NIH-PA Author Manuscript
NIH-PA Author Manuscript
NIH-PA Author Manuscript

NIH Public Access
Author Manuscript
J Nerv Ment Dis. Author manuscript; available in PMC 2012 July 1.

Published in final edited form as:
J Nerv Ment Dis. 2011 July ; 199(7): 478–486. doi:10.1097/NMD.0b013e31822142c7.

Religious Involvement and Suicidal Behavior among African Americans and Black Caribbeans

Robert Joseph Taylor, MSW, PhD.[1,2], **Linda M. Chatters, PhD.**[1,2,3], and **Sean Joe, MSW, PhD.**[1,2]

[1] School of Social Work, University of Michigan, Ann Arbor

[2] Program for Research on Black Americans, Institute for Social Research, University of Michigan, Ann Arbor

[3] School of Public Health, University of Michigan, Ann Arbor

Abstract

This study explores the relationship between religious denomination, four dimensions of religious involvement, and suicidality (lifetime prevalence of suicide ideation and attempts) within a nationally representative sample of African American and Black Caribbean adults. The relationship between religious involvement and suicide for African Americans and Black Caribbeans indicated both similarities and differences. For both groups, religious involvement was largely protective of suicidal ideation and attempts, although, in some instances, specific measures were associated with higher suicidality. Looking to God for strength, comfort and guidance was protective against suicidal attempts and ideation, whereas stating that prayer is important in stressful situations was associated with higher levels of ideation for both groups and higher attempts among Black Caribbeans. For African Americans, reading religious materials was positively associated with suicidal ideation. Among Black Caribbeans, subjective religiosity was negatively associated with ideation and being Catholic was inversely associated with attempts while being Pentecostal was inversely associated with ideation. These findings are discussed in relation to previous research and current conceptual frameworks that specify multiple (e.g., prevention, resource mobilization) and often divergent pathways of religious effects on physical and mental health outcomes.

Keywords

Afro Caribbean; National Survey of American Life; Religiosity; Spirituality; Suicidal Ideation; Suicidal Attempts

Introduction

Research on religion and suicidality indicates a largely consistent inverse association in which religious involvement is associated with lower rates of suicide-related thoughts and behaviors (Koenig et al., 2001). The pattern and strength of religion effects varies by the specific religious and suicide measures examined, study populations and methodologies, and the particular statistical controls used in analyses (IOM, 2002). Given the long-standing

Corresponding Author: Robert Joseph Taylor, School of Social Work, 1080 South University Avenue, Ann Arbor MI, 48109. rjtaylor@umich.edu.

DISCLOSURE
The authors do not have any commercial associations which may cause a conflict of interests.

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

significance and centrality of religion and religious institutions for African American populations (Billingsley, 1999; Taylor, Chatters, & Levin, 2004), religious involvement is often cited as an explanation for generally lower rates of suicide and non-fatal suicidal behavior among this group (Early, 1992; Molock et al, 2008). Current research based on typically small and select samples of African American respondents largely confirms this relationship. However, there is relatively little systematic information about the association between suicide risk and religious involvement within large, nationally representative samples of African Americans and which control for relevant demographic factors known to be associated with both religious involvement and suicide. Further, research is only beginning to examine suicide risk among Black Caribbeans.

Religion and Suicide among African Americans and Caribbean Blacks

The general literature on religion-suicide associations confirms that particular forms of religious involvement and commitment are related to lower rates of suicidal thought and behaviors. For example, religious involvement measured as public behaviors (e.g., service attendance), self-ratings of religiosity, and stated importance of religion in life, are associated with lower suicidality measured as lower rates of completed suicide, fewer suicide attempts, lower rates of ideation, and more negative views toward suicide (Hovey, 1999; IOM, 2002; Koenig et al., 2001; Lester, 2000). Similar to the general literature on religion and suicidality, research on Black American populations indicates that religious involvement is consequential for suicide risk (Anglin, Gabriel, & Kaslow, 2005; Marion & Range, 2003; Neeleman et al., 1998; Singh et al., 1986; Stack, 1998a, 1998b; Stack, 1998c, 2000; Stack & Lester, 1991a; Stack & Wasserman, 1995). Further, the demonstrated low rates of suicide phenomena found within this population group are often directly attributed to their high levels of religious involvement (Molock et al., 2008; Neeleman, Wessely, & Lewis, 1998).

Research on religious effects on suicide phenomena among African Americans indicates differences by types of religious measures. Public behaviors occurring within a religious setting such as service attendance and participation in other formal religious activities are linked to negative attitudes regarding suicide (Early, 1992; Stack, 1998; Stack & Lester, 1991b; Singh et al., 1986) and lower rates of suicide ideation, attempts, and completed suicide (Kaslow et al., 2005). Other aspects of religious involvement such as affiliation, private prayer, and other devotional activities, religious coping, and religious salience (e.g., intrinsic religiosity) have also been associated with suicide phenomena (Bender, 2000; Kaslow et al., 2005; Marion & Range, 2003; Greening & Stoppelbein, 2002). Finally, although recent research indicates that risk of suicide is substantial for Caribbean Blacks (Joe et al., 2006, 2009), literature on religion's effects on suicidality among this population is extremely limited. One study among a mixed ethnic sample of adolescents from Trinidad and Tobago found that service attendance and prayer with family was negatively associated with suicidal ideation, while family prayer was negatively associated with suicide attempts (Ali & Maharajh, 2005).

Finally, associations between religious involvement and suicide are not always straightforward, sometimes yielding null findings (Joe, Marcus, & Kaplan, 2007; Kaslow et al., 2004) for various measures of religious involvement (e.g., subjective religiosity). Understanding the exact relationships between religious involvement and suicide risk is further complicated by differences in the types of data analyzed (individual vs. aggregate), the study samples used (general population vs. select subgroups such as college students, clinical samples) and the overall representativeness of study samples.

NIH-PA Author Manuscript
NIH-PA Author Manuscript
NIH-PA Author Manuscript

Focus of the Present Investigation

The present analysis examines the relationship between religious denomination, four dimensions of religious involvement—organizational, non-organizational, subjective religiosity and religious coping—and life-time suicidality (e.g., ideation, attempts) among a large, nationally representative sample of African Americans and Black Caribbeans. This analysis also controls for demographic characteristics known to be associated with both religious involvement and suicide risk (e.g., gender, age, marital status, socioeconomic position). Unlike many other studies of religion and suicide, the present analysis also controls for the effects of any other psychiatric disorder which are known covariates of suicidal thoughts and behaviors.

METHODS

Sample

The National Survey of American Life: Coping with Stress in the 21st Century (NSAL) was collected by the Program for Research on Black Americans at the University of Michigan's Institute for Social Research. The field work for the study was completed by the Institute for Social Research's Survey Research Center, in cooperation with the Program for Research on Black Americans. The NSAL sample has a national multi-stage probability design which consists of 64 primary sampling units (PSUs). Fifty-six of these primary areas overlap substantially with existing Survey Research Center's National Sample primary areas. The remaining eight primary areas were chosen from the South in order for the sample to represent African Americans in the proportion in which they are distributed nationally.

The NSAL includes the first major probability sample of Black Caribbeans. For the purposes of this study, Black Caribbeans are defined as persons who trace their ethnic heritage to a Caribbean country, but who now reside in the United States, are racially classified as Black, and who are English-speaking (but may also speak another language). In both the African American and Black Caribbean samples, it was necessary for respondents to self-identify their race as black. Those self-identifying as black were included in the Black Caribbean sample if they: a) answered affirmatively when asked if they were of West Indian or Caribbean descent, b) said they were from a country included on a list of Caribbean area countries presented by the interviewers, or c) indicated that their parents or grandparents were born in a Caribbean area country.

The data collection was conducted from February 2001 to June 2003. The interviews were administered face-to-face and conducted within respondents' homes; respondents were compensated for their time. A total of 6,082 face-to-face interviews were conducted with persons aged 18 or older, including 3,570 African Americans, 891 non-Hispanic Whites, and 1,621 Blacks of Caribbean descent. The overall response rate was 72.3%. Response rates for individual subgroups were 70.7% for African Americans, 77.7% for Black Caribbeans, and 69.7% for non-Hispanic Whites. The response rate is excellent given that African Americans (especially lower income African Americans) are more likely to reside in major urban areas which are more difficult and expensive with respect to survey fieldwork and data collection. Final response rates for the NSAL two-phase sample designs were computed using the American Association of Public Opinion Research (AAPOR) guidelines (for Response Rate 3 samples) (AAPOR 2006) (see Jackson et al. 2004 for a more detailed discussion of the NSAL sample). The NSAL data collection was approved by the University of Michigan Institutional Review Board.

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Measures

Dependent Variables

Suicidal Behavior: Suicidality is assessed in its own section of the World Mental Health Composite International Diagnostic Interview (WMH-CIDI) by a series of questions about lifetime suicidal behaviors (Joe et al., 2006, Kessler et al., 2005). Respondents were screened into the suicidality section of the WMH-CIDI if they answered affirmatively to the question "Have you ever seriously thought about committing suicide?" These respondents are said to have engaged in suicidal ideation. Only those who have engaged in suicidal ideation were asked about suicidal attempts which were measured by the question "Have you ever attempted suicide?"

Independent Variables

Religious Involvement: Measures of organizational, nonorganizational, and subjective religious participation, religious coping, and religious denomination are investigated in this analysis. The measure of organizational religious participation is frequency of service attendance. This variable is measured by combining two items—one that indicates frequency of attendance and one that identifies respondents who have not attended services since the age of 18. The resulting categories for service attendance are: attend nearly everyday, at least once a week, a few times a month, a few times a year, less than once a year, and (except for weddings and funerals) never attended services since the age of 18. Preliminary analysis indicated that: 1) service attendance had a non-linear relationship with suicidal behavior and, 2) the relationship between attendance and suicide risk was different for African Americans and Black Caribbeans. So in the logistic regression analysis, service attendance is a categorical variable with less than once per year being the comparison category for the models for African Americans and a few times per month being the comparison category for Black Caribbeans.

Five measures of nonorganizational religious participation are used in this analysis: reading religious books or other religious materials, watching religious television programs, listening to religious radio programs on the radio, praying, and asking someone to pray for you. Respondents were asked the frequency with which they engaged in these activities (i.e., nearly everyday, at least once a week, a few times a month, at least once a month, a few times a year or never). The range of each item was 6 for nearly everyday to 1 for never.

Subjective religiosity is measured by an index of four items. Respondents were asked about the: 1) importance of religion while growing up, 2) importance of parents taking or sending their children to religious services, 3) overall importance of religion in the respondent's life, and 4) respondents' self-ratings of religiosity. All of these items had 4 categories ranging from 4 (very important or very religious) to 1 (not important at all or not religious at all). Cronbach's alpha for this 4-item index is 0.69 for African Americans and .77 for Black Caribbeans.

Two measures are examined that reflect religious coping. The first provides an assessment of the significance of prayer in difficult circumstances and asks: "How important is prayer when you deal with stressful situations?" very important (4), fairly important (3), not too important (2), or not important at all (1). The second question reflects an overall orientation toward God as a resource and asks respondents' level of agreement with the following statement: "I look to God for strength, support, and guidance." Respondents indicate whether they: strongly agree (4), somewhat agree (3), somewhat disagree (2), or strongly disagree (1) with this statement.

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Denomination is measured by the question: "What is your current religion?" More than 35 different denominations were reported. For analysis purposes, this variable was recoded into seven categories; Baptists, Methodists, Pentecostal, Catholic, Other Protestant (e.g., Lutheran, Presbyterian), other religions (e.g., Jewish, Buddhist, Muslim), and none. Given both the relatively small sample size of Black Caribbeans and the overall low occurrence of suicide attempts for this analysis, denomination was coded into four categories (Baptists, Catholic, other and none).

Control Variables: The demographic variables used in this analysis include age, gender, marital status, education, and family income. Missing data for family income and education were imputed using an iterative regression-based multiple imputation approach incorporating information about age, sex, region, race, employment status, marital status, home ownership, and nativity of household residents. The mental disorders sections used for NSAL are slightly modified versions of those developed for the World Mental Health project initiated in 2000 (World Health Organization, 2004) and the instrument used in the NCS-R (Kessler & Ustun, 2004). The analysis controls for whether respondents had any anxiety disorder (panic disorder, agoraphobia, social phobia, generalized anxiety disorder, obsessive compulsive disorder, posttraumatic stress disorder), mood disorder (major depressive disorder, dysthymia, bipolar I & II disorders), substance disorder (alcohol abuse, alcohol dependence, drug abuse, drug dependence), eating disorder (anorexia, bulimia, binge-eating), or disorder usually diagnosed in childhood (separation anxiety, oppositional defiant disorder, conduct disorder, attention deficit/hyperactivity disorder). Obsessive compulsive disorder was assessed using the CIDI-Short Forms (Kessler et al., 1998). The distribution of the study variables is presented in Table 1.

Analysis Strategy

All percentages reported are weighted based on the distribution of African Americans and Black Caribbeans in the population. Bivariate cross-tabulations and means are presented to illustrate the independent effect of each predictor on suicidal behavior. Bivariate cross-tabulations are tested using the Rao-Scott χ^2 which is a complex design-corrected measure of association. An F means test is used for bivariate associations with continuous variables. For the multivariate analyses logistic regression was used. Odds ratio estimates and 95% confidence intervals are presented. All analyses were conducted using SAS 9.13 which uses the Taylor expansion approximation technique for calculating the complex design-based estimates of variance. All statistical analyses accounted for the complex multistage clustered design of the NSAL sample, unequal probabilities of selection, nonresponse, and poststratification to calculate weighted, nationally representative population estimates and standard errors.

RESULTS

Suicidal Attempts

Overall, 4.02% of African Americans (n=141) and 5.11% of Black Caribbeans (n=48) reported that they had a lifetime suicidal attempt. Table 2 presents the bivariate analysis of religious participation and suicidal attempts for African Americans and Black Caribbeans. Among African Americans, service attendance was the only variable significantly related to attempts, but this relationship is non-linear. African Americans who attended services at least once per week were the least likely to have a suicidal attempt, whereas those who attended religious services nearly everyday and less than once per year were the most likely to have had a suicidal attempt. Among Black Caribbeans, service attendance, watching religious television, the importance of prayer for stressful situations, and denomination were all significantly related to suicidal attempts. Similar to African Americans, the relationship

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

between service attendance and attempts is non-linear with Black Caribbeans who attend services a few times per month being much more likely to have a lifetime suicidal attempt than any other group. Both watching religious television programs and the importance of prayer during stressful situations were positively associated with suicidal attempts. Catholics were less likely than the other denominations to report a suicidal attempt.

Table 3 presents the logistic regression of religious involvement on suicidal attempts for African Americans and Black Caribbeans. Among African Americans both service attendance and ‘look to God for strength’ were significantly associated with having a lifetime suicidal attempt. African Americans who attended religious services at least once per week were less likely to have attempted suicide than those who attended less than once per year. ‘Look to God for strength’ was inversely associated with having a lifetime suicidal attempt.

Among Black Caribbeans frequency of service attendance, both religious coping variables and denomination were significantly associated with having a lifetime suicidal attempt. Attending services a few times a month was the comparison category because bivariate analysis indicated that this category had the highest percentage of respondents who had a lifetime suicidal attempt and ideation. Black Caribbeans who have never attended religious services, those who attended services less than once per year, and those who attended services a few times per year were all less likely to have had a suicidal attempt than those who attended religious services a few times per month. No significant difference was found between attending at least once per week and a few times per month. Ancillary analysis (not shown) also indicates that there was no significant difference between attending at least once per week and any other attendance category.

‘Look to God for strength’ was negatively associated, whereas ‘importance of prayer in stressful situations’ was positively associated, with suicidal attempts. Catholics were less likely to have had a suicidal attempt than those who did not have a religious denomination. Other analysis (not shown) indicated that Catholics were also less likely to report a suicidal attempt than Baptists.

Suicidal Ideation—Roughly 10% of both African Americans (11.65%, n=397) and Black Caribbeans (12.29%, n=145) report lifetime suicidal ideation. The bivariate analysis of the religion variables on suicidal ideation is presented in Table 2. Among African Americans, only service attendance was significantly associated with ideation: respondents who attended religious services less than once per year were the most likely to report a suicidal ideation. Among Black Caribbeans, the importance of prayer during a stressful situation was positively associated with ideation and Pentecostals were less likely than other denominations to have had a suicidal ideation.

Table 4 presents the logistic regressions for religion involvement on suicidal ideation for African Americans and Black Caribbeans. Among African Americans, religious service attendance, frequency of reading religious materials, and ‘looking to God for strength’ were significantly associated with suicidal ideation. African Americans who attended religious services less than once per year were significantly more likely to have suicidal ideations than those who attended services nearly everyday, at least once per week, a few times per month, and never. Frequency of reading religious materials was positively associated, whereas ‘looking to God for strength’ was a negatively associated with suicidal ideations.

For Black Caribbeans, subjective religiosity, the two religious coping variables, and denomination were significantly associated with suicidal ideation (Table 3). Black Caribbeans with high levels of subjective religiosity were less likely to have had suicidal

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

ideations than those with low levels of subjective religiosity. 'Look to God for strength' was inversely associated whereas, 'importance of prayer in stressful situations' was positively associated, with suicidal ideation. Lastly, Black Caribbeans who were Pentecostal were less likely to have had suicidal ideations than those who did not have a denomination.

DISCUSSION

Consistent with previous research, the present study found that religious involvement was significantly associated with suicidal attempts and ideation among both African Americans and Black Caribbeans. The significant associations with religious involvement were noted even in the presence of statistical controls for psychiatric disorders and demographic factors that are known covariates of suicide risk.

Our analysis indicates both similarities and differences in the relationships between religion and suicide for African Americans and Black Caribbeans. The religious coping variables were significantly and similarly associated with suicidal behavior for both groups. In contrast, service attendance was significantly associated with suicidal behavior for both groups, but the pattern of relationships was different for African Americans and Black Caribbeans. Among African Americans only, reading religious materials was significantly associated with suicidal ideation, but not attempts. Whereas, for Black Caribbeans only, denomination and subjective religiosity were significantly associated with both suicidal attempts and ideation. Our analysis indicates that although both groups have high levels of religiosity, it is important to examine the impact of religious involvement on suicidal behavior separately for each group.

Among African Americans, service attendance was significantly associated with both attempts and ideation. The protective effect of service attendance on suicidal behavior is consistent with numerous previous studies in this area (e. g., Stack & Wasserman, 1995) and was especially pronounced among African Americans who attend religious services at least once per week (OR = .41 for attempts, OR = .29 for ideation).

Interestingly, the relationships between service attendance and suicidal behavior among Black Caribbeans were inconsistent with previous research. First, contrary to previous findings among both African Americans and whites (e.g., Stack & Wasserman, 1995), there was no relationship between service attendance and suicidal ideation among Black Caribbeans. Ancillary analysis (not shown) confirmed that service attendance and ideation were unrelated when using the other attendance categories (at least once a week, less than once per year or never) as comparisons. Second, although there is a significant relationship between attendance and attempts, it is not in the expected direction. Black Caribbeans who attended religious services a few times a month had a higher likelihood of having had a suicide attempt than those who attended less frequently and those who have never attended since the age of 18. These findings are surprising and suggest that both qualitative and quantitative research is needed to better understand this pattern of relationships.

Among Black Caribbeans only, those reporting higher levels of subjective religiosity (i.e., religious salience and importance) were less likely to report suicide ideation. This finding is interesting because it is inconsistent with previous research. Kaslow et al., (2004) found that subjective religiosity was not significantly associated with attempts among African Americans, and research generally indicates that subjective religiosity is unrelated to either mental or physical health (see review by Koenig et al., 2001). For instance, research among older African Americans found that subjective religiosity was not associated with mood or anxiety disorders (Chatters et al., 2008). These findings suggest that the meaning and

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

importance of subjective religiosity may be different for Black Caribbeans as compared to other groups.

Turning to denominational findings, our analyses found that among Black Caribbeans only, Catholics were less likely (than the comparison group: no denomination) to have attempted suicide. In supplementary analyses in which the excluded category is Baptists (analyses not shown), Black Caribbeans who are Catholic were also less likely to report suicide attempts. This denominational difference may be attributed to Catholicism's traditional proscription against suicide as a mortal sin (see Koenig et al., 2001). Additionally, Black Caribbeans who were Pentecostal were less likely to have had a suicidal ideation. This is consistent with previous research which shows that among Black Caribbeans Pentecostals have higher levels of service attendance, frequency of prayer, and subjective religiosity (Taylor et al., 2010) and suggests that high levels of investment in religious activities have protective effects on suicide ideation. Collectively, denomination, service attendance, and subjective religiosity findings indicated that ethnic origin is important for understanding the relationship between religion and suicide found among discrete subgroups in the Black population.

Across the various indicators of religious involvement, both negative, as well as positive associations with suicidal attempts and ideation were found. In particular, the two coping variables were both significantly associated with suicidality, but in opposite directions. 'Look to God for strength,' was inversely associated with suicidality, whereas, 'importance of prayer in stressful situations,' was positively associated with suicidality. Although this seems contradictory, these findings are consistent with theory and research on religious involvement as a multidimensional construct (Chatters, Taylor & Levin, 1992; Levin, Taylor & Chatters, 1995), as well as with current conceptual models of religion and health (e.g., prevention, resource mobilization) that specify multiple and often divergent pathways of religious effects on health outcomes (Chatters, 2000; Ellison & Levin, 1998).

The Prevention model (Ellison & Levin, 1998) asserts that by promoting prosocial attitudes, social connections and support, and healthy lifestyle choices and behaviors, religious involvement reduces the risk of mental health problems and suicide. Specifically, the Prevention model states that adherence to religious attitudes, behaviors, and lifestyle choices reduces the risk of problems in a variety of life domains such as family issues (e.g., guidelines for marital behavior), legal problems (reduced likelihood of criminal behavior), substance abuse, and other stressors that diminish physical and mental health (Ellison & Levin, 1998; Koenig et al., 2001; Wallace & Forman, 2001). Consistent with predictions of the Prevention model, several religious involvement variables were inversely associated with suicidal attempts and ideation (i.e., protective). Findings for the effects of service attendance indicated that it was protective for suicidal attempts and ideation among African Americans. Among Black Caribbeans, high levels of subjective religiosity and Catholic and Pentecostal denominational affiliation were protective against suicidal behavior. Among both African Americans and Black Caribbeans, 'looking to God for strength' as a form of religious coping, was also protective against suicidal behavior.

Our analysis also indicated that the importance of prayer during stressful situations was positively associated with suicidality among both African Americans and Black Caribbeans. In particular, importance of prayer during stressful situations was significantly associated with suicide ideation for both groups and with suicide attempts among Black Caribbeans. Further, frequency of reading religious materials (e.g., Bible, other religious books) was also positively associated with suicidal ideation among African Americans. Although these findings (higher religious involvement being associated with suicide ideation and attempts) appear counterintuitive, they are consistent with the Resource Mobilization model (also

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

known as the Stressor Response) of religion and health (Ellison & Levin, 1998). This model states that stressors or problems, such as a suicidal crisis, prompt individuals to mobilize a variety of religious resources, including increasing the frequency of religious behaviors (Ellison & Levin, 1998). In essence, individuals attempt to cope with life crises by increasing religious behaviors such as prayer and reading religious materials. Similarly, Pargament (1997) demonstrates that religious coping behaviors are most intense when individuals face extreme circumstances that are very threatening, serious and potentially harmful (p.143). In these circumstances, stress triggers increases in religious coping and individuals display heightened levels of private devotional behaviors (e.g., religious reading, private prayer).

Previous research findings on religion and suicide are consistent with this interpretation. For instance, Bagley and Ramsey (1989), found that persons who had previously attempted suicide increased their levels of religious participation in addition to switching from the church in which they were raised to one with a more fundamentalist orientation. Research on religion and depression is also consistent with the Resource Mobilization model: Ellison (1995) found that an index of non-organizational religious behaviors (i.e., prayer, reading religious materials and meditation) was positively associated with depressive symptoms among southern blacks and whites. Additionally, Ai et al., (1998) found that individuals who used religious coping strategies to deal with postoperative problems following coronary bypass surgery had less depression and general distress.

Pargament (1997), notes that it is not unexpected to have significant findings in both positive and negative directions between measures of religious coping and mental health outcomes. He argues that the protective aspects of religious participation produce inverse associations between religion and mental illness. He further argues that the tendency for individuals to increase their religious behavior in times of stress yields positive relationships between religion and distress (Pargament, 1997).

CONCLUSION

Overall, these findings confirmed the importance of different dimensions of religious involvement for suicide ideation and attempts within representative samples of African Americans and Caribbean Blacks. These analyses indicated that measures of religious involvement were associated with both lower (the prevention model) and higher (resource mobilization model) levels of suicide ideation and attempts. Consistent with the resource mobilization model, religious coping is employed as part of an individual's effort to mobilize religious resources in response to a crisis. In these instances, strong endorsements of the effectiveness of prayer in stressful situations may reflect the individual's attempts to cope with a crisis in which suicide ideation and attempts are prominent. In other circumstances, religious coping in the form of endorsements of the importance of looking to God for strength, appear to be protective (prevention model) against suicide ideation/ attempts. These interpretations of the data, although informed by relevant theory on religious involvement and health, cannot be directly tested given the cross-sectional nature of the data. Further, it would have been preferable to examine 12-month as opposed to lifetime suicide ideation and attempts to lessen the temporal differences between the dependent measures and religious participation variables. However, it is well-established that the number of cases for 12-month suicide ideation and attempts within non-clinical samples are generally too few especially for populations such as African Americans and Black Caribbeans. Clarification of the varied roles of religious involvement factors in relation to coping efforts awaits testing with prospective data.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

This study examined diverse measures of religious involvement (i.e., attitudes, public and private behaviors, religious coping, denomination) in relation to suicide ideation and attempts. The different religious involvement measures used in this study allowed the opportunity to examine how discrete dimensions of religious involvement are associated with suicide risk. The findings indicated that different aspects of religious involvement have preventive versus resource mobilization effects on suicide ideation and attempts and confirmed that both perspectives are important for understanding religion's role in regards to suicide risk. Clinicians should consider discussing religiosity as a part of treatment when seeking to reduce Black Americans risk for suicide. Further, prior studies of suicide and other mental health outcomes typically fail to differentiate between important subgroups within the Black American population on the basis of ethnicity. This study's findings underscored the importance of understanding within-group ethnic differences (i.e., African American and Caribbean Black) in the associations between religious involvement and suicidality. This analysis' confirmation of both similarities and differences in the pattern of significant effects demonstrated the importance of exploring unique patterns of relationships between religious involvement and suicidality among discrete groups of African Americans and Black Caribbeans

Acknowledgments

The data collection on which this study is based was supported by the National Institute of Mental Health (NIMH; U01-MH57716) with supplemental support from the Office of Behavioral and Social Science Research at the National Institutes of Health (NIH) and the University of Michigan. The preparation of this manuscript was supported by grants from the National Institute on Institute of Mental Health to Drs. Joe, Chatters and Taylor (R01-MH082807), R01-MH084963 to Dr. Chatters, and from the National Aging for Dr. Taylor (P30-AG15281).

References

Ai A, Dunkle R, Peterson C, Bolling SF. The role of private prayer in psychosocial recovery among midlife and aged patients following cardiac surgery. Gerontologist. 1998; 38(5):591–601. [PubMed: 9803647]

Ali A, Majarajh HD. Social predictors of suicidal behaviour in adolescents in Trinidad and Tobago. Soc Psych Psych Epid. 2005; 40(3):186–191.

American Association for Public Opinion Research. Standard definitions: Final dispositions of case codes and outcome rates for surveys. 4. Lenexa, Kansas: AAPOR; 2006.

Anglin DM, Gabriel KOS, Kaslow NJ. Suicide acceptability and religious well-being: A comparative analysis in African American suicide attempters and non-attempters. J Psych Theol. 2005; 33(2): 140–150.

Bagley, C.; Ramsay, RF. Attitudes toward suicide, religious values and suicidal behavior: Evidence from a community survey. In: Diekstra, RFW.; Maris, R.; Platt, S.; Schmidtke, A.; Sonneck, G., editors. Suicide and its prevention: The role of attitude and imitation. Leiden, Netherlands: E. J. Brill; 1989. p. 78-90.

Billingsley, A. Mighty like a river: The Black church and social reform. New York: Oxford University Press; 1999.

Chatters LM. Religion and health: Public health research and practice. Annu Rev Publ Health. 2000; 21:335–367.

Chatters LM, Taylor RJ, Lincoln KD, Jackson JS. Religious coping among African Americans, Caribbean Blacks, and non-Hispanic Whites. J Community Psychol. 2008; 36(3):371–386. [PubMed: 21048887]

Chatters LM, Levin JS, Taylor RJ. Antecedents and dimensions of religious involvement among older black adults. J Gerontol B-Psychol. 1992; 47:S269–S278.

Early, KE. Religion and suicide in the African-American community. Westport, CT: Greenwood; 1992.

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Ellison CG. Race, religious involvement and depressive symptomatology in a southeastern U.S. community. Soc Sci Med. 1995; 40:1561–1572. [PubMed: 7667660]

Ellison CG, Levin JS. The religion-health connection: Evidence, theory, and future directions. Health Educ Behav. 1998; 25(6):700–720. [PubMed: 9813743]

Greening L, Stoppelbein L. Religiosity, attributional style, and social support as psychosocial buffers for African American and White adolescents' perceived risk for suicide. Suicide Life-Threat. 2002; 3:404–417.

Hovey JD. Religion and suicidal ideation in a sample of Latin American immigrants. Psychol Rep. 1999; 85(1):171–177. [PubMed: 10575983]

Institute of Medicine. Reducing suicide: A national imperative. Washington: National Academy Press; 2002.

Jackson JS, Torres M, Caldwell CH, Neighbors HW, Nesse RN, Taylor RJ, Trierweiler SJ, Williams DR. The National Survey of American Life: A study of racial, ethnic and cultural influences on mental disorders and mental health. Int J Meth Psychiat Res. 2004; 13(4):196–207.

Joe S, Baser RE, Breeden G, Neighbors HW, Jackson JS. Prevalence of and risk factors for lifetime suicide attempts among Blacks in the United States. JAMA. 2006; 296 (17):2112–2123. [PubMed: 17077376]

Joe S, Baser RS, Neighbors HW, Caldwell CH, Jackson JS. 12-month and lifetime prevalence of suicide attempts among black adolescents in the National Survey of American Life. J Am Acad of Child Psy. 2009; 48(3):271–82.

Joe S, Marcus SM, Kaplan MS. Racial differences in the characteristics of firearm suicide decedents in the United States. Am J Orthopsychiat. 2007; 77(1):124–130. [PubMed: 17352593]

Kaslow NJ, Price AW, Wyckoff S, Grall MB, Sherry A, et al. Person factors associated with suicidal behavior among African American women and men. Cultur Divers Ethnic Minor Psychol. 2004; 10(1):5–22. [PubMed: 14992627]

Kaslow NJ, Sherry A, Bethea K, Wyckoff S, Compton MT, Grall MB, et al. Social risk and protective factors for suicide attempts in low income African American men and women. Suicide Life-Threat. 2005; 35(4):400–412.

Kessler RC, Andrews G, Mroczek D, Ustun B, Wittchen H. The World Health Organization composite international diagnostic interview short-form (CIDI-SF). Int J Meth Psych Res. 1998; 7(4):171–185.

Kessler RC, Berglund P, Borges G, Nock M, Wang PS. Trends in suicide ideation, plans, gestures, and attempts in the United States, 1990–1992 to 2001–2003. JAMA. 2005; 293(20):2558. [PubMed: 15914758]

Kessler RC, Ustun TB. The World Mental Health (WMH) survey initiative version of the World Health Organization (World Health Organization) Composite International Diagnostic Interview (CIDI). Int J Meth Psych Res. 2004; 13:93–121.

Koenig HG. Concerns about measuring "Spirituality" in research. J Nerv Ment Dis. 2008; 196:349–355. [PubMed: 18477877]

Koenig, HG.; McCullough, M.; Larson, D. The handbook of religion and health. New York: Oxford University Press; 2001.

Lester D. Religious homogeneity and suicide. Psych Rep. 2000; 87(3 Pt 1):766.

Levin JS, Taylor RJ, Chatters LM. A multidimensional measure of religious involvement for African Americans. The Sociological Quarterly. 1995; 36:901–919.

Marion MS, Range LM. African American college women's suicide buffers. Suicide Life-Threat. 2003; 33(1):33–43.

Molock SD, Matlin S, Barksdale C, Puri R, Lyles J. Developing suicide prevention programs for African American youth in African American churches. Suicide Life-Threat. 2008; 38(3):323–333.

Neeleman J, Wessley S, Lewis G. Suicide acceptability in African and White Americans: The role of religion. J Nerv Ment Dis. 1998; 186:12–16. [PubMed: 9457142]

Pargament, KI. The psychology of religion and coping: Theory, research, practice. New York: Guilford; 1997.

NIH-PA Author Manuscript
NIH-PA Author Manuscript
NIH-PA Author Manuscript

Singh BK, Williams JS, Ryther BJ. Public approval of suicide: A situational analysis. Suicide Life-Threat. 1986; 16(4):409–418.

Stack S. Gender, marriage, and suicide acceptability: A comparative analysis. Sex Roles. 1998a; 38(7–8):501–520.

Stack S. Heavy metal, religiosity, and suicide acceptability. Suicide Life-Threat. 1998b; 28(4):388–394.

Stack S. The relationship between culture and suicide: An analysis of African Americans. Transcult Psychiatry. 1998c; 35(2):253–269.

Stack S. Blues fans and suicide acceptability. Death Studies. 2000; 24:223–231. [PubMed: 11010628]

Stack S, Lester D. The effect of religion on suicide ideation. Soc Psych Psych Epid. 1991; 26(4):168–170.

Stack S, Wasserman I. The effect of marriage, family, and religious ties on African-American suicide ideology. J Marriage Fam. 1995; 57(1):215–222.

Taylor, RJ.; Chatters, LM.; Levin, JS. Religion in the lives of African Americans: Social, psychological, and health perspectives. Thousand Oaks: Sage Publications; 2004.

Taylor RJ, Chatters LM, Mattis JS, Joe S. Religious involvement among Caribbean Blacks in the United States. Rev Relig Res. 2010; 52:125–145.

Wallace JM Jr, Forman TA. Religion's role in promoting health and reducing risk among American youth. Health Educ and Behav. 1998; 25:721–741.

World Health Organization. The prevalence, severity, and unmet need for treatment of mental disorders in the World Health Organization World Mental Health Surveys. JAMA. 2004; 291:2581–2590. [PubMed: 15173149]

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

Table 1

Demographic Characteristics of the Sample and Distribution of Study Variables

	African Americans		Black Caribbeans	
	% (Mean)	N (S.D.)	% (Mean)	N (S.D.)
Organizational Religiosity				
Church Attendance				
Never	8.56	267	6.97	148
Less that Once Per Year	9.63	312	13.94	183
Few Times Per Year	19.53	670	24.61	359
Few Times Per Month	24.34	891	20.97	299
At Least Once a Week	32.60	1226	29.67	548
Nearly Everyday	5.32	204	3.81	82
Non-Organizational Religiosity				
Reading Religious Materials	4.17	1.44	4.19	0.60
Watch Religious Television	3.77	1.54	3.46	0.63
Listen to Religious Radio	3.69	1.74	3.26	0.70
Prayer	5.59	0.95	5.53	0.42
Ask Someone to Pray for You	3.71	1.65	3.17	0.65
Subjective Religiosity				
Low	849	25.37	29.53	451
Medium	545	15.32	13.25	235
High	2173	59.30	57.21	932
Religious Coping				
Importance of Prayer in Stressful Situations	3.85	0.42	3.80	0.19
Look to God for Strength	3.85	0.43	3.80	0.20
Age	42.32	14.49	40.27	5.77
Education	12.43	2.23	12.88	1.01
Income	36,833	33,068	47,044	15,190
Gender				
Male	44.02	1271	50.87	643
Female	55.97	2299	49.13	978
Marital Status				
Married/Partner	41.65	1222	50.15	693
Widowed, Separated, Divorced	26.77	1164	18.93	385
Never married	31.57	1176	30.91	543
Any Disorder				
Yes	40.06	1361	37.40	498
No	59.94	2060	62.60	1084
Denomination				
Baptist	49.08	1865	20.52	278
Methodist	5.87	216	3.17	66
Pentecostal	8.61	304	8.70	152

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

	African Americans		Black Caribbeans	
	% (Mean)	**N (S.D.)**	**% (Mean)**	**N (S.D.)**
Catholic	5.95	202	18.66	367
Other Protestant	17.70	566	32.64	500
Other Religion	2.25	71	3.56	56
No Religion	10.50	344	12.72	194

Percents and N are presented for categorical variables and Means and Standard Deviations are presented for continuous variables. Percents are weighted; frequencies are unweighted.

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Table 2

Bivariate Analysis of Religiosity on Suicidal Attempts and Ideation Among African Americans and Black Caribbeans

	Attempts				Ideation			
	African Americans		Black Caribbeans		African Americans		Black Caribbeans	
	Yes	No	Yes	No	Yes	No	Yes	No
Organizational Religiosity								
Church Attendance								
Never	5.13	94.86	2.97	97.03	11.65	88.35	11.72	88.28
Less that Once Per Year	5.40	94.59	2.95	97.05	19.29	80.71	12.55	87.45
Few Times Per Year	5.05	94.94	2.64	97.36	14.61	85.39	13.31	86.69
Few Times Per Month	3.64	96.35	15.15	84.85	10.34	89.65	20.03	79.97
At Least Once a Week	2.52	97.47	1.86	98.14	8.28	91.72	6.18	93.82
Nearly Everyday	6.84	93.15	1.68	98.32	13.42	86.58	9.19	90.80
N	3424		1576		3424		1576	
Rao-Scott	12.44*		30.95***		27.44***		5.49	
Non-Organizational Religiosity								
Reading Religious Materials	4.28	4.16	4.12	4.23	4.30	4.15	4.12	4.24
N	3423		1575		3423		1575	
F	0.31		0.07		2.11		0.22	
Watch Religious Television	3.64	3.76	4.12	3.43	3.69	3.76	3.33	3.48
N	3423		1573		3423		1573	
F	0.28		5.58*		0.37		0.14	
Listen to Religious Radio	3.74	3.67	3.57	3.24	3.68	3.67	3.26	3.26
N	3423		1575		3423		1575	
F	0.13		0.69		0.00		0.00	
Prayer	5.52	5.60	5.68	5.52	5.62	5.59	5.67	5.50
N	3422		1575		3422		1575	
F	0.45		0.65		0.14		1.16	
Ask Someone to Pray for You	3.80	3.71	2.57	3.18	3.86	3.69	2.81	3.21
N	3420		1573		3420		1573	
F	0.48		3.66		1.57		2.33	
Subjective Religiosity								

	Attempts				Ideation			
	African Americans		Black Caribbeans		African Americans		Black Caribbeans	
	Yes	No	Yes	No	Yes	No	Yes	No
Low	5.32	94.67	4.91	95.09	13.77	86.23	17.94	82.06
Medium	3.77	96.22	5.14	94.86	11.63	88.37	12.79	87.21
High	3.53	96.46	5.17	94.83	10.72	89.27	9.30	90.70
N	3421		1575		3421		1575	
Rao-Scott	4.20		.004		4.91		2.86	
Religious Coping								
Importance of Prayer in Stressful Situations	3.85	3.86	3.93	3.81	3.88	3.86	3.90	3.80
N	3417		1574		3417		1574	
F	0.00		6.06*		1.50		4.80*	
Look to God for Strength	3.78	3.85	3.78	3.80	3.81	3.86	3.75	3.81
N	3421		1574		3421		1574	
F	1.16		0.02		1.69		0.64	
Denomination								
None	4.77	95.23	6.08	93.92	14.45	85.54	11.45	88.55
Baptist	3.13	96.87	10.06	89.93	9.70	90.30	17.76	82.24
Methodist	2.53	97.47	--	--	10.90	89.10	5.91	94.09
Pentecostal	5.76	94.24	--	--	14.15	85.85	3.69	96.31
Catholic	4.82	95.18	1.01	98.98	17.55	82.45	12.91	87.09
Other Protestant	5.20	94.80	--	--	12.33	87.67	9.60	90.40
Other Religion	5.75	94.25	4.44	95.55	11.84	88.13	34.30	65.70
N	3422		1571		3422		1571	
Rao-Scott	7.22		8.54*		9.92		12.82*	

Percentages and Rao-Scott Chi-Squares are presented for Cross-Tabulations of Categorical Variables; Means and F-tests are presented for Continuous Variables

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Table 3

Logistic Regression Analysis of Religious Involvement and Suicidal Attempts among African Americans and Black Caribbeans.

	African Americans			Black Caribbeans		
	OR	95% CI	p	OR	95% CI	p
Organizational Religiosity						
Service Attendance						
Never	0.85	.41 – 1.79	.679	0.67	.01 – 0.48	.007
Less than Once Per Year[a]	--	--	--	0.18	.05 – 0.58	.004
Few Times Per Year	1.01	.52 – 1.97	.969	0.79	.01 – 0.58	.013
Few Times Per Month[a]	0.66	.31 – 1.39	.278	--	--	--
At Least Once a Week	0.41	.20 – 0.86	.017	0.31	.09 – 1.06	.061
Nearly Everyday	0.90	.40 – 2.01	.791	0.31	.04 – 1.96	.211
Non-Organizational Religiosity						
Reading Religious Materials	1.20	.95 – 1.52	.129	1.15	.85 – 1.63	.332
Watch Religious Television Programs	0.96	.81 – 1.14	.674	1.41	.91 – 2.15	.116
Listen to Religious Radio Programs	1.09	.95 – 1.26	.210	0.92	.79 – 1.02	.316
Prayer	0.94	.79 – 1.12	.482	0.94	.64 – 1.39	.774
Ask Someone to Pray for You	1.00	.92 – 1.09	.901	0.80	.64 – 1.02	.068
Subjective Religiosity						
Low[a]						
Medium	0.77	.42 – 1.44	.423	0.35	.09 – 1.32	.123
High	0.79	.50 – 1.22	.287	0.29	.08 – 1.04	.057
Religious Coping						
Importance of Prayer in Stressful Situations	1.18	.76 – 1.83	.464	4.36	1.41 – 13.48	.010
Look to God for Strength	0.67	.46 – 0.98	.038	0.44	.24 – 0.82	.010
Denomination						
None[a]						
Baptist	0.95	.39 – 2.29	.902	0.42	.14 – 1.31	.136
Methodist	0.95	.24 – 3.79	.948	--	--	--
Pentecostal	1.74	.67 – 4.53	.256	--	--	--
Catholic	1.37	.55 – 3.39	.499	0.09	.01 – 0.60	.012

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

	African Americans			Black Caribbeans		
	OR	95% CI	p	OR	95% CI	p
Other Protestant	1.74	.77 – 3.95	.180	--	--	--
Other Religion	1.82	.51 – 6.41	.349	0.60	.15 – 2.41	.474

OR=Odds Ratio, CI=Confidence Interval, Analysis controls for age, gender, education, income, marital status and having any 12 month psychiatric disorder.

[a] Reference Category. The reference category for service attendance is different for African Americans and Black Caribbeans

NIH-PA Author Manuscript NIH-PA Author Manuscript NIH-PA Author Manuscript

Table 4

Logistic Regression Analysis of Religious Involvement and Suicidal Ideation among African Americans and Black Caribbeans.

	African Americans			Black Caribbeans		
	OR	95% CI	p	OR	95% CI	p
Organizational Religiosity						
Service Attendance						
Never	0.47	.25 – .891	.020	0.46	.11 – 1.96	.297
Less than Once Per Year[a]	--	--	--	0.58	.22 – 1.53	.276
Few Times Per Year	0.65	.49 – 1.05	.079	0.30	.08 – 1.05	.061
Few Times Per Month[a]	0.41	.24 – .698	.001	--	--	--
At Least Once a Week	0.29	.18 – .483	.000	0.56	.25 – 2.49	.174
Nearly Everyday	0.38	.18 – .815	.013	0.87	.31 – 2.49	.805
Non-Organizational Religiosity						
Reading Religious Materials	1.24	1.11 – 1.38	.000	1.16	.85 – 1.59	.343
Watch Religious Television Programs	0.98	.90 – 1.07	.684	1.10	.89 – 1.35	.363
Listen to Religious Radio Programs	1.05	.97 – 1.13	.189	1.09	.88 – 1.35	.418
Prayer	1.05	.92 – 1.21	.454	1.16	.76 – 1.75	.482
Ask Someone to Pray for You	1.03	.96 – 1.11	.357	0.84	.62 – 1.14	.267
Subjective Religiosity						
Low[a]						
Medium	0.85	.54 – 1.34	.487	0.75	.39 – 1.42	.379
High	0.84	.57 – 1.25	.398	0.50	.26 – 0.95	.034
Religious Coping						
Importance of Prayer in Stressful Situations	1.31	.97 – 1.77	.075	2.80	1.38 – 5.71	.004
Look to God for Strength	0.65	.45 – 0.93	.020	0.43	.23 – 0.83	.011
Denomination						
None[a]						
Baptist	0.86	.50 – 1.47	.586	0.79	.30 – 2.07	.626
Methodist	1.23	.54 – 2.82	.618	0.48	.09 – 2.51	.385
Pentecostal	1.32	.73 – 2.40	.361	0.25	.07 – 0.95	.041
Catholic	1.60	.79 – 3.24	.185	0.95	.29 – 3.07	.927

NIH-PA Author Manuscript

NIH-PA Author Manuscript

NIH-PA Author Manuscript

	African Americans			Black Caribbeans		
	OR	**95% CI**	**p**	**OR**	**95% CI**	**p**
Other Protestant	1.14	.62 – 2.11	.667	0.54	.21 – 1.38	.202
Other Religion	0.94	.36 – 2.43	.898	2.05	.51 – 8.33	.313

OR=Odds Ratio, CI=Confidence Interval, Analysis controls for age, gender, education, income, marital status and having any 12 month psychiatric disorder.

[a]Reference Category. The reference category for service attendance is different for African Americans and Black Caribbeans.