

Results

Sample Description

The current sample comprises those for whom we had Wave 2 data, comprising 614 women (65.5%) and 323 men. Mean age of participants was 57.18 ($SD = 13.45$). In terms of highest level of education, 11.7% had less than a high school diploma, 31.5% had a high school diploma or equivalent, 28.7% had some college, and 28.2% had 4 or more years of college. In terms of relationship status, 11.9% were never married, 16.3% were single, 18.4% were separated/divorced, 37.3% were married, and 16.1% were widowed. In terms of employment status, 33.3% were employed full time, 12.1% were employed part-time, 22.8% were disabled or not working, and 31.7% were retired. Household income ranged from less than \$5000/year (6.7%) to over \$60,000 (20.8%); 12.3% had income of \$5,000 to \$10,000, 16.5% had income of \$10,000 to \$20,000, 14.5% had income of \$20,000 to \$30,000, 11.9% had income of \$30,000 to \$40,000, 8.7% had income of \$40,000 to \$50,000, and 8.6% had income of \$50,000 to \$60,000. Nearly half of participants (49.5%) reported their denominational affiliation as Baptist. Others included Christian (no denomination) (6.2%), Non-denominational (5.5%), Catholic (5.2%), Methodist (4.1%), Pentecostal, (3.6%), and Jehovah's Witness (2.0%). Many other denominations were reported at less than 2% of the sample (e.g., African Methodist, Church of Christ, New Age, Presbyterian).

Description of Coping Styles and Well-Being Indicators

Table 1 lists means and standard deviations of study variables at both waves. Levels of depressive symptoms were moderately high, but comparable with other community samples of African Americans (e.g., Makambi et al., 2009). Participants reported much lower levels of negative religious coping than positive religious coping and much more positive than negative affect. Levels of meaning in life and self-esteem were fairly high. Wave 1 positive and negative religious coping were modestly correlated ($r = -.13, p < .001$). Mean levels of all variables were quite constant from Wave 1 to Wave 2.

Bivariate Correlations between Wave 1 Religious Coping and Waves 1 and 2 Well-Being

Bivariate correlations between Wave 1 predictors and Wave 2 well-being indicators are shown in Table 1. All of the well-being indicators demonstrated moderately strong stability across the 2.5 year interim, with r s ranging from .59 (for depressive symptoms) to .39 (for negative affect). Wave 1 positive and negative religious coping were significantly correlated with all Wave 2 well-being outcomes in the expected direction. For example, both positive religious coping and negative religious coping were correlated with depressive symptoms ($r = -.19, p < .001$ and $r = .32, p < .001$, respectively). Importantly, the well-being indicators were only moderately intercorrelated, indicating that each was reflecting a unique aspect of well-being. For example, depressive symptoms were correlated moderately strongly with positive affect ($r = -.32, p < .001$) and negative affect ($r = .40, p < .001$).

Hierarchical Regression Analyses

Hierarchical linear regression analyses using sums of squares were conducted for each of our five well-being indicators (see Tables 2–6). In the first step, we entered covariates,

including age, gender, education, health status, and relationship status. In the second step, we entered Wave 1 positive and negative religious coping scores to examine the longitudinal effects of religious coping on our outcomes. The third step determined whether religious coping not only predicted subsequent well-being but also whether it predicted change in well-being across time. Thus, in this third step, the baseline level of each well-being indicator was entered to examine whether religious coping predicted that outcome above and beyond its Wave 1 score.

Both positive and negative religious coping independently predicted Wave 2 depressive symptoms (see Table 2). The longitudinal predictiveness of positive religious coping ($\beta = -.11, p < .01$) appeared weaker than that of negative religious coping ($\beta = -.20, p < .001$), but when baseline levels of depressive symptoms were entered, effect sizes were very similar, albeit in different (yet expected) directions ($\beta_s = -.08$ and $.08$, respectively, $p_s < .01$).

As can be seen in Table 3 (Step 2), positive affect appeared to be more strongly predicted by positive religious coping ($\beta = .24, p < .001$) than by negative religious coping ($\beta = -.09, p < .01$). In Step 3, when Wave 1 scores were entered, the effect of positive religious coping on positive affect remained significant ($\beta = .13, p < .001$) but the effect of negative religious coping was no longer statistically significantly associated with positive affect ($\beta = -.06, ns$).

In contrast, after controlling for demographic variables, only negative religious coping predicted negative affect ($\beta = .19, p < .001$) (see Step 2, Table, 4), an effect that held when Wave 1 negative affect was entered ($\beta = .13, p < .001$) (see Step 3, Table 4).

As shown in Step 2 of Table 5, positive and negative religious coping also both independently predicted self-esteem, in expected directions ($\beta_s = .14$ and $-.18$, respectively $p_s < .001$). These effects held when Wave 1 levels of self-esteem were entered into the analysis [$\beta_s = .08$ ($p < .01$) and $-.14$ ($p < .001$)], respectively; see Table 5, Step 3); it appears that negative religious coping was more predictive than was positive religious coping.

Finally, as shown in Step 2 of Table 6, positive and negative religious coping independently predicted Wave 2 life meaning [$\beta_s = .21$ ($p < .001$) and $-.08$ ($p < .01$), respectively]. However, only positive religious coping remained significantly predictive when Wave 1 sense of meaning in life was entered in the equation ($\beta = .08, p < .01$; see Table 6, Step 3).

Discussion

Our results suggest that religious coping consistently predicted multiple indicators of well-being across time in our community sample of African Americans. After controlling for demographic characteristics that accounted for substantial variance in the indicators of well-being, religious coping predicted each of the five well-being indicators assessed two-and-a-half years later and in the expected directions. Further, both positive and negative religious coping *independently* predicted these indicators of well-being, suggesting that both using positively-toned and negatively-toned religious coping may affect later well-being. Finally, there was mixed support for our initial hypothesis that negative religious coping would be a more consistent predictor of well-being than would positive religious coping. These results advance our understanding of previous research on religious coping by demonstrating that a

style of using religious coping to deal with life problems is robustly associated with well-being over a substantial period of time and that both positive and negative religious coping are independently predictive of well-being (cf., Sherman et al., 2009).

We examined whether positive and negative religious coping predict subsequent well-being when controlling for initial levels of well-being. These prospective analyses essentially demonstrate how Wave 1 religious coping style predicts *changes* in individuals' well-being from Wave 1 to Wave 2. Given the fairly strong stability between Wave 1 and Wave 2 levels of these indicators, these prospective analyses are quite conservative. Yet we found that most of the longitudinal predictive effects of both dimensions of religious coping on Wave 2 well-being, while smaller in size, remained statistically significant even when controlling for baseline levels of well-being.

Thus, it appears that positive and negative religious coping styles have both distinct and unique effects on changes in several aspects of well-being over time. In particular, negative religious coping styles predicted increases in depressive symptoms and negative affect and reductions in self-esteem, while use of positive religious coping style predicted lessened depressive symptoms and increases in positive affect, self-esteem, and life meaning. These results are consistent with recent findings on the power of negative religious coping variables to predict variance in mental health outcomes (Abu-Raiya, Pargament, Krause & Ironson, 2015) but also with the less common findings that positive religious coping can promote positive well-being (Chapman & Steger, 2010; Pargament et al., 2010).

Given that previous research has shown more consistent effects for negative religious coping with specific events (e.g., Pargament et al., 2000), we anticipated that negative religious coping *style* would also be consistently related to decrements in well-being over time. In fact, even though participants reported using this style of coping fairly infrequently (a mean of 4.26 on a scale ranging from 3 to 12), using negative religious coping to deal with life problems demonstrated a cumulative adverse relationship with multiple aspects of well-being.

Previous research on positive religious coping with specific events has been less consistently linked with well-being (e.g., Pargament et al., 2000), yet our findings were quite consistent regarding use of positive religious coping as a style for coping with major life problems. Greater use of this style related to higher levels of well-being assessed more than two years later. The present findings also support previous research with this African American sample that found that negative religious coping was a more consistent predictor of health behaviors (e.g., vegetable consumption, alcohol use) than was positive religious coping (Holt, Clark, Debnam, & Roth, 2014). In the present analyses, we found mixed support for the notion that negative religious coping would be a more potent determinant of subsequent well-being than would positive religious coping (cf. Pargament et al., 2000). When this pattern did emerge, it was primarily among the negatively-valenced indicators of well-being such as depressive symptoms and negative affect. It is possible that the greater effect sizes of negative religious coping with these variables reflect shared variance due to negative valence, which would not have been present with positive religious coping.

The magnitude of the effects of positive and negative religious coping were comparable, on average, across the outcomes although positive religious coping appeared to be a stronger predictor of positive affect while only negative religious coping predicted negative affect. These findings reflect those of a meta-analysis that found stronger effects for positive religious coping with positively-toned outcomes and for negative religious coping with negatively-toned outcomes (Ano & Vasconcelles, 2005). Interestingly, while both positive and negative religious coping predicted self-esteem, positive religious coping appeared to be a more consistent predictor of meaning in life. These findings differ from some previous research with African Americans. For example, an online survey of African Americans found no associations between positive religious coping style and distress, but a fairly strong association between negative religious coping style and distress (Szymanski & Obiri, 2011). The difference may be in the sample; the above-cited study was conducted primarily with college students, while our sample included a more diverse sample in terms of age and other sociodemographic indicators.

Given the independent and unique effect of positive and negative religious coping on several aspects of well-being over time, future studies should investigate the potential synergistic effects of religious coping on well-being. For example, if used concurrently, negative religious coping may modify, or offset, the positive effects reaped by using positive religious coping. In addition, research is needed to explore factors that have the potential to buffer the adverse effects of negative religious coping on African American adults. For example, a study with a predominately Caucasian sample found that religious support, religious hope, religious commitment and life satisfaction moderated the effect of negative religious coping on emotional well-being (Abu-Raiya, Pargament, & Krause, 2016).

The study has important limitations that must be acknowledged. While we made efforts to include a broad, population-based community sample, there are always response biases regarding who chooses to participate, and additional biases when not all participants are retained over time. As we noted, older participants, women, those in better health and those with higher education were more likely to remain in the study, although religious involvement was not related to retention (Holt et al., 2015). It is impossible to know what sorts of biases attrition may have introduced into our findings. We did not assess the specific types of stressful life experiences that our participants experienced during the interim between assessments; future studies would be informative if they carefully assessed types and severity of stressors as well as religious coping styles. Our negative religious coping measure exhibited fairly poor internal reliability, which likely attenuated findings for this critical study variable. We conducted essentially 20 tests of the relationships between religious coping style and well-being, finding significant associations in 16 of these tests. If a statistical correction were applied given the possibility of Type I error, fewer significant findings would have been observed.

However, in spite of these limitations, this study has several important strengths. First, these data were drawn from a large, heterogeneous sample of African Americans. Second, we examined both positive and negative religious coping styles together to allow us to look at cumulative effects across life stressors over time, and we included multiple indicators of well-being using established instruments. Thus, our study contributes to our knowledge of

both in terms of the roles of coping styles on well-being over time as well as to our understanding of these processes in African Americans, who are rarely the focus of largescale studies of coping. The tendency for stress and coping literature to privilege the experiences of white populations has thus far yielded a limited understanding of how the unique history and socio-religious traditions of the African American groups produces distinctive stressors and shapes characteristic responses to life's problems (Taylor et al., 2003). Future research could profitably expand this work by including samples of other racial and ethnic minority participants as well as Whites.

These results may also have useful implications for interventions, particularly those focusing on African American adults, who generally score higher on religiousness (Taylor et al., 2003). Therapists should keep in mind the critical role that religious and spiritual coping has historically played in the resilience of African Americans (Boyd-Franklin, 2010). Given that a reliance on positive religious coping was linked to higher levels of well-being across the board and even increases in most aspects of well-being over time, interventions that help individuals tap into their positive connections with the divine as well as with their congregations could be useful in helping people to cope with highly stressful situations. In addition, interventions aimed at helping people to reduce their use of negative religious coping, which was found to be adversely related to all of the dimensions of well-being we assessed and decrements over time in some of them, may be a priority for future interventions, particularly given its links with depressive symptoms. Especially given the important role that religion plays in the lives of many African Americans, culturally competent treatment should embrace a greater focus on assessment and integration of spiritual and religious issues, as indicated (Boyd-Franklin, 2010).

In summary, these results advance our understanding of religious coping and its role in well-being in African American community-dwelling adults. In particular, we found that both positive religious coping and negative religious coping styles differentially predicted myriad aspects of well-being over time. Future work to verify and extend these findings should consider the unique effects of both styles of coping and their role in mental well-being as well as, perhaps, in other aspects, such as physical health or lifestyle behaviors.

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References

- Abu-Raiya H, Pargament PI, Krause N. Religion as problem, religion as solution: Religious buffers of the links between religious/spiritual struggles and well-being/mental health. *Quality of Life Research*. 2016; 25:1265–1274. DOI: 10.1007/s11136-015-1163-8 [PubMed: 26476837]
- Abu-Raiya H, Pargament KI, Krause N, Ironson G. Robust links between religious/spiritual struggles, psychological distress, and well-being in a national sample of American adults. *Journal of Behavioral Medicine*. 2015; 3:118–128. DOI: 10.1007/s10865-008-9179-y

- Ahrens CE, Abeling S, Ahmad S, Hinman J. Spirituality and well-being: The relationship between religious coping and recovery from sexual assault. *Journal of Interpersonal Violence*. 2009; 27:1242–1263. DOI: 10.1177/0886260509340533J
- Amadi KU, Uwakwe R, Odinka PC, Ndukuba AC, Muomah CR, Ohaeri JU. Religion, coping and outcome in out-patients with depression or diabetes mellitus. *Acta Psychiatrica Scandinavica*. 2016; 6:489–496. DOI: 10.1111/acps.12537
- Ano GG, Vasconcelles EB. Religious coping and psychological adjustment to stress: A meta-analysis. *Journal of Clinical Psychology*. 2005; 61:461–480. DOI: 10.1002/jclp.20049 [PubMed: 15503316]
- Bjorck JP, Thurman JW. Negative life events, patterns of positive and negative religious coping, and psychological functioning. *Journal for the Scientific Study of Religion*. 2007; 46:159–167. DOI: 10.1111/j.1468-5906.2007.00348.x
- Boyd-Franklin N. Incorporating spirituality and religion into the treatment of African American clients. *The Counseling Psychologist*. 2010; 38:976–1000. DOI: 10.1177/0011000010374881
- Chapman LK, Steger MF. Race and religion: Differential prediction of anxiety symptoms by religious coping in African American and European American young adults. *Depression and Anxiety*. 2010; 27:316–322. DOI: 10.1002/da.20510 [PubMed: 20225240]
- Debnam K, Holt CL, Clark EM, Roth DL, Southward P. Relationship between religious social support and general social support with health behaviors in a national sample of African Americans. *Journal of Behavioral Medicine*. 2012; 35:179–189. DOI: 10.1007/s10865-011-9338-4 [PubMed: 21487724]
- Ellison CG, Taylor RJ. Turning to prayer: Social and situational antecedents of religious coping among African Americans. *Review of Religious Research*. 1996; 38:111–131. No doi available.
- Fetzer Institute/National Institute on Aging Working Group. Multidimensional measurement of religiousness/spirituality for use in health research: A report of a national working group. Kalamazoo, MI: Fetzer Institute; 1999.
- Hebert R, Zdaniuk B, Schulz R, Scheier M. Positive and negative religious coping and well-being in women with breast cancer. *Journal of Palliative Medicine*. 2009; 12:537–545. DOI: 10.1089/jpm.2008.0250 [PubMed: 19508140]
- Holt CL, Clark EM, Debnam KJ, Roth DL. Religion and health in African Americans: The role of religious coping. *American Journal of Health Behavior*. 2014; 38:190–199. DOI: 10.5993/AJHB.38.2.4 [PubMed: 24629548]
- Holt CL, Le D, Calvanelli J, Huang J, Clark EM, Roth DL, ... Schulz E. Participant retention in a longitudinal national telephone survey of African American men and women. *Ethnicity and Disease*. 2015; 25:187–192. No doi available. [PubMed: 26118147]
- Krause N. Stressors arising in highly valued roles, meaning in life, and the physical health status of older adults. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*. 2004; 59:S287–S297. DOI: 10.1093/geronb/59.5.S287
- Le D, Holt CL, Hosack DP, Huang J, Clark EM. Religious participation is associated with increases in religious social support in a national longitudinal study of African Americans. *Journal of Religion and Health*. 2015; Article first published online. doi: 10.1007/s10943-015-0143-1
- Lord BD, Gramling SE. Patterns of religious coping among bereaved college students. *Journal of Religion and Health*. 2014; 53:157–177. DOI: 10.1007/s10943-012-9610-0 [PubMed: 22581317]
- Makambi KH, Williams CD, Taylor TR, Rosenberg L, Adams-Campbell LL. An assessment of the CES-D scale factor structure in black women: The Black Women's Health Study. *Psychiatry Research*. 2009; 168:163–170. DOI: 10.1016/j.psychres.2008.04.022 [PubMed: 19501414]
- McCarthy JD, Hoge DR. Analysis of age effects in longitudinal studies of adolescent self-esteem. *Developmental Psychology*. 1982; 18:372–379. No doi available.
- Nunnally JC, Bernstein IH. *Psychometric theory*. New York: McGraw-Hill; 1994.
- Parenteau SC. Religious coping and substance use: The moderating role of sex. *Journal of Religion and Health*. 2016; Article first published online. doi: 10.1007/s10943-015-0166-7
- Pargament K, Feuille M, Burdzy D. The Brief RCOPE: Current psychometric status of a short measure of religious coping. *Religions*. 2011; 2:51–76. DOI: 10.3390/rel2010051

- Pargament KI, Kennell J, Hathaway W, Grevengoed N, Newman J, Jones W. Religion and the problem-solving process: Three styles of coping. *Journal of the Scientific Study of Religion*. 1988; 27:90–104. DOI: 10.2307/1387404
- Pargament KI, Koenig HG, Perez LM. The many methods of religious coping: Development and initial validation of the RCOPE. *Journal of Clinical Psychology*. 2000; 56:519–543. DOI: 10.1002/(SICI)1097-4679(200004)56:4<519::AID-JCLP6>3.0.CO;2-1 [PubMed: 10775045]
- Pargament KI, Koenig HG, Tarakeshwar N, Hahn J. Religious struggle as a predictor of mortality among medically ill elderly patients: A 2-year longitudinal study. *Archives of Internal Medicine*. 2001; 161:1881–1885. DOI: 10.1001/archinte.161.15.1881 [PubMed: 11493130]
- Pargament KI, Smith BW, Koenig HG, Perez L. Patterns of positive and negative religious coping with major life stressors. *Journal of the Scientific Study of Religion*. 1998; 37:711–725. DOI: 10.2307/1388152
- Park CL, Smith PH, Lee SY, Mazure CM, McKee SA, Hoff R. Positive and negative religious/spiritual coping and combat exposure as predictors of posttraumatic stress symptoms and post-traumatic growth in US Soldiers returning from Iraq and Afghanistan. *Psychology of Religion and Spirituality*. (in press).
- Radloff LS. The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*. 1977; 1:385–401. No doi available.
- Rosenberg M. *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press; 1965.
- Roth DL, Ackerman ML, Okonkwo OC, Burgio LD. The four-factor model of depressive symptoms in dementia caregivers: A structural equation model of ethnic differences. *Psychology & Aging*. 2008; 23:567–576. DOI: 10.1037/a0013287 [PubMed: 18808246]
- Roth DL, Mwase I, Holt CL, Clark EM, Lukwago S, Kreuter MW. Religious involvement measurement model in a national sample of African Americans. *Journal of Religion and Health*. 2012; 51:567–578. DOI: 10.1007/s10943-011-9475-7 [PubMed: 21416161]
- Sherman AC, Simonton S, Latif U, Spohn R, Tricot G. Religious struggle and religious comfort in response to illness: Health outcomes among stem cell transplant patients. *Journal of Behavioral Medicine*. 2005; 28:359–367. DOI: 10.1007/s10865-005-9006-7 [PubMed: 16049629]
- Sherman AC, Plante TG, Simonton S, Latif U, Anaisie EJ. Prospective study of religious coping among patients undergoing autologous stem cell transplantation. *Journal of Behavioral Medicine*. 2009; 3:118–128. DOI: 10.1007/s10865-008-9179-y
- Steger MF. Experiencing meaning in life: Optimal functioning at the nexus of well-being, psychopathology, and spirituality. In: Wong PTP, editor *The human quest for meaning: Theories, research, and applications*. 2. New York: Routledge; 2012. 165–184.
- Szymanski DM, Obiri O. Do religious coping styles moderate or mediate the external and internalized racism-distress links? *The Counseling Psychologist*. 2011; 39:438–462. DOI: 10.1177/0011000010378895
- Tarakeshwar N, Vanderwerker LC, Paulk E, Pearce MJ, Kasl SV, Prigerson HG. Religious coping is associated with the quality of life of patients with advanced cancer. *Journal of Palliative Medicine*. 2006; 9:646–657. DOI: 10.1089/jpm.2006.9.646 [PubMed: 16752970]
- Taylor RJ, Chatters LM, Levin J. *Religion in the lives of African Americans: Social, psychological, and health perspectives*. Thousand Oaks, CA: Sage; 2003.
- Watson D, Clark LA, Tellegen A. Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology*. 1988; 47:1063–1070. DOI: 10.1037/0022-3514.54.6.1063

Table 1
Bivariate Correlations between Wave 1 and Wave 2 Study Variables, Means, and Standard Deviations

Measure	Wave 2							M	SD
	1	2	3	4	5	6	7		
Wave 1									
1. Depressive Symptoms	.59***	-.27***	.43***	-.32***	-.38***	-.12***	.22***	31.13	9.96
2. Positive Affect	-.32***	.47***	-.19***	.29***	.37***	.21***	-.15***	36.88	9.04
3. Negative Affect	.40***	-.15***	.39***	-.22***	-.23***	-.04	.13***	15.63	6.38
4. Meaning in Life	-.36***	.30***	-.24***	.46***	.27***	.34***	-.08*	50.70	5.80
5. Self Esteem	-.35***	.36***	-.22***	.28***	.47***	.16***	-.24***	34.02	4.36
6. Positive Religious Coping	-.19***	.26***	-.08*	.26***	.17***	.54***	-.10**	10.13	2.12
7. Negative Religious Coping	.32***	-.13***	.21***	-.13***	-.24***	-.14***	.39***	4.26	1.75
M	30.67	35.34	15.34	49.22	33.78	9.89	4.21		
SD	9.11	8.56	6.00	6.41	4.43	2.16	1.65		

* $p < .05$

** $p < .01$

*** $p < .001$

(n = 890-930)

Table 2

Hierarchical Regression Analysis Predicting Time 2 Depressive Symptoms

TI variables	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Age	-0.01	0.00	-0.12**	-0.01	0.00	-0.10**	0.00	0.00	0.00
Gender	-0.01	0.06	-0.01	0.08	0.06	0.05	0.03	0.05	0.02
Education	-0.11	0.03	-0.14***	-0.09	0.03	-0.12***	-0.02	0.02	-0.02
Health	-0.16	0.03	-0.20***	-0.14	0.03	-0.17***	-0.05	0.03	-0.07*
Relationship	-0.02	0.03	-0.03	-0.01	0.03	-0.01	-0.01	0.02	-0.01
Positive Religious Coping				-0.04	0.01	-0.11**	-0.03	0.01	-0.08**
Negative Religious Coping				0.11	0.02	0.20***	0.04	0.02	0.08**
Depressive Symptoms							0.04	0	0.43***
R²			0.08			0.13			0.27
R²						0.05			0.13
F Change			15.99***			26.97***			164.22***

* $p < .05$

** $p < .01$

*** $p < .001$

n = 910

Table 3

Hierarchical Regression Analysis Predicting Time 2 Positive Affect

TI variables	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Age	-0.04	0.02	-0.07	-0.05	0.02	-0.08*	-0.06	0.02	-0.10**
Gender	0.04	0.57	0.00	-0.84	0.57	-0.05	-0.74	0.53	-0.04
Education	1.07	0.26	0.14***	1.04	0.26	0.13***	0.56	0.24	0.07*
Health	1.84	0.27	0.23***	1.51	0.26	0.19***	0.94	0.25	0.12***
Relationship	0.23	0.25	0.03	0.10	0.25	0.01	0.00	0.23	0.00
Positive Religious Coping				0.94	0.13	0.24***	0.54	0.12	0.13***
Negative Religious Coping				-0.45	0.17	-0.09**	-0.30	0.16	-0.06
Positive Affect							0.35	0.03	.38***
R²			0.97			0.16			0.28
R²						0.06			0.12
F Change			18.98***			32.99***			142.38***

* $p < .05$

** $p < .01$

*** $p < .001$

n = 983

Table 4

Hierarchical Regression Analysis Predicting Time 2 Negative Affect

TI variables	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Age	-0.05	0.02	-0.10**	-0.05	0.02	-0.10**	-0.02	0.02	-0.04
Gender	0.16	0.42	0.01	0.62	0.42	0.05	0.28	0.40	0.02
Education	-0.70	0.19	-0.12***	-0.56	0.19	-0.1**	-0.37	0.18	-0.07*
Health	-0.63	0.19	-0.11**	-0.53	0.19	-0.09**	-0.18	0.19	-0.03
Relationship	-0.28	0.18	-0.06	-0.19	0.18	-0.04	-0.22	0.17	-0.05
Positive Religious Coping				-0.07	0.09	-0.02	-0.05	0.09	-0.02
Negative Religious Coping				0.70	0.13	0.19***	0.50	0.12	0.13***
Negative Affect							0.33	0.03	.34***
R²			0.05			0.08			0.18
R²						0.03			0.10
F Change			8.97***			16.56***			107.59***

* $p < .05$

** $p < .01$

*** $p < .001$

n = 899

Table 5

Hierarchical Regression Analysis Predicting Time 2 Self Esteem

TI variables	Model 1			Model 2			Model 3		
	B	SE	β	B	SE	β	B	SE	β
Age	-0.04	0.01	-0.12**	-0.04	0.01	-0.13***	-0.04	0.01	-0.12***
Gender	0.20	0.29	0.02	-0.29	0.29	-0.03	-0.23	0.27	-0.02
Education	1.26	0.13	0.31***	1.18	0.13	0.29***	0.75	0.13	0.18***
Health	0.63	0.13	0.15***	0.49	0.13	0.12***	0.27	0.13	0.06*
Relationship	0.14	0.13	0.04	0.07	0.12	0.02	0.08	0.12	0.02
Positive Religious Coping				0.29	0.07	0.14***	0.18	0.06	0.08**
Negative Religious Coping				-0.49	0.08	-0.18***	-0.37	0.08	-0.14***
Self Esteem							0.31	0.03	.20***
R²			0.16			0.22			0.28
R²						0.05			0.07
F Change			34.26***			29.41***			84.10***

* $p < .05$

** $p < .01$

*** $p < .001$

n = 885

Table 6

Hierarchical Regression Analysis Predicting Time 2 Meaning in Life

TI variables	Model 1		Model 2		Model 3	
	B	SE	B	SE	B	SE
Age	0.03	0.02	0.03	0.02	0.01	0.02
Gender	0.37	0.44	-0.22	0.44	-0.39	0.41
Education	0.71	0.20	0.71	0.20	0.77	0.18
Health	1.17	0.20	0.95	0.20	0.54	0.19
Relationship	0.21	0.20	0.10	0.19	0.05	0.18
Positive Religious Coping			0.63	0.10	0.23	0.10
Negative Religious Coping			-0.33	0.13	-0.23	0.12
Meaning in Life					0.43	0.04
R²			0.07		0.12	
R²					0.05	
F Change			12.87		25.36	

* $p < .05$

** $p < .01$

*** $p < .001$

n = 882