

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

LATEST RESEARCH

Comparison of Symptomatic COVID-19 Cases and Controls by CDC

Researchers at the U.S. Centers for Disease Control compared community and close contact exposures of 154 symptomatic individuals with COVID-19 with those of a matched control group of 160 symptomatic individuals without COVID-19. COVID-19 was confirmed among cases using reverse transcription-polymerized chain reaction (RT-PCR) testing. Community exposures during the 14 days before illness onset included: shopping, congregating in a home with 10 or fewer persons, congregating in a home with more than 10 persons, dining in a restaurant (inside or outside), working in an office setting with others, going to a salon, engaging in public transportation, going to a bar or coffee shop, and *participating in a church or religious gathering*. **Results:** No form of participating in community gatherings distinguished COVID-19 cases from controls without COVID-19, except that cases of COVID-19 were more than double as likely to report dining at a restaurant (adjusted OR=2.4, 95% CI=1.5-3.8). When analyses were restricted to those who had not had a close contact with another person with COVID-19, cases were nearly 3 times more likely to have reported dining at a restaurant and nearly 4 times as likely to have gone to a bar/coffee shop. No difference between cases and controls was found for participating in a church or religious gathering (7.8% in COVID-19 cases and 5.0% in controls, $p=0.32$). Researchers concluded: "Implementing safe practices to reduce exposures to SARS-CoV-2 during on-site eating and drinking should be considered to protect customers, employees, and communities." Nothing was said, however, about participating in church or religious gatherings.

Citation: Fisher, K.A., et al. (September 11, 2020). Community and close contact exposures associated with COVID-19 among symptomatic adults ≥ 18 years and 11 outpatient healthcare facilities—United States, July 2020. *Morbidity and Mortality Weekly Report* 69 (36), 1258-1264.

Comment: Sample sizes were pretty small in comparing cases and controls on "participating in on-site church or religious gatherings" (12 of 154 cases vs. 8 of 160 controls). But, regardless, attending

religious gatherings on-site was at least not as bad as going to restaurants.

Frequency of Religious Attendance and COVID-19 Hospitalizations in the Netherlands

Investigators on the faculty of Philosophy, Theology and Religious Studies at Radboud University in the Netherlands examined the relationship between church attendance/church membership and hospitalization for COVID-19. Frequency of religious attendance was assessed by proportion of the population per municipality that attended worship services at least once a month. Nominal church membership was defined as the proportion of church members per municipality that attended worship services less than once a month. These religious data were collected between 2010 and 2015 by Statistics Netherlands, and included 600,000 participants. The dependent variable was total number of hospitalized patients with COVID-19 per 100,000 residents in each Dutch municipality between March 3 and May 11, 2020. Data was available on both church attendance and COVID-19 hospitalized patients available for a total of 350 municipalities. Analyses were also stratified by province location in the Netherlands (the Dutch Bible Belt in the north vs. Catholic provinces in the south). Analyses were controlled for proportion of citizens age 70 or older, proportion of overweight citizens, and likelihood of livestock farming. **Results:** In bivariate analyses, regular church attendance (once a month or more vs. less often) was unrelated to number of hospitalized patients per 100,000 residents in the Netherlands as a whole ($r=-0.00$). However, regular church attendance was significantly and positively related to hospitalization for COVID-19 in the Protestant north ($r=0.194$, $p<0.01$). This was not true for provinces in the Catholic south ($r=0.140$, $p=ns$). Nominal church membership (church members who attended less than once/month) was positively associated with hospitalization for COVID-19 in the Netherlands as a whole ($r=0.534$, $p<0.01$). However, when stratified by geographical location, this was only true in the Catholic south ($r=0.407$, $p<0.001$), not the Protestant north. Regression analyses controlling for age, being overweight, and likelihood of livestock farming indicated that proportion of regular church attenders was positively associated with COVID-19 hospitalizations for the Netherlands overall ($B=0.604$, $p<0.01$). This correlation with particularly strong for nominal church membership ($B=2.052$, $p<0.001$) and especially in the Catholic south. Researchers concluded: "On the basis of these findings, the conclusion was drawn that religion probably facilitates the spread of the virus in both a direct and indirect way. It facilitates the spread of the virus directly through worship services but also indirectly by way of endorsing more general cultural festivities like carnival and maybe even by strengthening certain non-religious social bonds."

Citation: Vermeer, P., & Kregting, J. (2020). Religion and the Transmission of COVID-19 in The Netherlands. *Religions*, 11(8), 393.

Comment: Besides being cross-sectional, the major weakness of this study was that frequency of church attendance was assessed between 2010 and 2015, long before the 2020 COVID-19 pandemic (not during the time period when COVID-19

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hospitalizations were measured). The results of this study may also suffer from the “ecological fallacy,” where relationships between religious involvement and health outcomes at the community or regional level are assumed to apply to those on the individual level. If one assumes that frequency of in-person religious attendance was proportionally similar in 2020 as it was in 2010-2015 and that the ecological fallacy is not operative in this case, then the findings are noteworthy. This is one of the few studies (if not only) examining the relationship between religious attendance/membership and COVID-19 hospitalizations to date.

Christian Nationalism, Religiosity and Behavior during COVID-19 Pandemic

Researchers in the department of sociology at the University of Oklahoma analyzed data from a 3-wave longitudinal study collected as part of the Public and Discourse Ethics Survey (PDES). A total of 2,519 Americans initially completed an online survey (convenience sample); of those, 1,255 completed all three waves of the survey and were without missing data. The data were weighted for age, gender, race, education, and census region in order to ensure a nationally representative sample. Participants were assessed in August 2019 (Wave 1), in February 2020 (Wave 2), and then in May 2020 (Wave 3). At Wave 3, information was gathered on experiences and behaviors during the COVID-19 pandemic, assessed by a 8-item “incautious behavior scale” (e.g., ate inside a restaurant, attended a gathering of 10+ people, went to a place of worship, went to work outside the home, etc.) and a 4-item “precautionary behavior scale” (washed hands more than typical, avoided touching face, used hand sanitizer, wore a mask in public). Christian nationalism was assessed at Wave 2 by a 6-item scale by agreement to the following statements: “The federal government should declare the United States a Christian nation”; “The federal government should advocate Christian values”; “The federal government should enforce strict separation of church and state” (scored in reverse); “The government should allow prayer in public schools”; “The government should allow religious symbols in public spaces”; and “The success of the US is part of God’s plan.” Religious tradition was assessed at Wave 1 by six categories: born-again Protestant, liberal Protestant, Catholic, other Christian, other religion, and secular. Religiosity was assessed at Wave 1 by a 3-item scale measuring frequency of religious attendance, frequency of prayer, and importance of religion. Controlled for in analyses were age, gender, race, marital status, number of children, education, income, and political affiliation. **Results:** Regression analyses controlling for covariates revealed that Christian nationalism was positively associated with incautious behaviors ($b=0.094$, $p<0.05$) and was negatively correlated with precautionary behaviors ($b=-0.106$, $p<0.05$). Interestingly, greater religiosity was positively associated with more precautionary behaviors ($b=0.362$, $p<0.05$) and was unrelated to incautious behaviors. With regard to specific behaviors, the strongest positive correlations between Christian nationalism and incautious behaviors were for ate inside a restaurant, attended a gathering of 10+ people, and visited family or friends in-person. The strongest negative correlations between Christian nationalism and precautionary behaviors were for avoiding touching face and wearing a mask. For religiosity, the only positive correlation with incautious behaviors was for attending a place of worship (not surprisingly). The strongest positive correlations for engaging in precautionary behaviors were for washing hands, using hand sanitizer, and wearing a mask. Researchers concluded: “we find Christian nationalism was the leading predictor that Americans engaged in incautious behavior... and was the second strongest predictor that Americans took fewer precautions. Religiosity, in contrast, was the leading predictor that Americans engaged in more frequent precautionary behaviors.”

Citation: Perry, S. L., Whitehead, A. L., & Grubbs, J. B. (2020). Culture wars and COVID-19 conduct: Christian nationalism,

religiosity, and Americans’ behavior during the coronavirus pandemic. *Journal for the Scientific Study of Religion*, 59(3), 405-416.

Comment: Interesting findings, especially the differences in precautionary behaviors between those endorsing Christian nationalism and those with a higher level of religiosity.

Impact of COVID-19 on Religion in Saudi Arabia

At the time the authors wrote this article, they indicated that on March 26, 2020 there were 1012 COVID-19 cases and 3 deaths in Saudi Arabia. By September 11, 2020, six months later, those numbers had increased to 325,000 confirmed cases and 4,213 deaths. This article, written by members of the Saudi Ministry of Health in Riyadh, describes precautions taken by the Saudi government in March 2020 to limit the spread of the coronavirus. This included the suspension of Umrah (the lesser pilgrimage to Mecca) on February 27, careful monitoring of the situation with regard to the Hajj in July, and the implementation of many other closures, as described in this now somewhat dated article.

Citation: Yezli, S., & Khan, A. (2020). COVID-19 social distancing in the Kingdom of Saudi Arabia: Bold measures in the face of political, economic, social and religious challenges. *Travel Medicine and Infectious Disease*, E-pub ahead of press. [See also Atique, S., & Itumalla, R. (2020). Hajj in the Time of COVID-19. *Infection, Disease & Health*, E-pub ahead of press]

Comment: In July 2020, the Saudi government limited the Hajj (one of the five pillars of Islam) to only those currently residing in Saudi Arabia and to a total of 1000 pilgrims for this weeklong visit to Mecca (vs. the usual attendance of 2.5 million attendees). No persons over the age of 65 or anyone with chronic illness were allowed to participate in the Hajj; all participants had to wear facemasks at all times and keep physical distancing of 1.5 meters (5 feet) during rituals and mass prayers; and no one was allowed to touch or kiss the Kaaba (<https://www.aljazeera.com/news/2020/06/hajj-2020-year-pilgrimage-200623085733669.html>). In mid-March, mosques were also closed for 5 daily prayers and congregating on Fridays (<https://www.reuters.com/article/us-health-coronavirus-saudi/saudi-arabia-suspends-prayers-at-mosques-over-coronavirus-idUSKBN2143DH?il=0>), although by May 31, 2020, mosques were re-opened (<https://www.aljazeera.com/news/2020/05/strict-measures-saudi-worshippers-mosques-reopen-200531163637648.html>). There has been a steady decrease in COVID-19 cases in Saudi Arabia from a peak of 4,019 new cases on June 17 to 775 new cases on September 9.

Does Religiosity Predict the Development of Major Depression in Japan?

Investigators in the division of general internal medicine at St. Luke’s International Hospital in Tokyo, Japan, and other academic institutions in the U.S. and Japan, examined the effect of self-reported religiosity on the development of major depressive disorder (MDD) among 67,723 outpatients recruited from a large hospital in Tokyo. Participants were not depressed and did not have a history of depression at baseline. During the 7-year follow-up, a total of 1,911 participants develop MDD. The diagnosis of MDD was based on information from medical records at the hospital and participant self-reports; an experienced physician made the diagnosis of MDD based on this information using DSM-IV criteria. Religiosity was assessed by a single question: “Are you religious?” Possible responses included “not at all religious,” “slightly religious,” “moderately religious,” or “extremely religious.” Covariates included demographic characteristics, health habits, and medical histories. Multivariate logistic analyses with generalized estimating equations adjusted for potential covariates while predicting the development of new MDD. **Results:** Bivariate analyses indicated a positive relationship between religiosity and likelihood of developing MDD ($p<0.01$). After controlling for time,

age, gender, smoking, alcohol consumption, exercise, body mass index, marital status, and medical history (but not socioeconomic status), those who were moderately or extremely religious were more likely than those in the not-religious-at-all group to develop MDD (OR=1.30, 95% CI=1.14-1.49, for the moderately religious group; OR=1.51, 95% CI=1.28-1.78, for the extremely religious group). However, the findings also indicated that those who increased their religiosity from baseline during the 7-year follow-up were significantly *less likely* to develop MDD compared to those who reported the same degree of religiosity at baseline and follow-up (OR=0.85, 95% CI=0.75-0.97).

Citation: Kobayashi, D., First, M. B., Shimbo, T., Kanba, S., & Hirano, Y. (2020). Association of self-reported religiosity with the development of major depression in multireligious country Japan. *Psychiatry and Clinical Neurosciences*, EPUB ahead of press.

Comment: Less than 40% of the Japanese population practice an organized religion (primarily Shintoism or Buddhism or both, and 2% are Christian); approximately two-thirds have no religion or practice a form of folk Shintoism. Only 10% of the Japanese population consider religion to be very important to them, according to the authors. In the current sample, 63% of participants indicated that they were either not religious at all or only slightly religious. Thus, participants in this study who indicated they were religious were a minority group, and therefore may have been under greater societal and cultural pressures compared to the nonreligious majority, increasing risk of developing depression in the former.

Do People Become More or Less Religious as Death Approaches?

Investigators in the department of economics at LMU Munich, Germany, analyzed cross-sectional data obtained on a total of 311,360 persons surveyed during rounds 3-6 of the World Values Surveys conducted between 1994 and 2014. These surveys involved representative samples obtained in nearly 100 countries. The purpose was to examine the relationship between importance of religion in life (1=not important; 4=very important) and estimates of future life expectancy based on age and gender. Estimates of future life expectancy for a given age and gender in a particular country were obtained from period life tables assembled by United Nations for years when the WVS was administered. A sophisticated set of multivariate regression analyses was used to create models controlling for sociodemographic characteristics such as education, income, number of children, and marital status. **Results:** Regression analyses indicated that estimated remaining years of life was *positively* correlated with importance of religion, i.e., greater religiosity was associated with more (not less) estimated years of remaining life. Thus, as estimated years of remaining life decreased (as death approached), importance of religion also decreased. These results caused the authors to conclude that "Contrary to wide-held beliefs, religiosity decreases with greater expected proximity to death."

Citation: Lechler, M., & Sunde, U. (2020). Aging, proximity to death, and religiosity. *Population and Development Review*, EPUB ahead of press

Comment: These findings are in stark contrast to most research reported previously, including longitudinal studies and qualitative research, showing an increase in religiosity as death approaches. Why do the results from this study differ from prior studies? First, the WVSs are cross-sectional in nature, not longitudinal, thus preventing any conclusions regarding causality no matter how sophisticated the statistical analyses. Thus, this study did not examine how religiosity changes as death approaches among individual persons, as would be the case in a longitudinal study. Second, investigators examined the relationship between religiosity on the individual level, but the estimates of future life expectancy at the country level (not individual level). This design increases the likelihood of the "ecological fallacy" (as noted

above), which involves making erroneous conclusions about religiosity and health outcomes (including life expectancies) at the regional level and applying those findings to relationships at the individual person level. For example, Alabama and Mississippi have some of the poorest health outcomes at the state level of any U.S. state, yet are among the most religious states; despite this positive relationship between religiosity and poor health at the regional level, relationships between religiosity and poor health at the individual level are usually negative (i.e., religiosity is usually positively related to better health in the states). Finally, it is not clear if the complex statistical methodology employed here considered the fact that countries where the average age of the population is older (and thus have shorter life expectancies) tend to be less religious, such as Japan and many of the northern European countries. Countries in which the average age of populations is younger (and therefore have longer life expectancies) tend to be more religious, such as countries in Africa, South America, etc. If not taken into account, then, this would help to account for lower religiosity among those with shorter life expectancies and higher religiosity among those with longer life expectancies. Thus, this study does not definitively establish that persons become less religious as death approaches, which previous research, common sense, and clinical experience all argue against.

Ageism, Religiosity and Well-Being among Older Adults in Europe

Researchers in the department of sociology at Ewha Women's University in Seoul, South Korea, and Nanyang Technical University in Singapore, examined the buffering effects of religiosity on the relationship between (a) systematic discrimination against people because of their age (ageism) and (b) psychological well-being. Participants were a random sample of 17,053 adults age 55 or older from 29 countries in Europe (wave IV of the European Social Survey 2008/2009). Outcome variables were self-rated health, happiness, and life satisfaction. The main predictor variable was ageism, which was assessed by a 3-item index (e.g., "How often, in the past year, has anyone shown prejudice against you or treated you unfairly because of your age?"). Religiosity, the moderating variable, was assessed by frequency of attendance at religious services and frequency of religious prayer. **Results:** Frequency of religious attendance was positively associated with self-rated health, level of happiness, and life satisfaction in regression models that controlled for age, gender, marital status, education, financial hardship, minority status, social integration, general trust, religious denomination, individual level religiosity, and ageism. In contrast, ageism was negatively correlated with self-rated health, happiness, and life satisfaction in all models. There was also an interaction between average country religious attendance and ageism in predicting well-being in all of the models, such that in countries with an overall higher average religious attendance, the negative correlation between ageism and well-being was significantly weaker compared to the relationship in countries with a lower average religious attendance. Similar results were obtained for average prayer at the country level. Unfortunately, the interaction between ageism and individual-level religious attendance or prayer on well-being was apparently not examined. Researchers concluded: "These findings suggest that the country's religious environment serves as a buffer against deleterious health consequences of ageism for the older population."

Citation: Kim, H. H. S., & Jung, J. H. (2020). Ageism, religiosity, and wellbeing among older adults: Evidence from the European Social Survey (ESS4). *Research on Aging*, EPUB ahead of press.

Comment: The relationship between religiosity and well-being is known to be weaker in less religious areas of the world such as Europe. However, in this study, positive relationships between religiosity and well-being were relatively robust, despite control for

multiple potential confounders. Also, the buffering effect of country-level religiosity on the inverse correlation between ageism and well-being is also notable. However, as in the previous study above, this study was cross-sectional in design and the ecological fallacy may also have been operative here as well (since religiosity was assessed at the regional level).

Religiosity and Parental Monitoring to Prevent Youth Suicide

Investigators from the department of social work at the University of Mississippi and other universities in the southern U.S. analyzed cross-sectional data from 14,272 youth ages 12-17 who participated in the 2016 National Survey on Drug Use and Health. The purpose was to identify associations between religiosity, parental monitoring, and suicidal thoughts. Religiosity was assessed by a 4-item scale assessing frequency of religious service attendance and importance of religious beliefs. A 7-item scale was used to assess parental monitoring including, for example, checking homework, providing help for homework, limiting amount of time watching TV, limiting amount of time spent out with friends on school nights, and encouraging children when they have done a good job. The dependent variable, suicidal thoughts, was measured by a 3-item scale that asked about thoughts about death, feeling better if dead, and thinking about killing self. Also assessed was a 9-item measure of depressive symptoms. Mediation, moderation, and moderated mediation analyses were conducted using the PROCESS macro for SPSS.

Results: Bivariate analyses revealed a significant inverse relationship between religiosity and suicidal ideation and an inverse relationship between parental monitoring and suicidal ideation (both $p < 0.01$). The same was true for religiosity and parental monitoring and depressive symptoms (both $p < 0.01$). In the main analyses, depression was found to fully explained (mediate) the relationship between religiosity and suicide ideation. Parental monitoring moderated the relationship between depression and suicidal ideation (high levels of depression were especially related to suicidal ideation among those with low parental monitoring), but parental monitoring did not moderate the relationship between religiosity and suicidal ideation.

Citation: Kim, Y. J., Moon, S. S., Kim, Y. K., & Boyas, J. (2020). Protective Factors of Suicide: Religiosity and Parental Monitoring. *Children and Youth Services Review*, EPUB ahead of press.

Comment: The suicide rate among girls ages 15-19 in the U.S. doubled between 2007 and 2015, and 17% of students in grades 9 to 12 have seriously considered attempting suicide in past 12 months. Given these increasing rates of suicide among U.S. adolescents, the current cross-sectional findings are notable.

Religiosity, Non-Suicidal Self Injuries, and Suicidal Behaviors in Jewish Adolescents

Researchers from the department of adolescent psychiatry at Jerusalem Mental Health Center analyzed cross-sectional data from a small sample of 60 psychiatrically hospitalized Jewish adolescents. The purpose was to examine the relationship between religiosity and non-suicidal self-injuries (NSSI), as well as suicidal behaviors. Religiosity was measured by self-identification as ultra-Orthodox (Haredi), observant (National Haredi, National religious, light religious), and non-observant (traditional or secular). The 20-item Katz Student Religiosity Questionnaire was used to assess intrinsic religious principles/beliefs (biblical miracles, rabbinical authority, reward and punishment, individual supervision by God, resurrection of the dead, creation ex nihilo, oral law, messianic era, divine law, prophecy) and extrinsic religious practices (Sabbath observance, inter-sex socializing, dietary law observance, observance of days of mourning, observance of fast days, grace before meals, Sabbath termination prayers, giving of tithes). Analyses were controlled for sex and history of abuse.

Results: NSSI was inversely correlated with a higher level of extrinsic religious practices ($p = 0.007$), a higher level of intrinsic religious principles/beliefs ($p = 0.005$), and a higher level of religious observance ($p = 0.02$); correlations remained significant after adjusting for gender. Likewise, greater extrinsic religious practice was associated with less suicidal ideation ($p = 0.03$), as was a higher level of religious observance ($p = 0.04$); these associations remained significant when corrected for history of child abuse and gender. Finally, transition in religious degree (change in religious observance, assuming from more to less) was positively associated with greater suicidal ideation ($p = 0.004$) and a greater likelihood of suicide attempt ($p = 0.005$); however, these relationships were explained (mediated) by history of child abuse. Researchers concluded "This study provides first evidence of a protective effect of some religiosity measures on NSSI and suicidal behaviors in hospitalized Jewish adolescents."

Citation: Malkosh-Tshopp, E., Ratzon, R., Gizunterman, A., Levy, T., Ben-Dor, D. H., Krivoy, A., ... & Shoval, G. (2020). The association of non-suicidal self-injurious and suicidal behaviors with religiosity in hospitalized Jewish adolescents. *Clinical Child Psychology and Psychiatry*, EPUB ahead of press.

Comment: Although a small sample and cross-sectional in design, this is one of the first studies to examine the relationship between religiosity and NSSI, suicidal ideation and attempts, in psychiatrically hospitalized Jewish adolescents in Israel.

Religiosity and Mental/Behavioral Outcomes among Adolescents in Child Protective Services

Researchers in the school of social work at Hunter College, City University of New York, analyzed data from an 18-month longitudinal study of a representative sample of 5,872 U.S. youth ages 0-18 involved in child protective services stemming from child abuse or neglect (National Survey of Child and Adolescent Well-Being). Most of the full sample (82%) were excluded because they were under the age of 11, leaving 474-552 participants ages 11-18 who were followed from 2008-2009 (Wave I) for 18 months (Wave II), which comprised the data set for analysis. Religiosity was assessed by importance of religion and frequency of attendance at religious services in Wave I. Seven outcomes were examined in Wave II: substance use disorder (SUD), positive future expectations, delinquency, depression, loneliness, school disengagement, and early sexual activity. Logistic regression was used to examine the effects of religiosity at Wave I on each of the seven outcomes at Wave II. Statistical analyses controlled for gender, age, race, child welfare information, child welfare worker's report of five family risk factors, report of youth trauma for youth suffering severe trauma, and social support (including availability of assistance with child-rearing). Baseline levels of the seven outcomes were not controlled for in these analyses. **Results:**

Youth who indicated that religiosity was very important were 53% less likely to have a SUD at 18-month follow-up (OR=0.47, 95% CI=0.24-0.90). In addition, those who reported religiosity was very important were 2.27 times more likely to have positive future expectations (OR=2.27, 95% CI=1.11-4.65). Importance of religion had no effect on any of the other seven outcomes. In addition, frequency of religious attendance had no effect on any of the seven outcomes. Researchers concluded: "In order to help prevent SUD and promote positive future expectations, professionals or caregivers can: (1) assess levels of religiosity and desire to grow accordingly; and (2) suggest use of resources in the community that foster religiosity."

Citation: Lalayants, M., Oyo, A., & Prince, J. D. (2020). Religiosity and outcomes among child welfare-involved youth. *Child and Adolescent Social Work Journal*, 37(3), 251-261.

Comment: This is one of the few longitudinal studies examining the effects of religiosity on mental and behavioral health of adolescents with a history of abuse or neglect during childhood referred to Child Protective Services. The relatively large random

sample is another study strength. The main study weakness is that baseline levels of the seven outcomes were not included in regression analyses.

Religiosity, Mental Health, and Quality of Life in Women with Chronic Pelvic Pain

Researchers in the department of gynecology and obstetrics at the Federal University of Goias, Brazil, analyzed data collected from 100 women with chronic pelvic pain in Brazil. Religiosity was assessed using the 5-item Duke University Religion Index. Pain intensity was assessed, as usual, with a 0-10 visual analogue scale. Also measured were depression and anxiety symptoms (14-item HADS), as well as quality of life (26-item WHOQOL-BREF). Regression analyses controlled for age, race, education, and BMI.

Results: Average age of participants was 38 years, average duration of pain was 7 years, and average rating of pain of 7.8 (fairly severe). Participants were 51% Catholic, 37% Protestant, and 3% Spiritualists, while 9% had no religious affiliation. Those who were more religious scored higher on quality of life (psychological component) and were less likely to have a mixed anxiety and depressive disorder (MADD), after adjustments for confounders. However, no association was found between frequency of religious attendance, frequency of private religious activities, or level of intrinsic religiosity and chronic pain scores.

Citation: Nunes-Reis, A. R., Da Luz, R. A., De Deus, J. M., Martinez, E. Z., & Conde, D. M. (2020). Association of religiosity with mental health and quality of life in women with chronic pelvic pain. *International Journal of Psychiatry in Medicine*, EPUB ahead of press.

Comment: Given that (a) this was a highly religious sample [frequency of weekly religious attendance (49%), daily private religious activities (62%), and agreement with intrinsic religious statements (e.g., 94% agreement with statement "In my life, I experience the presence of the Divine or God"]; (b) the sample size was relatively small; and (c) reverse causation was likely present (high levels of pain increasing religious activity, especially private religious activity), the findings with regard to the relationship between religiosity chronic pain are not unexpected in these cross-sectional analyses.

Religiosity and Self-Management in Patients Hospitalized with Acute Coronary Syndrome

Investigators in the department of population and quantitative health sciences and department of medicine at the University of Massachusetts Medical School in Worcester conducted a secondary data analysis involving 2,067 patients hospitalized for an acute coronary syndrome (ACS) at six medical centers in central Massachusetts and Georgia. Religiosity was assessed by a 3-item scale measuring strength and comfort from religion, making petitionary prayers for their own health, and awareness of intercessory prayers for others for their health. Patient self-care was assessed by a 6-item patient activation measure that measured knowledge, skills, and confidence in self-care. Adjusted for in analyses were sociodemographic (age, gender, race/ethnicity, education, marital status, employment status), psychosocial (perceived stress, depression, anxiety, health literacy, social support, cognitive impairment, health-related quality of life), and clinical characteristics during hospitalization (length of hospitalization, previously diagnosed core morbidities, type of acute coronary syndrome, and receipt of in-hospital interventional procedures). **Results:** Compared to those who indicated no strength and comfort from religion, those who indicated either "a little/some" or "a great deal" of such support were significantly more likely to score high on the patient activation scale (adjusted OR=1.45, 95% CI=1.07-1.98, and OR=2.02, 95% CI=1.44-2.84, respectively). Likewise, those who indicated that others were making intercessory prayers for their health, were also more likely

to be activated for self-care (adjusted OR=1.48, 95% CI=1.07-2.05). In contrast, petitionary prayers said for one's own health ("Do you use prayer specifically for your health?") was related to a lower likelihood of patient activation (OR=0.78, 95% CI=0.61-0.99). Researchers concluded: "Strength and comfort from religion and intercessory prayers for health were associated with high patient activation. Petitionary prayers for health were associated with low activation. Healthcare providers should use knowledge about patients' religiosity to enhance patient engagement in their care." *Citation:* Abu, H. O., McManus, D. D., Kiefe, C. I., & Goldberg, R. J. (2020). Religiosity and patient activation among hospital survivors of an acute coronary syndrome. *Journal of General Internal Medicine*, 35(3), 762-769.

Comment: Why strength and comfort from religion and receiving prayers from others for health were both positively related to patient activation (increased self-management for ACS), while prayer for one's own health was related to significantly lower patient activation, is not clear. However, it is possible that those who were more likely to pray for their own health were more likely to take a passive approach to self-care (depending instead on God to help them recover, rather than doing their part to care for themselves).

Development of the NERSH Questionnaire

Over the past 5 years, a Network for Research on Spirituality and Health (NERSH) has formed to study religion/spirituality among healthcare professionals and its impact on attitudes related to healthcare. Researchers from nine countries (Denmark, Saudi Arabia, Brazil, Germany, South Korea, Indonesia, United States, India, and Switzerland) have developed a questionnaire (NERSH Questionnaire) in order to facilitate research in this area. The questionnaire is based on the "Religion and Spirituality in Medicine, Perspectives of Physicians" (RSMPP) questionnaire developed by Farr Curlin and colleagues at Duke University to study physicians in the U.S. The present article describes the methodology behind development of the NERSH Questionnaire and the initial psychometric properties of the questionnaire, including reliability and dimensionality. The article also describes the construction of a data pool resulting from the administration of the NERSH questionnaire to over 6000 physicians and other healthcare professionals in 12 countries.

Citation: Kørup, A. K., Søndergaard, J., Alyousefi, N. A., Lucchetti, G., Baumann, K., Lee, E., ... & Schouten, E. (2020). The international NERSH data pool of health professionals' attitudes toward religiosity and spirituality in 12 countries. *Journal of Religion and Health*, EPUB ahead of press.

Comment: Readers from around the world should be aware of this questionnaire, particularly those wishing to conduct research on the religious/spiritual beliefs of healthcare professionals in order to understand how this impacts their healthcare attitudes and practices. The article formally invites interested readers and researchers to join the NERSH collaborative, instructing interested persons to contact professor Niels Hvidt at nchvidt@health.sdu.dk.

NEWS

Duke University's Monthly Spirituality and Health Webinars via Zoom

As noted in the September issue of Crossroads, 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. 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 join yourself and forward it to your colleagues and students. This month's seminar will be delivered by psychiatrist Theresa

Yuschok, M.D., Medical Instructor in the Department of Psychiatry and Behavioral Science, Duke University Health System, titled **LAUGHTER: Benefits to Mind, Body, Spirit**. Laughter is indeed the best medicine for these troubled times.

Duke University's Spirituality and Health Webinar Presentations now Available

The PDFs of the Power Point slides for the July 28 webinar (COVID-19, Religion and Health), Aug 25 webinar (Islam and Mental Health), and Sept 29 webinar (Perceptions of Food, Faith and Health from a Christian Context) are now available for download at <https://spiritualityandhealth.duke.edu/index.php/education/seminars>. In addition, the complete Aug 25 webinar on Islam and Mental Health and Sept 29 webinar on Perceptions of Food, Faith and Health are now available for viewing on at the website link above.

SPECIAL EVENTS

7th European Conference on Religion, Spirituality and Health

(Lisbon, Portugal, May 27-29, 2021)

The 2021 European Conference will focus on "Aging, Health and Spirituality" and will be held at the Catholic University of Portugal in Lisbon, one of the most beautiful cities in Europe.

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 Buessing, Prof. Niels Hvidt, Prof. Constantin Klein, and a number of other European presenters. For more information, go to: <http://ecrsh.eu/ecrsh-2020> or contact Dr. Rene Hefti at info@rish.ch.

17th Annual Duke University Summer Research Workshop

(Durham, North Carolina, August 9-13, 2021)

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.

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 newsletter). For more information, go to:

<https://spiritualityandhealth.duke.edu/index.php/5-day-summer-research-course>

RESOURCES

Books

Rituals and Practices in World Religions (Springer International, 2020)

From the publisher: "This book codifies, describes, and contextualizes group rituals and individual practices from world religious traditions. At the interface of religious studies, psychology, and medicine, it elucidates the cultural richness of practices and rituals from numerous world religions. The book begins by discussing the role that religious rituals and practices may play in the well-being of humans and the multi-dimensional cultural and psychological complexity of religious rituals and practices. It then discusses rituals and practices within a number of religions, including Christian, Islamic, Jewish, Buddhist, Taoist, Sikh, Hindu, Confucian, and other traditions. There is a need for a more inclusive collection of religious rituals and practices, as some practices are making headlines in contemporary society. Mindfulness is one of the fastest-growing psychological interventions in healthcare and Yoga is now practiced by tens of millions of people in the U.S.A. These practices have been examined in thousands of academic publications spanning neuroscience, psychology, medicine, sociology, and religious studies. While Mindfulness and Yoga have recently received widespread scientific and cultural attention, many rituals and practices from world religious traditions have remained underexplored in scholarly, scientific, and clinical contexts. This book brings more diverse rituals and practices into this academic discourse while providing a reference guide for clinicians and students of the topic." Available for \$79.05 (hardcover) at <https://www.amazon.com/Rituals-Practices-World-Religions-Cross-Cultural/dp/3030279529>.

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-Religion-Mental-Health-Rosmarin/dp/0128167661>.

Religion and Recovery from PTSD (Jessica Kingsley Publishers, 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 interpersonal violence, or combat experiences during war. They delve into the impact that spirituality has in both the development of and recovery from PTSD. Beyond reviewing research, they also use case vignettes throughout to illustrate the very human story of recovery from PTSD, and how religious or spiritual beliefs can both help or

hinder depending on circumstance. A vital work for any mental health or religious professionals who seek to help people dealing with severe trauma and loss." 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 \$67.38 (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)

For mental health professionals, clergy, researchers, and laypersons interested in the relationship between religion, spirituality and mental health in Muslims. Available for \$7.50 at: <https://www.amazon.com/Islam-Mental-Health-Research-Applications/dp/1544730330>.

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, and researchers interested in the relationship between religion, spirituality and 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/>

Spirituality & Health Research: Methods, Measurement, Statistics, & Resources

(Templeton Press, 2011)

This book summarizes and expands the content presented in the Duke University's Annual Summer Research Workshop on Spirituality and Health. Available for \$29.15 (used) at:

<http://www.amazon.com/Spirituality-Health-Research-Measurements-Statistics/dp/1599473496/>

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>.



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.



JOINTLY ACCREDITED PROVIDER™
INTERPROFESSIONAL CONTINUING EDUCATION

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)*™. 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**. These scholarships will cover the \$1200 tuition, up to \$1500 in international travel costs, and up to \$900 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 Health Care. 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/>

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>.

2020 CSTH CALENDAR OF EVENTS...

October

10/27 Spirituality & Health Research Seminar via Zoom
12:00-1:00 EST
Title: **LAUGHTER: Benefits to Mind, Body, Spirit**
Speaker: Theresa Yuschok, M.D., Medical Instructor
Department of Psychiatry and Behavioral Science, Duke University Health System
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)

November

11/17 Spirituality & Health Research Seminar via Zoom
12:00-1:00 EST
Title: **Spirituality, Trauma and Loss among Adolescents in Foster Care**
Speaker: Aurellia Anderson, MDiv, MA
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)

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

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