This newsletter provides updates on research, news and events related to spirituality and health, including 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.

LATEST RESEARCH AT DUKE

Religious Involvement and Depression in Older Adults

Researchers examining cross-sectional relationships between indicators of religious involvement and depression severity in 476 older adults with major depression and 167 non-depressed controls, all age 58 or older (average age 70 years). Subjects were interviewed between 1994 and 2008 in the Neurocognitive Outcomes of Depression in the Elderly (NODE) study. Major depression was diagnosed using the NIMH Diagnostic Interview Schedule, and depression severity was assessed using the Montgomery-Åsberg Depression Rating Scale. The six measures of religious involvement were frequency of religious attendance, watching religious TV or listening to religious radio, private religious practice such as prayer or scripture study, subjective religiosity, religious affiliation, and being born-again or having some other life-changing religious experience. Control variables were gender, age, race, and years of education, and vascular health (diabetes, heart trouble, hypertension, and hardening of the arteries, each on a 3-point scale). Possible mediators were social support and level of stress during past 6 months. Using hierarchical linear regression and logistic regression models controlling for vascular health and demographic factors, researchers found that religious attendance was inversely related to major depression (OR=0.87, 95% CI 0.57-0.78, p<0.001), whereas private religious activity (prayer and Bible study) was positively related to it (OR=1.21, 95% CI 1.04-1.42, p<0.05). The relationship with religious attendance was explained by greater social support and lower stress. Depression severity was also inversely related to religious attendance (p<0.001), as was being born again (p<0.05); however, subjective religiosity was positively related to depression severity. None of these relationships with depression severity could be explained by social support or level of stress. Researchers concluded that different aspects of religious involvement are related to depression in different ways.


Comment: Given the cross-sectional nature of these findings, it is not possible to determine direction of causation. Thus, religious attendance may have prevented major depression, or vice versa; likewise, private religious activities may have caused depressive disorder, or people have turned to private religious activities as a coping response to depression. Same bi-directional explanations could account for relationships between religious factors and depression severity. Longitudinal studies of this cohort are needed to help establish order of effects.

Longitudinal Relationships Between Depression and Religion Following Treatment

Researchers followed 380 of 476 older adults in the above NODE study before and 3 months after treatment for major depression, examining religious predictors of outcome. Structural equation modeling was used to examine relationships between religious variables and depression severity at baseline and follow-up, controlling for demographic factors and examining social support and stress level as mediators of the effect over time. Results indicated a complex relationship between religion and depression severity following treatment; certain religious characteristics appeared to have both a positive and a negative relationship to depression severity after treatment (subjective religiosity). Only prayer frequency had a direct relationship to depression severity. Other religious factors were related to prayer frequency, average stress level, and social support, which in turn related to depression severity. All significant effects of religious attendance, religious media use, and prayer frequency showed inverse relationships with depression severity, whereas subjective religiosity predicted worse depression severity acting through higher stress levels and greater baseline depression severity (as well as predicting less depression severity through prayer frequency). Researchers concluded that religious involvement is longitudinally related to depression severity both directly and indirect through influences on stress level and social support, and that the net effect on depression severity is a beneficial one after taking into consideration both direct and indirect effects.

Citation: Hayward RD, Owen AD, Koenig HG, Steffens DC, Payne ME (2012). Longitudinal relationships of religion and post-treatment depression severity in older psychiatric patients: Evidence of direct and indirect effects. Depression Research and Treatment. doi:10.1155/2012/745970

Comment: In one of the first studies, if not the first study, to examine the effects of religious activities on depression outcome following treatment of major depression, investigators found that frequency of prayer predicted a reduction in depressive symptoms over 3 months following treatment. The methods of analysis were sophisticated and the sample size was large, adding credibility to the findings.

Spirituality, Anxiety and Depression in Advanced Illness

Duke researchers surveyed 210 patients (mean age 66 years) with cancer (one-third), chronic lung disease (one-third), and one-third with congestive heart failure. Anxiety was measured using a subscale of the POMS and depressive symptoms using the 10-item brief CES-D. Spirituality was assessed with the Spiritual History Scale, which measures past religious help seeking and support, past religious participation, and past negative religious experiences. In addition, the FACT-Sp was also administered. Multiple regression analysis, controlling for demographics, self-rated religiousness/spirituality, and frequency of religious attendance and devotion, was used to assess relationships between variables. Results indicated that greater spiritual well-being (meaning, peace, purpose in life, role of faith in life) was inversely associated with both anxiety (P < 0.001) and depression (P < 0.001). Negative religious experiences were associated with more anxiety (p = 0.04) and depression (p = 0.004). No other measures of spiritual history were associated with anxiety or depression.


Comment: The study reports cross-sectional relationships in a seriously ill population; again, the study design precludes determination of direction of effect. The only concern is that some of the measures of spirituality used in this study may have been contaminated by indicators of the outcome (e.g., meaning and peace being associated with less anxiety/depression).
**LATEST RESEARCH OUTSIDE DUKE**

**Religious Involvement and Alcohol Risk Factors and Milestones**

Palo Alto VA researchers examined relationships between demographic factors, nine religious/spiritual characteristics, and five alcohol milestones (age at initial first drink, age at first intoxication, regular use of alcohol, heavy consumption of alcohol, and alcohol dependence) in 4,002 female adolescents/young adults. Multivariate modeling revealed that religious/spiritual involvement, in most cases, was moderately to strongly inversely related to alcohol risk factors and milestones. These results suggest that religious/spiritual characteristics may help to prevent alcohol use disorders in adolescents and young adult women.

Citation: Haber JR, Grant JD, Jacob T, Koenig LB, Heath A (2012). Alcohol milestones, risk factors, and religion/spirituality in young adult women. Journal of Studies on Alcohol and Drugs 73(1):34-43.

Comment: This is one more study reporting a possible protective effective of religious involvement in the development of alcohol use disorders in younger adults. In our systematic review of the literature covering the period from 1872 to 2010 (Handbook of Religion and Health, 2nd edition), we identified 278 quantitative studies that examined relationships between religious or spiritual involvement and alcohol use or alcohol use disorders; of those, 240 (86%) reported significant inverse relationships. Among the 145 best-designed studies, 131 (90%) reported such findings.

**Religious Involvement and Treatment Adherence in Cystic Fibrosis**

Researchers at Cincinnati Children’s Hospital examined the relationship between religious beliefs (sacralization of the body), coping attitudes (types and degree of religious coping), and several measures of parent adherence to treatment plans involving children ages 3-12 years with cystic fibrosis. A small sample of 28 parents were involved in this study. Despite the low power to detect significant differences due to the sample size, researchers found that collaborative religious coping (coping together with help from God) and believing that the child’s body was blessed or miraculous (created in God’s image) were significantly associated with a number of measures of adherence, including higher self-efficacy for completing airway clearance, self-efficacy for completing aerosolized medication administration, and attitude towards treatment usefulness. Researchers concluded that religious beliefs and coping show significant associations with indicators of better treatment adherence, and suggest that religious factors are often undervalued in the management of cystic fibrosis.


Comment: Compliance with treatment regimens is known to predict better disease control and overall prognosis. Cystic fibrosis is a devastating illness that shortens the lives of many children and young adults. Religious beliefs about the body and collaborative forms of religious coping by parents appear to have positive effects on treatment compliance, perhaps explaining the link between religious involvement and improved prognosis. In our systematic review of treatment compliance (Handbook, 2nd ed), we found that of 27 studies that had examined the association between religious or spiritual involvement and compliance, 15 (56%) found significant positive relationships.

**Religious Coping in 5-10 Year Olds with Sickle Cell Disease**

Interviews were conducted with 19 African-American children ages 5-10 years (average 8) with sickle cell disease (SCD) at the Cincinnati Children’s Hospital. The goal was to identify religious coping behaviors, the content and frequency of prayers related to SCD, and their views of God in relationship to SCD. Semi-structured interviews and an art drawing exercise were used to elicit information. Results indicated that majority of children used religion to gain a sense of control when sick, to give meaning to stressful life events related to SCD, and to give comfort when in pain. A couple children indicated disappointment that God did not do more when they were in pain. A majority of children used prayer to cope with their SCD, with the content of most prayers involving requests to get well, not get sick, or get out of the hospital. When asked whether prayer was effective, most said sometimes and next most common answer was yes, but a few said prayer didn’t work at all. Most children also said their families prayed for them, and that family prayer also made them feel better. One said that God was praying for them. With regard to God and SCD, children described either a functional God (who did practical things for them) or an emotional God (who provided children with comfort when in pain), and several children said both.

Citation: Cotton S, Grosseehme D, McGrady ME (2012). Religious coping and the use of prayer in children with sickle cell disease. Pediatric Blood Cancer 56(2):244-9

Comment: A small qualitative study, but unique in asking children of this age (5-10 yrs) about religious coping, prayer, and attitudes toward God. Study provides insights for future studies involving children with chronic illness.

**Religious Involvement by Adolescents with Asthma**

University of Cincinnati Children’s Hospital researchers (as in the two studies above) conducted a cross-sectional survey of 151 adolescents with asthma ages 11-19 (mean age 15.8, 85% African-American). Their goal was to examine various adolescents’ spirituality/religiosity (151) and assess preferences for religious involvement by clinicians in the clinical encounter. Spirituality was assessed by the FACIT-Sp, religious coping with the 14-item Brief RCOPE, spiritual well-being by the 10-item version of the Spiritual Well-Being Scale (religious and existential), daily spiritual experiences and spiritual meaning, religiosity using a 7-item scale, and a 25-item scale measuring preferences during the clinical encounter regarding S/R. Results indicated that 81% stated they were both religious and spiritual, whereas 7% said they were neither. With regard to religious practices, 38% attended religious services weekly, 49% prayed at least once/day, 45% indicated that their S/R beliefs helped them cope with asthma, and 92% found at least a little comfort in their S/R beliefs. However, 19% questioned God’s love for them, and 18% wondered what they did for God to punish them. With regard to preferences for spirituality in the clinical encounter, 42% felt a clinician should play a role in their child’s spiritual or religious life, and 52% (n=78) felt that the clinician should be aware of their patients’ S/R beliefs (although only 28% had ever told their provider about their own S/R beliefs). Interestingly, 17% (25 of 78) wanted their provider to discuss spiritual issues with them even if it meant spending less time on their medical problems. Meanwhile, 17% indicated that they had S/R beliefs that would influence future health care decisions (such as birth control, abortion and coping with asthma). Furthermore, 31% of the entire sample indicated that the provider (physician/nurse practitioner) should ask about religious beliefs during an office visit, 42% if adolescent were hospitalized, and 51% if dying; similar percentages resulted when asked if their provider should pray with them during an office visit (32%), if hospitalized (47%), and if they were dying (65%).


Comment: This is another report of research on religiosity in youth with chronic illness by the prolific research group at Cincinnati Children’s Hospital. Although these are largely African-American adolescents, and African-Americans are in generally more religious than Whites, it is pretty impressive that 81% said they were both religious and spiritual, that a larger proportion felt that their providers should ask about religious beliefs, and that their provider should pray with patients under varying circumstances.

**Religious Doubts in Youth, Existential Anxiety and Depression Among Youth in Hungary**

Researchers surveyed a convenience sample of 403 high school and university students from Hungary (average age 18.9 for high school and 21.4 for university students). Their goal was to examine relationship between religious doubts, religious attitudes, and depression/anxiety. Both schools were church affiliated but state financed. Religious doubts were measured with a 10-item scale; religious attitudes with a 33-item scale (Post-Critical Belief Scale):
inclusion vs. exclusion transcendence (IT), and symbolic inclusion vs. exclusion of transcendence (SI)). The Beck Depression Inventory-S (9-item version) and the State-Trait Anxiety Inventory (20-item version) were used to assess outcomes. Results of regression analyses indicated a positive correlation between religious doubts and anxiety/depression that was stronger in those with a higher level of IT, but was especially high among those with both a high level of IT and a high level of SI (a 3-way interaction). Researchers concluded that anxiety/depression that was stronger in those with a higher level of IT, indicated a positive correlation between religious doubts and anxiety when facing religious doubts.

Citation: Kezdy, A., Martos, T., Boland, V., & Horvath-Szabo, K. (2011). Religious doubts and mental health in adolescence and young adulthood; the association with religious attitudes. Journal of Adolescence, 34(1), 39-47.

Comment: These were pretty religious youth (half of the sample attended religious services once/week or more and 72% were Catholic). Since religious doubts were related to the greatest level of depression/anxiety in those with high IT and high SI, this means that youth with greater certainty about their beliefs experienced less depression/anxiety. This was significantly when they had high IT (e.g., stronger religious belief) and high SI (e.g., the Bible holds a deeper truth which can only be revealed by personal reflection vs. both secular and religious conceptions of the world give valuable answers to important questions about life). These are complicated ideas, but reflect the stage of questioning that youth of this age often experience early in their maturation of faith.

Borg's PET Scan Results Not Replicated on Spirituality and Serotonin Receptor Binding

Researchers from Finland did PET scans on 23 subjects with mild to moderately severe major depression and 20 healthy controls (average age 40), and had them fill out the Temperament and Character Inventory (TCI) (which includes a self-transcendence subscale, which in turn, includes a spiritual acceptance subscale). No significant correlations were found between any of the TCI subscales and serotonin receptor binding in any of 15 brain regions.


Comment: These investigators could not replicate the results of Borg et al (Am J Psychiatry 2003) who found that higher scores on the spirituality acceptance subscale of the self-transcendence scale of the TCI were inversely related to serotonin receptor binding. The original finding by Borg suggested that spirituality was related to the serotonin system in the brain (lower serotonin receptor binding, similar to that found in patients with depression). The present investigators found no association between serotonin receptor binding and self-transcendence or spirituality subscale scores in either depressed patients or healthy controls. These results suggest that the serotonin system may not form the biological basis for spiritual experiences.

Encouraging Church-Members Improves Health Behaviors in African-Americans

Researchers examined the relationship between congregational support for living a healthy lifestyle (i.e., encouragement by other church members to exercise, avoid cigarettes or alcohol, eat healthy foods, get a physical exam, take medications as prescribed) and health behaviors (exercise, healthy eating, intake of red meat, limitation of fat intake, and consumption of vitamins or other dietary supplements). Secular support for a healthy lifestyle from family and friends outside of church was also examined. The sample was a nationwide survey of 443 adults aged 66 and older (average age 80.2 years) who were practicing Christians, those who had been Christian in the past but were not currently practicing, and those with no affiliation with any faith now or in the past. This was Wave 4 of a 7-year survey that began with 1500 completed interviews. Also assessed was a 4-item scale of sense of belonging in a congregation, a 3-item scale assessing formal church programs supporting healthy lifestyles, and 4 religious control variables (frequency of church attendance, prayer alone, adult Sunday school or Bible study groups, and group prayer).

Results indicated that informal church-based support (other church members encouraging healthy lifestyles) was associated with healthy lifestyles among African Americans but not in Whites. Not surprising, the influence of support from church members on health behaviors was greater for those who closely identified with their congregations. Interestingly, secular support was not related to healthy lifestyles, nor were having formal programs in the church that encouraged healthy behaviors.

Comment: Even after controlling for frequency of religious involvement in church, encouragement to live a healthy lifestyle by fellow church members in this cross-sectional study of older survivors was related to healthy behaviors (at least exercise and diet) in African-Americans (but not in Whites). Encouragement from family and friends outside the church apparently had no effect at all in either race. These results suggest that encouragement to exercise and eat healthier by fellow church members may be particularly helpful for African-Americans, a group where health disparities are widespread, and provides clues on how to reduce disease risk in this population.

Religiosity, Participation in 12-step Programs, and Treatment Response

Researchers examined how religious practices influence substance-dependent youth participation in 12-step programs and outcomes from those programs. Examined were 195 adolescents ages 14-18 referred by the court to a two-month residential treatment program. Participants were assessed at time of admission and time of discharge. The Religious Background and Behaviors Questionnaire assessed lifelong religious involvement. Twelve-step program involvement was measured by frequency of meeting attendance, step work, and AA/NA-related helping of others. Outcomes were assessed using toxicology screens and various psychosocial scales. Results indicated that greater lifetime religious involvement assessed at baseline was significantly and positively correlated with increased step work and AA/NA-related helping, factors which in turn predicted better substance abuse outcomes, greater overall functioning and decreased narcissistic entitlement. Researchers concluded that lifetime religious involvement had protective effects that improved outcomes in substance-dependent adolescents, and suggested that helping others in recovery may help program participants to experience better substance abuse outcomes. Citation: Kelly JF, Pagano ME, Stout RL, Johnson SM (2011). Influence of religiosity on 12-step participation and treatment response among substance-dependent adolescents. Journal of Studies on Alcohol & Drugs 72(6):1000-11

Comment: Although not the first study to show impact of religious involvement on 12-step program compliance, one of the best.

NEWS

Handbook of Religion and Health (Second Edition)

According to Google Scholar, the 1st edition of the Handbook, published in 2001, is the most cited of any book or research article on religion and health in the past forty years (Google 2011). This new edition is completely re-written, and in fact, really serves as a second volume to the 1st edition. The 2nd edition focuses on the latest research published since the year 2000 and therefore complements the 1st edition that examined research prior to that time. Both volumes together provide a full survey of research published from 1872 through 2010 -- describing and synthesizing results from over 3,000 studies. The Second Edition covers the latest original quantitative scientific research, and therefore will be of greatest use to religion/spirituality-health researchers and educators. Together with the First Edition, this Second Edition will save a tremendous amount of time in locating studies done worldwide, as well as provide not only updated research citations but also explain the scientific rationale on which such relationships might exist. This volume will also be of interest to health professionals and religious professionals wanting to better understand these connections, and even laypersons who desire to learn more about how R/S influences health. Now available, at http://www.amazon.com/Handbook-Religion-Health-Harold-Koenig/dp/0195335953 ($101.49, discounted from $175.00)

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

Released in November 2011, this book summarizes and expands the content presented in the Duke Research Workshops on Spirituality and Health (see below), and is packed full of information necessary to conduct research in this area. No researcher in spirituality and health should be without it. Available at: http://www.amazon.com/Spirituality-Health-Research-Measurements-Statistics/dp/1599473496 ($36.04).

Update from Saudi Arabia

What is it like to do research and teach medical students at King Abdulaziz University in Jeddah on the Red Sea? Go to http://catholicexchange.com/in-a-far-and-distant-land-ce-exclusive-from-saudi-arabia/

SPECIAL EVENTS

David B. Larson Memorial Lecture by Ken Pargament

On March 8, 2012, Dr. Kenneth Pargament will give the 9th annual David B. Larson Memorial Lecture at Duke University Medical Center, Durham, North Carolina (Room 2001 Duke North). The title of his talk is From Research to Practice: Envisioning an Applied Psychology of Religion, Spirituality, and Health. The first part of this lecture will focus on why the movement from research to practice is especially challenging in the areas of religion, spirituality and health. The second portion will present a brief rationale for conceptualizing religion, spirituality, and health as an applied field. Most of this lecture will be devoted to elaborating on a vision for an applied psychology of religion, spirituality and health. The lecture concludes with a discussion of future directions and challenges for our field. For more information, go to http://www.ukjournalsnorthhealth.duke.edu, click on Scholars tab, and then on David B. Larson. This lecture is supported by a generous grant from Dr. Jeff Levin (www.religionandhealth.com). More information about Dr. Pargament: http://www.spiritualityandhealth.duke.edu/resources/pdfs/KenPargament.pdf.

Register now for 2012 Duke Spirituality & Health Research Workshops

Register now to ensure a spot and choice of mentors in one of our research workshops on spirituality & health during the summer of 2012. Dates are July 16-20 and August 13-17, 2012. An abbreviated form of this workshop is also being offered in Switzerland on May 13-16, 2012. This is the last year that full tuition scholarships will be available for those with strong academic potential and serious financial hardships. For more information, see website: http://www.spiritualityandhealthworkshops.org/

FUNDING OPPORTUNITIES

HealthCare Chaplaincy $1.5 Million Call for Proposals

The HealthCare Chaplaincy (HCC) in New York City has announced a call for proposals to: (1) develop and explore hypotheses about chaplains’ contributions to palliative care, (2) team experienced health, behavioral and social scientists with chaplains to develop their research skills by becoming active participants in the research enterprise; and (3) involve aspiring chaplain-researchers not selected for funding in this competitive RFP, but who nonetheless show considerable promise as researchers. HCC will select, fund and support 6 to 10 interrelated and interdisciplinary research projects for up to $1.5 million total (funded by the JohnTempleton Foundation). The deadline for applications is March 15, 2012. More information: http://www.healthcarechaplaincy.org/templeton-research-project.html

Templeton Foundation Online Funding Inquiry (OFI)

The Templeton Foundation is accepting letters of intent for research on spirituality and health (Feb 1-Apr 16, 2012). If the funding inquiry is approved (applicant notified by May 25, 2012), then the Foundation will ask for a full proposal that will be due May 26-Sept 4, 2012, with a decision on the proposal reached by Dec 21, 2012. More information: http://www.templeton.org/what-we-fund/our-grantmaking-process
2012 CALENDAR OF EVENTS...

March
7 Diagnosis and Treatment of Depression (and religious CBT)
   Harold G. Koenig, M.D.
   Pickens Family Practice Clinic, classroom 020A
   DUMC, corner of Erwin Road and Trent Drive
   Contact: Sandy Curtin (sandy.curtin@duke.edu)

8 From Research to Practice: Envisioning an Applied Psychology of Religion, Spirituality, and Health
   The David B. Larson Memorial Lecture
   Ken Pargament, Ph.D., Professor of Clinical Psychology
   Bowling Green State University, Bowling Green, OH
   Duke North, Room 2001, 5:00-6:30P
   Contact: Dr. Harold G. Koenig (koenig@geri.duke.edu)

28 Pastoral Care and PTSD
   John P. Oliver, D.Min., Chief of Chaplain Service,
   Durham Veterans Administration Hospital
   DUMC Center for Aging, Durham, North Carolina, 3:30-4:30P
   Contact: Dr. Harold G. Koenig (koenig@geri.duke.edu)

29-30 Religion, Spirituality and Medicine
   Harold G. Koenig, M.D.
   Cleveland Clinic, Cleveland, OH
   Contact: Dennis Kenny (kennyd2@ccf.org)

31 Spirituality and Medicine: Research and Applications
   Evangeline Andarsio, M.D.
   Philip Diller, M.D.
   Harold G. Koenig, M.D.
   University of Dayton, Dayton, OH
   Contact: Kathleen Scheltens (kscheltens1@udayton.edu)