CROSSROADS...
Exploring research on religion, spirituality and health

Newsletter of the Center for Spirituality, Theology & Health
Volume 10 Issue 7 Jan 2021

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 December 2020) go to: http://www.spiritualityandhealth.duke.edu/index.php/publications/crossroads

NOTE: The CSTH website is being moved to a different platform, so may not be accessible for periods during January.

LATEST RESEARCH
Religious Involvement and Mortality in Norway
Researchers from the faculty of nursing and health sciences at Nord University analyzed data from the Nord-Trøndelag Health Study (2006-2008) involving 35,902 participants (a sample that consisted of all residents ages 20 years or older living in Nord-Trøndelag county who completed study questionnaires). Participants were followed for 8 years through the end of 2015 with mortality determined by the Norwegian Cause of Death Registry. Average age of participants at the time of recruitment was 55 for men and 53 for women. Religious involvement was assessed at baseline was part of an index of (1) creative activities and (2) cultural participation. Creative activities included “parish work” (other categories were club meeting/activity; music, singing or theater; outdoor activities; dance; or sports/exercise). Response options were more than once a week, once a week, one-three times a month, 1-5 times in last six months, and never. Cultural (receptive) activities included involvement in a “the church/chapel” (other categories were participation in a museum/art exhibition; a concert, theater, or film; or a sports event). Response options were three times a month, 1-3 times a month, 1-6 times in the past six months, or never. Cox proportional hazards regression models were used to analyze the time to death or censoring, controlling for age and gender, marital status, occupation, long-standing illness, smoking status, alcohol consumption, physical activity, and body mass index. Results: There were 804 deaths in women (4.0%) and 1,101 deaths in men (6.9%) during the 8-year follow-up. Cox regression models indicated that participation in parish work predicted an overall 30% reduction in mortality (hazard ratio [HR]=0.70, 95% CI=0.53-0.94), an effect that was strongest in women (HR=0.54, 95% CI=0.35-0.84), indicating a 44% reduction in premature mortality among women parish workers, which investigators indicated was the “strongest effect of any activity.” Likewise, regular church/chapel participation predicted a 16% lower likelihood of dying during follow-up (HR=0.84, 95% CI=0.75-0.95). The effect was stronger in men (HR=0.82, 95% CI=0.70-0.96) than in women (HR=0.87, 95% CI=0.72-0.95).


Comment: Important about this study was that the focus was not on religion, but rather on cultural and creative activities more generally and their effects on mortality. The effects of religious participation as a congregant or a parish worker was hardly addressed in the discussion, nor was mention of this made in the abstract. The study is one of the few examining the impact of religiosity on mortality in secular northern Europe, where the health benefits of religion appear to be weaker. Nevertheless, a significant effect on future mortality was found, and the effect was pretty dramatic for women church workers, despite controlling for many confounders and even possible mediating variables (e.g., smoking status, alcohol consumption).

Active Religious Involvement and Well-Being during Economic Downturns in the U.S.
Investigators from Arizona State, Baylor, and Duke universities analyzed data using Gallup’s Daily Poll to examine associations between active religious involvement and psychological well-being between 2008 and 2017 in the U.S. The number of participants involved in analyses was a nationally representative sample of 2,386,405 adults. Religious involvement was assessed by religious affiliation, attendance at religious services, and importance of religion in life. Those categorized as “actively religious” indicated (a) a religious affiliation, (b) attended religious services at least twice per month, and (c) viewed their faith as important in life. Three categories of individuals were formed based on these responses: theists (76%: Christian, Mormon, Jewish, Muslim), Christians (71%), and active Christians (27%). The main outcome variable was life satisfaction based on two questions: (1) “Please imagine a ladder with steps numbered from 0 at the bottom to 10 at the top. The top of the latter represents the best possible life for you and the bottom of the latter represents the worst possible life for you. On which step of the latter would you say you personally feel you stand at this time?” (2) “On which step do you think you will stand about five years from now?” A “thriving” category (52%) included those who indicated at least a 7/10 on current life satisfaction and at least an 8/10 on expected future. Gallup data were matched with quarterly county employment data from the Quarterly Census of Employment and Wages (QCEW). Fixed effect regression models were used to analyze the data that included the effects of business cycle fluctuations (county and day-of-the-year), controlling for employment status, age, education, marital status, number of children, and race. Results: Current life satisfaction scores and levels of thriving were most strongly correlated at baseline with active Christian status. These associations remained constant from 2008 to 2017 regardless of the effects of business and unemployment cycle fluctuations. Researchers concluded that: “…we find that those who are
engaged in their local church and view their faith as important to their lives have not only higher levels of subjective well-being, but also acyclical levels [across economic downturns]. We show that the acyclicity of subjective well-being among Christians is not driven by selection effects or the presence of greater social capital, but rather a sense of purpose over the business cycle independent of financial circumstances."


Comment: Given the large and representative nature of the sample, along with the sophisticated economic analyses conducted from 2008 to 2017, these findings are important to be aware of.

Religiosity and Major Depression in 12-17-year-old U.S. Adolescents

Investigators at the health promotion and education program, University of Cincinnati, analyzed cross-sectional data on a random sample of 17,399 adolescents ages 12-17 participating in the 2012 US National Survey on Drug Use and Health. The purpose was to examine the relationship between religiosity and occurrence of a major depressive episode (MDE) in the past 12 months. Religiosity was assessed by frequency of attendance at religious services (52% of adolescents attended three or more times per month), importance of religious beliefs in life (73% agreed or strongly agreed that religious beliefs were very important), influence of religious beliefs on decision-making (66% agreed or strongly agreed that beliefs influenced their decisions), and the importance that friends shared their religious beliefs (33% agreed or strongly agreed). MDE was diagnosed based on DSM-IV criteria, which 10% of participants qualified for. Analyses were stratified by age group (12-13, 14-15, 16-17). Results: Religiosity progressively decreased with increasing age group, whereas likelihood of MDE in the past year progressively increased. Overall, adjusted logistic regression analyses indicated that frequency of religious attendance was unrelated to past year MDE. However, among 12-13-year-olds, past year MDE was significantly more common among those who disagreed or strongly disagreed that religious beliefs influenced their decisions (OR = 1.30, 95% CI = 1.01-1.67, p<0.05); this was also true for adolescents ages 14-15 years old (OR = 1.28, 95% CI = 1.01-1.63, p<0.05). Likewise, among 14-15-year-olds who disagreed or strongly disagreed that it was important for their friends to share their religious beliefs were also at increased risk of MDE (OR = 1.43, 95% CI = 1.15-1.78, p<0.001); the same was true for adolescents ages 16-17-year-old (OR = 1.44, 95% CI = 1.18-1.76, p<0.001). Researchers concluded: “Prevention professionals and health educators should consider these findings to help bolster ongoing and future MDE prevention efforts.”


Comment: This study, while cross-sectional, presents important findings in light of the increasing suicide rate among youth in the U.S. (of which religiosity is the most common cause).

Religiosity and Violence in Brazil

Researchers from the departments of psychiatry, medicine, and public health at several universities in Brazil analyzed data from a cross-sectional national random sample of 4,607 persons age 14 years or older. The average age of participants was 36 years, and the average education level was nine years. Religiosity was assessed by religious affiliation (90% had an affiliation) and importance of religion (81% indicated it was very important). Participation in violence during the past 12 months was assessed by (1) fight with physical aggression (2.6%); (2) throwing things, pushing, shaking, slapping, biting, kicking, burning, forcing to have sex, or striking a partner with a knife/weapon (domestic violence; 8.4%); and (3) detainment or arrest by police (1.4%). Regression analyses controlled for sociodemographic information, depression, social support, and alcohol dependency; this was done for both religious affiliation and importance of religion with regard to the outcome of fighting, but only for religious affiliation with regard to the outcomes of domestic violence and police detention. Results: Religious affiliation (any vs. none) was associated with a lower likelihood of involvement in fights (OR=0.60, 95% CI=0.37-0.98, p<0.05), as was religious importance (OR=0.60, 95% CI=0.36-0.99, p<0.05). Religious affiliation was also associated with a lower likelihood of domestic violence (OR=0.47, 95% CI=0.25-0.89, p<0.05) and police detention (OR=0.37, 95% CI=0.20-0.70, p<0.01). The relationship with domestic violence was explained by alcohol dependency. Researchers concluded: “Religiosity seems to be an important factor associated with lower levels of violence in this nationwide representative survey.”


Comment: Although the study is cross-sectional, these findings are important given the cost that violence has on individuals, families, and societies.

Identifying Moral Injury in Chinese Health Professionals during COVID-19: MISS-HP

In a second study assessing the psychometric properties of the 10-item Moral Injury Symptom Scale-Health Professional version (MISS-HP), researchers in China and the U.S. conducted a survey of nurses and physicians from across mainland China between March 27 and April 26, 2020, the heart of the COVID-19 pandemic in China. Participants were 583 nurses and 2,423 physicians who completed the online survey. The Chinese translation of the 10-item MISS-HP was used, a measure that assesses each of the 10 major symptoms of moral injury on a 1 to 10 scale (range 10-100). Internal reliability and test-retest reliability were performed, along with exploratory and confirmatory factor analysis to determine scale structure. Researchers concluded that the Chinese MISS-HP was acceptable (0.71 for nurses and 0.70 for physicians), as was the test-retest reliability (intraclass correlation coefficient [ICC]=0.77 for the scale in physicians). Exploratory factor analysis indicated three factors, and the confirmatory factor analysis indicated good fit to the data. Scale validity was also established. With regard to convergent validity, the MISS-HP was moderately strongly related to the 4-item Expressions of Moral Injury Scale (Currier et al), while discriminant validity was demonstrated by lower correlations with burnout (Maslöff) and psychological well-being (VanderWeele). Concurrent validity was demonstrated by moderate correlations with depression and anxiety symptoms, and known groups validity was established by higher scores in those exposed to workplace violence.

Researchers concluded: “The MISS-HP demonstrated acceptable reliability and validity in a large sample of physicians and nurses in mainland China, supporting its use as a screening measure for moral injury symptoms among increasingly stressed health professionals in this country during the COVID-19 pandemic.”


Comment: This study adds further cross-cultural evidence supporting the reliability and validity of this short scale (10-item MISS-HP) for identifying moral injury in healthcare professionals.
How Are Religious People Coping with COVID-19 in the U.S.?
Investigators from the Institute of Cognitive Science and Assessment at the University of Luxembourg conducted a survey in the United States via the online platform Prolific between March 13-15, 2020. A convenience sample of 1,182 US citizens was recruited matched on gender and age with the general population (50% female, average age 46). Less than half of the population were Christians (45%), while the other half were atheists/agnostics (44%) and other affiliations (11%) [see Comment below].
Religiosity was assessed by the 10-item Intrinsic Religious Motivation Scale (Hoge). Outcome measures included questions on cognitive anxiety (coronavirus worry) and somatic anxiety (coronavirus emotionality). Also examined were “reasonable” and “unreasonable” preventative behaviors as a coping reaction to the COVID-19 pandemic. Reasonable behaviors, for example, included avoiding crowded spaces and washing hands more frequently. Unreasonable behaviors, for example, included avoiding 5G networks and buying more toilet paper than usual. Bivariate and multivariate analyses were conducted to examine the relationship between religiosity, anxiety, and preventative coping behaviors. Results: Religiosity was inversely related to coronavirus worry (cognitive anxiety; r=-0.07, p<0.05), but was positively related to coronavirus emotionality (somatic anxiety; r=0.10, p<0.001). No association was found between religiosity and reasonable coronavirus preventative behavior. However, a significant positive association was found with unreasonable behavior (r=0.33, p<0.001). A mediation model was tested, demonstrating that the higher degree of religious participants’ unreasonable behavior was partially explained by their stronger somatic anxiety. With regard to reasonable coronavirus preventative behavior, the total effect of religiosity was nonsignificant due to the combination of a positive direct effect of religiosity on reasonable behavior and a negative indirect worry-mediated effect of religiosity on unreasonable behavior. The researchers concluded: “At the behavioral level, our findings are in line with current news from across the world that conservative or fundamentalist religious groups from all religious traditions are ignoring or even defying the coronavirus rules...Our data show that religious people tend to emotionally overreact and, thus, engage in unreasonable behavior, the latter possibly reflecting compensatory but illusory control.”
Comment: This study was conducted quite early during the pandemic (mid-March 2020), and there are also some concerns about the nature of the sample and the broad sweeping conclusions of the researchers. Gallup and Pew Research Center Polls of representative U.S. samples indicate that the population is 65% Christian, 26% without an affiliation, and approximately 5% atheists/agnostics. Thus, the present sample was highly skewed towards atheists/agnostics (44%), causing some questions about the validity of their results. One also wonders if the results (and conclusions) would be similar in the researchers’ own country of Luxembourg.

Religiosity and Intention to Receive the COVID-19 Vaccine in the US
Researchers in the division of community health sciences in the School of Public Health at the University of Illinois at Chicago and the department of medicine at Stroger Hospital in Cook County, Chicago, conducted an online cross-sectional survey using the platform Prolific (a reputable and reliable crowdfunding platform for researchers) that involved 501 U.S. adults on March 25, 2020. The primary dependent variable was intention to vaccinate against COVID-19. Religiosity was assessed by the Duke University Religion Index (DUREL). Regression models were used to examine the data, along with mediation and sensitivity analyses. Results: Religiosity was significantly and inversely related to intention to vaccinate (B=-0.14, p<0.0003), controlling for age, race, gender, marital status, income, employment status, education, and health locus of control. Mediation analysis indicated that religiosity was positively related to having an external health locus of control (HLOC) which was inversely related to COVID-19 vaccination intention. An external HLOC is the belief that a person’s health depends on external factors such as God, chance, or Powerful others. Researchers concluded: “We found a significant negative association between religiosity and COVID-19 vaccination intention. This relationship was partially mediated by external HLOC. Collaborative efforts with religious institutions may influence COVID-19 vaccine uptake.”
Citation: Olagoke, A., Olagoke, O., Hughes, A. M. (2020). Intention to vaccinate against the novel 2019 coronavirus disease: The role of health locus of control and religiosity. Research Square, available at https://doi.org/10.21203/rs.3.rs-31214/v1.
Comment: Although this study was also conducted early during the COVID-19 pandemic, more recent research indicates that these findings have not changed (see https://ssrn.com/abstract=3593098 and https://www.theguardian.com/australia-news/2020/nov/20/disadvantaged-and-strongly-religious-people-less-likely-to-get-covid-vaccine-survey). Because it is crucial for all Americans (and others throughout the world) to obtain the COVID-19 vaccine in order to control this pandemic, it is important for healthcare and government organizations to work closely with religious institutions to help convince religious individuals to obtain the Pfizer or Moderna vaccine for their good and the good of others.

Listening to Islamic Praises and Perioperative Anxiety in Muslims under Regional Anesthesia
Investigators in the department of anesthesia and intensive care at Kebangsaan University Malaysia Medical Center conducted a randomized controlled trial involving 63 Muslim patients scheduled for elective lower limb surgery under regional anesthesia. Participants were randomized to either (A) listening to Islamic praises (Dzikr), (B) nature-based sounds (water rippling and birds chirping), or (C) a headphone without any sounds. Dzikr involves listening to Islamic words of praise and glory to Allah in order to bring about a peaceful state of mind. Anxiety levels were assessed using a visual analog scale (100 mm horizontal line ranging from the far left of the scale (“not anxious at all”) to the far right of the scale (“maximum anxiety”) (VAS-A). In addition, participant satisfaction level with the overall perioperative experience was rated on a similar visual analog scale ranging from “no satisfaction” to “extreme satisfaction” (VAS-S). VAS-A score was obtained at baseline immediately prior to the procedure.
Once adequacy of the anesthetic block was established, a headphone was placed on all participants. The VAS was again recorded 30 minutes after skin incision. A final VAS-A was recorded after removal of headphones at the end of the surgery prior to transferring the patient out of the operating room. The VAS-S score was evaluated at the end of the study in the recovery area prior to being discharged to the ward. **Results:** At baseline there were no significant differences between the three groups on age, gender, physical status, previous anesthetic exposure, education level, or VAS-A score, or requirement for additional anxiolytics due to increased anxiety during the procedure. At 30 minutes after the initial incision, VAS-A scores were significantly lower in the Group A compared to Group C (17.2 vs. 34.6, p=0.001) and compared to Group B (17.2 vs. 33.0, p=0.002). By the end of the procedure, VAS-A scores were significantly lower in Group A than in Group C (8.9 vs. 28.7, p=0.001) and in Group B (8.9 vs. 17.2, p=0.028). Patients in Group A also indicated significantly greater satisfaction scores compared to Group B (87.4 vs. 80.7, p=0.038) and Group C (87.4 vs. 79.4, p=0.010).

Researchers concluded that: “Listening to Dzikr among Muslim patients was more effective in reducing perioperative anxiety levels when compared to nature-based sounds, in patients who had undergone lower limb surgery under regional anesthetic.”

**Citation:** Samsudin, A., Yahya, N., WR, W. M., Masdar, A., Liu, C. Y., & Izhaham, A. (2019). Listening to Islamic praises (Dzikr) is more effective in reducing perioperative anxiety levels when compared to nature-based sounds in Muslim patients undergoing surgery under regional anesthesia. IUM Medical Journal Malaysia. 18(3), 31-39.

**Comment:** This is an older article that just came to our attention. The findings and the solid study design, however, warrant our reporting the results here.

### Effects of an Islamic Intervention in Patients Following CABG Surgery

Investigators in the department of epidemiology and biostatistics at the Kurdistan University of Medical Sciences in Sanandaj, Iran, conducted a randomized controlled trial comparing the effects of a religious intervention (Group A) to breathing techniques with heart rate variability (HRV) biofeedback (Group B) or no intervention (Group C). Sixty patients who had received coronary artery bypass graft (CABG) surgery and were currently undergoing rehabilitation from the surgery at Tohid hospital were randomized to one of the three groups. The religious intervention Group A received 8 weeks of two hour sessions per week plus homework during the week. The religious therapy was based on Islamic and Qur’anic teachings concerning a God-oriented life, the role of belief and trust in God, the importance of saying specific prayers of thanks and praise to God, and other religious interventions using an Islamic cognitive-behavioral approach. Participants in Group B participated in individually trained deep and slow breathing techniques while being attached to an HRV monitoring device connected to a computer (again involving 2-hour sessions per week for 8 weeks and homework between sessions, similar to Group A participants). Outcomes were assessed using the 21-item DASS (Depression, Anxiety and Stress Scale) at baseline and postintervention. “Psycho-physiologic coherence” (HRV) was also compared between treatment groups at baseline and postintervention. Analysis of covariance was used to analyze the data. **Results:** Between-group differences indicated significant effects of the Group A and Group B interventions on reducing depression compared to the Group C control group; the religious Group A intervention was also significantly more effective compared to the Group B breathing intervention. For anxiety, while both Group A and B interventions reduced anxiety levels compared to the Group C control group, the Group B breathing intervention was slightly more effective in reducing anxiety than the religious Group A intervention. Finally, with regard to effects on HRV, again Group A and B interventions were more effective in increasing HRV compared to Group C controls, although the Group B breathing intervention was again slightly superior to the Group A religious intervention. Researchers concluded: “The results showed that both Islamic religious and breathing techniques with HRV biofeedback therapies can be used in rehabilitation programs for CABG patients in clinics and hospitals.”

**Citation:** Amjadiian, M., Ehsan, H. B., Saboni, K., Vahedi, S., Rostami, R., & Roshani, D. (2020). A pilot randomized controlled trial to assess the effect of Islamic spiritual intervention and of breathing technique with heart rate variability feedback on anxiety, depression and psycho-physiologic coherence in patients after coronary artery bypass surgery. Annals of General Psychiatry. 19(1), 1-10.

**Comment:** This was a poorly described RCT with a confusing explanation of findings, likely due to English language problems. Nevertheless, it appears that a religious Islamic-based cognitive-behavioral intervention was effective in reducing depression, anxiety, and increasing HRV in patients recovering from CABG surgery.

### Religion in Expressive Writing and Renal Cell Carcinoma Symptoms

Investigators in the department of palliative, rehabilitation and integrative medicine at the University of Texas MD Anderson Cancer Center (Houston) examined data from a randomized controlled trial involving participants with renal cell carcinoma (stages I–IV). After baseline assessments (T1), 117 participants were randomized to either (1) expressive writing or (2) neutral writing groups, with both groups completing three additional assessments at one (T2), four (T3), and 10 months (T4) following the intervention. Participants were asked to write about their deepest emotions and thoughts concerning their cancer experience. There were no instructions with regard to religion or spirituality (R/S). Writing samples were then coded later as either indicating positive religious coping (PRC, e.g., increased faith, religion as a source of help or strength, positive references about God) or negative religious coping (NRC, e.g., religion made things worse, negative references about God, decreased faith, negative responses from religious community). Writing samples were also coded based on participants spontaneous reports of religious engagement (RE), which included religious practices such as personal prayer, worship time, meditation, and scripture reading (“private/personal RE”), and going to church, corporate worship and prayer. Bible studies, praying with others (“collective RE”). Also administered at baseline was the Ironson-Woods Spirituality/Religiousness Index. Demographics, psychological distress, and social support were measured using standard scales. Cancer-related symptoms were assessed with the MD Anderson Symptom Inventory, a measure of 13 core cancer symptoms including pain, fatigue, nausea, disturbed sleep, distress/feeling upset, shortness of breath, difficulty remembering, lack of appetite, drowsiness, dry mouth, sadness, vomiting, and numbness/tingling. Multilevel growth curve models were used to analyze the data. **Results:** 89% of participants made at least one R/S reference, with 70% including at least one PRC statement and only 8% indicating a NRC statement. PRC was strongly correlated with the Ironson-Woods R/S religiosity index, whereas NRC was not associated with religiosity level based on this index. Private/personal RE (45%) and collective RE (42%) were also common. In prospective analyses from T1 through T4, private/personal RE was associated with a decrease in cancer-related symptoms over time (β=–0.13, t=–2.20, p=0.03), whereas NRC was associated with significantly increased scores on psychological distress over time (β=0.15, t=2.95, p=0.004). Private/personal RE also tended to be associated with less psychological distress over time (β=–0.02, t=–1.90, p=0.06). No other religious content or self-reported R/S variables were
associated with cancer-related symptoms or psychological distress. Researchers concluded: "Private RE (e.g., praying, scripture reading, meditation) was prospectively associated with reduced cancer-related symptoms and distress, and negative R/S was prospectively associated with increased psychological distress."

**Citation:** Narayanan, S., Milbury, K., Wagner, R., & Cohen, L. (2020). Religious Coping in Cancer: A quantitative analysis of expressive writing samples from patients with renal cell carcinoma. Journal of Pain and Symptom Management, 60(4), 737-745

**Comment:** This was a carefully done prospective study with sophisticated statistical analyses examining the effects of religiosity on physical and psychological outcomes among seriously ill patients with a deadly disease (renal cell carcinoma). The results bear considering, particularly given the approach towards assessing religiosity (spontaneous reports from expressive writing, which may be a more objective indicator of religiosity than that obtained from self-reported measures).

**Religiosity and Male Adolescent Pornography Use in Croatia**

Researchers from the University of Montréal (Canada) and University of Zagreb (Croatia) conducted a longitudinal study involving a convenience sample of 337 Croatian male adolescents (average age 16). Participants were re-surveyed five times at approximately six month intervals. Religiosity was assessed at baseline (T1) with a 4-item scale measuring religious faith (e.g., "I think a lot about God and faith"). Frequency of pornography use (PU) was assessed at all six waves of data collection. Problematic pornography use (PPU) was assessed with the Compulsive Pornography Consumption Scale (Noor et al). Also assessed was negative mood (PHQ-4) and impulsiveness (Barratt Impulsiveness Scale-Brief). Latent growth curve modeling was used to examine the effects of religiosity on the development of problematic pornography use over time. **Results:** Bivariate correlations indicated that religiosity at T1 was inversely related to PU at T6 and was unrelated to PPU at T5 and T6. However, latent growth curve modeling indicated that religiosity moderated the association between transitions from PU to PPU. PU that later resulted in a higher PPU was more common among religious adolescents compared to those who were less religious (i.e., the interaction between religiosity and PU in predicting PPU at T6 was positive and independent of PPU at T5 (b=0.71, SE=0.35, p<0.05). Researchers concluded: "Among more religious participants, growth in pornography use resulted in more intense PU symptoms than among their less religious peers - as predicted by the moral incongruence model (Grubbs et al., 2019).


**Comment:** The moral incongruence model argues that the cognitive dissonance created by transgressing moral values regarding pornography use creates greater psychological distress among religious persons, leading to compulsive pornography use over time.

**Religious and Spiritual Beliefs of Mayo Clinic Physicians**

Investigators in the departments of radiology and division of general surgery at the Mayo Clinic hospital in Phoenix, Arizona, conducted a survey of physicians at large Mayo Clinic multidisciplinary tertiary referral centers and satellite clinics between January and February 2014. Sites included Rochester, MN, Phoenix, AZ, Jacksonville, FL, and Mayo Clinic health systems in Minnesota, Wisconsin, Iowa, and Georgia. Of 4,834 potential participants, 43.4% (2,097) completed the survey. Most participants were ages 31-60 and 69% were male. Specialty was 74% internal medicine, 24% surgery, and 2% psychiatry. **Results:** Nearly two-thirds (65.2%) indicated they believed in God, 16.5% believed in a universal or higher power other than a god, and 18.2% believed in neither. In terms of self-description, 51% indicated they were religious, 25% spiritual, 12% agnostic, and 12% atheist. Depending on specialty, 53-55% attended religious services more than four times per month; 24-39% indicated that religion influenced their specialty choice (39% for psychiatry); 78%-82% indicated that religion influenced their medical practice at least sometimes; 40%-61% indicated they prayed daily or multiple times a day; and 0 to 27% indicated they prayed with patients at least sometimes (0% for psychiatry, 27% for surgery). Overall, 29% of physicians indicated that religious or spiritual beliefs influenced their decision to become a physician. Among the 1,760 respondents that answered the question, 35% believe that God or a higher power often or always actively intervenes in the natural processes of the world; 40% indicated sometimes or rarely; and 26% indicated never or didn’t know.


**Comment:** This study is an older one, but just recently came to our attention. It is one of the largest and most detailed studies of physicians’ religious/spiritual beliefs to date (with the closest studying to our knowledge being the Farr Curlin study, n=1,144). Of particular note is that this study involved physicians working at the Mayo Clinic.

**NEWS**

**Duke University’s Monthly Spirituality and Health Webinars via Zoom**

Our Center’s monthly spirituality and health research seminars are now being held by Zoom, and should be available to participants wherever they live in the world that supports a Zoom platform. All persons who receive this e-newsletter will be sent a link to join the seminar approximately one week before the seminar is held. When you receive this link, please save the link and forward it to your colleagues and students. This month’s seminar on Tuesday, January 26, will be delivered by Duke Health System neurology professor Sneha Mantri, M.D., M.S., titled **Moral Injury in Healthcare Professionals**. The PDFs of the Power Point slides for download and full recordings of all past webinars since July 2020 are now available at https://spiritualityandhealth.duke.edu/index.php/education/seminars.

**Impact of COVID-19 on Burnout in Healthcare Professionals**

COVID-19 has changed the way we interact with our patients and each other. We are looking to understand the impact of the pandemic on health care worker burnout, moral injury, fears, and hopes. Click the on the following link to fill out a brief (5-10 min) survey about your experiences; your responses will be de-identified prior to analysis: https://duke.qualtrics.com/jfe/form/SV_b2T9YDeI4JuxVQN. This study has been approved by the Institutional Review Board at Duke University Health System [Protocol 00105516]
SPECIAL EVENTS

Medicine and Religion Conference
(March 22, 2021, via Zoom)
The 2021 Conference on Medicine and Religion invites clinicians, scholars, clergy, students and others to take up these and other questions related to the intersection of medicine and religion. In light of the seismic events of 2020, we also encourage submissions that address either the COVID-19 pandemic or racial inequities in health and health care. We encourage participants to address these questions and issues in light of religious traditions and practices, particularly, though not exclusively, those of Judaism, Christianity and Islam. The conference is a forum for exchanging ideas from an array of disciplinary perspectives, from accounts of clinical practices to empirical research to scholarship in the humanities. The theme for this conference is True to Tradition? Religion, the Secular, and the Future of Medicine. Deadline for abstracts for paper presentations, posters, panel and workshop sessions, that address issues at the intersection of medicine and religion, including but not limited to the conference theme. For more information go to: http://www.medicineandreligion.com/

7th European Conference on Religion, Spirituality and Health
(Lisbon, Portugal, May 27-29, 2021)
The 2021 European Conference will focus on “Aging, Spirituality and Health” and will be held at the Catholic University of Portugal in Lisbon, one of the most beautiful cities in Europe. For more information go to: https://ecrsh.eu/ecrsh-2021. Note: depending on the coronavirus situation, the conference may occur remotely via Zoom.

Research Workshop on Religion, Spirituality and Health in Lisbon, Portugal
(Lisbon, Portugal, May 23-26, 2021)
The 7th European Conference will also host a 4-day pre-conference spirituality and health research workshop on May 23-26 with Prof. Koenig from the U.S., along with Dr. Rene Hefti, Prof. Arndt Bussing, Prof. Niels Hvidt, Prof. Constantin Klein, and a number of other European presenters. For more information, go to: https://ecrsh.eu/ecrsh-2021 or contact Dr. Rene Hefti at info@rish.ch. Note: depending on the coronavirus situation, the workshop may occur remotely via Zoom.

17th Annual Duke University Summer Research Workshop
(Durham, North Carolina, August 9-13, 2021, in-person1)
Register to attend this one-of-a-kind 5-day training session on how to design research, obtain funding support, carry out the research, analyze and publish the findings, with an emphasis on developing an academic career in the area of religion, spirituality and health.

1 As I’m sure you are aware, the coronavirus situation is a fluid one at this time, i.e., constantly changing. However, because of the risk to health that this infection poses, we are requesting that all those who attend the workshop be vaccinated with the latest vaccine (both shots) at least one month before coming to the workshop in August. This is necessary because of the large gathering (50-70 participants expected). It will not be possible to social distance from each other while meeting inside during the long time each day (8:30-5:00) in close contact with each other and workshop faculty and because of the workshop length (5 days). We understand that there is controversy about receiving the vaccine. However, in order to prevent the spread of this virus to other members of the workshop and faculty, we are asking all participants to be vaccinated. Be aware of this if you decide to register this year.

Pass this information on to colleagues, junior faculty, graduate students, and anyone you think might be interested. The workshop compresses training material that was previously taught during our 2-year post-doctoral fellowship, so the curriculum is packed. Leading religion-health researchers from Duke, Yale and Emory serve as workshop faculty. Participants will have the option of a 30-minute one-on-one with Dr. Koenig or another faculty mentor of their choice, although these mentorship slots are limited, so early registration will be necessary to ensure that the mentor requested will be available. Nearly 900 academic researchers, clinical researchers, physicians, nurses, chaplains, community clergy, and students at every level in medicine, nursing, social work, chaplaincy, public health, psychology, counseling, sociology, theology, and rehabilitation (as well as interested members of the general public) have attended this workshop since 2004. Participants from every faith tradition and region of the world have come to this workshop, and this year should be no different. Partial tuition reduction scholarships are available, as are full tuition and travel scholarships for academic faculty in underdeveloped countries (see end of enewsletter). For more information, go to: https://spiritualityandhealth.duke.edu/index.php/5-day-summer-research-course

RESOURCES

Books

Weekly Soul: 52 Meditations on Meaningful, Joyful, and Peaceful Living
(MSI Press, 2020)
From the publisher: “Weekly Soul is a collection of 52 meditations on meaningful, joyful and peaceful living. The meditations begin with thought-provoking quotations from a range of people—writers, journalists, theologians, musicians and artists, activists—and touch on themes of miracles, aliveness, purpose, laughter and joy, presence/mindfulness, activism, acceptance, gratitude, forgiveness, creativity, civility, and hope. Each meditation also offers Dr. Craigie’s stories and commentary, questions for individual and group reflection, suggestions for daily follow-up, and biographical background on the quotation authors. In Weekly Soul, readers will find a year’s worth of affirmation and engaging exploration of wholeness and well-being. Frederic Craigie, Ph.D., [the author] is a clinical psychologist, consultant, educator, speaker, and writer. His passions and areas of expertise include spirituality in health and health care, healing relationships, clinician well-being, and resiliency and positive mental health.” Available for $19.95 at https://www.amazon.com/Weekly-Soul-Fifty-two-Meditations-Meaningful/dp/1950328473.

Religion and Health Care in East Africa: Lessons from Uganda, Mozambique, and Ethiopia
(Policy Press, 2019)
From the publisher: “What social factors contribute to the tragic state of health care in Africa? Focusing on East African societies, this book is the first to investigate what role religion plays in health care in African cultures. Taking into account the geopolitical and economic environments of the region, the authors examine the roles played by individual and group beliefs, government policies, and pressure from the Millennium Development Goals in affecting health outcomes. Informed by existing related studies, and on-the-ground interviews with individuals and organizations in Uganda, Mozambique and Ethiopia, this interdisciplinary book will form an invaluable resource for scholars seeking to better understand the links between society, multi-level state instruments, and health...”

**Handbook of Spirituality, Religion, and Mental Health** (Academic Press, 2020)
From the publisher: “The Handbook of Religion and Mental Health, Second Edition, identifies not only whether religion and spirituality influence mental health and vice versa, but also how and for whom. The contents have been re-organized to speak specifically to categories of disorders in the first part of the book and then more broadly to life satisfaction issues in the latter sections. This updated edition is now revised with new chapters and new contributors.” Available for $84.95 (paperback) at https://www.amazon.com/Handbook-Spirituality-Mental-Health-Rosmarin/dp/0128167661.

Religion and Recovery from PTSD
(Jessica Kingsley publishers, December 19, 2019)
From the publisher: “This volume focuses on the role that religion and spirituality can play in recovery from post-traumatic stress disorder (PTSD) and other forms of trauma, including moral injury. Religious texts, from the Bible to Buddhist scriptures, have always contained passages that focus on helping those who have experienced the trauma of war. Many religions have developed psychological, social, behavioral, and spiritual ways of coping and healing that can work in tandem with clinical treatments today in assisting recovery from PTSD and moral injury. In this book the authors review and discuss systematic research into how religion helps people cope with severe trauma, including trauma caused by natural disasters, intentional inter-personal violence, or combat experiences during war.” Available for $29.95 at https://www.amazon.com/Religion-Recovery-PTSD-Harold-Koenig/dp/1785928228.

Religion and Mental Health: Research and Clinical Applications
(Academic Press, 2018) (Elsevier)
This 384 page volume summarizes the latest research on how religion helps people cope with stress, covering its relationship to depression, anxiety, suicide, substance abuse, well-being, happiness, life satisfaction, optimism, generosity, gratitude and meaning and purpose in life. It integrates research findings with best practices for treating mental health disorders in religious clients with depression, anxiety, posttraumatic stress disorder, and other emotional (and neuropsychiatric) problems. Available for $69.96 (paperback) at https://www.amazon.com/Religion-Mental-Health-Research-Applications-dp/0128112824/dp/0128112824.

Hope & Healing for Those with PTSD: Psychological, Medical, and Spiritual Treatments.
(Amazon: CreateSpace Publishing Platform, 2018)
From the author: “If you or a family member has PTSD or are experiencing the aftermath of severe trauma, you will know a lot more about this disabling condition and how to deal with it after reading this book.” Available for $5.38 at https://www.amazon.com/dp/172445210X.

Protestant Christianity and Mental Health: Beliefs, Research and Applications
(part of the Religion and Mental Health Book Series; Amazon: CreateSpace Platform, 2017)
For mental health professionals, clergy, researchers, and laypersons interested in the relationship between religious involvement and mental health in Protestant Christians. Available for $7.50 at: https://www.amazon.com/dp/1544642105/

Catholic Christianity and Mental Health: Beliefs, Research and Applications
(part of the Religion and Mental Health Book Series; Amazon: CreateSpace Platform, 2017)
For mental health professionals, clergy, researchers, and laypersons interested in the relationship between religion, spirituality and mental health in Catholics. Available for $7.50 at: https://www.amazon.com/Catholic-Christianity-Mental-Health-Applications/dp/1544207646

Islam and Mental Health: Beliefs, Research and Applications
(part of the Religion and Mental Health Book Series; Amazon: CreateSpace Platform, 2017)

Hinduism and Mental Health: Beliefs, Research and Applications
(part of the Religion and Mental Health Book Series; Amazon: CreateSpace Platform, 2017)
For mental health professionals, clergy, researchers, and laypersons interested in the relationship between religion, spirituality and mental health in Hindus. Includes original research on current religious beliefs/practices in Hindus from India and throughout the world. Available for $7.50 at: https://www.amazon.com/dp/1544642105/.

Judaism and Mental Health: Beliefs, Research and Applications
(part of the Religion and Mental Health Book Series; Amazon: CreateSpace Platform, 2017)
For mental health professionals, clergy, researchers and laypersons interested in the relationship between religion, spirituality and mental health in Judaism. Available for $7.50 at: https://www.amazon.com/Judaism-Mental-Health-Research-Applications/dp/154405145X/

Buddhism and Mental Health: Beliefs, Research and Applications
(part of the Religion and Mental Health Book Series; Amazon: CreateSpace Platform, 2017)
For mental health professionals, clergy, researchers, and laypersons interested in the relationship between religion, spirituality and mental health in Buddhists. Available for $7.50 at: https://www.amazon.com/dp/1545234728.

You are My Beloved. Really?
(Amazon: CreateSpace Publishing Platform, 2016)
From the author: “Simple and easy to read, this book is intended for Christians and non-Christians, those who are religious or spiritual or neither, and is especially written for those experiencing trauma in life (everyone). The book examines the evidence for God's love from Christian, Jewish, Muslim, Buddhist and Hindu perspectives based largely on the sacred scriptures from these traditions. Those of any age with an open mind will find this book enlightening, if not inspiring. Available for $8.78 from https://www.amazon.com/You-are-My-Beloved-Really/dp/1530747902/.
Spirituality & Health Research: Methods, Measurement, Statistics, & Resources
(Templeton Press, 2011)

Other Resources

CME/CE Videos (Integrating Spirituality into Patient Care)
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” healthcare that includes the identifying and addressing of spiritual needs. Go to: http://www.spiritualityandhealth.duke.edu/index.php/cme-videos.

DukeHealth
In support of improving patient care, the Duke University Health System Department of Clinical Education and Professional Development is accredited by the American Nurses Credentialing Center (ANCC), the Accreditation Council for Pharmacy Education (ACPE), and the Accreditation Council for Continuing Medical Education (ACCME), to provide continuing education for the health care team.

Category 1: Duke University Health System Department of Clinical Education and Professional Development designates this CME activity for a maximum of 3.75 AMA PRA Category 1 Credit(s)TM. Physicians should claim only credit commensurate with the extent of their participation in the activity.

Nurse CE: Duke University Health System Department of Clinical Education and Professional Development designates this activity for up to 3.75 credit hours for nurses. Nurses should claim only credit commensurate with the extent of their participation in this activity.

TRAINING OPPORTUNITIES

Full Scholarships to Attend Research Training on Religion, Spirituality and Health
With support from the John Templeton Foundation, Duke University’s Center for Spirituality, Theology and Health is offering eleven $3,600 scholarships to attend the university’s 5-day Workshop on conducting research on religion, spirituality, and health. The workshop will be held on Aug 9-13, 2021 (rescheduled due to coronavirus). These scholarships will cover the $1200 tuition, up to $1500 in international travel costs, and up to $500 in living expenses. They are available only to academic faculty and graduate students living in third-world underdeveloped countries in Africa, Central and South America (including Mexico), Eastern Europe and North Asia (Russia and China), and portions of the Middle East, Central and East Asia. The scholarships will be competitive and awarded to talented well-positioned faculty and graduate students with the potential to conduct research on religion, spirituality, and health, and serve as research leaders in their part of the world. If you want to know more about this program, contact Harold.Koenig@duke.edu or go to our website for a description of the workshop: https://spiritualityandhealth.duke.edu/index.php/5-day-summer-research-course. Please let your academic colleagues in developing countries know about this unusual and time-limited opportunity.

Unfortunately, but not surprisingly, the demand for such scholarships has far exceeded availability. Now that we are set up to evaluate potential scholarship recipients, we are hoping to identify individuals or foundations willing to support highly qualified third-world applicants we are unable to provide scholarships to in 2021-2023 and the years ahead. A donation of $3,500 to our Center will sponsor a faculty member or graduate student from a disadvantaged region of the world to attend the workshop in 2021 or future years. If you are interested in sponsoring one or more such applicants and want to know more about this program, or have ideas about other sources of support, please contact Harold.Koenig@duke.edu.

Certificate in Theology and Healthcare
The Duke University Divinity School is now accepting applications for a new graduate certificate, the Certificate in Theology and Healthcare. This one-year residential program provides robust theological and practical engagement with contemporary practices in medicine and health care for those individuals with vocations in health-related fields (e.g., trainees or practitioners of medicine, nursing, and other health care professions). The Certificate aims to equip Christian health care practitioners with the training to embrace that calling and live into it with theological clarity and spiritual joy. This fully accredited course of study focuses on combining foundational courses in Christian theology, scripture, and church history with courses engaging the practical issues that health care practitioners encounter in contemporary culture. If you, or some you know, seek theological formation and further confidence engaging questions of suffering, illness, and the place of health care in a faithful life, go to the following website: https://tmc.divinity.duke.edu/programs/certificate-in-theology-and-health-care/

(continued next page)
FUNDING OPPORTUNITIES

**Templeton Foundation Online Funding Inquiry**
The John Templeton Foundation has postponed all Online Funding Inquiries (OFIs) for 2020 in the area of religion, spirituality and health to their 2021 funding cycle. The next deadline for Small Grant requests ($234,800 or less) and Large Grant requests (more than $234,800) is **August 20, 2021**. The Foundation will communicate their decision (rejection or invitation) to submit a full proposal for all OFIs by October 15, 2021. Therefore, researchers need to think “long-term,” perhaps collecting pilot data in the meantime, with or without funding support. JTF’s current interests on the interface of religion, spirituality, and health include: (1) investigating the causal relationships between health, religion, and spirituality (determining direction of causation in associations reported; identifying the underlying causal mechanisms responsible), with a specific focus on longitudinal studies, and (2) engaging religious and spiritual resources in the practice of health care (increasing the religious and spiritual competencies of health care practitioners; testing the impact of religiously integrated therapies; and increasing the scientific literacy of health care chaplains). More information: https://www.templeton.org/project/health-religion-spirituality.

JOBS

**Research Faculty Position**
The Institute for the Psychological Sciences at Divine Mercy University (DMU), in collaboration with McLean Hospital, the largest psychiatric affiliate of Harvard Medical School, is pleased to invite applications for the position of Research Professor in the area of Spirituality and Mental Health. The successful candidate will have the opportunity to establish and build a research laboratory with this specific focus. The position will be based in Sterling, VA and will commence during the Spring Semester of 2021, and no later than Fall 2021. Salary is competitive. The Research Professor will be responsible for hiring and supervising one or more Postdoctoral Research Fellows and Research Assistants, establishing daily operating procedures for the laboratory, and collaborating with other clinical and research faculty employed at the Institute for the Psychological Sciences, as well as researchers from McLean Hospital. Duties will include but not be limited to the following activities: Establish an active research laboratory specific to the area of Spirituality and Mental Health, collect and analyze data, disseminate research findings in high quality peer reviewed publications, and participate in service-related committee work as appropriate. The selected candidate will also assist the DMU doctoral program with some teaching and supervision of student dissertations. For more information, contact Dr. David Rosmarin drosmarin@mclean.harvard.edu


PLEASE Partner with us to help the work to continue…

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

---

2021 CSTH CALENDAR OF EVENTS…

**January**

1/13  **Spirituality and Personal Resilience Lecture Series**  
Reading Hospital, West Reading, PA  
12:00-1:00 EST (via Zoom)  
Title: **Medicine and Spirituality**  
Speaker: Koenig  
Contact: Tom Adil, LPC (Thomas.Adil@towerhealth.org)

1/14  **Duke University Psychiatry Grand Rounds**  
12:00-1:00 EST (via Zoom)  
Title: **Religion, Spirituality and Mental Health: Research and Clinical Applications**  
Speaker: Koenig  
Contact: Lynn Labuda, Ed.D. (lynn.labuda@duke.edu)

1/26  **32nd International Military Chiefs of Chaplains Conference: Military Chaplain Ministry during a Pandemic**  
U.S. European Command, Stuttgart, Germany  
9:45-10:35 EST (recorded, plus Q&A via Zoom)  
Title: **Religious Involvement and Enhanced Immune Function**  
Speaker: Koenig  
Contact: Col. Kleet Barclay (Kleet.A.Barclay.mil@mail.mil)

1/26  **Spirituality & Health Research Seminar**  
12:00-1:00 EST (via Zoom)  
Title: **Moral Injury in Healthcare Professionals**  
Speaker: Sneha Mantri, M.D.  
Assistant Professor of Neurology, Duke University Movement Disorders Center  
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)

1/29  **TCCHE: Conference for Consciousness & Human Evolution: Power of Prayer, gratitude and Forgiveness**  
1:00-2:30 EST (via Zoom)  
Title: **Religion, Spirituality and Mental Health**  
Speaker: Koenig  
Contact: Giulia Boccaccini (richard@tcche.org)

**February**

2/23  **Spirituality & Health Research Seminar**  
12:00-1:00 EST (via Zoom)  
Title: **The Shalom REST (Reality Engagement and Socialization Treatment) Program**  
Speaker: Karl Benzio, M.D.  
Medical Director, Honey Lake Clinic, Greenville, FL  
Founder and Clinical Director, Lighthouse Network  
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)