Religiousness, social support and reasons for living in African American and European American older adults: An exploratory study

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Objectives: This study examined the relationship between religiousness, perceived social support, and reasons for living among European American (n = 37; M age = 67.7 years) and African American (n = 35; M age = 71.1 years) older adults, where ethnicity was predicted to behave as a moderator.

Method: Community-dwelling participants completed the Brief Multidimensional Measure of Religiousness/Spirituality, the Multidimensional Measure of Perceived Social Support, and the Reasons for Living Inventory.

Results: As expected, high religiousness was associated with more reasons for living. Ethnicity alone did not meaningfully account for variance differences in reasons for living, but significant interactions indicated that the relationship between religiousness and reasons for living was stronger for African Americans, whereas the relationship between social support and reasons for living was stronger for European Americans.

Conclusion: The present findings may be valuable for understanding potentially modifiable pathways to suicide resilience in diverse populations of older adults.

Keywords: suicide; aging; prevention; ethnicity; religion; support

Suicide among older adults is a major societal problem. In the United States, older adults aged 65 and older have the highest suicide completion rate of any age group at 14.7 per 100,000 (Centers for Disease Control and Prevention [CDC], 2005). Older adults are also the fastest growing segment of the US population. According to current population trends, by the year 2030, older adults will make up approximately 20% of the population, consisting of about 71.5 million older persons, almost twice their number in 2004 (Administration on Aging, 2007). As the baby boom cohort reaches older adulthood, it is expected that there will be increases in the already high number of cases of late-life suicides as the boomers move into a phase of life in which rates of suicide are the highest.

However, the rates of elder suicide are impacted significantly when ethnicity is considered. Specifically, older European American men have the highest rates of suicide of any age and ethnicity category, at more than 32.1 deaths by suicide per 100,000 people (CDC, 2005). Even though European American men 50 years old and older comprise less than a quarter of the population, they are responsible for almost 40% of all suicides. According to a recent publication from the CDC, the suicide rate in 2005 for African American men 65 years old and older was 10.2 suicides per 100,000 people (Kung, Hoyert, Xu, & Murphy, 2008). It also indicates, reporting death rates by suicide between 1985 and 2004, that although European American older women complete suicide at a far lower rate than European American older men, the rate is still five times greater than that of older African American women. Indeed, the African American community sees fewer suicides than the European American community across all age groups (Kung et al., 2008). So the question remains: What is accounting for this difference?

It appears that African Americans and European Americans share similar concerns regarding the problems of old age but may deal with the stressors differently (Barer & Johnson, 2003). Among African Americans, more social integration and strong reliance upon religious faith as a means of coping with problems were both associated with increasing age. Higher levels of family cohesion and support have been found to be associated with lower levels of suicidal ideation and suicidal risk in African American older adults (Roy, 2003; Vanderwalker et al., 2007). Bender (2000) examined protective factors against suicide in older African American and European American women and found that African American women report stronger reasons for not completing suicide on scale items with regard to family and religion, although total scale scores did not significantly differ. African Americans scored higher than European Americans on two items: ‘I believe I can find a purpose in life and a reason to live’ and ‘My family depends upon me and needs me’. European Americans scored higher on, ‘I love and enjoy my family too much and could not leave them’. Bender also reported that African Americans scored higher on religious beliefs than European Americans.

Social support and religiousness, across ethnic categories, both appear to be robustly inversely related to suicide, suicidal ideation and suicidal attempts. In clinical practice, a person’s social support system is
one of the most common domains assessed in people thought to be suicidal as research supporting this relationship has been strong and plentiful. For example, Vanderhorst and McLaren (2005) found that among older adults, having fewer social support resources was associated with higher levels of depression and suicidal ideation. In a study of older adults using home healthcare services, Rowe (2006) reported that lower social interaction patterns and lower perceived social support were both significantly related to increased suicidal ideation. In a study of low-income African American men and women, aged 18 to 64 years, Compton, Thompson, and Kaslow (2005) studied the relationship between social environment and suicide attempts and found that deficits in family functioning and social support were associated strongly with suicide attempts. MacMahon and Pugh (1965) showed that suicide risk is elevated during the first four years of widowhood and decreases thereafter. This finding is supported by Duberstein, Conwell, Conner, Eberly, and Caine (2004) who found that completed suicide victims were more likely to have separated from an intimate partner. Rowe, Conwell, Schulberg, and Bruce (2006) suggest that high subjective social support may serve as a buffer against suicidal ideation and self-harming behavior in the older adult home healthcare population.

In a large study, Cook, Pearson, Thompson, Black, and Rabins (2002) found that low levels of religiousness was associated with higher levels of suicidal ideation in African American older adults. In their study, 835 African American older adults completed suicidal ideation questions as part of the General Health Questionnaire (GHQ; Goldberg & Hillier, 1979) and completed questions about religious and spiritual beliefs. Religiousness was a significant predictor when regressed on both passive suicidal ideation and active suicidal ideation, where more religiousness predicted less suicidal ideology. Further evidence for the relationship between religiousness and suicidality in later life comes from the emerging research using the Reasons for Living Inventory (RFL; Linehan, Goodstein, Nielsen, & Chiles, 1983) to measure protective factors against suicide rather than suicidal intent. Miller, Segal, and Coolidge (2001) in a cross-sectional design comparing younger adults and older adults on the RFL found that the older group reported moral objections as a stronger reason for not completing suicide compared to the younger group, showing a potentially important positive relationship between religious values and a person’s decision to live. A limitation of this study, however, was that the sample was 90% European American.

Whereas an emerging research base has demonstrated that older adults with limited social support and lower levels of religiousness are at higher suicide risk at the macro level, it would be potentially important to study these variables together among older adults from diverse ethnic backgrounds. National statistics indicate that whereas older adults complete suicide at higher rates than any other age group, minority older adults appear to complete suicide at much lower rates than European American older adults. The purpose of the present study was to examine one possible explanation for the relatively low suicide rate among African American older adults. Based on the literature in this area, it was predicted that perceived social support and religiousness will act as stronger protective factors against suicide among African American older adults than among European American older adults, and that this would help to explicate the differential suicide rates seen between these groups. This hypothesis was selected because religiousness and social support have been identified as especially important sources of resilience in the face of hardship for the African American community (Brodsky, 2000; Brown, 2008; Clay, Roth, Wadley, & Haley, 2008; Krause, 2003).

Method

Participants and procedure

Older adult participants were recruited through undergraduate college students who received extra credit for their voluntary recruitment of older adult family members, through an older adult research registry, through a local African American health fair, and through an urban hospital. Participants recruited by students received the questionnaire packet from the students and returned the packet directly to the research team. Participants recruited from the research registry, health fair, and hospital received the questionnaire packet from a research team member and returned the packet directly to the research team. Informed consent was obtained from all participants who read and signed a consent form that was provided in each survey packet, clearly explaining to participants that they are free to discontinue their participation at any point with no penalty. This study was approved by the university’s Institutional Review Board. There was a 50% return rate for packets distributed to potential volunteers. Participants completed anonymously the questionnaire packet and were classified in ethnic groups based upon self-reported identity classification.

European American older adults (n = 37; 51% female) ranged in age from 60 to 85 years old (M age = 67.7 years, SD = 6.5 years) with a mean level of 14.5 years of education (SD = 2.8 years). Sixteen percent reported they lived alone. Their religious preference was reported as follows: 19% Catholic, 57% Protestant, 5% Non-Denominational, 5% Jewish and 14% Other.

African American older adults (n = 35; 66% female) ranged in age from 62 to 86 years old (M age = 71.1 years, SD = 7.2 years), with a mean level of 12.5 years of education (SD = 3.4 years). Fifty-one percent reported they lived alone. Their religious
preference was reported as follows: 17% Catholic, 60% Protestant, 9% Non-Denominational and 14% Other.

Measures

Reasons for Living Inventory (RFL; Linehan et al., 1983) is a 48-item self-report measure that assesses potential reasons for not completing suicide should the thought arise. The RFL is based on a cognitive-behavioral view of suicidal behavior, which posits that cognitive patterns, whether they are beliefs, expectations, or capabilities, mediate suicidal behaviors. Respondents answer using a 6-point scale ranging from (1) extremely unimportant to (6) extremely important, with higher scores indicating higher reasons for living. The RFL includes six subscales: Survival and Coping Beliefs, Responsibility to Family, Child-Related Concerns, Fear of Suicide, Fear of Social Disapproval, and Moral Objections. The number of items for each subscale ranges from 3 to 24. Subscale and total scores are divided by the number of items, therefore scores range from one to six. The RFL has a solid theoretical base, is widely used in clinical research, and has ample evidence of reliability and validity (Osman et al., 1993; Range, 2005; Range & Knott, 1997). In the present study, internal consistency (Cronbach’s alpha) for the RFL total score in the full sample was moderate at 0.72, for African Americans the alpha was good at 0.81, and for European Americans the alpha was adequate at 0.59.

Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS; Fetzer Institute & National Institute on Aging Working Group, 1999) is a 40-item self-report measure developed to examine religiousness/spirituality and health with sensitivity to the depth and complexity of the topic. The BMMRS has 12 subscales: Daily Spiritual Experiences, Meaning, Values/Beliefs, Forgiveness, Private Religious Practices, Religious and Spiritual Coping, Religious Support, Religious/Spiritual History, Commitment, Organizational Religiousness, Religious Preference, and Overall Self-Ranking (Fetzer Institute & National Institute on Aging Working Group, 1999). The scale and number of items on each subscale differ. Scales range from a 7-point Likert scale to a 2-point format. In the present study, Cronbach’s alphas for the religiousness total score were excellent for the full sample (0.94), for African Americans (0.95), and for European Americans (0.95).

Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlem, Zimet & Farley, 1988) is a 12-item self report measure of perceived social support from three groups: family, friends, and significant others. Respondents answer using a 7-point Likert scale ranging from very strongly disagree (1) to very strongly agree (7) with higher scores indicating higher perceived social support. The MSPSS has strong reliability and validity (Canty-Mitchell & Zimet, 2000; Zimet, Powell, Farley, Werkman, & Berkoff, 1990). In this sample, Cronbach’s alphas were good to excellent at 0.95 in the full sample, 0.97 among African Americans, and 0.88 among European Americans.

Results

To determine whether the European American and African American older adult groups differed, several preliminary analyses were conducted. No significant differences were found with regard to gender, \( \chi^2 (1, N = 72) = 0.22, p = 0.24 \), or religious affiliation, \( \chi^2 (4, N = 72) = 2.23, p = 0.70 \). To further explore the potential impact of gender, a series of 2 (gender) \( \times 2 \) (ethnicity) ANOVAs was conducted on each of the primary outcome measures. None of the interactions were significant, and there was only one significant main effect for gender: Females were higher on total religiousness than males. Descriptive data by gender is provided in Table 1. Due to the generally minimal impact of gender, it was not included as a sociodemographic covariate in further analyses. The groups were significantly different in their level of education, \( t(70) = 2.28, p < 0.05 \), and in how many participants currently lived alone, \( \chi^2 (1, N = 72) = 10.04, p < 0.05 \). European Americans reported more years of education completed, about 1.6 years more on average than African Americans, and fewer European Americans reported living alone compared to African Americans. As seen in the correlation matrix in Table 2, although neither level of education nor living situation significantly correlated with the dependent variable, each

| Table 1. Univariate analysis of variance on RFL total, social support and religiousness by gender. |

<table>
<thead>
<tr>
<th></th>
<th>Men M (SD)</th>
<th>Women M (SD)</th>
<th>F</th>
<th>Cohen’s d</th>
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<tbody>
<tr>
<td>RFL total</td>
<td>4.01 (0.84)</td>
<td>4.35 (0.82)</td>
<td>3.10</td>
<td>-0.41</td>
</tr>
<tr>
<td>Social support</td>
<td>-0.02 (1.37)</td>
<td>0.01 (1.56)</td>
<td>0.23</td>
<td>-0.02</td>
</tr>
<tr>
<td>Religiousness</td>
<td>0.33 (0.84)</td>
<td>-0.17 (0.77)</td>
<td>4.19*</td>
<td>0.62</td>
</tr>
</tbody>
</table>

Notes: Social support and religiousness are centered variables. *p = 0.05.
significantly related with the independent variables. As such, both were added into the regression in the first block of the analyses to control for any overlapping variance.

A sequential regression analysis was completed with level of education and living situation entered into the first block to control for group differences. Total perceived social support and total religiousness were entered in the second block to understand how each of these variables related to RFL total. Ethnicity was placed in the third block and the interactions of ethnicity by perceived social support and ethnicity by total religiousness were placed in the fourth block, to examine whether ethnicity moderated the relationship between these individual variables and RFL total. The categorical variable of ethnicity was dummy coded, with zero indicating African American and one indicating European American. The products of centered social support and religiousness with ethnicity were used as the interaction terms. Correlations between variables used in the multiple regression analyses are provided in Table 2. Descriptive statistics for each of the individual variables and the interaction terms are provided in Table 3.

In the first block of the analysis, level of education and living situation did not account for a significant amount a variance in RFL total, \( R^2 = 0.02, F(2, 69) = 0.77, p = 0.47 \) (Table 3 provides the regression coefficients). Together in the second block of the analysis results revealed that perceived social support and religiousness significantly predicted RFL total scores, \( \Delta R^2 = 0.27, \Delta F(2, 67) = 12.96, p < 0.001 \). Total religiousness, \( (\beta = -0.50, p < 0.001) \), significantly contributed to the proportion of variance accounted for by the model whereas perceived social support did not \( (\beta = 0.12, p = 0.30) \), demonstrating the importance of religious beliefs as protective in suicide risk among older adults.

In the third block, it was found that including ethnicity did not produce a significant change in the amount of variance accounted for, \( \Delta R^2 = 0.001, \Delta F(1, 66) = 0.07, p = 0.80 \). This indicates that ethnicity alone does not meaningfully account for differences in RFL total scores. However, ethnicity appears to have an impact on RFL scores, as the significant interaction listed below indicates.

The interactions of ethnicity and total perceived social support and ethnicity and total religiousness were added in the fourth block to determine whether ethnicity moderates the relationship between these individual variables and RFL total. The interactions produced a significant change in the model, \( \Delta R^2 = 0.14, \Delta F(2, 64) = 7.59, p = 0.001 \), with the ethnicity by total religiousness interaction \( (\beta = 0.56, p = 0.001) \) and the ethnicity by total perceived social support interaction \( (\beta = 0.31, p = 0.01) \) each significantly contributing to the proportion of variance accounted for by the model.

To further understand these two significant interactions, the relationship of total religiousness and RFL total at each level of ethnicity (Figure 1) and the relationship of perceived social support and RFL total at each level of ethnicity (Figure 2) were plotted. As seen in Figure 1, for each ethnic group, as one’s score on the total religiousness scale decreases, indicating higher levels of religiousness, one’s score on the RFL total increases. However, the slopes of the lines are different, with the inverse relationship being stronger between total religiousness and RFL total for African American older adults than for European American older adults. For African American older adults, religiousness accounts for 55% of the variance in RFL scores, whereas it accounts for only 9% of the variance in European American older adults’ RFL scores, supporting the hypothesis in the expected direction.

Figure 2 demonstrates that the slopes of the lines for each ethnic group are also different. This indicates that although both appear to be positive relationships, the positive relationship between perceived social support

### Table 2. Correlations between variables in multiple regression analyses (N=72).

<table>
<thead>
<tr>
<th></th>
<th>RFL total</th>
<th>Educ.</th>
<th>Living situation</th>
<th>Social support</th>
<th>Religiousness</th>
<th>Ethnicity</th>
<th>Social support and ethnicity interaction</th>
<th>Religiousness and ethnicity interaction</th>
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<tr>
<td>RFL total</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>0.14</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Living situation</td>
<td>0.08</td>
<td>0.21*</td>
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<tr>
<td>Social support</td>
<td>0.27**</td>
<td>0.28*</td>
<td>0.26*</td>
<td>0.15</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Religiousness</td>
<td>-0.53**</td>
<td>0.24*</td>
<td>-0.17</td>
<td>0.33**</td>
<td></td>
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</tr>
<tr>
<td>Ethnicity</td>
<td>-0.08</td>
<td>0.32**</td>
<td>0.37**</td>
<td>0.27*</td>
<td>0.15</td>
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<tr>
<td>Social support and</td>
<td>0.24*</td>
<td>0.22*</td>
<td>0.30**</td>
<td>0.45**</td>
<td>-0.18</td>
<td>0.33**</td>
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<tr>
<td>ethnicity interaction</td>
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<tr>
<td>Religiousness and</td>
<td>-0.19</td>
<td>-0.04</td>
<td>-0.15</td>
<td>-0.10</td>
<td>0.73**</td>
<td>0.10</td>
<td>-0.28**</td>
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<tr>
<td>ethnicity interaction</td>
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Notes: Social support and Religiousness are centered variables. *p < 0.05, **p < 0.01.
and RFL total for European American older adults is stronger than that for African American older adults. Social support accounts for 20% of the variance in RFL scores for European Americans, whereas it accounts for only 8% of the variance in African American older adults’ RFL scores.

Discussion

The aims of the present study were to examine relationships between religiousness, perceived social support, ethnicity, and reasons for living to understand the protective factors that lead African American older adults to complete suicide at much lower rates than European American older adults. It was hypothesized that while perceived social support and religiousness act as protective factors for both groups, they act as stronger protective factors against suicide for African American older adults than European American older adults.

Results indicated that total religiousness was found to be a negative predictor of RFL total (because of how the is scale scored), regardless of ethnicity, indicating that individuals with more religiousness have more reasons for living. Indeed, our finding that religious beliefs appear to be protective in suicidal risk is congruent with much of the literature (Dervic et al., 2004; Nisbet, Duberstein, Conwell, & Seidlit, 2000). Perceived social support did not uniquely predict RFL scores, suggesting that it may not be a meaningful protective factor for older adults; however, this conclusion is made with caution as it does not consider ethnicity, and as the significant interactions indicated, the relationship between these variables depends upon one’s ethnicity.

The significant interactions that were found for ethnicity by total religiousness and for ethnicity by total perceived social support in predicting RFL total scores supported the prediction that ethnicity behaves as a moderator. That is, the relationship between the independent variables and reasons for living depends upon one’s ethnicity. In this sample, religiousness explained more variance in RFL scores for African American older adults than for European American older adults. This result may help to explain what it is about one’s ethnicity that behaves as a protective factor against suicidal risk, because the present findings show that it is not ethnicity alone that can account for meaningful differences in reasons for living. Analogous to other research on ethnic differences in protective factors or suicidal gestures, these findings highlight the greater importance of religiousness in the African American older adult community compared to other communities. Barer and Johnson (2003) found that for African Americans, calling upon strong religious faith was a means of coping with
problems associated with increasing age. Similarly, Cook et al. (2002) found that low levels of religiousness were associated with higher levels of suicidal ideation in older African Americans. Bender (2000) also reported that African American older women scored higher on religious beliefs than European American older women.

Our findings are also consistent with those reported by Marion and Range (2003a) who found that perceptions of social support from family, the attitude that suicide is unacceptable, and a collaborative style of religious problem solving among African American women college students were all uniquely and inversely related to suicidal ideation suggesting that these variables act as buffers to suicide ideation. Similarly, Marion and Range (2003b) found that religiousness corresponded with lower suicide acceptability among African American women students. An important distinction between these prior studies and the present one is that in this study our primary dependent variables (the RFL scales) evaluate cognitive deterrents to suicide and not direct suicidal behavior per se.

Contrary to our prediction, perceived social support explained more variance in RFL scores for European American older adults compared to African American older adults indicating that European Americans in this sample expressed more reasons for living with increases in perceived social support than African Americans. This result was surprising given the considerable literature implicating stronger social support networks in minority populations when examining reasons for the ethnic differences in suicidal ideation and behavior (Bender, 2000; Roy, 2003; Vanderwalker et al., 2007).

One possible explanation for this finding is that due to a lifetime exposure to social and legal oppression, many African American older adults have developed a noteworthy resilience and thus possess multiple protective factors against suicidal ideation. Because of the presence of multiple buffers to suicidal ideation among African American older adults, social support may be somewhat less important for them compared to European American older adults. Yet another possibility is illustrated in Figure 2: Although some African American older adults perceived having little multidimensional social support, they still reported many reasons to live. There may be a third variable that seems to be more important as a protective factor for African American older adults than European American older adults. There may be at least two separate groups of African Americans in Figure 2. As the previous interaction demonstrated, total religiousness may have accounted for so much variance in RFL total that any other protective variable is likely to have less of an impact. The fact that the sample did not have any European American older adults who had low social support may present another possible explanation for the surprising result.

A significant limitation of the present study was that the participants were all relatively high functioning, generally well-educated older adults who lived in an urban area. Given the immense diversity found among older adults, the generalizability of these findings may be limited. Future research should be extended to rural and less educated populations of European American and African American older adults. Replications of the present study with larger, more diverse samples of older adults might also increase the generalizability of the findings. A second limitation was its primary focus on European American older adults.
American and African American older adults. It is vitally important that researchers examine protective factors to suicide among other minority older populations (e.g., Hispanic Americans, Asian Americans, Native American Indians) to provide comparisons among a host of different older groups on possible deterrents to suicide. With the increased emphasis on cultural competency in mental health practice (e.g., Constantine & Sue, 2005; Pedersen, Dragns, Lonner, & Trimble, 2008; Sue & Sue, 2007), it is crucial that data-driven and empirically supported suicide prevention efforts are sensitive to the important context of cultural and ethnic identity. As Canetto and her colleagues (e.g., Canetto & Lester, 1998; Stice & Canetto, 2008) have suggested, the ways in which suicide is explained and the conditions under which suicidal behavior are prohibited and accepted are highly culturally specific. Indeed, these cultural scripts play an important role in shaping important attitudes and resiliency toward suicide across the lifespan and are worthy of further study.

Because compromised physical health status is known to be an important risk factor for suicidal behavior among older adults (see a recent review by Fiske, O’Riley, & Widoe, 2008) and because global health status has also been shown to significantly relate to reasons for living (Segal, Lebenson, & Coolidge, 2008), future studies should also explore the impact of health status on perceived support and religiousness as they relate to diverse types of deterrents to suicidal ideation and behavior among older adults. Prospective studies are needed to examine more clearly the causal relationships between religiousness, social support, and deterrents to suicide among European American and African American older adults. Whereas our study focused on two potential protective factors against suicide, namely religiousness and social support, further study of other cultural variables that may protect against suicidal risk among African Americans (e.g., racial pride; negative cultural attitudes toward suicide; a cultural worldview grounded in a strong religious belief system, collective social orientation, cognitive flexibility and present time orientation) are sorely needed, heeding the important call by Utsey, Hook, and Stanard (2007) for this type of systematic research.

It is a noteworthy goal for researchers to continue to understand the complex phenomena of later-life suicide to ameliorate suffering. As the statistics indicated, suicide is still a sizable societal problem even with the growing knowledge that we possess. Identification of those individuals at risk for suicide and enhancement of preventative interventions among diverse populations continue to be areas of much needed research. The more that is learned about the risk factors and preventative measures for suicide, the better equipped society will be in addressing this tragic issue. Finally, in the clinical setting, it is vital that mental health professionals thoroughly evaluate the domains of social support and religiousness during a comprehensive assessment of suicidal risk and resiliency among older adult clients.

References


