Religiousness/Spirituality and Mental Health Among Older Male Inmates

Rebecca S. Allen, PhD, Laura Lee Phillips, PhD, Lucinda Lee Roff, PhD, Ronald Cavanaugh, PsyD, and Laura Day, MA

**Purpose:** With the rapid growth in the older inmate population, emerging issues regarding physical and mental health require greater research and clinical attention. We examined the relation of religiousness/spirituality; demographic characteristics such as age, race, and type of crime; and physical and mental health among 73 older male inmates in the state of Alabama. **Design and Methods:** Inmates older than age 50 who passed a cognitive screening completed face-to-face interviews lasting between 30 and 60 min. Due to the low literacy rates of the participants, we administered all measures orally with response cards to facilitate understanding. **Results:** Nearly 70% of the inmates were incarcerated for murder or sexual crimes. There were no racial/ethnic differences in reported religiousness/spirituality, demographic characteristics, or mental health. We found an association between self-reported years of incarceration and experienced forgiveness. Three regression models examined whether inmates' self-reported religiousness/spirituality influenced anxiety, depression, and desire for hastened death. We found that having a greater number of daily spiritual experiences and not feeling abandoned by God were associated with better emotional health. **Implications:** Future studies, perhaps using longitudinal or case-control methodology, should examine whether increased daily spiritual experiences and decreased feelings of abandonment by God foster better mental health among older inmates.

Key Words: Older inmates, Religiousness/spirituality, Depression, Anxiety, Hastened death

Older inmates are the fastest growing segment of the population in U.S. federal and state prisons (Williams, 2006). Aday (2003) reported that the number of prisoners 50 years and older in state and federal correctional facilities in 2001 was 113,358, 3 times as many as the number in 1990. This growth results from the overall aging of the population, tougher sentencing laws (e.g., mandatory minimums and “three strikes” laws), and the elimination of parole programs (Yates & Gillespie, 2000). Older inmates’ physical health and mental health care needs are stretching already scarce resources allocated for prison programming (Fazel, Hope, O'Donnell, & Jacoby, 2004). Mitka, 2004; Morton, 1992; Regan, Alderson, & Regan, 2002). The annual cost of incarceration for an older inmate exceeds $60,000 annually and is approximately 3 times that of their younger counterparts (U.S. Department of Justice, 2000). There is some evidence that religious-
ness helps inmates cope with the prison experience (Clear & Sumter, 2002). Only one study, however, examined the relationship between religiousness/spirituality and mental health in the older prisoner (Koenig, 1995).

**Mental Health and the Older Prisoner**

Nearly 40% of state inmates 55 and older have a recent history or symptoms of mental health disorders (James & Glaze, 2006). Researchers have documented significant mental health problems among older inmates in U.S. prisons (Colsher, Wallace, Loeffelholz, & Sales, 1992; Loeb & AbuDagga, 2006; Regan et al., 2002) and among those of other nations (Fazel & Grann, 2002, 2004; Fazel & Lubbe, 2005). Aday (2003) reviewed several U.S. studies of older inmates and noted that depression, guilt, worry, and psychological stress are common. Inmates also highlighted the stress of being away from their families, the stigma associated with their crime, and depression related to the possibility of dying in prison as some of the largest factors in their problems with emotional well-being.

**Religiousness/Spirituality and Mental Health**

A growing literature links religious participation with better mental health among older adults (Chen, Cheal, Herr, Zubritsky, & Levkoff, 2007; Hackney & Sanders, 2003; Hebert, Dang, & Schulz, 2007; Klemmack et al., 2007; Koenig, 1998; Koenig, McCullough, & Larson, 2001; Levin & Chatters, 1998a). Ellison (1994) provided a conceptual framework to help understand the mechanisms through which religious involvement and spirituality may influence mental health. He suggested that religiousness/spirituality may (a) reduce the risk of a number of stressors (e.g., antisocial behavior); (b) provide a sense of meaning or coherence that counteracts stress and assists with coping; and (c) provide a network of like-minded persons who can serve as social resources and promote the development of psychological resources, including self-esteem and a sense of personal worth.

Efforts to assess the impact of religiousness/spirituality on mental health have suffered from difficulties in measuring religiousness (Levin & Chatters, 1998b). Researchers have recognized that the concepts of religiousness and spirituality are complex and multidimensional. In response, the Fetzer Institute and the National Institute on Aging convened a panel of scholars to devise a series of short measures representing the domains of religiousness/spirituality most likely to influence mental health (Fetzer Institute/National Institute on Aging Work Group [Fetzer/NIA], 1999; Idler et al., 2003). A number of these measures may be particularly salient in studies of religiousness/spirituality involving inmates or other underserved populations (e.g., Crowther, Parker, Achenbaum, Larimore, & Koenig, 2002), and the measurement of these constructs may operate somewhat differently with inmates than with community-dwelling adults.

**Religiousness/Spirituality in the Prison Setting**

Only one study has examined religiousness and mental health among incarcerated older male inmates at a federal correctional facility (Koenig, 1995). This study examined associations between depression and a number of religious domains. A total of 37% of inmates had a history of psychiatric problems requiring treatment. Of these, 57% were incarcerated for drug charges, 9% for robbery or embezzlement, and the remaining 34% for unspecified crimes. Approximately one third of the sample claimed that religion was their most important coping method. Lower levels of depression were significantly associated with greater attendance at religious services and higher levels of intrinsic religiousness, but there was no relationship between private religious activities and depression.

**Need for the Current Study**

The purpose of this study was to understand the relations between dimensions of religiousness/spirituality and anxiety, depression, and desire for hastened death within a sample of older male state inmates. Koenig (1995) examined depression among federal inmates, and Aday’s (2003) research with older state prisoners supported the notion of increased anxiety and, perhaps, desire for hastened death among these individuals. The dimensions of religiousness/spirituality we chose to examine were daily spiritual experiences, forgiveness, positive religious coping, feelings of abandonment (e.g., a measure of negative religious coping), private religious practices, and religious meaning. In relation to Ellison’s (1994) model, positive religious coping and private religious practices may reduce stressors, and daily spiritual experiences and religious meaning may provide a sense of meaning or coherence that assists with coping. The experience of forgiveness and feelings of abandonment by God have particular salience in the prison setting, and we explored them in relation to anxiety, depression, and desire for hastened death.

Three issues contrast our work with Koenig’s (1995). First, Koenig’s study was conducted in the federal prison system. State prisons can vary dramatically from one another and from the federal system in terms of available resources. State prisoners may differ from federal prisoners in criminal history. Second, the men in our study were 6 years older, on average, than those in Koenig’s study. Third, besides depression, we examined anxiety and desire for
hastened death as well as additional components of religiousness/spirituality.

**Research Design and Hypotheses**

We used regression analyses to explore the relation of participant characteristics and selected measures of religiousness/spirituality derived from Ellison's (1994) model or suggested by Aday's (2003) findings on depression, anxiety, and desire for hastened death. We hypothesized that an inverse relationship would exist between measures of positive religiousness/spirituality and anxiety, depression, and desire for hastened death. However, we anticipated that the measure of negative spiritual coping (e.g., feelings of abandonment by God) would be associated with higher levels of anxiety, depression, and desire for hastened death.

**Methods**

**Participants**

All inmates older than age 50 (N = 81) at the Alabama Aged and Infirm Correctional Facility in Hamilton, Alabama, were invited to participate in a screening for eligibility for this study. Although 50 is not considered old in community settings, inmates' physical health may resemble that of people approximately 10 years older than the inmates' chronological age (Dawes, 2002). This difference may be due to inmates' history of excessive drug and alcohol use, poor nutrition, stressful life experiences, personal neglect, and lower socioeconomic status in comparison with nonoffenders.

Screening with the Mini-Mental State Examination (Folstein, Folstein, & McHugh, 1975) and the reading subtest of the Wide Range Achievement Test (Wilkinson, 1993) determined functional level of educational achievement and whether the inmate was cognitively able to participate in the study (Manly, Byrd, Touradji, & Stern, 2004). A total of 76 older inmates agreed to participate (94%). We deemed 3 inmates to be ineligible due to scoring below 15 on the Mini-Mental State Examination (Newman, 2003). Participants who passed the screening completed face-to-face interviews lasting from 30 to 60 min. We administered all measures orally with response cards to facilitate understanding.

**Measures**

**Brief Multidimensional Measure of Religiousness and Spirituality (Fetzer/NIA, 1999).**—This study used six indices or items from the Brief Multidimensional Measure of Religiousness and Spirituality (19 Likert-type items) with the following psychometric properties in this sample. The Daily Spiritual Experiences index (six items; range = 6–36; \(\alpha = .87\)) was intended to measure "the individual's perception of the transcendent (God, the divine) in daily life and the perception of interaction with, or involvement of, the transcendent in life" (Fetzer/NIA, 1999, p. 11). Illustrative items asked participants how often they "find strength and comfort in my religion," "feel God's love for me, directly or through others," and "feel God's presence."

Items in the Forgiveness index (three items; range = 3–12; \(\alpha = .75\)) asked participants how often they had "forgiven myself for things that I have done wrong," "have forgiven those who hurt me," and "know that God forgives me."

The Positive Religious Coping index (four items; range = 4–16; \(\alpha = .82\)) addressed "benevolent religious methods of understanding and dealing with life stressors" (Fetzer/NIA, 1999, p. 43) and included items such as "I work together with God as partners to get through hard times" and "I look to God for strength, support and guidance in crises." The one item used from the Negative Religious Coping index dealing with religious struggle in coping was "I wonder whether God has abandoned me" (range = 1–4).

The Private Religious Practices index (three items; range = 3–24; \(\alpha = .79\)) measures religious involvement that is nonorganizational and informal. Items asked participants to indicate how often they prayed privately in places other than at church or synagogue, how often they read the Bible or other religious literature, and how often they said prayers or grace before or after meals.

Two items suggested for consideration as a short-form measure of "religious meaning" (Fetzer/NIA, 1999) were "I believe in a God who watches over me" and "I feel a deep sense of responsibility for reducing pain and suffering in the world" (two items; range = 2–8; \(\alpha = .64\)). These items assessed an individual's sense of having a "unique, externally given purpose in life" (Fetzer/NIA, 1999, p. 19).

**Demographics.**—Participants provided their age, race, marital status, years of education, self-rating of general health, type of crime, and self-reported years of incarceration for the current offense.

**Brief Symptom Inventory–Third Edition (Derogatis, 1993).**—We chose the Depression (five items; \(\alpha = .80\); range = 0–20) and Anxiety (six items; \(\alpha = .78\); range = 0–24) subscales of the Brief Symptom Inventory for brevity and due to the desire to measure anxiety in addition to depression. These Brief Symptom Inventory subscales have test–retest reliability ranging from \(r = .68–.84\). Construct validity estimates are high, with factor loadings ranging from .42 to .65 for Depression and .49 to .57 for Anxiety.

**Hastened Death Scale–Modified (Rosenfeld et al., 1999).**—The Hastened Death Scale–Modified is a 20-item scale written for assessing patients with a
terminal illness (range = 0–20). We selected 10 items that could be easily altered by replacing “cancer” or “illness” with “in prison” so that the instrument would measure the influence being in prison has upon desire for hastened death (range = 0–10; \( \alpha = .71 \)). Exemplar items include “Being in prison has drained me so much that I do not want to go on living,” “Unless I am able to reduce my sentence or get out of prison, I will consider taking steps to end my life,” and “I hope my health will fail rapidly because I would prefer to die rather than continue living in prison.”

### Procedure

Two interviewers received standardized instruction in interview technique and the administration of study measures by a licensed clinical psychologist (Rebecca S. Allen). Interviewers were trained to criterion and passed a “check-out” with the licensed psychologist prior to data collection. Inmates older than age 50 were escorted to the semiprivate interview area by a correctional officer, who stood 50 feet away from the interview area to allow privacy. Inmates were read informed consent forms and received copies of brief, bulleted consent forms highlighting the risks and benefits of participation. After signing consent forms, the inmates were administered the Mini-Mental State Examination and Wide Range Achievement Test reading subtest to determine their eligibility for participation. Inmates deemed eligible to participate were read each item in the assessment battery and were shown response cards with the appropriate possible responses for each assessment (e.g., Likert-type response items, true/false items, as appropriate). At the end of the interview, the inmate was thanked for his time and was escorted back to the general population by the correctional officer.

### Data Analysis

Table 1 reports descriptive statistics for each variable. We conducted three linear regressions using age and self-reported health as control variables and all religiousness/spirituality measures for each of our dependent variables (e.g., anxiety, depression, and desire for hastened death). We were interested in examining relations with anxiety, depression, and desire for hastened death separately, as relations between religiousness/spirituality and two of these constructs have not been examined previously among older male inmates. Our regression models included no interaction terms due to our small sample size and resultant limitations in power to detect significant interaction effects. We centered the individual multi-item subscales of the Brief Multidimensional Measure of Religiousness and Spirituality, allowing for easy interpretation of the beta weights.

### Results

#### Description of Participants

Of the participants, 67% were Caucasian \( (n = 49) \) and 33% African American \( (n = 21) \) or Native American \( (n = 3) \). The majority of participants had committed either murder \( (n = 28, 38\%) \) or a sexual offense \( (n = 23, 32\%) \). Concerning religious affiliation, 60% of participants reported being Baptist, 11% Church of God, and 25% “other.” Only 4% reported that they had no religious/spiritual affiliation. In addition, 68% reported not having taken medication for “mood or nerves.” There were no significant differences between Caucasians and minorities in current age, number of years of education, religiousness/spirituality, anxiety, depression, or desire for hastened death.

#### Bivariate Correlations

Self-reported years of incarceration was associated with the type of crime committed \( (r = .25, p = .033) \). Participants incarcerated for murder or assault...
reported more years of incarceration (M = 15.32 and 13.25, respectively) than did those incarcerated for sexual (M = 10.65), financial (M = 8.86), drug-related (M = 3.75), or other (M = 8.00) crimes. Greater self-reported years of incarceration was also associated with lower levels of forgiveness (r = -.25, p = .036). Type of crime was associated with religious meaning (r = .28, p = .017) such that those who committed other offenses reported more religious meaning than those who committed murder or sexual crimes. Marital status was associated with religious meaning (r = -.26, p = .029) such that individuals who were divorced or separated reported less meaning than individuals who were married or widowed.

Regression Analyses

Table 2 depicts the results of the regression models. Based on the recommendation of Cohen, Cohen, West, and Aiken (2003), none of the models showed significant multicollinearity among the variables. The overall model for anxiety was not significant, F(8, 67) = 1.34, p = .242, R^2 = .15, adjusted R^2 = .07. However, the overall model for depression was significant, F(8, 67) = 6.27, p < .0001, R^2 = .46, adjusted R^2 = .39. Inmates who reported better health and those who reported feeling less abandoned by God and having more daily spiritual experiences reported fewer symptoms of depression. Of note, those reporting less positive religious coping also reported fewer symptoms of depression. The overall model for desire for hastened death also was significant, F(8, 67) = 4.71, p < .0001, R^2 = .39, adjusted R^2 = .31. Inmates who reported feeling less abandoned by God reported less desire for hastened death.

Discussion

This study extends prior research regarding religiousness/spirituality and mental health among older male inmates in three ways: (a) Participants were incarcerated primarily for murder and sexual crimes; (b) participants were 6 years older, on average, than those in prior research (Koenig, 1995); and (c) anxiety and desire for hastened death were examined in addition to depression. As expected, we found that better self-reported health was associated with less anxiety and depression among older male inmates. It is interesting that forgiveness, private religious practices, and religious meaning did not explain unique variance in anxiety, depression, or desire for hastened death. As Ellison’s (1994) model would predict, having greater daily spiritual experiences was associated with less depression and less desire for hastened death. However, other measures of religiousness/spirituality displayed positive associations with negative mental states. Specifically, positive religious coping was associated with increased feelings of depression. It may be that depressed inmates attempt to cope with their negative emotional state by turning to God. Moreover, feeling abandoned by God was associated with more symptoms of depression and a greater desire for hastened death. Thus, it appears that the relation between religiousness/spirituality and mental health among older male inmates depends largely on whether individuals feel connected with or abandoned by a Higher Power. The implications of these findings require further study, possibly using qualitative methods, in order to examine the potential conflict between the belief that death will bring a relief from confinement and suffering and the oft-held religious belief that death will bring one into God’s presence.

Additionally, we found that more self-reported years of incarceration was associated with lower levels of experienced forgiveness. Although there was no significant bivariate association between type of crime and forgiveness, inmates who were incarcerated for murder or assault reported more years of incarceration. These violent crimes may be associated with greater societal stigma or remorse.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Anxiety β</th>
<th>Anxiety t</th>
<th>Anxiety p</th>
<th>Depression β</th>
<th>Depression t</th>
<th>Depression p</th>
<th>Hastened Death β</th>
<th>Hastened Death t</th>
<th>Hastened Death p</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>-.016</td>
<td>-.012</td>
<td>.90</td>
<td>-.145</td>
<td>-1.45</td>
<td>.15</td>
<td>.130</td>
<td>1.22</td>
<td>.23</td>
<td>1.10</td>
</tr>
<tr>
<td>Self rated health</td>
<td>-.246</td>
<td>-1.85</td>
<td>.07</td>
<td>-.249</td>
<td>-2.34</td>
<td>.02*</td>
<td>-.083</td>
<td>-0.74</td>
<td>.46</td>
<td>1.23</td>
</tr>
<tr>
<td>Private Religious Practices</td>
<td>-.091</td>
<td>-0.53</td>
<td>.60</td>
<td>-.043</td>
<td>-0.31</td>
<td>.76</td>
<td>-.145</td>
<td>-0.99</td>
<td>.33</td>
<td>2.07</td>
</tr>
<tr>
<td>Positive Religious Coping</td>
<td>-.003</td>
<td>-0.01</td>
<td>.99</td>
<td>-.470</td>
<td>2.71</td>
<td>.01*</td>
<td>.200</td>
<td>1.08</td>
<td>.28</td>
<td>3.28</td>
</tr>
<tr>
<td>Feeling abandoned</td>
<td>.135</td>
<td>1.06</td>
<td>.29</td>
<td>.255</td>
<td>2.50</td>
<td>.01*</td>
<td>.470</td>
<td>4.34</td>
<td>.001*</td>
<td>1.13</td>
</tr>
<tr>
<td>Forgiveness</td>
<td>-.057</td>
<td>-0.33</td>
<td>.75</td>
<td>-.198</td>
<td>-1.43</td>
<td>.16</td>
<td>-.001</td>
<td>-0.01</td>
<td>.99</td>
<td>2.09</td>
</tr>
<tr>
<td>Daily Spiritual Experiences</td>
<td>-.154</td>
<td>-0.77</td>
<td>.44</td>
<td>-.415</td>
<td>-2.62</td>
<td>.01*</td>
<td>-.231</td>
<td>-1.37</td>
<td>.18</td>
<td>2.75</td>
</tr>
<tr>
<td>Meaning</td>
<td>.076</td>
<td>0.45</td>
<td>.65</td>
<td>-.210</td>
<td>-1.56</td>
<td>.12</td>
<td>-.115</td>
<td>-0.80</td>
<td>.42</td>
<td>1.98</td>
</tr>
<tr>
<td>Adjusted R^2</td>
<td>.04</td>
<td></td>
<td></td>
<td>.39**</td>
<td></td>
<td></td>
<td>.31*</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes: Multicollinearity among variables was not significant based on the variance inflation factor (VIF), as only those above 10 are considered to demonstrate significant multicollinearity (Cohen, Cohen, West, & Aiken, 2003).

* p < .05; **p < .01.
Limitations of this study include the single study site, the small number of participants, and the fact that some of the measures were relatively new (e.g., religious meaning, desire for hastened death in prison) and required further examination of psychometric properties and construct validity. However, the 73 participants in this study were similar to older first offenders in type of crime (Aday, 2003, p. 33), as these individuals tend to be incarcerated for crimes such as rape, murder, and child molestation. Moreover, the measures used in this study exhibited adequate to good internal consistency in this sample. Nevertheless, certain aspects of this sample may have been unique (e.g., 60% Baptist), and these results need to be replicated in a representative national sample.

The increase in the number of older inmates in the past decade necessitates innovative and cost-effective approaches to physical and mental health care in cash-strapped systems. Exploring the relation of positive and negative aspects of religiousness/spirituality and mental health holds clinical and scientific promise for improving quality of life and further developing conceptual models such as Ellison’s (1994). Future research should use longitudinal or case-control methods in nationally representative samples to further examine the relation between mental health among older inmates and increased daily spiritual experiences or decreased feelings of abandonment by God. Perhaps those inmates who experience increased daily spiritual experiences might feel less abandoned and, thus, have better mental health.

References


References


