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Spiritual Well-Being and Psychological Adjustment: Mediated by Interpersonal Needs?

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Abstract

Spiritual well-being has been shown to reduce suicidal behavior, depressive symptoms, and hopelessness. Thwarted interpersonal needs have been shown to increase risk of suicidal behavior. This paper aims to explore the interrelationships among spiritual well-being, thwarted interpersonal needs, and negative outcomes including suicidal ideation, hopelessness, and depressive symptoms among African American women. Sixty-six African American women ($M = 36.18$; $SD = 11.70$), from a larger study of women who had experienced interpersonal violence within the past year, completed self-report questionnaires. Mediation analyses revealed that thwarted belongingness, but not perceived burdensomeness, significantly mediated the relations between spiritual well-being and the three outcomes. This study provides the first examination of the role of thwarted interpersonal needs on the link between spiritual well-being and negative psychological outcomes. Spiritual well-being serves a protective role against feelings of social isolation, which may reduce one's risk of negative psychological outcomes. Treatments that bolster a sense of spirituality and social connectedness may reduce suicidal ideation, hopelessness, and depressive symptoms.

Keywords

Suicide; African American; Interpersonal needs; Spiritual well-being

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Conflict of interest None.

Ethical Statement All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards.

Introduction

In the African American community, as in the general population, although women are less likely to die by suicide, they attempt suicide more than men (Griffin-Fennell and Williams 2006). The 12-month prevalence rate for suicidal ideation (12.8 %) and nonfatal suicide attempts (5.0 %) in African American women is high relative to men and women from other ethnic groups (Joe et al. 2006). Despite this, most research is conducted with European Americans (Molock et al. 2006). This disproportionate amount of research reflects several facts including (1) death by suicide occurs less often in African Americans (retrieved from: http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html, December 10, 2013), (2) stigma associated with service utilization and suicide in this community, and (3) limited empirical focus in general on African Americans relative to European Americans (Poussaint and Alexander 2000). Fortunately, the past decade has witnessed efforts to understand and prevent suicidal behavior among African American women (Davis et al. 2009; Kaslow et al. 2002, 2010; Lamis and Lester 2012; Marion and Range 2003).

Two of the most cited psychological correlates of suicidal behavior in African American women are depressive symptoms and hopelessness. There are high correlations between depressive symptoms overall and the somatic and cognitive-affective symptoms of depression and suicidal ideation in African American women (Carr et al. 2013; Houry et al. 2006). Similarly, there is a strong link between hopelessness and suicidal behavior among African American women; hopelessness powerfully predicts suicide attempts in this population (Kaslow et al. 2000, 2002) and is more strongly correlated with suicidal behavior in African American than European American women (Lamis and Lester 2012). Moreover, it mediates the associations between various predictors (e.g., childhood maltreatment) and suicidal behavior in African American women (Meadows and Kaslow 2002).

There is mounting interest in factors that serve a protective function vis-à-vis suicidal behavior and its correlates (depressive symptoms, hopelessness) in African American women (Bradley et al. 2005; Compton et al. 2005; Harris and Molock 2000; Jesse et al. 2005; Kaslow et al. 2002, 2005; Meadows et al. 2005; Siefert et al. 2007). One culturally relevant variable that has received attention as a protective factor for African Americans is spiritual well-being. Spirituality is an inclusive construct that refers to the ways in which people conceptualize their lives in light of their ultimate meaning and self-worth. The term used to capture one's spiritual "state of affairs" is spiritual well-being (Sulmasy 2002). It also refers to the way people find meaning and value in their lives (Muldoon and King 1995). There are two components to spiritual well-being, existential and religious (Ellison 1983; Paloutzian and Ellison 1982). Higher levels of spiritual well-being are associated with psychological well-being including more adaptive personality traits and increased quality of life, as well as better physical health (Bekelman et al. 2007, 2010; Dalmida et al. 2009; Prince-Paul 2008; Unterrainer et al. 2010).

Relevant to this study, a small literature links spiritual well-being to suicidal behavior. Among college students, existential well-being contributes to levels of suicidal ideation (Taliaferro et al. 2009). Among war veterans with posttraumatic stress disorder, lower levels of existential well-being are associated with a higher frequency of suicide attempts (Nad

et al. 2008). In medically ill individuals, including those who are terminally ill, spiritual well-being correlates with suicidal ideation in the predicted direction (McClain et al. 2003). Moreover, recent years have witnessed some empirical attention to the association between spiritual well-being and depressive symptoms. For example, in medically ill patients, higher levels of spiritual well-being are linked to lower levels of depressive symptoms (Bekelman et al. 2007, 2010; McClain et al. 2003). Among older adults, spiritual well-being predicts psychological well-being, including levels of depressive symptoms (Lawler-Row and Elliott 2009). Similarly, there is a connection between spiritual well-being and feelings of hopelessness. In medically ill individuals, including those facing death, correlations are found between spiritual well-being and hopelessness (McClain et al. 2003). Few studies have examined these links in individuals with psychological/psychiatric symptoms and disorders or in nonmedically ill adults.

To understand the link between spiritual well-being and suicidal ideation and its correlates (depressive symptoms, hopelessness), potential mediators must be considered. One such factor is interpersonal distress. The Interpersonal–Psychological Theory of Suicide proposes that increased suicide risk is associated with interpersonal distress, which occurs when people feel disconnected from others and like they are a burden to people in their lives (Joiner 2005). In other words, according to the theory it is the interaction of thwarted belongingness and perceived burdensomeness that predicts suicidal ideation (Van Orden et al. 2008). Thwarted belongingness is described as feeling separated from others, not integrated into the family, and feeling a lack of connectedness with friends or other valued social groups (Joiner 2005). Indeed, the experience of feeling isolated and distanced from loved ones may be one of the most robust risk factors for suicidal behavior (Van Orden et al. 2010).

Perceived burdensomeness occurs when individuals believe that their life places a burden on family, friends, and/or society (Joiner 2005); people with this thought might feel as though others will benefit more from their death than their life (Joiner 2005; Joiner et al. 2009).

There is a well-documented connection between perceived burdensomeness and thwarted belongingness and suicidal behavior across populations, including African Americans (Davidson et al. 2010; Lamis and Lester 2012). Moreover, a small body of research indicates that burdensomeness and thwarted belongingness are associated with depressive symptoms (Davidson et al. 2011). The link between these constructs and hopelessness has yet to be studied. It may be that thwarted interpersonal needs increase feelings of hopelessness, as individuals see themselves as having less potential for social engagement and gaining social support due to isolating themselves and fears of being a burden to others. In addition, only one known study has examined the contribution of one aspect of spirituality (i.e., forgiveness) to thwarted interpersonal needs and how this association impacts suicidal behavior and its correlates; however, this study was conducted with primarily White participants in a rural area identified as a Health Provider Shortage Area (Nsamenang et al. 2013), so it is unclear how these factors may interrelate in an urban, African American population.

Therefore, this study represents the first effort to examine the link between spiritual well-being, thwarted interpersonal needs, and suicidal ideation and its correlates (depressive symptoms, hopelessness). Guided by the Interpersonal–Psychological Theory of Suicide, we hypothesize that the predictor (spiritual well-being) will be negatively associated with the outcome variables (suicidal ideation, depressive symptoms, hopelessness) and the hypothesized mediators, namely thwarted interpersonal needs. Moreover, we hypothesize that the hypothesized mediators will be positively correlated with the three outcome variables. Our hypothesis of greatest interest, however, is a mediational one in which it is predicted that thwarted interpersonal needs, which include perceived burdensomeness and thwarted belongingness, will mediate the link between spiritual well-being and suicidal ideation, depressive symptoms, and hopelessness, such that higher levels of spiritual well-being will be associated with lower levels of thwarted interpersonal needs, which will, in turn, be associated with lower levels of psychopathology.

Methods

Sample

Participants were 66 African American females ($M = 36.18$; $SD = 11.70$) recruited as part of a larger, longitudinal study from a large, urban public healthcare system that serves a predominantly African American, low-resourced population in a large southeastern city. The healthcare system offers comprehensive emergency, inpatient, outpatient, and community-based services. The criteria for being accepted into the larger study included: (a) ages 18–64 years old; (b) self-identified as female and as African American; (c) suicide attempt in prior 12 months as determined by their acknowledgment of self-harm with a moderate level of suicidal intent as determined by the Suicide Intent Scale (Beck et al. 1974a); and (d) intimate partner violence (IPV) exposure in prior 12 months, as determined by the Universal Violence Prevention Screening Protocol (Dutton et al. 1996). The criteria for being excluded were: (a) active psychosis, determined by the Nia Psychotic Screen (Kaslow et al. 2010); (b) significant cognitive impairment, as determined by the Mini-Mental State Examination (Folstein et al. 2001); and (c) refusal to participate.

Procedures

Authorization for data collection was obtained from the university Institutional Review Board and the health system's Research Oversight Committee. Women who sought medical and/or psychiatric services from the health system with a known suicide attempt and/or IPV exposure in the prior year were referred to the study by hospital staff. Following these referrals, research team members met with the potential participants, explained the purpose of the study, and asked whether they were interested in participating in a study investigating different interventions for treating abused and suicidal low-income African American women. It was further conveyed that their decision whether or not to participate would not impact the services they received within the healthcare system. Participants who consented to the study and who met the aforementioned inclusion and exclusion criteria were scheduled for two three-hour assessments at a convenient time, the first of which included the self-report measures included in this report and the second of which included

structured diagnostic interviews. Following the second assessment, women were randomized to intervention condition, but this report only includes Time 1 assessment data.

Time 1 assessments were conducted by trained and supervised research team members. At the outset of these assessments, participants were read the consent form, their questions were answered, and data collection was begun once they signed the consent form. Team members assisted participants in completing the assessment protocol by reading aloud each measure due to the low literacy rates of individuals served by the health system. Participants were compensated \$25 for these Time 1 assessments.

Measures

Predictor Variable—Spiritual well-being, the predictor variable, was assessed using the spiritual well-being scale (SWBS) (Paloutzian and Ellison 1982, 1991), one of the most widely used instruments to measure spirituality in clinical research (Monod et al. 2011). It provides an overall measure of the perception of spiritual quality of life (focus of this paper), as well as subscale scores for existential and religious well-being (EWB and RWB). The measure consists of 20 6-point Likert-type scale items, with answers ranging from strongly agree to strongly disagree. Scores can range from 20 to 120, with higher scores indicating greater levels of spiritual well-being. The scale has good convergent validity and test–retest reliability (Monod et al. 2011; Paloutzian and Ellison 1982) and has been widely used with African Americans (Meadows et al. 2005; Mitchell et al. 2006; Utsey et al. 2005, 2007). In the current study, the SWBS has excellent internal consistency ($\alpha = .90$).

Outcome Variables—The outcome variables are suicidal ideation, depressive symptoms, and hopelessness. These constructs are assessed by the Beck Scale for Suicidal Ideation (BSS), Beck Depression Inventory-II (BDI-II), and Beck Hopelessness Scale (BHS), respectively.

The BSS is a 21-item self-report measure designed to assess the presence and severity of suicidal ideation over the past week (Beck and Steer 1991). The measure has five screening items, and if participants endorse item number 4 or 5, they complete the remaining fourteen items. Items are scored on a Likert-type scale from 0 to 2, and total scores may range from 0 to 38. Items assess suicidal ideation, desire for suicide, plans and preparation for suicide, and willingness to communicate with other about suicide. The BSS demonstrates good reliability including internal consistency ($\alpha = .90$) and test–retest reliability (Beck and Steer 1991; Dozois and Covin 2004), including in African American samples (Houry et al. 2006; Leiner et al. 2008). In this study, the internal consistency was excellent ($\alpha = .98$).

Depressive symptoms were assessed using the BDI-II, a gold standard self-report measure for assessing these construct adults (Beck et al. 1996). This BDI-II consists of 21 items scored on a Likert-type scale from 0 to 3; total scores range from 0 to 63. Prior research demonstrates that this measure has excellent reliability including internal consistency ($\alpha = .92$), construct validity, and factorial validity (Beck et al. 1996; Dozois et al. 1998) and is appropriate for use with African Americans (Grothe et al. 2005; Joe et al. 2008). Internal consistency in the current study was excellent ($\alpha = .94$).

The 20-item BHS assesses the extent of negative attitudes about the future (Beck et al. 1974b). It consists of true (0) or false (1) items, with 9 keyed as false and reverse scored, and 11 keyed as true; higher scores indicate greater hopelessness. Total scores may range from 0 (no hopelessness) to 20 (extreme hopelessness). Scoring guidelines for psychiatric inpatients and outpatients indicate that scores between 0 and 3 = minimal hopelessness, 4–8 = mild hopelessness, 9–14 = moderate hopelessness, and 14–20 = severe hopelessness. Across studies, the BHS has shown good internal consistency ($r = .82-.93$) and test–retest reliability ($r = .66-.69$), as well as construct and discriminant validity (Dozois and Covin 2004; Steed 2001). It has been found to be reliable and valid with other African American samples (Kaslow et al. 2002, 2004; Meadows and Kaslow 2002). In this study, internal consistency was excellent ($\alpha = .90$).

Mediating Variables—Interpersonal needs, the mediating constructs, are measured by the Interpersonal Needs Questionnaire (INQ) (Van Orden et al. 2012; Van Orden et al. 2008). Several versions of the scale exist; the current study utilizes the 15-item version upon suggestion that this brief version retains sound psychometric properties (Van Orden et al. 2012). It is comprised of two subscales: (1) thwarted belongingness—extent to which the individual feels connected to other people, and (2) perceived burdensomeness—individual’s perception of feeling like a burden to others. Using a 7-point Likert scale, ranging from 1 “Not at all true for me” to 7 “Very true for me,” the thwarted belongingness subscale contains eight items and has a range of scores from 7 (no thwarted belongingness) to 49 (extreme thwarted belongingness); the perceived burdensomeness subscale has 8 items and potential scores ranging from 8 (no perceived burdensomeness) to 56 (extreme perceived burdensomeness). Although the INQ is relatively new (Van Orden et al. 2008), it is being used increasingly in suicide research (Davidson et al. 2010; Rasmussen and Wingate 2011; Van Orden et al. 2012; Wong et al. 2011). Several studies demonstrate psychometric support for the INQ total and subscale scores in terms of construct and convergent validity, (Davidson et al. 2010; Rasmussen and Wingate 2011; Van Orden et al. 2012; Wong et al. 2011). Among college student and older adult community samples, the perceived burdensomeness subscale has shown good internal consistency ($\alpha = .74-.92$) and convergent validity with suicidal ideation ($r = .35-.38$) and depressive symptoms ($r = .52-.57$). Similarly, the thwarted belongingness subscale has shown good internal consistency ($\alpha = .74-.90$) and adequate convergent validity with suicidal ideation ($r = .31$) and depressive symptoms ($r = .52-.56$). In this study, internal consistency was good for both the thwarted belongingness subscale ($\alpha = .82$) and the perceived burdensomeness subscale ($\alpha = .89$).

Analyses

Bivariate correlations were conducted to determine strength of association among study variables of interest. Pearson correlation coefficients (r) were calculated to examine independence of, and associations between, study variables. Mediation, otherwise known as an indirect effect, occurs when the relation between an independent variable (X) and a dependent variable (Y) is explained, or partially explained, by a third variable (M) (Preacher et al. 2007). Bootstrapping, a procedure for surmounting limitations of statistical methods that assume a normal distribution of data, was used in all analyses. Bootstrapping

(Shrout and Bolger 2002) is becoming a preferred method for analyzing data and involves repeated random samples of observations and computation of the test statistic (F -statistic in this instance) in each resample. Across many re-samplings, an approximation of the sampling distribution is calculated and utilized to test the hypothesis. Often, multiple mediators affect the association between X and Y , which can be tested utilizing standard techniques (Preacher and Hayes 2008). Multiple mediation analyses utilize a series of multiple linear regression analyses to determine the impact of more than one mediator in a direct relationship. In the proposed study, thwarted belongingness and perceived burdensomeness were simultaneously analyzed in a full model as mediators of the relations between total spiritual well-being and each of the outcome variables (suicidal ideation, depressive symptoms, hopelessness). These statistical techniques estimate path coefficients in a multiple mediator model and generate bootstrap confidence intervals (percentile, bias-corrected, and bias-corrected and accelerated) for total and specific indirect effects of X on Y through one or more M s. This allows for more than one mediator and adjusts all paths for the potential influence of covariates not proposed to be mediators in the model. If a true zero falls between the upper and lower confidence intervals, there is not a significant indirect effect via the mediator.

Results

Descriptive results including variable means and standard deviations are given in Table 1. In the larger study sample, from which our sample came, 52 % were homeless, 85 % were unemployed, and 41 % had less than a high school education. In addition, 12.4 % endorsed clinically significant levels of suicidal ideation, the majority (77.9 %) reported moderate-to-severe depressive symptoms, and 38.1 % endorsed moderate-to-severe hopelessness. Given that the correlations among the three outcome variables were $<.7$, suggesting limited multicollinearity, they were treated as separate outcomes.

In accord with the Interpersonal–Psychological Theory of Suicide, the first hypothesis tested was that spiritual well-being would correlate negatively with suicidal ideation, depressive symptoms, and hopelessness, as well as with thwarted interpersonal needs. As expected, Table 1 reveals that spiritual well-being correlated negatively with the three outcome variables and the two mediating constructs. Moreover, in keeping with the second hypothesis, the mediators correlated in the positive direction, as expected, with the three outcome variables.

In a multiple mediation model examining both thwarted belongingness and perceived burdensomeness simultaneously, thwarted belongingness significantly mediated the relationship between spiritual well-being and suicidal ideation (LLCI = $-.180$; ULCI = $-.006$; see Fig. 1). Perceived burdensomeness was not a significant mediator of the relationship between spiritual well-being and suicidal ideation (LLCI = $-.153$; ULCI = $.59$). Thwarted belongingness also significantly mediated the relationship between spiritual well-being and depressive symptoms (LCI = $-.228$; UCI = $-.020$; see Fig. 2), as well as hopelessness (LCI = $-.077$; UCI = $-.004$; see Fig. 3). Perceived burdensomeness was not a significant mediator of the relationship between spiritual well-being and depressive

symptoms (LLCI = $-.170$; ULCI = $.137$), or spiritual well-being and hopelessness (LLCI = $-.089$; ULCI = $.036$).

Discussion

Study findings provided further confirmation that higher levels of spiritual well-being are associated with lower levels of suicidal ideation, depressive symptoms, and hopelessness among African American women (Arnette et al. 2007; Hirsch et al. 2014; Kaslow et al. 2002). In addition, the results partially supported existing literature that higher levels of various aspects of spirituality are associated with lower levels of thwarted interpersonal needs, which includes both thwarted belongingness and perceived burdensomeness (Nsamenang et al. 2013). Specifically, an inverse correlation between spiritual well-being and the two components of thwarted interpersonal needs was found. Moreover, this is the first study with African American women to find a correlation between thwarted interpersonal needs and suicidal ideation, depressive symptoms, and hopelessness such that the more individuals felt socially connected the less they exhibited suicidal ideation, depressive symptoms, and hopelessness. Of greatest significance was the introduction of the meaningful role of thwarted interpersonal needs—specifically thwarted belongingness—in explaining how spiritual well-being is associated with suicidal ideation and its correlates. Specifically, spiritual well-being was protective against negative outcomes because of the sense of belonging it fostered for individuals.

Consistent with a small body of research with African Americans, higher spiritual well-being was associated with more positive outcomes (Utsey et al. 2007), such as lower levels of suicidality. Higher levels of spiritual well-being have been found in African Americans who had never attempted suicide as compared to their male and female suicide attempter counterparts (Anglin et al. 2005; Kaslow et al. 2004), as well as for African American abused women who have never attempted suicide relative to abused, African American women with a history of suicide attempts (Meadows et al. 2005). The link between spiritual well-being and depressive symptoms adds to the small literature in which among heterosexual African Americans living with HIV/AIDS, spiritual well-being explains a significant percentage of the variance in depressive symptoms (Coleman 2004). Similarly, the association with hopelessness that emerged has been found in other samples of African American female survivors of IPV, particularly when spiritual well-being is of an existential nature (Arnette et al. 2007).

The most notable finding was that consistent with the Interpersonal–Psychological Theory of Suicide (Joiner 2005) and our hypotheses, feelings of isolation and disconnectedness from others (i.e., thwarted belongingness) significantly mediated the links between spiritual well-being and the three outcome variables, namely suicidal ideation, depressive symptoms, and hopelessness. These novel findings suggest that spirituality may provide a sense of belonging and support and, in turn, reduce harmful outcomes among African American women. This builds upon a limited body of evidence, such as data showing that belongingness accounted for differences in suicidal ideation across semesters in college students (Van Orden et al. 2008).

However, our second hypothesized mediator, perceived burdensomeness, was not a significant predictor or mediator of suicidal ideation, depressive symptoms, and hopelessness. The finding that thwarted belongingness, but not perceived burdensomeness mediated the relationship between spirituality and suicidal ideation and its correlates is the opposite finding as was found among a very rural, European American sample (Nsamenang et al. 2013) suggesting that these constructs may be differentially salient in these populations. Nsamenang et al. (2013) considered suicidal behavior (i.e., both thoughts and actions) within the last year, while we examined suicidal ideation within the past week, which may speak to the saliency of each of the interpersonal constructs over different time periods. Other studies that did not consider spirituality have shown perceived burdensomeness, but not thwarted belongingness, to mediate suicidal ideation (Hill and Pettit 2012; O'Keefe et al. 2014; Woodward et al. 2014). These latter studies, which assessed suicidal ideation over the past 2 weeks to 1 month, included sexual minority samples and ethnic minority samples (i.e., American Indians)—other socially oppressed groups similar to our study. It has been argued, for example, that perceived burdensomeness may be particularly salient in sexual minority groups because people may be concerned that their identity is a burden on their family friends and thus perceive death by suicide as a way to eliminate what they deem to be a permanent problem, namely themselves (Woodward et al. 2014). More work would need to be carried out to determine whether the differences are related to racial and ethnic factors or to urban versus rural status.

It is curious that unlike the majority of the literature (Bryan et al. 2010; Hill and Pettit 2012; Nademin et al. 2008; Nsamenang et al. 2013; O'Keefe et al. 2014; Woodward et al. 2014), thwarted belongingness, but not perceived burdensomeness was a significant predictor of suicidal ideation in this study. Such a finding could be due to the communalistic nature of African American culture (Tyler et al. 2005). In a seminal theoretical chapter on the socialization of African American children, Boykin and Toms (1985) purport that African Americans have adapted and passed on traditional West African values including a focus on spirituality, communalism (e.g., interdependence of people), and emotional expressiveness. It may be that feelings of belonging to a community are more important in our sample and that there are fewer feelings of perceived burdensomeness given that bearing burdens with others is more customary in African American culture.

Our novel results should be understood in the context of the following limitations. This study only examined two of the three components of the Interpersonal–Psychological Theory and did not include the construct of acquired capability. A more comprehensive examination of the model is recommended for future research. Second, the outcome was suicidal ideation in suicide attempters, rather than the suicide attempt itself. The theory is focused on suicidal behavior with the intent to die, and scholars note that not all individuals who think about suicide (i.e., ideation) go on to attempt it (Van Orden et al. 2010). In our study, suicidal ideation was assessed within the past week, while the suicide attempt only needed to have occurred at some point within the last year. Assessing thwarted interpersonal needs during an acute episode of suicidal behavior with the intent to die may be a better means of testing the theory. Third, the cross-sectional nature of our study precluded the examination of causality and bi-directionality as a possibility. Replication of our models utilizing prospective assessments is needed. Fourth, although a significant strength of

our study is the focus on a vulnerable group for suicide attempts, namely low-income African Americans females with a history of intimate partner violence (Kaslow et al. 2002), this homogeneity may limit generalizability. Future research is needed utilizing diverse demographic, community, and clinical samples, to confirm that our findings apply to other sociocultural groups. Finally, the fact that the mediational role that thwarted belongingness but not perceived burdensomeness played in this sample as compared to other samples suggests that the findings require replication before strong conclusions can be drawn.

Despite the aforementioned limitations, there are a number of potential clinical implications of these findings, especially if they are replicated over time. Given the importance of feeling socially connected in the relationship between spiritual well-being and better outcomes, psychotherapy groups that focus on enhancing spiritual well-being may be beneficial for patients experiencing suicidal ideation, depressive symptoms, and hopelessness. Indeed, data from the Grady Nia Project show that African American women who participated in a culturally informed group treatment showed less suicidal ideation and fewer depressive symptoms due to the positive impact of the treatment on their spiritual well-being (Zhang et al. 2013). Women in the control group participated in other groups that did not necessarily include a focus on spirituality, which suggests that both the group setting—which fosters a sense of social connectedness—combined with the elements of the treatment that emphasized healthy meaning making (i.e., existential well-being aspect of spiritual well-being) produced the most beneficial outcomes. Furthermore, data from health psychology highlight the value of life review with regard to enhancing spiritual well-being, as well as reducing psychological symptoms associated with suicidality, including depression, anxiety, and suffering (Ando et al. 2008). Life review therapy entails individuals reviewing their lives, which is recorded and edited by a therapist who then makes albums of the patients' lives to give to the patients (Ando et al. 2008). Similarly, meaning-centered group psychotherapy has been found to yield significant improvements in levels of spiritual well-being in medically ill individuals (Breitbart et al. 2010). Such techniques could be adapted to be delivered in psychotherapy groups for use with suicidal individuals to enhance spiritual well-being, increase feelings of social connectedness, and reduce negative outcomes.

One paradox in the field of suicidal behavior within the African American community is that despite the fact that African Americans are at lower risk of death by suicide as compared to the general population, they often are exposed to more risk factors than their counterparts from other racial and ethnic groups (Davidson and Wingate 2011). This paradox has been explain in part by the presence of key protective processes within the African American community, such as spirituality, which indeed was found to be inversely associated with suicidal ideation and its correlates in a sample of African American suicide attempters. Moreover, consistent with the growing attention to the Interpersonal–Psychological Theory of Suicide, this research highlights the need to attend to thwarted interpersonal needs when understanding the link between spirituality and suicidal behavior and its correlates within the African American community. Our study allowed for the consideration of individual level differences in suicide risk among low-income, African American females. African Americans are not a monolithic group with the same level of risk across all members. Thus, future culturally informed examinations will allow for a more nuanced understanding of how the interplay among spirituality, interpersonal processes, and suicidality may be influenced

by experiences of culturally relevant processes (e.g., racial identity, racial socialization) and race-related stress (e.g., racism, colorism).

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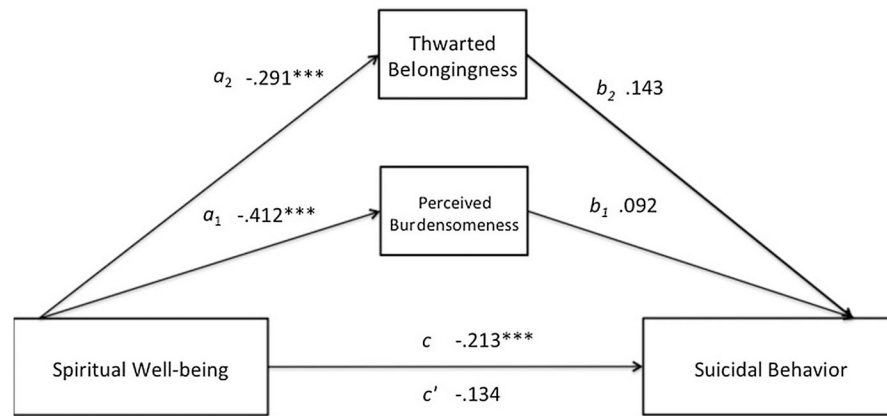


Fig. 1. Effect of spiritual well-being on suicidal behavior as mediated by interpersonal needs *** $p < .001$

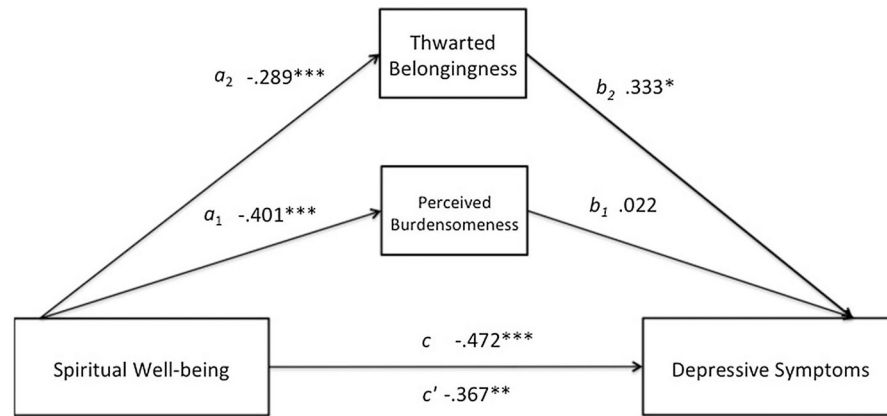


Fig. 2. Effect of spiritual well-being on depressive symptoms as mediated by interpersonal needs * p .05; ** p .01; *** p .001

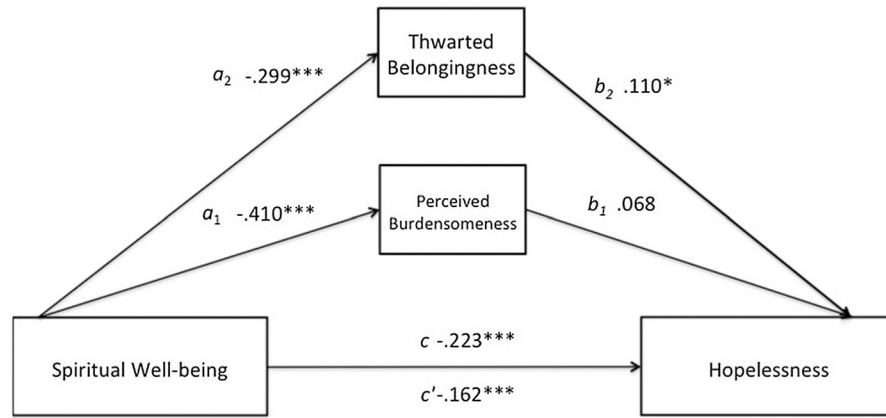


Fig. 3. Effect of spiritual well-being on hopelessness as mediated by interpersonal needs * $p < .05$; *** $p < .001$

Table 1

Sample descriptives and bivariate correlations of study variables

	Mean	SD	SWBS-total	INQ-TB	INQ-PB	BSS	BDI
Age	36.18	11.70	-.06	.23	.12	.19	.04
Spiritual well-being scale (SWBS)—total score	84.67	16.76	–	-.42**	-.64**	-.44**	-.57**
INQ—thwarted belongingness (TB)	35.04	12.11	–	–	.50**	.39**	.45**
INQ—perceived burdensomeness (PB)	21.50	10.85	–	–	–	.40**	.43**
BSS—total score	11.37	8.36	–	–	–	–	.50**
BDI—total score	30.90	13.95	–	–	–	–	–

INQ Interpersonal Needs Questionnaire, *BSS* Beck Scale for Suicidal Ideation, *BDI* Beck Depression Inventory-II

*
 $p < .01$;

**
 $p < .001$