

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 issues (July 2007 through June 2022) go to: <http://www.spiritualityandhealth.duke.edu/index.php/publications/crossroads>

LATEST RESEARCH

Changes in Religiosity and Human Flourishing during COVID-19

Researchers at Oxford University in the United Kingdom and Harvard University in the United States conducted a survey of 1,480 adults from 12 diverse faith communities in the United States (Washington DC, Maryland, Virginia, and Texas). The purpose was to examine the effect on human flourishing of perceived changes in religiosity from before the COVID-19 pandemic to during the pandemic. The survey was conducted online between October and December 2020. Faith communities included Catholic, Evangelical, Jewish, Baptist, Mormon, and Hindu. Perceived changes in four dimensions of religiosity were assessed: importance of religion, frequency of prayer, frequency of religious service attendance, and sense of connectedness to one's faith community. Participants were asked how each of these four dimensions of religiosity had changed since the COVID-19 pandemic started (decreased, stayed the same, or increased). Human flourishing was assessed with the 10-item Flourishing Index (VanderWeele). Multivariate analyses controlled for age, gender, race, marital status, education, income, and political party. Also included was a measure of religious service attendance before the COVID-19 pandemic. A series of linear multilevel regression models were estimated for each of the five dimension of human flourishing and for overall flourishing as outcomes.

Results: A decrease in any of the four dimensions of religiosity (vs. no change) was associated with a decrease in every single dimension of human flourishing including overall flourishing (with β 's ranging from -1.11 for decrease in importance of religion to -0.22 for decrease in religious attendance (all p values <0.05 after Bonferroni correction). Researchers concluded: "Based on multilevel regressions, results indicated that self-reported decreases each dimension of religiosity were associated with lower overall flourishing. This pattern of findings was largely similar for the domains of flourishing, with some variation in the strength of associations that emerged... Faith communities might have to find ways of supporting members during the challenging COVID-19 period to prevent long-term declines in flourishing."

Citation: Jacobi, C. J., Cowden, R. G., & Vaidyanathan, B. (2022). Associations of changes in religiosity with flourishing during the COVID-19 pandemic: A study of faith communities in the United States. *Frontiers in Psychology*, 13, EPUB ahead of press.

Comment: Rather than showing a positive correlation between religiosity and mental health during the COVID-19 pandemic, as other studies have reported, this study found that the declines in religiosity were associated with decreases in all aspects of human flourishing, including life satisfaction and happiness, mental and physical health, meaning and purpose, character and virtue, and close social relationships.

Religiosity, Alcohol Consumption, Health and Sleep Quality during the COVID-19 Pandemic in the U.S.

Investigators from the department of health management and policy at the University of Miami, Florida, analyzed data from a 1-month online longitudinal survey of 680 participants at baseline in March 2020 who completed follow-up in April-May 2020. The purpose was to examine the effects of religiosity and other predictor variables on self-rated health, alcohol consumption, and sleep quality during this time. Self-rated physical and mental health (whether it had worsened in the past three months) were assessed by single items. Alcohol consumption was assessed by a single question asking about whether alcohol consumption had increased in the past three months. Sleep quality was measured by a single question asking whether the quality of sleep had gotten worse. Religiosity was also assessed by single item rated from 1 (not at all religious) to 7 (extremely religious). Other predictors included age, gender, race, ethnicity, marital status, number of children, education, employment status, and whether or not participant had ever been diagnosed with mental illness. Random effects logit models were conducted to analyze the data with change scores calculated for the dependent variables (outcomes). **Results:** During the 1-month period of follow-up, physical health, mental health, sleep quality, and alcohol consumption all worsened, declining on average (or increasing for alcohol consumption) by 6%-9%. Religiosity was protective against declining mental health, worsening sleep quality, and increasing alcohol consumption in these analyses. Researchers concluded: "Results show that individuals reported significantly worse outcomes in all four areas as the pandemic progressed, especially for alcohol consumption and sleep quality. In general, age, non-white race, religiosity, and resiliency are protective factors while being female and having greater fear of the coronavirus are risk factors."

Citation: French, M. T., Mortensen, K., & Timming, A. R. (2022). Changes in self-reported health, alcohol consumption, and sleep quality during the COVID-19 pandemic in the United States. *Applied Economics Letters*, 29(3), 219-225.

Comment: Although all major variables in this study were assessed by only single-item measures, and the follow-up period was relatively short, religiosity appeared to help protect against some of the negative mental health effects of the COVID-19 pandemic in these longitudinal analyses.

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Religiosity, Depression and Anxiety in Moroccan Cancer Patients

Researchers from the departments of medicine and pharmacy at Mohammed V. University in Rabat, Morocco, analyzed associations between religiosity, depression, and anxiety in 1,055 Moroccan cancer patients (93.7% response rate; 77% female, majority of participants ages 40-60, 74% married, 100% Islam). Religious characteristics assessed included religiosity, religious practices, prayer, fasting, pilgrimage to Mecca, giving charity, reading or listening to the Qur'an, wearing religious clothing (hijab), belief that cancer was a divine test, leaving that the cancer was divine punishment, and other religious practices such as Ruqya (i.e., seeking healing through reading and reciting versus from the Qur'an, seeking of refuge in Allah, repeating the names and attributes of Allah, and saying the prayers in Arabic, as the Prophet Mohammad would do when sick). The Hospital Anxiety and Depression Scale (HADS) was used to assess the primary dependent variables of anxiety and depression. Logistic regression analyses were used to analyze the data while controlling for sociodemographic characteristics. **Results:** Anxiety symptoms were inversely related to prayer ($p < 0.001$), considering the cancer divine test ($p < 0.01$), and practicing Ruqya ($p < 0.01$). Depressive symptoms were inversely related to prayer ($p < 0.001$), reading the Qur'an ($p < 0.001$), and being a practicing believer ($p = 0.001$). However, for some reason, wearing a hijab was positively correlated with both anxiety and depression. Researchers concluded: "These findings suggest that religiosity is important for cancer patients in Morocco and is also associated with a better quality of life."

Citation: Elkhalloufi, F., Boutayeb, S., Alaoui, Y. L., Zakkouri, F. A. Z., Jaouhari, M. E., & Errihani, H. (2022). Association between religiosity, depression, and anxiety among Moroccan cancer patients. *Journal of Religion and Health*, EPUB ahead of press. *Comment:* Although a cross-sectional study, the large sample size and strong inverse correlations between religious practices and both anxiety and depression in these Muslim Moroccan cancer patients is worth noting.

Religion, Hope, Purpose and Depressive Symptoms in Black Americans

Investigators analyzed data from a 10-year prospective study (US Health and Retirement Study) of 1,906 community-dwelling Black Americans ages 51 and older, examining the relationship between religiosity, hope, purpose in life, and depressive symptoms. Hope was assessed by a 2-item scale; purpose in life by a 7-item scale; depressive symptoms by the 8-item CES-D; and religiosity by 4 items: "I believe God watches over me;" "Events in my life unfold according to a divine or greater plan;" "I try hard to carry my religious beliefs into all my other dealings in life;" and "I find strength and comfort in my religion." Other covariates included physical functioning, chronic disease burden, and sociodemographic factors such as age, gender, nativity, marital status, education, poverty status, and employment status. Linear mixed models were used to examine effects of religiosity on depressive symptoms over time using a series of six models that included interactions between religiosity and age, hope and age, and purpose and age. **Results:** Bivariate cross-sectional analyses at Wave 1 indicated significant positive relationships between religiosity and greater hope ($r = 0.07$, $p < 0.01$), more purpose in life ($r = 0.16$, $p < 0.001$), and fewer depressive symptoms ($r = -0.29$, $p < 0.001$). In linear mixed models examining the effects of religiosity on depressive symptoms over time, after controlling for hope and purpose in life, no relationship was found. Interactions between age and religiosity were not significant. Age-stratified analyses resulted in similar findings, again after controlling for hope and purpose in life. Researchers concluded: "In contrast to

our findings for hope and purpose in life, subjective religiosity was unrelated to depressive symptoms for all age groups."

Citation: Mitchell, U. A., Nguyen, A. W., & Brown, L. L. (2022). Hope, purpose, and religiosity: The impact of psychosocial resources on trajectories of depressive symptoms among middle-aged and older Blacks. *Journal of Aging and Health*, 34(3), 363-377.

Comment: Unfortunately, these researchers did not examine the indirect effects of religiosity on depressive symptoms through hope and purpose in life (which could be the primary mediators of the effect of religiosity on depressive symptoms); based on the bivariate analyses at baseline, those indirect effects of religiosity on depression may have been substantial.

Religiosity/Spirituality and Mental Health Outcomes among Stressed Young Adults in South Africa and Canada

Researchers examined resilience-enabling cultural resources of young adults ages 14-24 years old who were living in stressed environments in South Africa ($n = 576$) and Canada ($n = 481$). In this project titled the Resilient Youth in Stressed Environment (RYSE) study, young persons living in environments stressed by the oil and gas industry were recruited (stressors included environmental degradation, economic volatility, disruptions of family and community life). Participants were a convenience samples acquired by snowball sampling in each location (a rural boomtown in Alberta, Canada, and a small town near a large coal-liquefaction plant in the economically poor Mpumalanga province of South Africa). The Child and Youth Resilience Measure assessed cultural resources. Spiritual/religious resources were assessed by the questions "Spiritual beliefs help me to be strong" and "I participate in organized religious activities." Also assessed were cultural and family traditions (CFT) and community traditions (CT) as resources. Depression was assessed by the 21-item Beck Depression Inventory-II, and conduct disorder was assessed by the 5-item Enactment of Violent Scale. Demographic information collected included race, gender, age, and school attendance. Latent profile analyses were used to analyze the data. **Results:** In the South African sample, cultural allegiance was distinguished by two profiles: nominal cultural allegiance (22%; characterized by low spiritual beliefs, low participation in organized religious activities, and low enjoyment of family and community traditions) and robust cultural allegiance (78%; characterized by high appreciation for spiritual beliefs, high organized religious activities, and high family/community traditions). In the Canadian sample, compared to the South African sample, nominal cultural allegiance was more prevalent (69%) and robust cultural allegiance was less prevalent (31%). With regard to outcomes in the South African sample, nominal cultural allegiance was associated with higher depression scores (vs. robust cultural allegiance), and there was a trend for higher conduct disorder score ($p = 0.08$) and those with nominal cultural allegiance. In the Canadian sample, nominal cultural allegiance was also associated with higher depression scores, although there was no association with conduct disorder. Researchers concluded: "As anticipated, robust cultural allegiance had mental health benefits (albeit for internalizing mental illness only) for the Canadian and SA youth participants. Regarding depression, robust cultural engagement was associated with significant protective effects for both samples."

Citation: Theron, L., Rothmann, S., Höltege, J., & Ungar, M. (2022). Differential adaptation to adversity: A latent profile analysis of youth engagement with resilience-enabling cultural resources and mental health outcomes in a stressed Canadian and South African community. *Journal of Cross-Cultural Psychology*, 53(3-4), 403-425.

Comment: Interesting that the same pattern of results was found for depression in both the more religious community of young

persons (South Africa) and the largely secular community of young persons (Canada).

Religiosity, Meaningful Work, and Life Satisfaction

Researchers from the University of Airlangga and other universities in Indonesia analyzed cross-sectional data acquired from a convenience sample of 263 Christian employees working in 118 organizations in Indonesia (lecturers, administrative employees, teachers, doctors, nurses, psychologists, employees from private and state universities, banks, hospitals, and Christian schools). Most (84%) had masters or doctoral degrees, and 76% were church members. Their primary hypothesis was that religiosity what have a significant positive effect on meaningful work. Religiosity was assessed by the 15-item Centrality of Religiosity Scale (Huber & Huber, 2012). Meaningful work was assessed by the 10-item Work and Meaning Inventory. Life satisfaction was measured by the 6-item Riverside Life Satisfaction Scale. Finally, perceived organizational support was assessed by the 8-item Survey of Perceived Organizational Support. Structural equation modeling was used to analyze the data. **Results:** Religiosity was positively associated with meaningful work (total effect $b = 6.55$, $p = 0.001$), which in turn was positively associated with life satisfaction (total effect $b = 5.68$, $p = 0.001$). Religiosity was also directly associated with life satisfaction (total effect $b = 6.31$, $p = 0.001$), an effect that was partially mediated by meaningful work. Perceived organizational support was also positively associated with both meaningful work (total effect $b = 3.51$, $p = 0.001$) and with life satisfaction (total effect $b = 4.55$, $p = 0.001$). Researchers concluded: "Organizational leaders should maintain employees' life satisfaction through religious activities and provide them with organizational support."

Citation: Novanto, Y., Handoyo, S., & Setiawan, J. L. (2022). Predicting the life satisfaction of Indonesian Christian employees: Examining the role of religiosity, perceived organizational support, and meaningful work. Indonesian Journal of Indigenous Psychology, EPUB ahead of press.

Comment: An interesting study, although relatively modest in design. This is one of the few studies examining Christian workers in a largely Muslim country, and more specifically, the role of religiosity in meaningful work and effects on life satisfaction.

Religiosity and Life Satisfaction Meta-Analysis

Investigators from the department of Islamic economics at the Institut Agama Islam Negeri Corup in Rejang Lebong, Indonesia, conducted a meta-analysis involving 21 studies on the relationship between religiosity and life satisfaction. The studies analyzed were conducted in Indonesia, Iran, South Korea, United States, Peru, Greece, and Australia. The average overall effect size was 2.85 (95% CI = 1.82-3.88, $p < 0.01$) indicating a relatively large positive effect on life satisfaction. Researchers concluded: "In general, this study succeeds in demonstrating that the influence of religiosity variable on life satisfaction in various study samples is linear and has a positive effect."

Citation: Sholihin, M., Hardivizon, H., Wanto, D., & Saputra, H. (2022). The effect of religiosity on life satisfaction: A meta-analysis. HTS Teologiese Studies/Theological Studies, 78(4), 7172.

Comment: This was a quite modest meta-analysis with less than exemplary methodology, at least in terms of locating studies. Investigators also did not distinguish between studies that were cross-sectional from those that were longitudinal, or conduct subgroup analyses. Nevertheless, the findings are consistent with prior meta-analyses and add further evidence for a link between religious involvement and life satisfaction.

Association between Religious Attendance and Mental Health in Britain

Researchers in the research department of behavioral science and health at the University College of London analyzed data on 2,125 persons participating in the Medical Research Council National Survey of Health and Development. Mental health was assessed by the 28-item General Health Questionnaire at ages 53, 60-64, and 68-69. Religious attendance was assessed on a 4-point scale at ages 43, 60-64, and 68-69. Cross-lagged path analysis was used to analyze the relationship between religious attendance and mental health controlling for gender and education. **Results:** Poor mental health at ages 53 and 60-64 predicted more frequent religious attendance at ages 60-64 and at ages 68-69. There was no evidence that religious attendance at ages 43, 60 to 64, or 68 to 69 predicted later or current mental health. The researchers concluded: "Using birth cohort data from the UK, it was found that poor mental health was associated with later religious attendance but not vice-versa."

Citation: Kaushal, A., Stafford, M., Cadar, D., & Richards, M. (2022). Bi-directional associations between religious attendance and mental health: findings from a British birth cohort study.

Journal of Epidemiology and Community Health, 76(2), 190-195.

Comment: It is quite likely that poor mental health may have driven participants to turn to religion for comfort and hope (through religious attendance). Religion is a powerful coping behavior that often occurs in response to psychological distress, whether in Great Britain or anywhere else. It may be more difficult to show that religious involvement positively affects mental health in a secular environment where social forces discourage religious involvement, and religious people are under cultural pressures that may adversely affect their mental health (only about 5% of persons in the UK attend religious services; see <https://faithsurvey.co.uk/uk-christianity.html>).

Religiosity, Psychological Distress, and Psychological Well-Being: The Influence of Familial Factors on the Relationship

Markus Jokela from the department of psychology and logopedics at the University of Helsinki, Finland, argues in this paper that the previously reported association between religiosity and better mental health in longitudinal studies has not been adequately controlled for the problem of confounding. Previous studies, he claims, have not taken into consideration confounding by familial factors (shared family background and genetics). To assess this issue, he analyzed data collected between 1982 in 2017 using multiple longitudinal studies conducted in the US, the United Kingdom, and Germany. Results from within sibling analyses (controlling for familial factors) were compared to results overall. The effects of religiousness/religious attendance on both psychological distress and psychological well-being were examined. **Results:** Religious attendance (weekly versus never) was associated with lower psychological distress in the overall analysis ($B = -0.14$), but after controlling for familial factors in the sibling analysis, the association was reduced by 43% ($B = -0.08$), although the effect remained statistically significant. Religious attendance was also associated with higher well-being ($B = 0.29$), and this estimate was not reduced when controlling for familial factors. Results were similar for religiousness. The author concludes: "The findings suggest that previous longitudinal studies may have overestimated the association between religiosity and psychological distress, as the sibling estimate was only one third of the previously reported meta-analytic association (standardized correlation -0.03 vs. -0.08) ... Religiosity may be more relevant for psychological well-being than for psychological distress."

Citation: Jokela, M. (2022). Religiosity, psychological distress, and well-being: Evaluating familial confounding with multicohort sibling data. American Journal of Epidemiology, 191(4), 584-590.

Comment: These findings need replication by other researchers. The researcher includes cohort studies from the United Kingdom and Germany in the analysis, secular areas of the world where the association between religiosity, psychological distress, and well-being tend to be smaller due to secularization effects (see earlier study above), at least when compared to cohort studies conducted in the United States. The findings there were not broken down by region where study took place. Tyler VanderWeele at Harvard notes that the researcher also combines anxiety and depression in the psychological distress category, which may have reduced effect sizes because those for depression are considerably larger than those for anxiety (where effect sizes are fairly close to null, at least for service attendance, and may be in the positive direction for subjective indicators of religiosity since anxiety often drives religious involvement as a coping strategy). Effects on suicide are also much, much larger, which the researcher did not consider. Even with the current analyses, VanderWeele notes that this analysis, along with the prior meta-analysis, provides reasonably compelling evidence for a small but meaningful effect of religiosity on psychological distress.

ADHD, Religiosity, and Psychiatric Comorbidity

Researchers in the department of psychiatry at Duke University analyzed data from over 8000 subjects ages 12 to 34 participating in four waves of the National Longitudinal Study of Adolescent Health (Add Health Study). Relationship between religious variables and childhood ADHD symptoms were examined. The mediating and moderating effects of religiosity on the relationship between ADHD symptoms and depression, delinquency, and substance use were also examined. Religious variables included attendance at religious services, personal importance of religion, and frequency of prayer. Linear regression analyses, unconditional and controlled for demographic variables examined the relationship symptoms with religiosity at each time point (cross-sectional analyses). ADHD symptoms were also regressed on depressive symptoms, delinquent behavior, smoking, alcohol use, marijuana use. **Results:** Greater religiosity was associated with lower levels of ADHD symptoms at nearly all waves. In some analyses of Wave IV during early adulthood, prayer and attendance interacted with ADHD symptoms to predict worse psychopathology. Investigators explained that ADHD patients who are having more problems with depression, alcohol use or criminality in young adulthood may be more likely to turn to religion for support. An alternative explanation was that the frustration of trying to fit into a religious community, which may be adversely affected by ADHD symptoms, may have exacerbated mood and behavioral problems. Researchers concluded: "Further research should explore whether lower religiosity partially explains prevalent comorbidities in ADHD."

Citation: Dew, R. E., Kollins, S. H., & Koenig, H. G. (2022). ADHD, religiosity, and psychiatric comorbidity in adolescence and adulthood. *Journal of Attention Disorders*, 26(2), 307-318.

Comment: Unfortunately, the cross-sectional nature of these analyses prevent any causal inference with regard to the direction of effect in the relationships identified here. Nevertheless, it is a first step in trying to sort out how ADHD symptoms affect religiosity and how religiosity affects ADHD symptoms and the psychopathology that is often associated with those symptoms.

Religiosity/Spirituality and Psychological Status in Patients with COPD in Brazil

Investigators from the Federal University of Juiz de Fora in Minas Gerais, Brazil, analyzed data from a cross-sectional survey of 72 patients with stable COPD (average age 68; 95.8% religious, 69% Catholic). The purpose was to examine the relationship between religiosity/spirituality and depressive symptoms, anxiety symptoms, and quality of life. Religiosity was assessed by the 5-item Duke Religion Index (which measures organizational, non-

organizational, and intrinsic religiosity). Spirituality was assessed by the FACIT-Sp, a measure that is heavily contaminated with indicators of mental health (i.e., meaning and purpose, peacefulness). Spiritual/religious (S/R) coping was assessed using the 14-item Brief RCOPE which measures positive and negative religious coping (RC). Anxiety and depression were assessed with the 14-item HADS, while quality of life was measured using the 20-item Chronic Respiratory Disease Questionnaire. Hierarchical multivariate linear regression was used to control for age, gender, and education level. **Results:** The only dimension of religiosity related to psychological status was intrinsic religiosity, which was inversely related to depression in multivariate analyses ($b=-0.59$, $p=0.003$), models that included scores on the FACIT-Sp and the Brief RCOPE positive RC. In contrast, positive RC was positively related to depression in this model ($b=0.23$, $p=0.002$).

Unsurprisingly, negative RC was positively related to anxiety, and scores on the FACIT-Sp were inversely related to both anxiety and depression (as would be expected from meaning/purpose and peacefulness). Researchers concluded: "Higher spirituality and less negative S/R coping are associated with reduced dyspnea, burden of the disease, anxiety and depressive symptoms, and better quality of life in patients with stable COPD."

Citation: Mendes, N. S., Malaguti, C., dos Anjos Sena, L., Lucchetti, G., de Jesus, L. A. S., Vitorino, L. M., ... & Oliveira, C. C. (2022). Spirituality and religiosity are associated with physical and psychological status in patients with chronic obstructive pulmonary disease. *Journal of Clinical Nursing*, 31(5-6), 669-678.

Comment: The only finding that was meaningful or interpretable (given confounding of the spirituality measure, i.e., the FACIT-Sp, with indicators of mental health) was the inverse relationship between intrinsic religiosity and depressive symptoms. The latter was present even after controlling for scores on the FACIT-Sp (meaning and peace). The association between negative RC and both physical and mental health states was also expected based on multiple prior research studies. We review this small cross-sectional study here only because it was conducted in patients with COPD, a chronic condition in which very little research on religiosity/spirituality has been conducted.

What Aspects of Religiosity are Associated with Values?

Researchers from the department of sociology at the University of Nebraska-Lincoln and Brigham Young University examined various aspects of religiosity and their relationship with the 10 values of self-direction, stimulation, hedonism, achievement, power, security, conformity, tradition, benevolence, and universalism. Aspects of religiosity that were examined were service attendance, frequency of prayer, religious salience, belief in God, closeness to God, and number of religious friends. Data from the fourth wave of the US National Study of Youth and Religion (a nationally representative sample of adolescents in 2002-2003) was used in this analysis. At Wave IV participants were between the ages of 22 and 29 years ($n=2,071$). The 10 values were assessed by 21 items adapted from the Portrait Values Questionnaire (Schwartz, 2003); these were categorized into values with a social focus (security, conformity, tradition, benevolence, universalism) and values with a personal focus (self-direction, stimulation, hedonism, achievement, power). Regression models controlled for number of friends, age, gender, race, education, marital status, number of children, and region. **Results:** With regard to values with a social focus, religious service attendance was inversely related to security ($\beta=-0.11$, $p<0.01$) and universalism ($\beta=-0.11$, $p<0.05$), but was unrelated to conformity, tradition, or benevolence. With regard to values with a personal focus, religious attendance was inversely related to self-direction ($\beta=-0.12$, $p<0.05$), stimulation ($\beta=-0.10$, $p<0.05$), hedonism ($\beta=-0.13$, $p<0.01$), achievement ($\beta=-0.17$, $p<0.001$), and power ($\beta=-0.15$, $p<0.001$). For values with a social focus,

frequency of prayer was inversely related to conformity ($\beta=-0.11$, $p<0.05$), but was unrelated to security, tradition, benevolence, or universalism. For values with a personal focus, frequency of prayer was unrelated to any of the values in this category. For values with a social focus, religious salience (importance of religion) was positively related to conformity ($\beta=0.22$, $p<0.001$) and tradition ($\beta=0.25$, $p<0.001$), but was unrelated to security, benevolence, or universalism. Religious salience was unrelated to any of the five values with a personal focus. For social values, belief in God was positively related to tradition ($\beta=0.07$, $p<0.05$) and was inversely related to benevolence ($\beta=-0.08$, $p<0.05$) and universalism ($\beta=-0.16$, $p<0.001$). Belief in God was unrelated to any of the five values with the personal focus. With regard to social values, closeness to God was positively related to security ($\beta=0.15$, $p<0.01$), conformity ($\beta=0.12$, $p<0.05$), tradition ($\beta=0.12$, $p<0.05$), benevolence ($\beta=0.12$, $p<0.05$), and universalism ($\beta=0.11$, $p<0.05$). With regard to personal values, closeness to God was positively associated with stimulation ($\beta=0.13$, $p<0.05$) and hedonism ($\beta=0.11$, $p<0.05$), but was unrelated to self-direction, achievement, and power. With regard to social values, number of religious friends was positively associated with security ($\beta=0.07$, $p<0.05$), conformity ($\beta=0.07$, $p<0.05$), tradition ($\beta=0.10$, $p<0.001$), and benevolence ($\beta=0.06$, $p<0.05$), but was unrelated to universalism. Number of religious friends was unrelated to any of the five personal values. Researchers concluded: "Multivariate regression results... show that the relationship between religiosity and values is largely due to the positive associations between closeness to God and social focus values, the positive association between number of religious friends and social focus values, and the negative association between religious service attendance and personal focus values."

Citation: Schwadel, P., & Hardy, S. A. (2022). What aspects of religiosity are associated with values? *Journal for the Scientific Study of Religion*.

Comment: Some of the findings here are expected, and others are not expected (i.e., inverse relationship between belief in God and benevolence, and positive relationship between closeness to God and hedonism). Some of these findings may have been due to the way that each of the 10 values was measured. For example, hedonism was assessed by the questions: "Having a good time is important to her. She likes to 'spoil' herself" and "She sees every chance she can to have fun. It is important to her to do things that give her pleasure."

The Role of the Black Church in HIV Care of Congregants

Investigators from Central Connecticut State University and other academic institutions in the US examined the perceptions of HIV-positive Black Americans (BAAPLH), church leaders and members, and HIV health and service providers with regard to incorporating religiosity into HIV care of Black American congregants (particularly among those with reduced engagement in HIV care [EIHC]). A total of 78 participants completed surveys and personal interviews (20 BAAPLH, 40 church leaders/members, and 18 health/service providers). Focus groups and individual interviews were used to collect qualitative and quantitative data. Religiosity was assessed by a 7-item version of the Religious Background in Behavior Survey (e.g., prayed, meditated, attended a worship service, etc.). Religious coping was assessed with the 9-item RCOPE assessing positive and negative religious coping strategies. Church leader/member and health/service provider HIV stigma were also assessed. As part of semi-structured interviews and focus group discussions, participants were asked about their willingness to participate in religiously tailored EIHC support services, with responses ranging from 0 to 10. Participants were also asked about barriers against and strategies for implementing religiously tailored EIHC support services as part of joint church-health system efforts to increase

the IEHC for BAAPLH. **Results:** Results indicated that Black Americans living with HIV would be willing to engage in religiously tailored joint church-health system initiatives to increase engagement in care. Church leaders/members and HIV health/service providers also reported willingness to provide religiously tailored services. Researchers concluded: "These findings should be considered in future research designed to enhance engagement in HIV care for Blacks/African Americans living with HIV."

Citation: Berman, M., Berkley-Patton, J., Bowe-Thompson, C., Bauer, A., Stortz, S., & Green, H. D. (2022). Religiosity and engagement in HIV care among African American people living with HIV. *Journal of Racial and Ethnic Health Disparities*, 1-13. *Comment:* Given the powerful role that the Black Church plays in the African-American community, joint ventures between the church and healthcare providers would seem to be a natural for helping Black Americans living with HIV becoming more involved in their care, thereby improving health outcomes.

Religiosity and COVID-19 Vaccination Intentions in Saudi Arabia

Investigators from several universities in the United States and South Africa analyzed data from a survey of 759 Muslims in Saudi Arabia between April and June 2021, the heart of the pandemic. The relationship between religiosity and COVID-19 vaccination intentions was examined. A 4-item measure of extrinsic religiosity and a 3-item measure of intrinsic religiosity was used to assess religious involvement. Vaccination intentions was measured by a 4-item scale. Also assessed was "travel desire" with a 4-item scale. Attitude towards COVID vaccines was also measured as a possible mediating factor. Two-thirds of respondents were male (66%) and most (79%) were in the age group 25-44. Structural equation modeling was used to analyze the data. **Results:** Intrinsic religiosity was significantly and positively associated with a positive attitudes toward vaccination; this effect was mediated largely through positive attitudes towards COVID vaccines. There was also an indirect positive effect of extrinsic religiosity on vaccination intention through social norms and travel desire. Researchers concluded: "Intrinsic religiosity influences individuals' subjective norms, directly and perceived behavioral control and COVID-19 vaccination intentions indirectly through attitudes and subjective norms. Extrinsic religiosity influences individuals' objective norms and travel desire directly, as well as COVID-19 vaccination intentions indirectly through subjective norms and travel desire."

Citation: Kesgin, M., Can, A. S., GURSOY, D., EKINCI, Y., & Aldawodi, K. (2022). Effects of religiosity and travel desire on COVID-19 vaccination intentions. *Current Issues in Tourism*, 1-17.

Comment: The results from this study are difficult to interpret since researchers did not provide details on what they meant by intrinsic and extrinsic religiosity. Nevertheless, an interesting finding here was that intrinsic religiosity was positively related to vaccine intentions (at least indirectly through a positive attitude towards vaccines). This is the opposite of what has been found in Western countries, where some studies have found that religiosity is associated with negative attitudes towards vaccines and vaccine intention.

NEWS

Duke University's Monthly Spirituality and Health Webinar via Zoom

Our Center's monthly spirituality and health research seminars are now being held by Zoom, and should be assessable to participants wherever they live in the world that supports a Zoom platform. All persons who receive our 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. Because we had to postpone our June 21 seminar until July, there will be two seminars during this month. The first seminar will be on Tuesday, July 5, and will take place at 12:00-1:00 EST (New York Time). This seminar will be delivered by **Stephen G. Post, Ph.D., Director, Center for Medical Humanities, Compassionate Care and Bioethics, and Professor of Family, Population and Preventive Medicine at Stony Brook University.** The title of his presentation is **Dignity for Deeply Forgetful People: How Caregivers Can Meet the Challenges of Alzheimer's Disease,**

The second seminar this month will be on Tuesday, July 26, 2022, also occurring at 12:00-1:00 EST. That seminar will be delivered by **Ken Pargament, Ph.D., Emeritus Professor of Psychology, Bowling Green University, Bowling Green, Ohio.** The title of his presentation is **Working with Spiritual Struggles in Psychotherapy.** The PDFs of the Power Point slides for download and full video recordings of most past webinars since July 2020 are available at <https://spiritualityandhealth.duke.edu/index.php/education/seminars/>. All those who receive this e-newsletter will receive a Zoom link approximately 1 week before the Webinar.

SPECIAL EVENTS

18th Annual Duke University Summer Research Workshop

(Durham, North Carolina, August 15-19, 2022)

LAST CHANCE to register to attend this one-of-a-kind 5-day training session on how to design research, obtain funding support for it, carry it out, 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. 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 the workshop, and the workshop in 2022 is no different. **Partial tuition reduction scholarships** are available, as are **\$3600 scholarships (two cover travel, lodging, food, tuition) for academic faculty from underdeveloped countries** (see below). For more information, go to: <https://spiritualityandhealth.duke.edu/index.php/5-day-summer-research-course/>.

RESOURCES

Books

Handbook of Religion and Health, 3rd Edition

(Oxford University Press, 2022)

From the publisher, "The *Handbook of Religion and Health* has become the seminal research text on religion, spirituality, and health, outlining a rational argument for the connection between religion and health. For the past two decades, this handbook has

been the most cited of all references on religion and health. This Third Edition is the most scientifically rigorous edition to date, covering the best research published through 2021 with an emphasis on prospective studies and randomized controlled trials. This volume examines research on the relationship between religion and health outcomes, surveys the historical connections between religion and health, and discusses the distinction between the terms "religion" and "spirituality" in research and clinical practice. It reviews research on religion and mental health, literature on the mind-body relationship, and develops a model to explain how religious involvement may impact physical health through the mind-body mechanisms. It also explores the direct relationships between religion and physical health, covering such topics as immune and endocrine function, heart disease, hypertension and stroke, neurological disorders, cancer, and infectious diseases; and examines the consequences of illness including chronic pain, disability, and quality of life. Additionally, most of its 34 chapters conclude with clinical and community applications making this text relevant to both health care professionals and clergy. This book is the most insightful and authoritative resource available to anyone who wants to understand the relationship between religion and health." Available in December 2022.

Religion and Recovery from PTSD

(Jessica Kingsley, 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. 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." 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, used) 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/>

You are My Beloved. Really?

(Amazon: CreateSpace Publishing Platform, 2016)

From the author: "Simple and easy to read, 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. 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)

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: <https://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.



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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 nine \$3,600 scholarships to attend the university's 5-day Workshop on conducting research on religion, spirituality, and health. Applications are now being sought for the 2022 workshop to be held August 15-19. 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 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 whom we are unable to provide scholarships to in 2022-2023 and the years ahead. A donation of \$3,600 to our Center will sponsor a university faculty member from a disadvantaged region of the world to attend the workshop in 2022 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.

Theology, Medicine, and Culture Initiative

The Theology, Medicine, and Culture Initiative at Duke Divinity School invites you to consider both residential and hybrid opportunities for theological study and spiritual formation:

Theology, Medicine, and Culture Fellowship

Combining deep formation in Christian thought with practical spiritual disciplines, mentorship, seminars, retreats, and partnership with health-related ministries, the Fellowship equips participants for a lifetime of wise and faithful healing work. The Fellowship is open to current and future students and practitioners in any of the health professions, as well as to others whose vocations involve full-time work in health-related contexts. Scholarships are available for both one and two-year tracks.

Flexible Hybrid Certificate in Theology and Health Care (hybrid CTHC)

This program invites both practicing and future clinicians to be formed intellectually, relationally, and spiritually for excellent and faithful healing work. In the flexible hybrid format, students come together for two separate weeks in person at Duke University and then join for eight months of online learning designed for working clinicians—studying together the difference that Christian faith makes for health care. For more information on both these programs, go to: <https://tmc.divinity.duke.edu/>

FUNDING OPPORTUNITIES

Templeton Foundation Online Funding Inquiry

The next deadline for Small Grant requests (\$234,800 or less) and Large Grant requests (more than \$234,800) is **August 19, 2022**.

The Foundation will communicate their decision (rejection or invitation to submit a full proposal) for all OFIs by October 14, 2022. 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>.

2022 CSTH CALENDAR OF EVENTS...

July

- 7/5 Spirituality and Health Research Seminar**
12:00 -1:00 EST (online by Zoom)
Title: **Dignity for Deeply Forgetful People: How Caregivers Can Meet the Challenges of Alzheimer's Disease**
Speaker: **Stephen G. Post, Ph.D.**
Director, Center for Medical Humanities, Compassionate Care and Bioethics, and Professor of Family, Population and Preventive Medicine at Stony Brook University
Contact: Harold G. Koenig (Harold.Koenig@duke.edu)
- 7/14-15 NIH Conference on Religion, Spirituality, & Health**
(online, by invitation only)
Title: **Multiple presentations**
Speakers: Numerous
Contact: Joan Romaine (joan.romaine@nih.gov)
- 7/21-22 Course on Spirituality and Health**
Course development
Pontifical Catholic University of Rio Grande do Sul
Porto Alegre, Brazil
Speaker: Harold G. Koenig, M.D.
Contact: Larissa Lahorgue (llahorgue@uoledtech.com)
- 7/26 Spirituality and Health Research Seminar**
12:00 -1:00 EST (online by Zoom)
Title: **Working with Spiritual Struggles in Psychotherapy**
Speaker: Ken Pargament, Ph.D.
Emeritus Professor of Psychology, Bowling Green University, Bowling Green, Ohio
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>