

CROSSROADS...

Exploring research on religion, spirituality and health

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This newsletter provides updates on research, news and events related to spirituality and health, including educational resources and funding opportunities. **Please forward to colleagues or students who might benefit.** Our goal is to create a community of researchers, clinicians, clergy, and laypersons interested in spirituality and health and keep them informed and updated. An EVENTS CALENDAR concludes the newsletter and describes spirituality and health related presentations happening at Duke and around the world. This is your newsletter and we depend on you to let us know about research, news, and events in this area.

All e-newsletters are archived on our website. To view previous editions (July 2007 through July 2016) go to: <http://www.spiritualityandhealth.duke.edu/index.php/publications/crossroads>

LATEST RESEARCH

Religious Attendance and Suicide in US Women

Researchers from the Harvard School of Public Health analyzed data from a prospective study of 89,708 women aged 30-55 years (98% white) participating in the Nurses' Health Study, examining predictors of completed suicide during the 14-year follow-up. Religious service attendance was assessed in 1992 and 1996 with the question "How often do you go to religious meetings or services?" (never, almost never, less than once per month, 1-3 times per month, once a week, or more than once a week). Death by suicide were documented using state mortality files, the US National Death Index, and reports from next of kin, using the standard definition contained in the 8th version of the International Classification of Disease (ICD-8). Multiple covariates possibly related to suicide were assessed and controlled for including age, employment status, family history of alcoholism, BMI, physical activity level, caffeine intake, alcohol intake, smoking status, depressive symptoms, history of chronic medical illness, living situation, social integration (including marital status, other group participation, number of close friends, number of close relatives, number of close friends seen at least once per month, number of close relatives seen at least once per month), and religious service attendance in 1992. The primary predictor was religious service attendance in 1996. To ensure that depressive symptoms or chronic health problems at baseline were not responsible for low religious attendance (reverse causation), women who were depressed or used antidepressant medications or had a history of cancer or other cardiovascular condition in 1996 were excluded from the analysis. Multivariable Cox proportional hazards regression models were used to analyze the data, and mediation analysis was used to examine factors that might help to explain the relationship (depressive symptoms, alcohol intake, social integration). In addition sensitivity analysis was used to assess the robustness of the results. **Results:** Women who attended religious services at least once per week were 84% less likely to commit suicide than women who never attended services (hazard ratio=0.16, 95% CI=0.06-0.46), with more than a five-fold reduction in incidence rate from 7 per 100,000 person-years to only 1 per

100,000 person-years. Results were similar when excluding women who were depressed or had chronic illness at baseline in 1996. Effects were particularly strong among Catholic women (HR = 0.05, 95% CI = 0.006-0.48). Adjustments for age, lifestyle, demographic, and religious service attendance in 1992, as well as further adjustment for social integration in 1992, could not explain the effect. Sensitivity analysis indicated that unmeasured confounders would have to both increase the likelihood of religious service attendance and decreased the likelihood of suicide by 12-fold above and beyond the measured confounders to explain the effect (highly unlikely).

Citation: VanderWeele TJ, Li S, Tsai AC, Kawachi I (2016). Association between religious service attendance and lower suicide rates among US women. *JAMA psychiatry* (formerly *Archives of General Psychiatry*), June 29, E-pub ahead of press
Comment: The quality of this study (large sample size and long follow-up) and of the statistical methods used to analyze the data (careful control for confounding, elimination of possible reverse causation, sensitivity analysis) make it a seminal one in the study of religion and suicide. Given the CDC's recent announcement of an alarming 60% increase in suicide rate between 1999 and 2014 among white women in the US, these results are relevant to public health. For more comments, see editorial accompanying this article (Koenig HG. Association of religious involvement and suicide. *JAMA Psychiatry*, June 29, 2016, E-pub ahead of press).

Religion, Depression, & Suicidal Ideation in Youth

Investigators in the departments of psychology and psychiatry at the University of Michigan, Ann Arbor, conducted a survey of 161 youth ages 12-15 who presented to an urban pediatric emergency department in the Midwestern region of the US; all were at elevated risk for suicide due to peer victimization, bullying, or low social connectedness. There were 106 females and 55 males. The majority (84%) were in families receiving public assistance. Racial composition was 52% African-American, 30% Caucasian, 13% multiracial, and the balance other racial groups. Religious involvement was measured using three subscales of the BMMRS (Fetzer scale): private religious practices, religious support, and organizational religiosity. Outcomes assessed were suicidal ideation using the 15-item SIQ-JR (Reynolds, 1987), school connectedness using a 6-item measure (Resnick et al, 1997), parent-family connectedness using a 13-item measure (Resnick et al, 1997), and depressive symptoms using the 10-item RADS-2:SF (Reynolds 1987). Hierarchical regression was used to examine the relationship between religious involvement and outcomes independent of demographic covariates, school connectedness, and patient-family connectedness. **Results:** With regard to depressive symptoms, regression models indicated a significant inverse relationship with private religious practices (B=-0.15, p=0.03) and religious support (B=-0.56, p=0.006). With regard to suicidal ideation, regression models indicated an inverse relationship with private religious practices (B=-0.26, p=0.002) and organizational religiosity (B=-0.18, p=0.03). School connectedness and patient-family connectedness helped to explain these relationships, with the exception of the relationship between private religious practices and suicidal thoughts, which remained significant after controlling for these mediators (B=-0.17,

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p=0.03). The effects were present across gender and race. Researchers concluded: "Results suggest the importance of considering religious involvement as a target of youth depression and suicide prevention interventions."

Citation: Cole-Lewis YC, Gipson PY, Opperman KJ, Arango A, King CA (2016). Protective role of religious involvement against depression and suicidal ideation among youth with interpersonal problems. *Journal of Religion and Health* 55:1172-1188

Comment: Again, religious involvement is related to less suicidal ideation among youth (as well as less depressive symptoms that might be driving suicidal ideation). This time the association was found among vulnerable youth whose life experiences place them at risk for self harm or future violence against others.

Religiosity, Spirituality and Depression in Buddhist/Daoist 10th-12th Graders

Researchers in the department of public health at Chung Shan Medical University in Taichung City (Taiwan) surveyed a random sample of 2,239 adolescents ages 16-18 years old from four local high schools. Participants completed a questionnaire at baseline and at 6-month follow-up. Religiosity was measured by (1) religious affiliation (no religion, Buddhist, Daoist, Catholic, Protestant and other); (2) depth of religion (importance of religion and degree of belief in God); and (3) frequency of religious activity (participation in activities, prayer, reading religious texts). In addition, the 12-item Spiritual Index of Well-Being was administered (first 6 items measure self efficacy, i.e., individual's belief in his or her capacity to organize and perform activities required to achieve their goals; the last 6 items measured life scheme, i.e., positive ways of viewing the world in one's life with regard to comprehensibility, manageability and meaningfulness). Depressive symptoms were assessed using the 20-item CES-D. Mixed models and path analysis were used to analyze the data.

Results: Average CES-D scores at baseline and follow-up were both 15.3 (scores of 16 or higher are considered positive for clinical depression, indicating a relatively high level of depressive symptoms in this population). One-half of the sample (50.0%) indicated some religious belief, and of those, 86.8% were Buddhist or Daoist. Despite the fact that 50% reported no religious belief, two thirds (65.3%) indicated at least occasional participation in religious activities and in prayer (66.5%); a smaller percentage (28.3%) read religious texts. However, nearly four-fifths (79.6%) indicated that they believed in the existence of God (although 65.8% indicated religion was not important). There was no significant relationship between religious variables and scores on the Spiritual Index of Well-Being (SIWB), after controlling for sociodemographic variables at baseline; the same was true for the six-month follow-up evaluation, although the self-efficacy subscale of the SIWB was significantly and positively associated with importance of religion (B=0.46, p=0.003), degree of belief in God (B=0.50, p=0.003), and frequency of prayer (B=0.43, p=0.003). The life scheme subscale of the SIWB was negatively correlated with depressive symptoms at baseline and at follow-up. Analyses using mixed models for repeated measures over time (i.e., baseline and 6 month follow-up) revealed that higher frequency of prayer at baseline predicted increased depressive symptoms over time; both subscales of the SIWB (self-efficacy and positive life scheme) predicted a decline in depressive symptoms over time. Path analysis did not reveal a reciprocal relationship between frequency of prayer and depressive symptoms, i.e., depressive symptoms did not predict increased frequency of prayer and increased frequency of prayer did not predict increased depressive symptoms. In contrast, self-efficacy and positive life scheme predicted lower depressive symptoms and vice-versa in path analysis models. Researchers concluded that: "mixed models found no significant relationship between religiosity and spirituality or between religiosity and depressive symptoms...A reciprocal

relationship was found between spiritual well-being and depressive symptoms."

Citation: Yang HJ, Mao CL, Wei CY, Huang SS (2016). Religious characteristics, spirituality, and depressive symptoms among 10th- to 12th-graders living in a Buddhist or Taoist culture: A short-term longitudinal study. *International Journal for the Psychology of Religion*, E-pub ahead of press

Comment: This is an important study given the nature of the population, the large sample size, the longitudinal nature of the design, and use of mixed models to analyze the data. Again, as we have repeatedly emphasized, the measure of spirituality (Spiritual Index of Well-Being) was completely contaminated by indicators of mental health (self-efficacy and positive life scheme). It does not take a rocket scientist to figure out that youth who have high self-efficacy and positive views toward their ability to organize their activities and achieve life goals -- are going to be less depressed. Thus, the finding that "spirituality" measured in this way predicted less depression, and that depression predicted less spirituality, is not an earth-shaking finding: it was completely predictable given that having good mental health ought to predict less depression, and vice-versa). The positive relationship between prayer and depressive symptoms, however, is significant (and could not be explained by reverse causation, i.e., depression causing an increase in prayer). Less clear, however, is the impact that religious affiliation may have had on these results; 87% of those with a religious affiliation in this study were Buddhist/Daoist. Did this have anything to do with the positive correlation found between prayer and depressive symptoms? Is there something about praying in the Buddhist/Daoist tradition by those in late adolescence (ages 16-18) that generates depression, as opposed to praying in Western religious traditions where belief in a *personal* God is more widespread? Only future research will tell. What is amazing is that 80% of these youth believed in the existence of God (since Buddhism and Daoism are considered non-theistic religions).

Religiosity and Disability-Related Depression in Pakistan

Researchers in the department of psychology at GC University in Lahore, Pakistan, examined the relationship between religiosity, social support and depressive symptoms in 100 male and female patients disabled by accidents or amputations. All were missing at least one or two peripheral limbs such as arms or legs; maximum duration of limb loss was about two years. Participants ranged in age from 20 to 50 (mean 38.4 years). The 18-Item Religiosity Index (Farooq and Imam, 1997) was administered along with the 10-item General Self-Efficacy Scale, the 36-item Siddiqui-Shah Depression Scale, and the Berlin Social Support Scale (four of six subscales were used for this study: perceived available support, need for support, support seeking, actual support received). Path analysis was used to analyze the data, along with hierarchical regression. **Results:** Religiosity was positively related to social support and self-efficacy (both p<0.001), and was inversely related to depression (p<0.001). Hierarchical regression revealed that religiosity was inversely correlated with depressive symptoms, and the relationship was independent of both social support and self-efficacy (B=-0.38, p=0.0001). The direct effect of religiosity on depressive symptoms was -0.38 and the indirect effect through social support and self-efficacy was -0.17, resulting in a total effect of -0.45. Researchers concluded that "The findings suggest that low level of religiosity, social support and self-efficacy may play a role in the onset and continuation of depression or its symptoms."

Citation: Batool SS, Nawaz S (2016). Factors affecting disability-related depression in patients with lost limbs: A mediational model. *Journal of Religion and Health* 55-1381-1393

Comment: Understandably, depression was common in this population. The average level of depressive symptoms here (58.3) was about four times that of nondisabled Pakistani adults (11.1-

22.8). Given that the study was from Pakistan, it is likely that most participants were Muslim. It appears that two-thirds of religiosity's effect was unexplained, whereas about one third was due to increased self-efficacy and greater social support.

Religion, Quality of Life, and Schizophrenia in Latin America

Investigators from the psychology & philosophy departments of the University of Tarapaca in Arica, Chile, examined the relationship between religious involvement and quality of life (QOL) in 253 patients with schizophrenia living in La Paz (Bolivia), Arica (Chile), and Tacna (Peru). Participants were 66% men, average age 35.6 years, 94% unmarried, 84% less than high school graduate, and 57% Catholic (11.5% no affiliation). Religious involvement was measured using a semi-structured interview that assessed religious affiliation, importance of religion, participation in private and community religious activities, importance of religion in coping. Inter-rater reliability for responses was high ($\kappa > 0.80$). Based on responses, patients were classified into two groups: low (46.8%) vs. high (53.2%) religious involvement (RI). QOL was measured using the 18-item Schizophrenia Quality of Life Questionnaire that assesses 8 dimensions: psychological well-being, self-esteem, family relationships, relationships with friends, resilience, physical well-being, autonomy, and "sentimental" life. A total QOL score is also produced. **Results:** Overall QOL was higher among those with high RI compared to low RI (57.2 vs 51.6, $p = 0.002$). Controlling for type of religion, gender, age, ethnicity, marital status, education, duration of schizophrenia, type of treatment and total PANSS score (severity of psychosis), the association between RI and QOL remained ($B = 0.13$, $p < 0.05$). The aspect of QOL most strongly related to high RI was *autonomy*. Severity of psychotic symptoms (PANSS score), however, was the strongest correlate of QOL ($r = -0.38$, $p < 0.001$).

Citation: Caqueo-Urizar A, Urzua A, Boyer L, Williams DR (2016). Religion involvement and quality of life in patients with schizophrenia in Latin America. *Social Psychiatry and Psychiatric Epidemiology* 51:521-528

Comment: Religious involvement was associated with greater QOL, especially autonomy, in these Latino patients with schizophrenia. Autonomy is an aspect of this disease that is most distressing for patients, since they often feel they have no control over their disease. Also note that severity of psychotic symptoms was the strongest predictor of QOL in this population, underscoring the need to treat psychotic symptoms with medication.

Prayer and Spiritual Healing in Australian Women

Investigators at academic institutions in Sydney analyzed data from a cross-sectional survey of 8,180 women ages 31-36 years who participated in the 2009 Australian Longitudinal Study on Women's Health. Participants were a nationally representative sample randomly selected from across Australia. A wide range of demographic characteristics were assessed, as well as measures of health status including health symptoms and medical diagnoses. The SF-36 Quality-of-Life Questionnaire and the Life Orientation Test (LOT, a measure of optimism) were also administered. Finally, women were asked if they had used prayer or spiritual healing in the last 12 months (with response options: never, rarely, sometimes, or often). Logistic regression was used to analyze the data. **Results:** Use of prayer or spiritual healing (P/SpH) was indicated "often" by 9%, "sometimes" by 11%, "rarely" by 11%, and "never" by 69%. Compared to women who never smoked, ex-smokers were 22% less likely to use P/SpH (OR=0.78, 95% CI=0.67-0.90) and current smokers were 30% less likely (OR=0.70, 95% CI=0.58-0.85). Women who consulted a counselor or other mental health professional were 22% less likely to use P/SpH. In contrast, those who reported having heart palpitations were 32% more likely to use P/SpH (OR=1.32, 95% CI=1.11-1.58). Women who used P/SpH were 47% more likely to

use vitamins or minerals (OR=1.47, 95% CI 1.26-1.71). Use of P/SpH was also associated with greater optimism on the LOT (OR=1.04, 95% CI 1.02-1.05). Those who used P/SpH were also more likely to engage in other forms of alternative therapy, including consulting an acupuncturist, participating yoga or meditation, and seeking herbal remedies or aromatherapy. Researchers concluded: "A significant proportion of Australian women are using prayer or spiritual healing... Given that women may be using prayer or spiritual healing modalities as an adjunctive symptom management strategy, it is in the interest of policy makers and healthcare providers to respect the spiritual and religious preferences of these women and to provide an environment that promotes spiritual expression within health care settings."

Citation: Rao A, Hickman L, Phillips JL, Sibbritt D (2016).

Prevalence and characteristics of Australian women who use prayer or spiritual healing. A national representative cross-sectional study. *Complementary Therapies in Medicine*, E-pub ahead of press

Comment: An interesting study of young women living in a Western country with a relatively low rate of religious participation. The fact that 69% of women *never* used prayer or spiritual healing is reflective of that. The women who did use prayer or spiritual healing were also much more likely to use other alternative therapies (and were more optimistic, although also had more medical problems).

Spirituality and the Oxytocin System

Investigators at the University of North Carolina (Chapel Hill) and Ohio State University randomly assigned 83 male participants (ages 35-64) to receive either intranasal oxytocin ($n = 41$) or placebo ($n = 42$). In addition, participants were genotyped for polymorphisms of two genes related to the oxytocin receptor gene. Researchers hypothesized that since oxytocin (OT) is involved in social bonding, it may also be related to "spirituality" (see definition below). Participants were 51% Christian, 1% Muslim, 2% Buddhist, 2% Jewish, 39% agnostic or atheist, and 5% other. Spirituality was measured using two self-report measures: (1) a single item "Right now, would you say that spirituality is important in your life?" (0 = not at all, 7 = completely). The second measure was the Spiritual Transcendence Scale (minus the prayer fulfillment subscale, the only aspect of the scale related to religion). This measure assesses the "tendency to orient oneself toward a larger transcendent reality that binds all things into a unity of harmony...[and] reflects the personal search for connection with a larger sacredness"; it also includes several questions about making contact with dead people. Involvement in organized religion (as distinct from spirituality) was also assessed but only as religious affiliation (1=affiliated with a religion, 2= not affiliated, i.e., agnostics and atheists). After the administration of oxytocin or placebo, all participants provided a saliva sample for genotyping, and 40 minutes later (time for oxytocin to take effect), completed the spirituality measures. Next, participants participated in a 20-minute guided Buddhist meditation (mindfulness or loving-kindness meditation), and immediately after that, they completed measures of to assess their emotional state (the Implicit Positive and Negative Affect Test and the Differential Emotion Scale). A week later, participants completed the two measures of spirituality again. **Results:** Compared to those receiving placebo, those receiving intranasal OT reported greater spirituality on both spirituality scales after receiving the OT and one week later. The results remained significant after controlling for baseline positive and negative emotions. Further analyses indicated that intranasal OT primarily increased participants' feelings of interconnectedness with all people (i.e., greater social connectedness, as oxytocin is known to do anyway). The authors reported greater positive emotions during and following meditation, and spirituality was found to mediate the experience of positive emotions. There were also significant

interactions between genotype and the spirituality scales. When stratifying analyses by religious affiliation, researchers noted that the effects of OT on spirituality were present *only among those with no religious affiliation*, i.e., agnostics and atheists.

Researchers concluded: "These results provide the first experimental evidence that spirituality, endorsed by millions worldwide, appears to be supported by OT."

Citation: Van Cappellen P, Way BM, Isgett SF, Fredrickson BL (2016). Effects of oxytocin administration on spirituality and emotional responses to meditation. Social Cognitive and Affective Neuroscience, online June 17, E-pub ahead of press

Comment: An interesting and complex study focusing on spirituality (as distinct from religion). The use of the Spiritual Transcendence Scale (a broad and non-distinctive measure that includes indicators of positive emotions, social connections, and communication with dead people) and conceptualization of spirituality (again, without distinction from similar psychological or social constructs) are the primary weaknesses of the study that make interpretation of the results difficult. Fascinating that the effects of OT on spirituality (defined in this way, i.e., primarily as feeling interconnected with all humanity) were present only in the 39% of the sample who were atheists and agnostics, and not in the remainder of the sample who were primarily Christian.

Dealing with Grief: 1 and 3 Months After Infant/Child Death in the ICU

Researchers in the college of nursing at Florida Atlantic University in Boca Raton examined the coping strategies and mental health of 114 mothers and 51 fathers after the death of their infant (69 in the neonatal ICU) or child (55 in the pediatric ICU). Participants were assessed at 1 month (T1) and 3 months (T2) following the death. Spiritual coping was assessed with the Spiritual Coping Strategies Scale, which consists of two subscales: a 9-item religious strategies/activities subscale and an 11-item spiritual strategies/activities subscale. Religious affiliation was recorded as Protestant (54%), Catholic (29%), none (12%), and other. The spiritual strategies subscale included self-reflection, relating to relatives and friends, and appreciating nature and the arts; the religious strategies subscale included standard indicators of religious activities. Outcome measures were grief (61-item Hogan Grief Reaction Checklist), depression (21-item BDI), PTSD (22-item Impact of Events Scale-Revised), and personal growth. Cross-sectional associations were examined between spiritual coping and mental health outcomes at each time point in mothers and fathers separately. **Results:** At T1 *among mothers*, greater spiritual activities were associated with less grief ($r=-0.54$ for despair), less depression ($r=-0.54$), less PTSD ($r=-0.30$), and more personal growth ($r=0.51$); religious activities were associated with greater personal growth only ($r=0.42$). At T1 *among fathers*, greater spiritual activities were associated with less grief, less depression and greater personal growth, but not less PTSD; greater religious activities were associated with less grief ($r=-0.32$ for despair, $r=-0.26$ for detachment, $r=-0.25$ for disorganization) and less depression ($r=-0.27$). Relationships at T2 were similar to those at T1 for both mothers and fathers, except among fathers, where relationships with religious activities weakened to nonsignificance for grief and depression, although a positive relationship with personal growth emerged ($r=0.31$, $p<0.01$). Most of these relationships lost statistical significance when race/ethnicity and religion were controlled. Researchers concluded that "Spiritual strategies and activities help patients cope with their grief and help bereaved mothers maintain their mental health and experience personal growth."

Citation: Hawthorne DM, Youngblut JM, Broton D (2016). Parent spirituality, grief, and mental health at 1 and 3 months after their infant's/child's death in an intensive care unit. Journal of Pediatric Nursing 31:73-80

Comment: Although this is a notable study, the design and analyses are concerning. First, the data allowed for longitudinal analyses, although only cross-sectional relationships were examined. Second, the subscale "spiritual strategies/activities" (which most mental health outcomes were related to) was highly contaminated by indicators of social support and positive psychological constructs making associations with mental health difficult to interpret due to their circular or tautological nature. The subscale of "religious strategies/activities" was the only distinctive measure used here, and it was unrelated to most mental health outcomes (although was associated with personal growth in both mothers and fathers in bivariate analyses). Finally, controlling for religious affiliation was probably the reason why even the latter association diminished to non-significance, and was probably not appropriate since religious activities and religious affiliation would be highly correlated.

Religion and Parental Sources of Support in the Pediatric ICU

Investigators in the division of critical care medicine at Children's National Medical Center, George Washington University School of Medicine and from the department of pediatrics at Children's Hospital of Philadelphia, University of Pennsylvania School of Medicine, examined sources of support and guidance that parents rely on when making difficult decisions in the pediatric ICU. They also determined associations with anxiety, depression, and positive/negative emotional states. The sample consisted of 86 parents who had 75 children in the PICU of a hospital in the Washington, DC/Philadelphia area. Parents were 70% mothers, 69% white, 80% married, and 74% with one or more children in the home. The most common sources of support and guidance were physicians, nurses, friends/extended family, their own instincts, their own research, and preferences of the child. Less frequent sources of support and guidance were church community, prayer, higher power, and their spiritual leader. Mental health states were assessed using the 20-item Positive and Negative Affect Scale (PANAS), the 14-item Hospital Anxiety and Depression Scale (HADS), and the 8-item Adult Dispositional Hope Scale. Latent class modeling was used to identify groups of parents who had similar patterns of support and guidance, with two distinct groups emerging: "the more spiritual group" ($n=47$) and "the less spiritual group" ($n=39$). Those in the more spiritual group were more likely to be African-American (83% vs. 17%), but otherwise did not differ on parent type, ethnicity, education, relationship status, or financial status. **Results:** Parents in the more spiritual group experienced significantly more positive emotions on the PANAS (37.1 vs. 32.9, $p=0.029$) and less depression on the HADS (9.6 vs. 11.9, $p=0.049$), after adjusting analyses for child characteristics (race, age, ethnicity, severity of illness, and presence of complex chronic conditions). Researchers concluded: "Respondents tended to fall into 1 of 2 groups where the more-spiritual respondents were associated with greater positive affect and may be more resistant to depression."

Citation: Madrigal VN, Carroll KW, Faerber JA, Walter JK, Morrison WE, Feudtner C (2016). Parental sources of support and guidance when making difficult decisions in the pediatric intensive care unit. Journal of Pediatrics 169:221-226 (and 226e1-226e4)

Comment: Although sources of spiritual support and guidance were less common than reliance on physicians, nurses, etc., the parents in the more spiritual group appeared to be coping better with the situation. In contrast to the previous study (Hawthorne et al), however, parents were not dealing with the loss of their infant or child, a traumatic situation that may challenge even the best sources of spiritual support and guidance.

Commentary on Hill et al's Religious Involvement and Telomere Length

Researchers at the Harvard School of Public Health and Center on Genomics, Vulnerable Populations, and Health Disparities, comment on the findings presented in the Hill et al. (2016) report on religious involvement and telomere length (described in the June issue of *Crossroads*). While acknowledging the importance of the findings (one step forward), they emphasize the need to examine these relationships in longitudinal studies so that something about causal inferences could be made. They also make comments concerning the relatively small sample size and low power to detect moderators/mediators of this relationship, indicating that larger samples would be more helpful in this regard and emphasizing that statements made by Hill et al. regarding an absence of moderators/mediators were premature. They also remarked that much larger prospective studies were now being conducted.

Citation: VanderWeele TJ, Shields AE (2016). Religiosity and telomere length: One step forward, one step back. *Social Science & Medicine*, E-pub ahead of press.

DOI:10.1016/j.socscimed.2016.06.038.

Comment: This commentary provides directions for future research on the relationship between religious involvement and telomere length, and will be valuable for anyone interested in designing research to further our understanding of this fascinating relationship.

Hill et al's response to VanderWeele's Commentary on Religious Involvement and Telomere Length

In response to VanderWeele and Shields' commentary above, however, Hill and colleagues drafted a response. In their response, Hill et al. challenged the notion that longitudinal data is a "new standard" for the field, noting that over the past two decades nearly all reviews of the empirical research have argued that longitudinal designs are preferred to cross-sectional designs, and noted that longitudinal studies on religion and health have often confirmed earlier cross-sectional relationships. They argue that "cross-sectional evidence is preferable to no evidence at all," since no longitudinal studies of religiosity and telomere length had yet been performed or reported (emphasizing that establishing cross-sectional relationships is an important step forward, not backward). Hill et al. also challenged the critique that their conclusion of no mediation is premature and that mediation cannot be tested with cross-sectional data (and that there was inadequate power in the present study for moderation analysis). They conclude by stating that the claims and recommendations in the VanderWeele & Shields commentary above "are potentially damaging to the field of religion and health in particular and science more broadly" for reasons they then describe.

Citation: Hill TD, Ellison CG, Taylor J, Burdette AM (2016). A response to a commentary on "Dimensions of religious involvement and leukocyte telomere length." *Social Science & Medicine*, E-pub ahead of press.

DOI:10.1016/j.socscimed.2016.06.050.

Comment: This articulate duel between young leading scientists in the religion and health field is definitely worth reading since it provides important views on the value of longitudinal vs. cross-sectional data for evaluating the religion-health relationship and advancing knowledge in this exploding area of study.

SPECIAL EVENTS

Duke University Spirituality & Health Research Workshop

(Durham, North Carolina, August 15-19, 2016)
A few more spots are still left in the 2016 Workshop. Those wanting to attend need to register ASAP. Individual mentorship

spots are now available only on the day after the workshop, Saturday August 20, and are limited to 30 min per participant. There will be an extraordinary array of speakers and participants this year. Presentors are from Johns Hopkins School of Nursing, Yale University School of Medicine, Duke University Medical Center, and the the Veterans Administration. Participants from Botswana, Nigeria, Canada, Mexico, Curacao, Switzerland, Turkey, Saudi Arabia, and other countries around the world will be present. Participants from a wide range of faith traditions will be present, including those from Christian, Muslim, Sufi, and other religious and spiritual backgrounds. Join the party! See website: <http://www.spiritualityhealthworkshops.org/>.

RESOURCES

Christianity and Social Work: Readings on the Integration of Christian Faith and Social Work Practice (North American Association of Christians in Social Work, 2016)

From the publisher: "The fifth edition of *Christianity and Social Work* is written for social workers whose motivations to enter the profession are informed by their Christian faith, and who desire to develop faithfully Christian approaches to helping. *Christianity and Social Work* is organized around four themes: 1. Christian Roots of the Social Work Profession; 2. Christians Called to Social Work: Scriptural Basis, Worldviews and Ethics; 3. Human Behavior and Spiritual Development in a Diverse World; 4. Christians in Social Work Practice: Contemporary Issues. Chapters address a breadth of curriculum areas such as social welfare history, human behavior and the social environment, social policy, and practice at micro, mezzo, and macro levels. Containing 19 chapters and more than 400 pages, this revised edition of *CSW* includes six new chapters and six extensively-revised chapters in response to requests by readers of previous editions, including chapters on working with clients from the LGBT community, evidence-based practice (EBP), congregational social work, military social work, human trafficking, and spiritual assessment." Available for \$54.95 at:

<https://www.amazon.com/Christianity-Social-Work-Integration-Christian/dp/0989758117/>

CME/CE Videos

(Integrating Spirituality into Patient Care)

Due to the generous support of the Templeton Foundation and Adventist Health System, five professionally produced 45-minute videos on **why and how** to "integrate spirituality into patient care" are now available on our website (*for free*, unless CME/CE is desired). Videos are targeted at physicians, nurses, chaplains, and social workers in an effort to help them form **spiritual care teams** to provide "whole person" medical care that includes the identifying and addressing of spiritual needs. No other resource like this currently exists. Go to:

<http://www.spiritualityandhealth.duke.edu/index.php/cme-videos>.

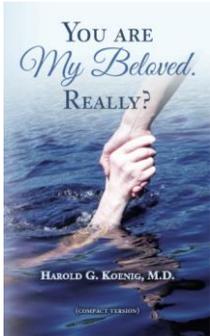
You Are My Beloved. Really?

(CreateSpace publishing platform, 2016)

From the publisher: "How does God feel about us? Are we his beloved, as some claim? Or is this just fantasy and wishful thinking? The author, a psychiatrist and medical researcher, examines the evidence for God's love from Christian, Jewish, Muslim, Buddhist and Hindu perspectives based largely on the sacred scriptures from these traditions. Not a theologian, the author draws from his 30 years in clinical practice, his research background, and his personal life in taking a practical approach to the subject. Those of any age with an open mind – especially if going through hard times -- will find this book enlightening,

inspiring, and possibly healing. Written for Christians, non-Christians, those who are religious, those who are spiritual, and those who are neither." Dedicated to Veterans and active duty Service Members. Plans are to use this version in a future clinical trial examining spirituality-oriented cognitive processing therapy for moral injury in PTSD; however, it is written for a much broader audience than just those with PTSD. Compact paperback version (6 x 4 in, with illustrations) available for \$8.90:

<https://www.amazon.com/You-are-My-Beloved-Really/dp/1530747902/>



Health and Well-being in Islamic Societies (Springer International, 2014)

What exactly do Muslims believe? How do these teachings line up with Christian beliefs? While differences and similarities between Christian and Muslim beliefs and practices are examined, the core of the book focuses on research exploring religiosity and health in Muslim populations. Available for \$53.22 at:

<http://www.amazon.com/Health-Well-Being-Islamic-Societies-Applications/dp/331905872X>

Spirituality in Patient Care, 3rd Ed (Templeton Press, 2013)

The 3rd edition provides the latest information on how health professionals can integrate spirituality into patient care. Chapters target physicians, nurses, chaplains and pastoral counselors, mental health professionals, social workers, and OT/PT. Available for \$21.23 (used) at: <http://www.amazon.com/Spirituality-Patient-Care-When-What/dp/1599474255/>.

Handbook of Religion and Health (2nd Ed) (Oxford University Press, 2012)

This Second Edition covers the latest original quantitative research on religion, spirituality and health (more than 3300 studies in 2010). Spirituality and health researchers, educators, health professionals, and religious professionals will find this resource invaluable. Available for \$132.51 (used) at:

<http://www.amazon.com/Handbook-Religion-Health-Harold-Koenig/dp/0195335953>

Spirituality & Health Research: Methods, Measurement, Statistics, & Resources (Templeton Press, 2011)

This book summarizes and expands the content presented in the Duke University's Summer Research Workshop on Spirituality and Health (see above), and is packed full of information helpful in performing and publishing research on this topic. Available for \$38.20 (used) at: <http://www.amazon.com/Spirituality-Health-Research-Measurements-Statistics/dp/1599473496/>

FUNDING OPPORTUNITIES

Templeton Foundation Online Funding Inquiry (OFI)

The John Templeton Foundation is now accepting new funding requests *at any time of the year* through their OFI form. Small Grants are defined as requests for \$217,400 or less. OFI deadlines for small grant requests are February 28/29, May 31, **August 31** and November 30, with decisions communicated no later than the end of March, June, September and December (respectively). Large Grants are defined as requests for more than \$217,400. The Foundation has only one deadline per year for OFIs related to large grant requests on August 31st. All decisions on large grant OFIs will be communicated by the end of September.

The three main areas in religion, spirituality and health that the Foundation funds are: (1) research on causal mechanisms (basic psychosocial, behavioral, and physiological pathways), (2) increasing competencies of health care professionals in working with religious patients (physicians, but also psychologists and experts in public health), and (3) research involving the development of religious-integrated interventions that lead to improved health. More information:

<https://www.templeton.org/what-we-fund/grantmaking-calendar>

2016 CSTH CALENDAR OF EVENTS...

August

- 1-2 **Training for U.S. Special Forces Chaplains**
Joint Special Operations University (JSOU)
MacDill Air Force Base, Tampa, FL (8:30A-12:30 noon)
Faculty: Koenig and others
Contact: Glen Bloomstrom
(glenbloomstrom@gmail.com)
- 15-19 **Duke University Spirituality & Health Research Workshop**
Durham, North Carolina
Speakers: Blazer, Oliver, Doolittle, Kinghorn, Hamilton, Carson, Williams, H Koenig, C Koenig
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)
- 31 **The Power of Religious Song**
Speakers: Dr. Luke A. Powery, Dean, Duke Chapel, & Dr. Jill Hamilton, Associate Professor of Nursing, Johns Hopkins School of Nursing
Center for Aging, 3rd floor, Duke South, 3:30-4:30
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)

September

- 16 **Megatrends: Mental Health, Faith, and the Future**
American Association of Christian Counselors (AACC)
National Conference (Friday 3:15-5:00)
Dallas, Texas
Contact: Dina Jones (Dina.Jones@aacc.net)
- 28 **Religion and Health: Research on Buddhism**
Speaker: Carol Weingarten, M.D., Ph.D.
Adjunct Assistant Professor of Psychiatry, DUMC
Center for Aging, 3rd floor, Duke South, 3:30-4:30
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)

PLEASE Partner with us to help the work to continue...

<http://www.spiritualityandhealth.duke.edu/index.php/partner-with-us>