



# RESEARCH REVIEW

A DIGEST OF NEW SCIENTIFIC RESEARCH  
CONCERNING RELIGION, BRAIN & BEHAVIOR

JANUARY, 2015

## INTRODUCTION

*IBCSR Research Review (IRR)* is published by the Institute for the Biocultural Study of Religion, a non-profit research institute dedicated to the scientific study of religion using biocultural techniques. *IRR* briefly annotates and furnishes online information about scientific research articles related to brain, behavior, culture, and religion published in English in leading journals. It also lists relevant books. Articles in press are listed without annotation. Annotations for articles aim to supply a preliminary understanding of the methods and results of a research study, or the argument of a paper. Annotations typically furnish more detail for articles in the scientific study of religion related to religion, brain, and behavior, than for articles in the area of spirituality and health, in accordance with IBCSR research priorities.

Articles for this issue were located by searching the following databases: H. W. Wilson Applied Science and Technology, ATLA Religion Database, H. W. Wilson General Science, PubMed, EBSCO Psychology and Behavioral Sciences Collection, PsycARTICLES, PsycINFO, ScienceDirect, and Web of Science. The search terms were altruism, god, goddess, meditat\*, prayer, relig\*, ritual, spiritu\*, and yoga, tailored to the database being searched. Books were located on Amazon.com. Articles not directly relevant to the scientific study of religion were excluded, as were correspondence and reviews. From a universe of 735 articles, 99 articles have been retained from 53 journals. There are 43 pre-publication citations from 32 journals.

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## PART 1: ARTICLES IN RELIGION, BRAIN, AND BEHAVIOR

### 1.1 SCIENTIFIC STUDY OF RELIGION: COGNITIVE NEUROSCIENCE

Berman, Amanda E. & Larry Stevens. 2015. EEG manifestations of nondual experiences in meditators. *Consciousness and Cognition* 31. 1–11.  
doi:10.1016/j.concog.2014.10.002.

*The holistic experiential benefits of meditation among a widely ranging population have been well established within the empirical literature. What remain less clear are the underlying mechanisms of the meditative process. A large impediment to this clarity is attributable to the lack of a unified and comprehensive taxonomy, as well as to the absence of clear differentiation within the literature between method of practice and resulting state. The present study discusses and then attempts to identify within this sample a theoretically universal culminating meditative state known as Nondual Awareness, which is differentiated from the method or practice state. Participants completed an in-lab meditation, during which neurological patterns were analyzed using electroencephalography (EEG). Analyses indicated significantly higher EEG power among slower wave frequencies (delta, theta, alpha) during the reported nondual events. These events appear neurologically distinct from meditation sessions as a whole, which interestingly demonstrated significant elevation within the gamma range.*

Ding, Xiaoqian, Yi-Yuan Tang, Chen Cao, Yuqin Deng, Yan Wang, Xiu Xin & Michael I. Posner. 2015. Short-term meditation modulates brain activity of insight evoked with solution cue. *Social Cognitive and Affective Neuroscience* 10(1). 43–49.  
doi:10.1093/scan/nsu032.

*Meditation has been shown to improve creativity in some situations. However, little is known about the brain systems underlying insight into a problem when the person fails to solve the problem. Here, researchers examined the neural correlation using Chinese Remote Association Test, as a measure of creativity. After providing a solution to a participant, following the failure of the participant to provide one, the researchers examine how meditation in comparison with relaxation influences the reaction of the participant to the correct solution. The event-related*

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*functional magnetic resonance imaging showed greater activity, mainly distributed in the right cingulate gyrus (CG), insula, putamen, inferior frontal gyrus (IFG), and the bilateral middle frontal gyrus (MFG), the inferior parietal lobule (IPL) and the superior temporal gyrus (STG). This pattern of activation was greater following 5 h of meditation training than the same amount of relaxation. Based on prior research, the authors speculate on the function of this pattern of brain activity: (i) CG may be involved in detecting conflict and breaking mental set, (ii) MFG/IFG may play an important role in restructuring of the problem representation, (iii) insula, IPL and STG may be associated with error detection, problem understanding or general attentive control and (iv) putamen may be activated by the “Aha” feeling.*

Kurth, Florian, Allan MacKenzie-Graham, Arthur W. Toga & Eileen Luders. 2015. Shifting brain asymmetry: The link between meditation and structural lateralization. *Social Cognitive and Affective Neuroscience* 10(1). 55–61.  
doi:10.1093/scan/nsu029.

*Previous studies have revealed an increased fractional anisotropy and greater thickness in the anterior parts of the corpus callosum in meditation practitioners compared with control subjects. Altered callosal features may be associated with an altered inter-hemispheric integration and the degree of brain asymmetry may also be shifted in meditation practitioners. Therefore, researchers investigated differences in gray matter asymmetry as well as correlations between gray matter asymmetry and years of meditation practice in 50 long-term meditators and 50 controls. A decreased rightward asymmetry in the precuneus in meditators compared with controls was detected. In addition, the researchers observed that a stronger leftward asymmetry near the posterior intraparietal sulcus was positively associated with the number of meditation practice years. In a further exploratory analysis, the authors observed that a stronger rightward asymmetry in the pregenual cingulate cortex was negatively associated with the number of practice years. The group difference within the precuneus, as well as the positive correlations with meditation years in the pregenual cingulate cortex, suggests an adaptation of the default mode network in meditators. The positive correlation between meditation practice years and asymmetry near the posterior intraparietal sulcus may suggest that meditation is accompanied by changes in attention processing.*

Leung, Mei-Kei, Chetwyn C. H. Chan, Jing Yin, Chack-Fan Lee, Kwok-Fai So & Tatia M. C. Lee. 2015. Enhanced amygdala-cortical functional connectivity in meditators. *Neuroscience Letters* 590C. 106–110.  
doi:10.1016/j.neulet.2015.01.052.

*Previous studies have demonstrated that meditation is associated with neuroplastic changes in the brain regions including amygdala, anterior cingulate cortex (ACC), and temporal-parietal junction. Extended from these previous works, this study examined the functional connectivity of the amygdala in meditation experts during affective processing and observed that these experts had significantly stronger left amygdala (LA) connectivity with the dorsal ACC (dACC), premotor, and primary somatosensory cortices (PSC) while viewing affectively positive stimuli when compared to the novices. The current findings have implications for further understanding of affective neuroplastic changes associated with meditation in the amygdala.*

Luders, Eileen, Nicolas Cherbuin & Florian Kurth. 2014. Forever Young(er): potential age-defying effects of long-term meditation on gray matter atrophy. *Frontiers in Psychology* 5. 1551.  
doi:10.3389/fpsyg.2014.01551.

*While overall life expectancy has been increasing, the human brain still begins deteriorating after the first two decades of life and continues degrading further with increasing age. Thus, techniques that diminish the negative impact of aging on the brain are desirable. Existing research, although scarce, suggests meditation to be an attractive candidate in the quest for an accessible and inexpensive, efficacious remedy. Here, researchers examined the link between age and cerebral gray matter re-analyzing a large sample (n=100) of long-term meditators and control subjects aged between 24 and 77 years. When correlating global and local gray matter with age, negative correlations within both*

*controls and meditators were detected, suggesting a decline over time. However, the slopes of the regression lines were steeper and the correlation coefficients were stronger in controls than in meditators. Moreover, the age-affected brain regions were much more extended in controls than in meditators, with significant group-by-age interactions in numerous clusters throughout the brain. Altogether, these findings seem to suggest less age-related gray matter atrophy in long-term meditation practitioners.*

Pasquini, Henrique Adam, Guaraci Ken Tanaka, Luis Fernando Hindi Basile, Bruna Velasques, Mirna Delposo Lozano & Pedro Ribeiro. 2015. Electrophysiological correlates of long-term soto zen meditation. *BioMed Research International* 2015. 598496.  
doi:10.1155/2015/598496.

*This study aimed to verify the electrophysiological correlates of the changes in long-term regular meditators. Researchers used modern techniques of high-resolution electroencephalography applied to slow potentials, power spectra, and potencies related to the events. To obtain encephalographic records, an assembly of 128 channels in 31 subjects (17 Soto Zen Buddhist meditators) was used. The motivation of this study was to determine whether the induced beta power would present an increase in meditators as well as a decrease in induced theta/beta ratio in absolute and relative values. However, opposite to what was expected, no significant change was found in the beta frequency. In contrast, the main findings of the study were correlations between the frequency of weekly meditation practice and the increased theta induced relative power, increase of induced power ratio (ratio theta/beta), and increase of the ratio of induced relative powers (theta/beta ratio) during our task that featured an “adapted meditation,” suggesting that the meditative state of “mindfulness” is much more related to the permissivity of “distractions” by the meditators, with a deliberate reduction of attention.*

## **1.2 SCIENTIFIC STUDY OF RELIGION: EVOLUTION**

Chapais, Bernard. 2014. Complex Kinship Patterns as Evolutionary Constructions, and the Origins  
Baumard, Nicolas, Alexandre Hyafil, Ian Morris & Pascal Boyer. 2015. Increased Affluence Explains the Emergence of Ascetic Wisdoms and Moralizing Religions. *Current Biology* 25(1). 10–15.  
doi:10.1016/j.cub.2014.10.063.

*Between roughly 500 BCE and 300 BCE, three distinct regions—the Yangtze and Yellow River Valleys, the Eastern Mediterranean, and the Ganges Valley—saw the emergence of highly similar religious traditions with an unprecedented emphasis on self-discipline and asceticism, and with “otherworldly,” often moralizing, doctrines. These traditions include Buddhism, Jainism, Brahmanism, Daoism, Second Temple Judaism, and Stoicism, and inform later offshoots such as Christianity, Manichaeism, and Islam. This cultural convergence, often called the “Axial Age,” presents a puzzle: why did this emerge at the same time as distinct moralizing religions, with highly similar features in different civilizations? The puzzle may be solved by quantitative historical evidence that demonstrates an exceptional uptake in energy capture (a proxy for general prosperity) just before the Axial Age in these three regions. The authors present evidence utilizing statistical modeling confirming that economic development, not political complexity or population size, accounts for the timing of the Axial Age. Several possible causal pathways are discussed, including the development of literacy and urban life. The authors put forward the idea, inspired by life history theory, that absolute affluence would have impacted human motivation and reward systems, nudging people away from short-term strategies (resource acquisition and coercive interactions) and promoting long-term strategies (self-control techniques and cooperative interactions).*

Lindeman, Marjaana, Annika M. Svedholm-Häkkinen & Jari Lipsanen. 2015. Ontological confusions but not mentalizing abilities predict religious belief, paranormal belief, and belief in supernatural purpose. *Cognition* 134. 63–76.  
doi:10.1016/j.cognition.2014.09.008.

*The current research tested the hypothesis that the abilities for understanding other people's minds give rise to the cognitive biases that underlie supernatural beliefs. The authors used structural equation modeling (n=2789) to determine the roles of various mentalizing tendencies, namely self-reported affective and cognitive empathy (i.e., mind reading), actual cognitive and affective empathic abilities, hyper-empathizing, and two cognitive biases (core ontological confusions and promiscuous teleology) in giving rise to supernatural beliefs. Support for a path from mentalizing abilities through cognitive biases to supernatural beliefs was weak. The relationships of mentalizing abilities with supernatural beliefs were also weak, and these relationships were not substantially mediated by cognitive biases. Core ontological confusions emerged as the best predictor, while promiscuous teleology predicted only a small proportion of variance. The results were similar for religious beliefs, paranormal beliefs, and for belief in supernatural purpose.*

Mohr, Christine, Nikolaos Koutrakis & Gustav Kuhn. 2014. Priming psychic and conjuring abilities of a magic demonstration influences event interpretation and random number generation biases. *Frontiers in Psychology* 5. 1542.  
doi:10.3389/fpsyg.2014.01542.

*Magical ideation and belief in the paranormal is considered to represent a trait-like character; people either believe in it or not. Yet, anecdotes indicate that exposure to an anomalous event can turn skeptics into believers. This transformation is likely to be accompanied by altered cognitive functioning such as impaired judgments of event likelihood. Here, researchers investigated whether the exposure to an anomalous event changes individuals' explicit traditional (religious) and non-traditional (e.g., paranormal) beliefs as well as cognitive biases that have previously been associated with non-traditional beliefs, e.g., repetition avoidance when producing random numbers in a mental dice task. In a classroom, 91 students saw a magic demonstration after their psychology lecture. Before the demonstration, half of the students were told that the performance was done respectively by a conjuror (magician group) or a psychic (psychic group). The instruction influenced participants' explanations of the anomalous event. Participants in the magician, as compared to the psychic group, were more likely to explain the event through conjuring abilities while the reverse was true for psychic abilities. Moreover, these explanations correlated positively with their prior traditional and non-traditional beliefs. Finally, it was observed that the psychic group showed more repetition avoidance than the magician group, and this effect remained the same regardless of whether assessed before or after the magic demonstration. The authors conclude that pre-existing beliefs and contextual suggestions both influence people's interpretations of anomalous events and associated cognitive biases. Beliefs and associated cognitive biases are likely flexible well into adulthood and change with actual life events.*

### **1.3 SCIENTIFIC STUDY OF RELIGION: PSYCHOLOGY AND CULTURE**

Bixter, Michael T. 2015. Happiness, political orientation, and religiosity. *Personality and Individual Differences* 72. 7–11.  
doi:10.1016/j.paid.2014.08.010.

*Previous research has focused on how happiness is independently associated with political orientation and religiosity. The current study instead explored how political orientation and religiosity interact in establishing levels of happiness. Data from both the 2012 General Social Survey and the 2005 World Values Survey were used. Results from both data sets support prior research by showing a positive association between happiness and both political conservatism and religiosity. Importantly, it was found that political conservatism and religiosity interact in predicting happiness levels. Specifically, the current results suggest that religiosity has a greater effect on happiness for more politically conservative individuals compared to more politically liberal individuals.*

Braithwaite, Scott R., Gwen L. Coulson, Kersti Spjut, Will Dickerson, Austin R. Beck, Kelli Dougal, Cassidy Debenham & Dustin Jones. 2015. The influence of religion on the partner selection strategies of emerging adults. *Journal of Family Issues* 36(2). 212–231.

doi:10.1177/0192513X13491748.

*Previous research has suggested that religiosity is associated with positive marital outcomes, but the underlying reasons for this association are not fully understood. The present researchers tested the hypothesis that religion influences marriage via partner selection strategies. Specifically, it was hypothesized that proximal (more than distal) religiosity would predict partner selection strategies that facilitates positive marital outcomes; the authors also conducted exploratory analyses examining the influence of religious affiliation. Using a novel methodology that allowed for an examination of explicit and implicit attitudes, the researchers tested the hypotheses using a large sample of emerging adults (n=437). Findings indicate that religion influences partner selection preferences, but the effect is not uniformly positive. Religious affiliation, not individual level religiosity (distal or proximal), was the most robust predictor of mate-selection preferences.*

Burris, Christopher T. & Traci Dow. 2015. Lost in the Myst?: Narrative Video Gaming Decreases Self-Reported Propensity for Spiritual/Religious Experience. *The International Journal for the Psychology of Religion* 25(1). 18–28.

doi:10.1080/10508619.2014.884393.

*Based on the proposition that the visual “what you see is what you get” environment of video games may undermine ability/motivation for mental simulation/internal narrative, researchers hypothesized that exposure to virtual gaming would lead to decreased propensity for spiritual/religious experience. Fifty-six Canadian undergraduates moderately interested in gaming completed measures of propensity for unitive (focus on connectedness) and numinous (focus on presence of Other) experiences online, and again following a randomly assigned virtual or text-based narrative gaming session. Self-reported unitive and numinous propensities both declined significantly following the virtual gaming session as expected. Mystical propensity declined following the text-based session as well, but numinous propensity tended to increase in this condition. Virtual gaming offers an absorbing “escape” narrative with comparatively little “in the head” effort that appears to diminish—at least temporarily—the propensity for spiritual/religious experience, which is predicated upon a sustained internal narrative involving the Unseen.*

Connor, Phillip & Matthias Koenig. 2015. Explaining the Muslim employment gap in Western Europe: individual-level effects and ethno-religious penalties. *Social Science Research* 49. 191–201.

doi:10.1016/j.ssresearch.2014.08.001.

*It is well-documented that Muslims experience economic disadvantages in Western European labor markets. However, few studies comprehensively test individual-level explanations for the Muslim employment gap. Using data from the European Social Survey, this research note briefly examines the role of individual-level differences between Muslims and non-Muslims in mediating employment differences. Results reveal that human capital, migration background, religiosity, cultural values, and perceptions of discrimination jointly account for about 40% of the employment variance between Muslims and non-Muslims. Model specifications for first- and second-generation Muslim immigrants reveal a similar pattern, with migration background and perceived discrimination being of key relevance in mediating employment difference. While individual-level effects are indeed relevant, unexplained variance suggests that symbolic boundaries against Islam may still translate into tangible ethno-religious penalties.*

Crescentini, Cristiano & Viviana Capurso. 2015. Mindfulness meditation and explicit and implicit indicators of personality and self-concept changes. *Frontiers in Psychology* 6. 44.

doi:10.3389/fpsyg.2015.00044.

*The scientific interest on mindfulness meditation (MM) has significantly increased in the last two decades, perhaps because of the positive health effects that this practice exerts in a great variety of clinical and non-clinical conditions. Though attention regulation, emotional regulation, and body awareness have been argued to be critical mechanisms through which MM improves well-being, much less is known on the effects of this practice on personality. Here, researchers review the current state of knowledge about the role of MM in promoting changes in practitioners’*

*personality profiles and self-concepts. The article first focuses on studies that investigated the relations between mindfulness and personality using well-known self-report inventories such as the Five-Factor model of personality traits and the Temperament and Character Inventory. Second, based on the intrinsic limitations of these explicit personality measures, a key set of results is reviewed, showing effects of MM on implicit, as well as explicit, self-representations. Although the research on MM and personality is still in its infancy, it appears that this form of meditative practice may notably shape individuals' personality and self-concept toward more healthy profiles.*

- David, Prabu & Laura Stafford. 2015. A relational approach to religion and spirituality in marriage: The role of couples' religious communication in marital satisfaction. *Journal of Family Issues* 36(2). 232–249.  
doi:10.1177/0192513X13485922.

*Using a relational model of religion and spirituality in marriage, the role of individual relationship with God, couple's joint religious communication, and forgiveness were examined as predictors of marital satisfaction. Data from 342 heterosexual married couples were analyzed using an actor partner interdependence model and path analyses. Results indicate that one's individual relationship with God is important to marital quality indirectly as it appears to manifest itself in religious communication between partners, which in turn is directly linked to marital quality. Also, one's own forgiveness and forgiveness of the spouse are both positively linked to marital quality, whereas one's tendency not to forgive and one's spouse's tendency not to forgive are both detrimental to marital quality. Finally, joint religious communication is more strongly associated with marital satisfaction among mixed-faith couples than same-faith couples.*

- Desai, Kavita M. & Kenneth I. Pargament. 2015. Predictors of Growth and Decline Following Spiritual Struggles. *International Journal for the Psychology of Religion* 25(1). 42–56.  
doi:10.1080/10508619.2013.847697.

*This study aimed to identify predictors of growth and decline outcomes following a spiritual struggle. Drawing from Pargament's theory of the religious orienting system (ROS), four potential predictor categories were identified: spiritual struggle characteristics, religious history, positive religious coping, and support. Variables from each predictor category were tested as individual predictors of outcome. For this study, college students (n=127) who were experiencing spiritual struggles completed online surveys at two time points. Results of regression analyses generally supported hypotheses. Specifically, variables that strengthen the ROS were associated with growth, whereas variables that weaken the ROS were associated with decline. There was one surprising finding: Spiritual struggle severity was related to both growth and decline outcomes. Study limitations and implications are discussed, and suggestions for future research are identified.*

- Droit-Volet, S., M. Fanget & M. Dambrun. 2015. Mindfulness meditation and relaxation training increases time sensitivity. *Consciousness and Cognition* 31. 86–97.  
doi:10.1016/j.concog.2014.10.007.

*Two experiments examined the effect of mindfulness meditation and relaxation on time perception using a temporal bisection task. In Experiment 1, the participants performed a temporal task before and after exercises of mindfulness meditation or relaxation. In Experiment 2, the procedure was similar than that used in Experiment 1, except that the participants were trained to meditate or relax every day over a period of several weeks. The results showed that mindfulness meditation exercises increased sensitivity to time and lengthened perceived time. However, this temporal improvement with meditation exercises was primarily observed in the experienced meditators. These results also showed the experienced meditators were less anxious than the novice participants, and that the sensitivity to time increased when the level of anxiety decreased. Results were explained by the practice of mindfulness technique that had developed individuals' abilities in devoting more attention resources to temporal information processing.*

Dykstra, Robert. 2014. Zombie Alleluias: Learning to Live in the Space Between Worlds. *Pastoral Psychology* 63(5/6). 611–624.  
doi:10.1007/s11089-014-0615-3.

*This essay considers an increasing fascination with zombies in recent American cultural life as a means by which individuals attempt to cope with anxieties related to the rise of political and religious extremism in the post-9/11 landscape. Building on Freud's recognition of fundamentalist tendencies within the human psyche and his sense that modern persons are living psychologically 'beyond their means,' it calls for an empathic embrace of the complexities of what Donald Capps deems the 'ecumenical self' as a path toward engaging personal threats within and without.*

Exline, Julie J., Joshua B. Grubbs & Steffany J. Homolka. 2015. Seeing God as Cruel or Distant: Links with Divine Struggles Involving Anger, Doubt, and Fear of God's Disapproval. *The International Journal for the Psychology of Religion* 25(1). 29–41.  
doi:10.1080/10508619.2013.857255.

*Many people experience what psychologists refer to as divine struggle: struggle focused on ideas about God or a perceived relationship with God. When trying to predict this type of spiritual struggle, it may be useful to consider a person's basic concept of God. In this article, researchers examined two facets of a negative God concept—seeing God as cruel or distant—as potential predictors of divine struggle. The authors expected that views of God as cruel and distant would correlate highly; however, it was also proposed that each view would be especially useful in predicting certain forms of divine struggle. Specifically, the authors reasoned that seeing God as cruel would be especially useful in predicting anger at God and concern about God's anger or disapproval toward the self. In contrast, they proposed that seeing God as distant would be especially predictive of doubt about God's existence. These hypotheses received solid support in web-based studies with two samples (413 undergraduates and a broader sample of 471 U.S. adults).*

Hichy, Zira, Sharon Coen & Graziella Di Marco. 2015. The interplay between religious orientations, state secularism, and gay rights issues. *Journal of GLBT Family Studies* 11(1). 82–101.  
doi:10.1080/1550428X.2014.914005.

*This study tested the effects of religious orientations (intrinsic, extrinsic, and quest) and secularism of state on attitude towards both same-sex marriage and adoption by same-sex couples. Moreover, the mediating effects of secularism of state on the relationship between religious orientations and attitude towards gay rights were assessed. Participants were 276 heterosexual, Catholic Italians who completed a questionnaire containing measures of the investigated constructs. Results showed that state secularism and quest orientation positively correlated with both attitudes investigated, whereas intrinsic orientation negatively correlated with both types of attitude. Moreover, secularism of state mediated the relationship between extrinsic and intrinsic orientations and attitude towards both same-sex marriage and adoption by gay men and lesbians.*

MacInnis, Cara C. & Gordon Hodson. 2015. Do American States with more religious or conservative populations search more for sexual content on google? *Archives of Sexual Behavior* 44(1). 137–147.  
doi:10.1007/s10508-014-0361-8.

*In America, religiosity and conservatism are generally associated with opposition to non-traditional sexual behavior, but prominent political scandals and recent research suggest a paradoxical private attraction to sexual content on the political and religious right. For this study, researchers examined associations between state-level religiosity/conservatism and anonymized interest in searching for sexual content online using Google Trends (which calculates within-state search volumes for search terms). Across two separate years, and controlling for demographic variables, results indicated moderate-to-large positive associations between: (1) greater proportions of state-level religiosity and general web searching for sexual content and (2) greater proportions of state-level conservatism and image-specific searching for sex. These findings were interpreted in terms of the paradoxical hypothesis that a greater*



*preponderance of right-leaning ideologies is associated with greater preoccupation with sexual content in private internet activity. Alternative explanations (e.g., that opposition to non-traditional sex in right-leaning states leads liberals to rely on private internet sexual activity) are discussed, as are limitations to inference posed by aggregate data more generally.*

- Meagher, Benjamin R. 2015. The Effects of Interpersonal Differences Within Religious Communities: A Group Actor-Partner Interdependence Model of U.S. Congregations. *International Journal for the Psychology of Religion* 25(1). 74–90.  
doi:10.1080/10508619.2013.864531.

*This study examined how the composition of religious communities influences the spiritual outcomes of members. The U.S. Congregational Life Survey was analyzed using the group actor-partner interdependence model, an analysis that assesses how individual-level outcomes are influenced by (a) the actor's characteristics, (b) the characteristics of other congregants, (c) the relational demography of the actor, and (d) the degree that other congregants differ among themselves. This model, including both surface-level (e.g., demographic) and deep-level (e.g., theological belief) attributes, allowed for the estimation of distinct effects for actor and group similarity, which have been confounded in prior research. Relational demography was found to be positively related to one's needs being met on nearly all measured items. In contrast, a lack of diversity in terms of deep-level constructs (e.g., theological belief and worship preference) predicted less belonging and less satisfaction. These results suggest that religious communities may offer an important setting to benefit from exposure to varied beliefs and values.*

- Park, Julie J. & Nicholas A. Bowman. 2015. Religion as bridging or bonding social capital: Race, religion, and cross-racial interaction for college students. *Sociology of Education* 88(1). 20–37.  
doi:10.1177/0038040714560172.

*Religion is the most segregated arena of American life, but its effect on collegiate diversity outcomes has been overlooked, despite the significance of both race and religion in many students' lives. This study examines whether religious observance, religious worldview identification, and participation in a religious student organization are significantly related to cross-racial interaction (CRI), a form of bridging social capital, during college. The current study yielded largely positive relationships between general religiosity and CRI. General religiosity was also positively linked to CRI for Asian American, white, and black students. CRI was higher for students from minority religious backgrounds. Participation in campus religious groups was nonsignificant, regardless of the racial composition of the group. Findings are surprising given previous work that has mainly found negative relationships between religion and diversity-related outcomes in college.*

- Wallwork, Sarah B., David S. Butler, Dianne J. Wilson & G. Lorimer Moseley. 2015. Are people who do yoga any better at a motor imagery task than those who do not? *British Journal of Sports Medicine* 49(2). 123–U81.  
doi:10.1136/bjsports-2012-091873.

*Yoga is a popular recreational activity in Western society and there is an abundance of literature suggesting that yoga may be beneficial for people with a chronic pain disorder. Despite consistently positive results in the literature, the mechanisms of effect are unclear. On the grounds that chronic pain is associated with disruptions of brain-grounded maps of the body, a possible mechanism of yoga is to refine these brain-grounded maps. A left/right body part judgment task is an established way of interrogating these brain-grounded maps of the body. This research aims to determine if people who do regular yoga practice perform better at a left/right judgment task than people who do not. Using a case-control design, participants who reported taking part in regular yoga were selected against age, gender, neck pain and arm pain-matched controls. Participants viewed 40 photographs of a model with their head turned to the left or right, and were asked to judge the direction of neck rotation. They then completed a left/right-hand judgment task. Of the 1,737 participants, 86 of them reported regularly taking part in yoga. From the remaining participants, 86 matched controls were randomly selected from all matched controls. There was no*

*difference between Groups (yoga and no yoga) for either response time or accuracy. There was a difference between Tasks; people were faster and more accurate at making left/ right neck rotation judgments than they were at making left/ right-hand judgments, regardless of group.*

Waters, Sonia. 2014. I Surrender All: Subverting the Cruelty of Capitalist Optimism with Affective Expressions of Worship. *Pastoral Psychology* 63(5/6). 749–761.  
doi:10.1007/s11089-014-0606-4.

*This paper explores the experience of an affectively charged healing worship service comprised of mostly working-class parishioners. It suggests that they seek healing from a feeling of being worn out by the precarity of daily life and by their efforts to reach the “American dream.” The ensuing discussion is framed by Lauren Berlant’s “cruel optimism”: the idea that individuals are attached to ideals that both define identities as productive members of a capitalist society and at the same time necessitate failures at reaching those ideals. The work of relational psychoanalyst Stephen Mitchell is utilized to describe how affective worship builds a co-created relational space of vulnerability and care that subverts this dominant ideal. The paper concludes with Emmanuel Ghent’s suggestion that religious surrender leads to an expansion of the self.*

Wittmann, Marc, Simone Otten, Eva Schötz, Anna Sarikaya, Hanna Lehnen, Han-Gue Jo, Niko Kohls, Stefan Schmidt & Karin Meissner. 2014. Subjective expansion of extended time-spans in experienced meditators. *Frontiers in Psychology* 5. 1586.  
doi:10.3389/fpsyg.2014.01586.

*Experienced meditators typically report that they experience time slowing down in meditation practice as well as in everyday life. Conceptually this phenomenon may be understood through functional states of mindfulness, i.e., by attention regulation, body awareness, emotion regulation, and enhanced memory. However, hardly any systematic empirical work exists regarding the experience of time in meditators. In the current cross-sectional study, researchers investigated whether 42 experienced mindfulness meditation practitioners (with on average 10 years of experience) showed differences in the experience of time as compared to 42 controls without any meditation experience matched for age, sex, and education. The perception of time was assessed with a battery of psychophysical tasks assessing the accuracy of prospective time judgments in duration discrimination, duration reproduction, and time estimation in the milliseconds to minutes range as well with several psychometric instruments related to subjective time such as the Zimbardo Time Perspective Inventory, the Barratt Impulsivity Scale and the Freiburg Mindfulness Inventory. In addition, subjective time judgments on the current passage of time and retrospective time ranges were assessed. While subjective judgments of time were found to be significantly different between the two groups on several scales, no differences in duration estimates in the psychophysical tasks were detected. Regarding subjective time, mindfulness meditators experienced less time pressure, more time dilation, and a general slower passage of time. Moreover, they felt that the last week and the last month passed more slowly. Overall, although no intergroup differences in psychophysical tasks were detected, the reported findings demonstrate a close association between mindfulness meditation and the subjective feeling of the passage of time captured by psychometric instruments.*

Zafar, Sadia & Erin C. Ross. 2015. Interreligious contact, attitudes, and stereotypes: A study of five religious groups in Canada. *Canadian Journal of Behavioural Science* 47(1). 37–46.  
doi:10.1037/a0036720.

*The rich religious diversity in Canada provides a particularly relevant context for the study of interreligious relations. This study analyses the stereotypes of 5 religious groups (Christians, Hindus, Jews, Muslims, and Sikhs) among a sample of undergraduate students (n=152) in Canada. It also examines the relationship between intergroup contact, knowledge, and attitudes toward these religious groups. Open-ended response methodology was used to elicit participants’ perceptions of the characteristics of target religious groups as well as the emotions they felt toward these groups. Participants also completed attitude thermometers, Attitude Toward Religious Group (ATRG) Scales, and items assessing knowledge about target groups as well as the extent of contact with the groups. Results suggest that,*

overall, more positive than negative characteristics were ascribed to the groups. Similarly, more positive or neutral emotions than negative emotions were expressed toward the groups. Consistent with the first hypothesis, knowledge and contact score positively predicted ATRG scores. The second hypothesis that Muslims would be evaluated least favorably among the 5 groups was also supported. Results indicate that the contact hypothesis can be extended to religious groups as contact and information about the target groups predicted positive attitudes toward them.

Zukerman, Gil & Liat Korn. 2014. Post-traumatic stress and world assumptions: The effects of religious coping. *Journal of Religion and Health* 53(6). 1676–1690.  
doi:10.1007/s10943-013-9755-5.

*Religiosity has been shown to moderate the negative effects of traumatic event experiences. The current study was designed to examine the relationship between post-traumatic stress (PTS) following traumatic event exposure; world assumptions defined as basic cognitive schemas regarding the world; and self and religious coping conceptualized as drawing on religious beliefs and practices for understanding and dealing with life stressors. This study examined 777 Israeli undergraduate students who completed several questionnaires which sampled individual world assumptions and religious coping in addition to measuring PTS, as manifested by the PTSD check list. Results indicate that positive religious coping was significantly associated with more positive world assumptions, while negative religious coping was significantly associated with more negative world assumptions. Additionally, negative world assumptions were significantly associated with more avoidance symptoms, while reporting higher rates of traumatic event exposure was significantly associated with more hyper-arousal. These findings suggest that religious-related cognitive schemas directly affect world assumptions by creating protective shields that may prevent the negative effects of confronting an extreme negative experience.*

#### **1.4 SCIENTIFIC STUDY OF RELIGION: METHOD & THEORY**

Hong, Sun-ha. 2015. When life mattered: The politics of the real in video games' reappropriation of history, myth, and ritual. *Games and Culture: A Journal of Interactive Media* 10(1). 35–56.  
doi:10.1177/1555412014557542.

*Games borrow ceaselessly from the past to constitute themselves. This locates the medium at the heart of our contemporary obsession with how to engage the past and the “real.” In tethering digital hyperreality to the horizon of history, myth, and ritual, games generate a disavowed and subjunctive engagement with a sense of “real enough.” They thus resemble Victor Turner’s liminoids: autotelic, bounded experiences of leisure that cultivate accepting yet playful attitudes against the “real enough” on offer. This commercialized bricolage is not dismissible as inauthentic simulacrum. Rather, such games demonstrate the ways in which new media are recalibrating our modes of engagement with the real. This article analyzes three key aspects of liminoid games: (1) techniques of reappropriation during production, (2) rules and expectations of engagement with the past and the “real” that games offer, and (3) emergent ways in which player communities, discourses, and productions recalibrate those politics of engagement.*

Kass, Jared D. 2015. Person-centered spiritual maturation: A multidimensional model. *Journal of Humanistic Psychology* 55(1). 53–76.  
doi:10.1177/0022167814525261.

*The author explains person-centered spiritual maturation as a person-specific process of psychospiritual development that can be mentored in communities where belief systems and cultural identities are diverse. It enables individuals to deepen engagement with contemplative practices from spiritual traditions that hold personal salience, while building inclusive, respectful communities. This multidimensional model emerges from three decades mentoring person-centered spiritual maturation with university students in the service of their growth as professionals and socially responsible citizens. Growth includes (a) behavioral self-regulation through mindfulness; (b) cognitive understanding of humanity’s chain of pain that supports social justice; (c) social–emotional development that repairs broken attachment templates and promotes compassionate attunement to self and others; (d) contemplative practice that*

*strengthens secure existential attachment and taps the human capacity for unconditional altruistic love; and (e) formation of a resilient worldview, confidence in life and self, that helps people confront life's existential, interpersonal, and intergroup tensions with sufficient internal composure to derive maturational growth. This model provides a cohesive multidimensional explanation of person-centered spiritual maturation that highlights its prosocial value, integrates relevant neuroscience, and offers researchers a conceptual framework for future investigations.*

## PART 2: ARTICLES IN SPIRITUALITY & HEALTH RESEARCH

### 2.1 SPIRITUALITY & HEALTH: GENERAL HEALTH & WELL-BEING

Banerjee, Ananya Tina, Patricia H. Strachan, Michael H. Boyle, Sonia S. Anand & Mark Oremus. 2014. Attending religious services and its relationship with coronary heart disease and related risk factors in older adults: a qualitative study of church pastors' and parishioners' perspectives. *Journal of Religion and Health* 53(6). 1770–1785.  
doi:10.1007/s10943-013-9783-1.

*A qualitative study was undertaken to explain findings of a cross-sectional study of Canadian Community Health Survey (CCHS) 4.1 data showing older persons who attend religious services more than once a week, compared to persons who do not attend at all, have lower prevalence of coronary heart disease (CHD), diabetes and high blood pressure. Twelve semi-structured interviews with ordained pastors and three focus groups with older parishioners from Canadian churches were conducted. Interviews were transcribed and analyzed for emergent themes through a process of direct content analysis. All participants claimed that religious service attendance (RSA): (1) enhances mental health; (2) provides social support and activities; and (3) promotes health and lifestyle behaviours that lower CHD risk. These three themes appear to be underlying mechanisms that help to explain the inverse association between RSA and the prevalence of adverse health outcomes found in the CCHS 4.1 data.*

Brechting, Emily H. & Charles R. Carlson. 2015. Religiousness and alcohol use in college students: Examining descriptive drinking norms as mediators. *Journal of Child & Adolescent Substance Abuse* 24(1). 1–11.  
doi:10.1080/1067828X.2014.958000.

*Religiousness has consistently emerged in the literature as a protective factor for alcohol use. Relatively few studies have empirically explored possible mechanisms for this robust effect. The present study examines descriptive drinking norms as a potential mediator of the religiousness–alcohol consumption association. Consistent with the literature, religiousness was inversely related to alcohol use and alcohol-related problems. Religiousness was also inversely related to descriptive drinking norms for close friends but not for more distal targets. Descriptive drinking norms for one's close friends mediated the relationships between religiousness and alcohol use outcomes. These results suggest that religiousness may influence alcohol use outcomes through perceptions of close friends' alcohol use.*

Butzer, Bethany, Danielle Day, Adam Potts, Connor Ryan, Sarah Coulombe, Brandie Davies, Kimberly Weidknecht, Marina Ebert, Lisa Flynn & Sat Bir S. Khalsa. 2015. Effects of a classroom-based yoga intervention on cortisol and behavior in second- and third-grade students: A pilot study. *Journal of Evidence-Based Complementary & Alternative Medicine* 20(1). 41–49.  
doi:10.1177/2156587214557695.

*This uncontrolled pilot study examined the effects of a classroom-based yoga intervention on cortisol concentrations and perceived behavior in children. A 10-week Yoga 4 Classrooms intervention was implemented in one second-grade and one third-grade classroom. Students' salivary cortisol responses were assessed at 3 time points. Classroom teachers also documented their perceptions of the effects of the intervention on students' cognitive, social, and emotional skills. Second, but not third, graders showed a significant decrease in baseline cortisol from before to after the intervention. Second and third graders both showed significant decreases in cortisol from before to after a cognitive task, but neither grade showed additional decreases from before to after a single yoga class. The second-grade teacher perceived significant improvements in several aspects his/her students' behavior. The third-grade teacher perceived some, but fewer, improvements in his/her students' behavior. Results suggest that school-based yoga may be advantageous for stress management and behavior.*

- Cvengros, Jamie A., Megan R. Crawford, Rachel Manber & Jason C. Ong. 2015. The Relationship Between Beliefs About Sleep and Adherence to Behavioral Treatment Combined With Meditation for Insomnia. *Behavioral Sleep Medicine* 13(1). 52–63.  
doi:10.1080/15402002.2013.838767.

*This study examined beliefs about sleep, as measured by the Dysfunctional Beliefs and Attitudes about Sleep (DBAS) scale, as predictors of adherence to 3 specific insomnia treatment recommendations: restriction of time spent in bed, maintenance of a consistent rise time, and completion of daily meditation practice. Higher DBAS scores predicted poorer adherence to restriction of time spent in bed and to maintenance of a prescribed rise time. DBAS scores were not associated with completion of daily meditation. These preliminary findings suggest that pre-treatment beliefs about sleep may impact patient engagement with behavioral recommendations regarding time in bed and consistent rise time during treatment for insomnia.*

- Giordano, Amanda L., Elizabeth A. Prosek, Cynthia M. Daly, Jessica M. Holm, Zachary B. Ramsey, Meagan R. Abernathy & Kristy M. Sender. 2015. Exploring the relationship between religious coping and spirituality among three types of collegiate substance abuse. *Journal of Counseling & Development* 93(1). 70–79.  
doi:10.1002/j.1556-6676.2015.00182.x.

*Religion and spirituality are protective factors against collegiate substance abuse; however, considering the variance among different types of drug abuse is important. Researchers investigated religious coping and spirituality in relation to hazardous drinking, marijuana use, and psychostimulant use. Results indicated that positive religious coping and several dimensions of spirituality protect against hazardous drinking and marijuana use. Furthermore, differences in religious coping and spirituality may not exist between groups of psychostimulant users.*

- Guner, Senem & Fatma Inanici. 2015. Yoga therapy and ambulatory multiple sclerosis Assessment of gait analysis parameters, fatigue and balance. *Journal of Bodywork and Movement Therapies* 19(1). 72–81.  
doi:10.1016/j.jbmt.2014.04.004.

*Gait impairment, falls due to balance problems and fatigue are among the most important complaints in patients with multiple sclerosis (MS) and cause significant functional limitation. Use of complementary and alternative medicine (CAM) to help symptom management and to improve quality of life is growing among MS patients. Yoga is widely used as one of these CAM interventions, however, the number of studies that show the efficacy of yoga training in MS is inadequate. In this study, researchers aimed to evaluate the effects of a short term yoga program on fatigue, balance and gait in patients with MS. Eight volunteer ambulatory MS patients with clinically definite relapsing remitting MS whose Expanded Disability Status Score (EDSS) is less than or equal to 6.0, and eight healthy subjects were included in the study. Patients participated in 12 weeks of a bi-weekly yoga program under supervision. After short term yoga therapy, statistically significant achievements were obtained in fatigue, balance, step length and walking speed. Although sagittal plane pelvis and hip angles, ankle plantar flexor moment, powers generated at the hip and ankle joints at the pre-swing were improved, the improvements were not statistically significant.*

- Jeitler, Michael, Stefan Brunnhuber, Larissa Meier, Rainer Lüdtker, Arndt Büssing, Christian Kessler & Andreas Michalsen. 2015. Effectiveness of jyoti meditation for patients with chronic neck pain and psychological distress: A randomized controlled clinical trial. *Journal of Pain* 16(1). 77–86.  
doi:10.1016/j.jpain.2014.10.009.

*Chronic neck pain is a common medical complaint partly mediated by psychosocial distress and having a high socioeconomic impact. There is preliminary evidence that stress reduction by meditation might be beneficial in chronic pain syndromes. Researchers aimed to evaluate the effectiveness of an 8-week meditation program (jyoti meditation)*

*in patients with chronic neck pain by means of a randomized clinical trial. Eighty-nine patients with chronic neck pain who scored >40 mm on a 100-mm visual analog scale and had concomitant increased perceived stress were randomized to an 8-week meditation program (jyoti meditation) with weekly 90-minute classes (n=45) or to a home-based exercise program (n=44) with a wait list offer for meditation. Both groups were instructed to practice at home. Outcomes were assessed at baseline and after 8 weeks. Meditation training significantly reduced pain when compared to the exercise group after 8 weeks. Pain-related bothersomeness decreased more in the meditation group. No significant treatment effects were found for pain at motion, psychological scores, and quality of life, although the meditation group showed nonsignificant greater improvements compared to the exercise group. In conclusion, meditation may support chronic pain patients in pain reduction and pain coping.*

Kremer, Heidemarie, Gail Ironson, Lauren Kaplan, Rick Stuetzle, Neil Baker & Mary Ann Fletcher. 2015. Spiritual coping predicts CD4-cell preservation and undetectable viral load over four years. *AIDS Care* 27(1). 71–79.  
doi:10.1080/09540121.2014.952220.

*In this study of 177 people living with HIV, researchers examined if spiritual coping leads to slower HIV disease progression (CD4 cells, viral load [VL]), and more positive health behaviors (adherence, safer sex, less substance use). Prior research suggests that physicians' assessment of spiritual coping can be an interventional aid in promoting positive spiritual coping. Longitudinal spiritual coping was rated using qualitative content analysis of six-monthly interviews/essays. Positive spiritual coping (65%) was predominant over negative (7%), whereas 28% did not make significant use of spirituality as a means to cope. Spiritual coping was associated with less substance use disorder but not with less sexual risk behavior. Hierarchical linear modeling demonstrated that spiritual coping predicted sustained undetectable VL and CD4-cell preservation over four years, independent of sociodemographics, baseline disease status, and substance use disorder. Achieving undetectable VL significantly increased over time in participants with positive spiritual coping but decreased among those with negative spiritual coping. For every participant with positive spiritual coping achieving undetectable VL, four with negative spiritual coping reported with detectable/transmittable HIV. Notably, even when controlling for the effect of VL suppression, CD4-cell decline was 2.25 times faster among those engaged in negative versus positive spiritual coping. In conclusion, spiritual coping is associated with positive health behaviors, such as maintaining long-term VL suppression and less onset/relapse of substance use disorder over time. Among those who are sexually active, positive spiritual coping reduces the risk of HIV transmission via VL suppression but may not prevent the transmission of other STDs because spiritual coping is not related to safer sexual behavior. Notably, the association between spiritual coping and immune preservation was direct (i.e., not explained by VL suppression), suggesting potential psychoneuroimmunological pathways. Thus, assessment of spiritual coping may be an important area of intervention to achieve undetectable VL, reduce HIV disease progression, and prevent substance use onset/relapse.*

Ludema, Christina, Irene A. Doherty, Becky L. White, Cathy A. Simpson, Olga Villar-Loubet, Eleanor McLellan-Lemal, Christine M. O'Daniels & Adaora A. Adimora. 2015. Religiosity, Spirituality, and HIV Risk Behaviors among African American Women from Four Rural Counties in the Southeastern U.S. *Journal of Health Care for the Poor and Underserved* 26(1). 168–181.  
doi:10.1353/hpu.2015.0005.

*In a cross-sectional survey of 1,013 African American women from rural Alabama and North Carolina, researchers examined the relationship of (1) organizational religiosity (i.e., religious service attendance), (2) non-organizational religiosity (e.g., reading religious materials), and (3) spirituality with these outcomes: women's reports of their sexual behaviors and perceptions of their partners' risk characteristics. Women with high non-organizational religiosity, compared with low, had fewer sex partners in the past 12 months and were less likely to have concurrent partnerships. Similar results were observed for spirituality, and protective but weaker associations were observed for organizational religiosity. Weak associations were observed between organizational religiosity, non-organizational religiosity, and spirituality with partners' risk characteristics.*

Noronha, Konrad J. 2015. Impact of religion and spirituality on older adulthood. *Journal of Religion, Spirituality & Aging* 27(1). 16–33.  
doi:10.1080/15528030.2014.963907.

*An understanding of the role of religion and spirituality in the mental health of older adults is needed to better treat and work with such populations so that they can prepare themselves long in advance to respond to the challenges of old age. Research shows that the use of religion and spirituality in therapy with clients, who profess such beliefs, can have a positive impact in the therapeutic encounter. This article draws on disengagement, reengagement, and activity theory to show how religion and spirituality can be used in treating older adults. Older adults can age gracefully if they learn new ways to build community, find spiritual and cultural interests, and continue to work for as long as they can render service, even if limited.*

Paiva, Carlos Eduardo, Bianca Sakamoto Ribeiro Paiva, Sriram Yennurajalingam & David Hui. 2014. The impact of religiosity and individual prayer activities on advanced cancer patients' health: Is there any difference in function of whether or not receiving palliative anti-neoplastic therapy? *Journal of Religion and Health* 53(6). 1717–1727.  
doi:10.1007/s10943-013-9770-6.

*Consecutive patients (n=221) presenting for initial consultation at a palliative care outpatient clinic were prospectively interviewed and then followed until death. Individual prayer activity (IPA) and global religion scores were associated with quality of life, symptoms, inflammatory markers, and survival. Analyses were adjusted for whether patients were still receiving anti-neoplastic therapies (ANTs) or not. Higher religion scores were associated with lower levels of inflammation in advanced cancer patients still undergoing ANTs. Additionally, higher IPA was an independent good prognostic factor in patients on active ANTs. Further studies are necessary to confirm these findings and to investigate possible biological mechanisms involved.*

Phillips, Lauren, Jeanne K. Kemppainen, Brandy M. Mechling, Sally MacKain, Yeounsoo Kim-Godwin & Louisa Leopard. 2015. Eating disorders and spirituality in college students. *Journal of Psychosocial Nursing and Mental Health Services* 53(1). 30–37.  
doi:10.3928/02793695-20141201-01.

*Associations were examined between eating disorder symptoms and spiritual well-being in a convenience sample of college students. Undergraduate nursing students at a university in a Mid-Atlantic coastal beach community were recruited for the study. A total of 115 students completed the Spiritual Well-Being Scale (SWBS); the Sick, Control, One Stone, Fat, Food (SCOFF) screening questionnaire; and the Eating Attitudes Test (EAT-26). Approximately one quarter of students had positive screens for an eating disorder, and 40% admitted to bingeing/purging. SWBS scores reflected low life satisfaction and a lack of clarity and purpose among students. A significant association was found between EAT-26 scores and SWBS Existential Well-Being (EWB) sub-scale scores. SCOFF scores were significantly associated with SWBS EWB scores. Symptoms of eating disorders were pervasive.*

Ravishankar, Nidhi & Mark Bernstein. 2014. Religion benefiting brain tumour patients: a qualitative study. *Journal of Religion and Health* 53(6). 1898–1906.  
doi:10.1007/s10943-014-9895-2.

*As the focus on modern neurosurgery has shifted to the realm of technological advancement, some patients and their loved ones still hold a strong faith in their religion to guide them through the process. This study aimed to determine whether religion as a coping mechanism was beneficial for patients before, during and after craniotomy. Qualitative case study methodology was used. Interviews were conducted with randomly selected 36 adult patients who underwent surgery for a benign or malignant brain tumor. Interviews were audio recorded and transcribed, and the data subjected to thematic analysis. Four overarching themes emerged from the data: (1) religion significantly benefited neurosurgical*



patients; (2) neurosurgical patients did not require a dedicated religious room in the hospital; (3) neurosurgical patients required religious resources such as leaders and/or groups; and (4) patients were not in favor of their physician engaging in the religious ritual. Most patients found religion to be an effective coping mechanism, offering them strength, comfort, and hope through the surgery. The findings from this study emphasize the need for including a “religious time-out” before and after surgery and the inclusion of religious leaders/groups for those in favor to ensure quality care and patient satisfaction.

Smith, Scott James. 2015. Risky sexual behavior among young adult Latinas: Are acculturation and religiosity protective? *Journal of Sex Research* 52(1). 43–54.  
doi:10.1080/00224499.2013.821443.

*A sexual health disparity exists among U.S. Latinas, who have rates of sexually transmitted infections (STIs) that are more than double their peers. Previous research has identified acculturation and religiosity as key social determinants of sexual health, but such findings have been inconsistent, with some researchers identifying protective benefits and other researchers noting increased risk. The purpose of this study was to explain how intrinsic and extrinsic religiosity as well as acculturation predict risky sexual behavior using Structural Equation Modeling of a nationally representative sample of self-identified Latinas (n=1,168) from the National Longitudinal Survey of Adolescent Health. Results indicated that intrinsic religiosity and acculturation assert protective effects while extrinsic religiosity increases risk.*

Snipes, Daniel J., Amy J. Jeffers, Eric G. Benotsch, Jessica McCauley, Dana Bannerman, Catherine Granger & Aaron M. Martin. 2015. Religiosity in the non-medical use of prescription medication in college students. *American Journal of Drug and Alcohol Abuse* 41(1). 93–99.  
doi:10.3109/00952990.2014.939755.

*The non-medical use of prescription drugs (NMUPD) is a hazardous health behavior popular among young adults and college students. Past research has documented prevalence rates and risk factors associated with NMUPD, while little research has addressed protective factors. The present study examined the associations of religiosity and NMUPD in a sample of college students. Young adult (ages 18-25) college students (n=767) completed an anonymous online survey assessing demographic variables, NMUPD, personality factors, perceptions of risk, mental health, and religiosity. Results showed that greater religiosity scores were consistently associated with lower odds of engaging in NMUPD in the past 3 months. These associations were partially mediated by the personality characteristics of conscientiousness and openness to experience as well as perceived risk of NMUPD. The effect of religiosity on NMUPD was moderated by Greek (i.e., fraternity or sorority) membership, such that those in a Greek organization showed no relation between religiosity and NMUPD, while religiosity served as a protective factor for NMUPD among those who did not have Greek membership.*

Sprod, Lisa K., Isabel D. Fernandez, Michelle C. Janelins, Luke J. Peppone, James N. Atkins, Jeffrey Giguere, Robert Block & Karen M. Mustian. 2015. Effects of yoga on cancer-related fatigue and global side-effect burden in older cancer survivors. *Journal of Geriatric Oncology* 6(1). 8–14.  
doi:10.1016/j.jgo.2014.09.184.

*Sixty percent of cancer survivors are 65 years of age or older. Cancer and its treatments lead to cancer-related fatigue and many other side effects, in turn, creating substantial global side-effect burden (total burden from all side effects) which, ultimately, compromises functional independence and quality of life. Various modes of exercise, such as yoga, reduce cancer-related fatigue and global side-effect burden in younger cancer survivors, but no studies have specifically examined the effects of yoga on older cancer survivors. The purpose of this study was to assess the effects of a 4-week yoga intervention (Yoga for Cancer Survivors: YOCAS®) on overall cancer-related fatigue, and due to its multidimensional nature, the subdomains of cancer-related fatigue (general, physical, emotional, and mental) and global side-effect burden in older cancer survivors. Researchers conducted a secondary analysis on data from a multicenter phase III randomized controlled clinical trial with 2 arms (standard care and standard care plus a 4-*

*week YOCAS<sup>®</sup> intervention). The sample for this secondary analysis was 97 older cancer survivors, between 2 months and 2 years post-treatment, who participated in the original trial. Participants in the YOCAS<sup>®</sup> intervention arm reported significantly lower cancer-related fatigue, physical fatigue, mental fatigue, and global side-effect burden than participants in the standard care arm following the 4-week intervention period.*

- Thiyagarajan, Ramkumar, Pravati Pal, Gopal Krushna Pal, Senthil Kumar Subramanian, Madanmohan Trakroo, Zachariah Bobby & Ashok Kumar Das. 2015. Additional benefit of yoga to standard lifestyle modification on blood pressure in prehypertensive subjects: a randomized controlled study. *Hypertension Research* 38(1). 48–55.  
doi:10.1038/hr.2014.126.

*High blood pressure (BP) is a known risk factor for cardiovascular disease morbidity. Considering the growing evidence of nonpharmacological interventions in the management of high BP, researchers designed a randomized, parallel active-controlled study on the effect of yoga and standard lifestyle modification (LSM) on BP and heart rate in individuals with prehypertension. Volunteers (20-60 years) of both genders without any known cardiovascular disease were randomized into either LSM group (n=92) or LSM + yoga group (n=92). Before the intervention, age, waist circumference, physical activity, BP and fasting plasma glucose and lipids were comparable between the groups. After 12 weeks of intervention, researchers observed a significant reduction in the BP and heart rate in both the groups. Further, the reduction in systolic BP was significantly more in LSM + yoga group (6 mm Hg) as compared with LSM group (4 mm Hg). In addition, 13 prehypertensives became normotensives in LSM + yoga group and four in LSM group. The results indicate efficacy of nonpharmacological intervention and the additional benefit of yoga to standard LSM.*

- Trevino, K. M. & T. R. McConnell. 2014. Religiosity and religious coping in patients with cardiovascular disease: change over time and associations with illness adjustment. *Journal of Religion and Health* 53(6). 1907–1917.  
doi:10.1007/s10943-014-9897-0.

*Little is known about the longitudinal relationship between religiosity/spirituality (R/S) and patient physical and mental health in patients with cardiovascular disease. Forty-three patients with a first-time myocardial infarction or coronary artery revascularization bypass surgery completed measures of religiosity, religious coping, quality of life (QOL), and weight prior to a cardiac rehabilitation program and 1 and 2 years later. R/S changed over time; the direction of the change varied by type of R/S. Increases in religiosity were associated with increases in weight and QOL; increases in religious coping were associated with decreases in weight and increases in QOL.*

- Vanderpot, Lynne E. 2014. Case study explorations of the interrelationship between spirituality and psychiatric medication use. *Spirituality in Clinical Practice* 1(4). 300–306.  
doi:10.1037/scp0000044.

*Both spirituality and psychiatric medication are thought to mediate the processes of wellness and recovery in the treatment of mental health problems. The following two case studies relate to an ongoing qualitative research study using the approach of hermeneutic phenomenology to explore service users' perspectives on the interrelationship between spirituality and psychiatric medication use. These cases were chosen because they ideally embody the divergent nature of the findings in the larger study. By using these purer, more extreme examples of the data, the task of delineating the wide scope of experiences was made easier. A key finding in this study is that participants experienced a complex relationship between their spirituality and psychiatric medication use, which significantly affected the processes of wellness and recovery. This relationship was uniquely expressed, with some common themes. What these case reports suggest is the clinical value of understanding each client's unique spiritual resources, and how they may be perceived to interact with the use of psychiatric medication. Such an awareness has the potential to strengthen the therapeutic alliance and to increase clinicians' ability to provide informed support to service users. It is hoped that the findings of this study will enable another step forward in current treatment practices.*

## 2.2 SPIRITUALITY & HEALTH: MENTAL HEALTH

Abdollahi, Abbas & Mansor Abu Talib. 2015. Hardiness, spirituality, and suicidal ideation among individuals with substance abuse: the moderating role of gender and marital status. *Journal of Dual Diagnosis* 11(1). 12–21.  
doi:10.1080/15504263.2014.988558.

*Substance abuse is a serious and major public health problem in Iran and potentially increases the risk of suicidal behavior; therefore, it is essential to increase our knowledge concerning the etiology of suicide among individuals with substance use disorders. The present study sought to examine the associations among hardiness, spirituality, and suicidal ideation in Iranian individuals with substance abuse. This cross-sectional study was conducted in 2012, and participants comprised 450 individuals seeking substance abuse treatment at 10 addiction treatment centers in Tebran, Iran. All data were collected via self-report questionnaires. Structural equation modeling (SEM) suggested that, as expected, spirituality and hardiness were positively associated with each other. Findings also showed that spirituality and hardiness were negatively associated with suicidal ideation among this group of individuals with substance abuse, explaining 46% of the variance in suicidal ideation. That is, those with low levels of spirituality and low levels of hardiness were more likely to report suicidal ideation. There was a moderating effect of gender, such that greater hardiness predicted a lower likelihood of suicidal ideation for males but not for females. These findings reinforce the importance of spirituality and hardiness as protective factors against suicidal ideation in individuals with substance abuse, as well as the particular role of hardiness for men.*

Bryant-Davis, Thema, Sarah Ullman, Yuying Tsong, Gera Anderson, Pamela Counts, Shaquita Tillman, Cecile Bhang & Anthea Gray. 2015. Healing Pathways: Longitudinal Effects of Religious Coping and Social Support on PTSD Symptoms in African American Sexual Assault Survivors. *Journal of Trauma & Dissociation* 16(1). 114–128.  
doi:10.1080/15299732.2014.969468.

*African American women are at a slightly increased risk for sexual assault. However, because of stigma, experiences of racism, and historical oppression, African American women are less likely to seek help from formal agencies compared to White women and/or women of other ethnic backgrounds. Therefore, the provision of culturally appropriate services, such as the inclusion of religion and spiritual coping, may be necessary when working with African American women survivors of sexual assault. Controlling for age and education, the current study explores the impact of religious coping and social support over one year for 252 African American adult female sexual assault survivors recruited from the Chicago metropolitan area. Results from hierarchical linear regression analyses reveal that high endorsement of religious coping and social support at Time 1 does not predict a reduction in posttraumatic stress disorder (PTSD) symptoms at Time 2. However, high social support at Time 2 does predict lower PTSD at Time 2. Also, it is significant to note that survivors with high PTSD at Time 1 and Time 2 endorse greater use of social support and religious coping.*

Büssing, Arndt, Désirée Lötze, Michaela Glöckler & Peter Heusser. 2015. Influence of spirituality on cool down reactions, work engagement, and life satisfaction in anthroposophic health care professionals. *Evidence-Based Complementary and Alternative Medicine: eCAM* 2015. 754814.  
doi:10.1155/2015/754814.

*This study aimed to analyze whether spirituality is a resource for health care professionals to deal with increasing stress and work burden, specifically to analyze associations between “cool down reactions” (which describe an emotional distancing towards patients and/or reduced engagement as a strategy to protect their own functionality), work burden, and life satisfaction. Researchers specifically focused on anthroposophic health care professionals because of their unique approach to distinct aspects of spirituality. In a cross-sectional survey using standardized questionnaires, 489 persons were enrolled. They scored very high on all measures of spirituality and moderate to low with respect to “cool down reactions.” Significant predictors of “cool down reactions” were low work vigor, perceived*

*work burden, alcohol consumption, low life satisfaction, and religious orientation. In contrast, their life satisfaction was explained best by vigor, with further positive influences of being a physician, conscious interactions, and living with a partner on one hand and negative influences of “cool down reactions,” work burden, and transcendence convictions on the other hand. Thus, specific aspects of spirituality have only a small influence on anthroposophic health care professionals’ “cool down reactions,” but might buffer against a loss of vigor and dedication in their work.*

Grubbs, Joshua B., Julie J. Exline, Kenneth I. Pargament, Joshua N. Hook & Robert D. Carlisle. 2015. Transgression as addiction: religiosity and moral disapproval as predictors of perceived addiction to pornography. *Archives of Sexual Behavior* 44(1). 125–136.  
doi:10.1007/s10508-013-0257-z.

*Perceived addiction to Internet pornography is increasingly a focus of empirical attention. The present study examined the role that religious belief and moral disapproval of pornography use play in the experience of perceived addiction to Internet pornography. Results from two studies in undergraduate samples (Study 1, n=331; Study 2, n=97) indicated that there was a robust positive relationship between religiosity and perceived addiction to pornography and that this relationship was mediated by moral disapproval of pornography use. These results persisted even when actual use of pornography was controlled. Furthermore, although religiosity was negatively predictive of acknowledging any pornography use, among pornography users, religiosity was unrelated to actual levels of use. A structural equation model from a web-based sample of adults (Study 3, n=208) revealed similar results. Specifically, religiosity was robustly predictive of perceived addiction, even when relevant covariates (e.g., trait self-control, socially desirable responding, neuroticism, use of pornography) were held constant. In sum, the present study indicated that religiosity and moral disapproval of pornography use were robust predictors of perceived addiction to Internet pornography while being unrelated to actual levels of use among pornography consumers.*

Jones, Justin. 2014. Spirituality as attachment: The psychotherapy treatment of a lesbian woman suffering from schizophrenia. *Spirituality in Clinical Practice* 1(4). 307–312.  
doi:10.1037/scp0000036.

*The purpose of this case report is to demonstrate the way in which spirituality can function as an essential pathway to foster attachment in psychotherapy. The author details a yearlong psychotherapy treatment with a chronically and persistently mentally ill lesbian woman diagnosed with a traumatically induced schizophrenia in a state psychiatric hospital in New York City. The case not only details the use of the relational model of psychotherapy, but also illustrates how the active integration of spirituality is an essential component to the relational psychotherapy treatment.*

Khanna, Surbhi & Bruce Greyson. 2014. Near-death experiences and spiritual well-being. *Journal of Religion and Health* 53(6). 1605–1615.  
doi:10.1007/s10943-013-9723-0.

*People who have near-death experiences often report a subsequently increased sense of spirituality and a connection with their inner self and the world around them. In this study, researchers examined spiritual well-being, using Paloutzian and Ellison’s Spiritual Well-Being Scale, among 224 persons who had come close to death. Participants who reported having near-death experiences reported greater spiritual well-being than those who did not, and depth of spiritual well-being was positively correlated with depth of near-death experience. The authors discuss the implications of these findings in light of other reported aftereffects of near-death experiences and of spiritual well-being among other populations.*

Kim, Paul Youngbin, Dana L. Kendall & Marcia Webb. 2015. Religious coping moderates the relation between racism and psychological well-being among Christian Asian American college students. *Journal of Counseling Psychology* 62(1). 87–94.

doi:10.1037/cou0000055.

*The authors examined the moderating role of positive and negative religious coping in the relation between racism and psychological well-being in a sample of Catholic and Protestant Asian American college students (n=107). On the basis of prior theorizing on the 2 types of religious coping, combined with some limited empirical evidence, they predicted that positive religious coping would have a buffering effect (Hypothesis 1) on the racism–mental health relation and that negative religious coping would have an exacerbating effect (Hypothesis 2). Participants completed an online survey containing measures corresponding to the study variables. Results indicated that the interaction between positive religious coping and racism was not significant, so Hypothesis 1 was not supported. For Hypothesis 2, the negative religious coping and racism interaction term was statistically significant, but the moderating effect was in an unexpected direction, such that negative religious coping actually protected against the deleterious impact of racism on mental health. The findings suggest that the theorized deleterious influence of negative religious coping may need to be reconsidered in an Asian American setting. The findings have the potential to inform practitioners who work with Asian American college students to better cope with the detrimental consequences of racism.*

Krause, Neal & R. David Hayward. 2015. Acts of Contrition, Forgiveness by God, and Death Anxiety Among Older Mexican Americans. *The International Journal for the Psychology of Religion* 25(1). 57–73. doi:10.1080/10508619.2013.857256.

*The purpose of this study is to see if performing acts of contrition in order to be forgiven by God is associated with lower levels of death anxiety among older Mexican Americans. A conceptual model containing the following relationships was developed to evaluate this and other hypotheses: (a) It is hypothesized that older Mexican Americans who attend church more often will have a stronger sense of God-mediated control (i.e., the belief that God works together with people to attain desired goals and eliminate unwanted stressors), (b) individuals with a stronger sense of God-mediated control will be more likely to perform acts of contrition in order to earn God's forgiveness, (c) performing acts of contrition will enhance feelings of self-worth, and (d) a stronger sense of self-esteem will be associated with lower levels of death anxiety. Data from a nationwide sample of older Mexican Americans provide support for each of these relationships.*

Lee, Yu-Hao, Yung-Jong Shiah, Sharon Chia-Ju Chen, Shih-Feng Wang, Ming-Shing Young & Chih-Lung Lin. 2015. Improved emotional stability in experienced meditators with concentrative meditation based on electroencephalography and heart rate variability. *Journal of Alternative and Complementary Medicine (New York, N.Y.)* 21(1). 31–39. doi:10.1089/acm.2013.0465.

*Researchers sought to determine whether emotional stability distinguishes how 10 experienced and 10 novice meditators react to visual stimuli. As predicted, both groups had increased parasympathetic activities during concentrative meditation. Experienced meditators had increased low-frequency electroencephalography (EEG) rhythms in response to visual stimulation, whereas novices had increased high-frequency EEG rhythms. Correlational analyses revealed that novice meditators changed from a meditative state to a nonrelaxed state when the visual stimuli were presented, whereas experienced meditators maintained the meditative state.*

Lilly, Michelle M., Kathryn H. Howell & Sandra Graham-Bermann. 2015. World Assumptions, Religiosity, and PTSD in Survivors of Intimate Partner Violence. *Violence Against Women* 21(1). 87–104. doi:10.1177/1077801214564139.

*Intimate partner violence (IPV) is among the most frequent types of violence annually affecting women. One frequent outcome of violence exposure is posttraumatic stress disorder (PTSD). The theory of shattered world assumptions represents one possible explanation for adverse mental health outcomes following trauma, contending that trauma disintegrates individuals' core assumptions that the world is safe and meaningful, and that the self is worthy. Research*

*that explores world assumptions in relationship to survivors of IPV has remained absent. A more consistent finding in research on IPV suggests that religiosity is strongly associated with survivors' reactions to, and recovery from, IPV. The present study found that world assumptions was a significant mediator of the relationship between IPV exposure and PTSD symptoms. Religiosity was also significantly, positively related to PTSD symptoms, but was not significantly related to amount of IPV exposure. Though African American women reported more IPV exposure and greater religiosity than European American women in the sample, there were no interethnic differences in PTSD symptom endorsement. Implications of these findings are discussed.*

Pezzella, Frank S. & Sophia Vlahos. 2014. The moderating influence of religion on the behavioral health of formerly incarcerated men. *Journal of Religion and Health* 53(6). 1873–1884.  
doi:10.1007/s10943-014-9847-x.

*Formerly incarcerated persons have been found to sustain disproportionate rates of infectious and chronic diseases that place them at elevated levels of morbidity and mortality. However, prior research has found that religiosity moderates risks for poor health outcomes. In this study, researchers assess the moderating influence of religiosity on non-compliance with health maintenance and risk behaviors found to be robust predictors of poor health. Findings indicated that religiosity was not significantly associated with health maintenance behaviors. However, religiosity did demonstrate a significant negative relationship with reductions in health risk behaviors including marginal reductions in prior substance dependency and significant reductions in opinions on extramarital and unprotected sex practices contrary to prior research findings of the prevalence of high sexual risk behaviors. Findings validate prior research that found this population at sustained risk for illness. However, the study demonstrated a clear inverse relationship between religion and health risk behaviors found to be prevalent among formerly incarcerated men.*

Ramos, Katherine, Terri L. Barrera & Melinda A. Stanley. 2014. Incorporating nonmainstream spirituality into CBT for anxiety: A case study. *Spirituality in Clinical Practice* 1(4). 269–277.  
doi:10.1037/scp0000035.

*Generalized anxiety disorder is common in adults, and cognitive-behavior therapy has demonstrated positive outcomes. Recent approaches have considered the potential benefit of incorporating religion and spirituality into cognitive-behavioral therapy for generalized anxiety disorder, with positive effects. Although the model for this treatment allows flexibility with regard to religious and/or spiritual beliefs and behaviors, all pilot work to date has been conducted with participants who describe themselves as Christians. The current case study examines the flexibility and utility of this treatment with the incorporation of nontraditional religious and spiritual beliefs and behaviors (i.e., Unitarian Universalism).*

Robles-García, Rebeca, Sonia López-Luna, Francisco Páez, Raúl Escamilla, Beatriz Camarena & Ana Fresán. 2014. History of religious delusions and psychosocial functioning among Mexican patients with paranoid schizophrenia. *Journal of Religion and Health* 53(6). 1622–1633.  
doi:10.1007/s10943-013-9727-9.

*To compare religiosity and psychosocial functioning in Mexican schizophrenia patients with and without a history of religious delusions, seventy-four patients with paranoid schizophrenia were recruited. Patients with a history of religious delusions had more psychiatric hospitalizations and poorer psychosocial functioning compared with those without a history of religious delusions. No differences emerged between groups in the total scores of religiosity scales. A history of religious delusions rather than religiosity itself may have an influence on psychosocial functioning among Mexican patients with schizophrenia.*

Song, Yeoungsuk & Ruth Lindquist. 2015. Effects of mindfulness-based stress reduction on depression, anxiety, stress and mindfulness in Korean nursing students. *Nurse Education Today* 35(1). 86–90.  
doi:10.1016/j.nedt.2014.06.010.

*Researchers sought to examine the effects of MBSR on depression, anxiety, stress and mindfulness in 50 Korean nursing students. Students were randomly assigned to two groups: MBSR (n=21) and a wait list (WL) control (n=23). The MBSR group practiced mindfulness meditation for 2 h every week for 8 weeks. The WL group did not receive MBSR intervention. Standardized self-administered questionnaires of depression, anxiety, stress and mindfulness were administered at the baseline prior to the MBSR program and at completion (at 8 weeks). Following intervention, compared with WL participants, MBSR participants reported significantly greater decreases in depression, anxiety and stress, and greater increase in mindfulness.*

### **2.3 SPIRITUALITY & HEALTH: METHOD AND THEORY**

Best, Alicia L., Mindi Spencer, Ingrid J. Hall, Daniela B. Friedman & Deborah Billings. 2015. Developing spiritually framed breast cancer screening messages in consultation with African American women. *Health Communication* 30(3). 290–300. doi:10.1080/10410236.2013.845063.

*The goals of this study were to engage a group of African American women to identify important spiritual elements to be included in health communication materials, and to subsequently develop a spiritually framed breast cancer screening (BCS) message in response to their feedback. Three nominal group sessions were conducted with 15 African American women. Results revealed three important spiritual elements that can be incorporated into BCS health messages: (a) the body as a temple; (b) going to the doctor does not make you faithless; and (c) God did not give us the spirit of fear. These elements were used to draft a spiritually framed BCS message. Next, 20 face-to-face semistructured interviews were conducted to help finalize the spiritually framed BCS message for use in a future study on culturally framed health communication.*

Carey, Lindsay B. & Laura Del Medico. 2014. Correctional services and prison chaplaincy in Australia: An exploratory study. *Journal of Religion and Health* 53(6). 1786–1799. doi:10.1007/s10943-013-9788-9.

*This paper summarizes an exploratory study undertaken to consider the work of Australian chaplaincy personnel ministering to prisoners within correctional facilities. This qualitative research was not concerned with specific correctional institutions per se, but predominantly about the perspectives of chaplains concerning their professional contribution and issues they experienced while trying to provide pastoral care to prisoners. Data from a single-focus group indicated that prison chaplains were striving to fulfill religious and spiritual duties according to national and international standards for the treatment of prisoners. Given various frustrations identified by participants, that either impeded or thwarted their professional role as chaplains, a number of improvements were subsequently identified in order to develop the efficiency and effectiveness of chaplaincy and thus maximize the benefits of pastoral care to prisoners. Implications of this exploratory study relate not only to prison chaplaincy but also to ecclesiastical organizations, correctional facilities, governments and the need of support for further research to be conducted.*

Carissoli, Claudia, Daniela Villani & Giuseppe Riva. 2015. Does a meditation protocol supported by a mobile application help people reduce stress? Suggestions from a controlled pragmatic trial. *Cyberpsychology, Behavior and Social Networking* 18(1). 46–53. doi:10.1089/cyber.2014.0062.

*The aim of this study was to examine the efficacy of a 3 week mindfulness inspired protocol, delivered by an Android application for smartphones, in reducing stress in the adult population. By using a controlled pragmatic trial, a self-help intervention group of meditators was compared with a typical control group listening to relaxing music and a waiting list group. The final sample included 56 Italian workers as participants, block randomized to the three conditions. The self-reported level of perceived stress was assessed at the beginning and at the end of the protocol. Participants were also instructed to track their heart rate before and after each session. The results did not show any significant differences between groups, but both self-help intervention groups demonstrated an improvement in coping*

*with stress. Nevertheless, meditators and music listeners reported a significant decrease in average heartbeats per minute after each session. Furthermore, both groups perceived a moderate but significant change in stress reduction perceptions, even if with some peculiarities. Limitations and opportunities related to the meditation protocol supported by the mobile application to reduce stress are discussed.*

Code, Pamela & Larry Poston. 2015. Not going gentle into that good night: Science and religion in the face of death. *Journal of Religion, Spirituality & Aging* 27(1). 67–86.  
doi:10.1080/15528030.2014.952054.

*For millennia, religions have provided rituals bringing comfort in the face of death. Modern science, however, is developing new means for dealing with this phenomenon. Controversial issues include: how to ascertain “death,” particularly in light of “premature burials”; religious questions regarding the morality of embalming; religious questions regarding the desirability of burial versus cremation; and extending life in attempts to achieve immortality (versus the contention that mortality is the result of human sinfulness). This article explores these issues and seeks to answer the question of whether science has contributed positively or negatively to the experience of dying.*

Dobson, Marcia D.-S. 2015. Transcendent dimensions of the self: A spiritual home for self psychology? *International Journal of Psychoanalytic Self Psychology* 10(1). 1–13.  
doi:10.1080/15551024.2015.977482.

*Both Jung and Kohut place the notion of the discovery of “self” at the center of their psychological theories. Yet where Jung sees this process of discovery as possible only through connecting with the archetypes, which are at once immanent and transcendent, Kohut seemingly veers away from any notion of this in his thought. This article discusses the similarities and differences between Jungian and Kohutian ideas regarding dimensions of self to suggest that Kohut’s discovery of a mature self through cosmic narcissism is indeed touched with overtones of transcendence and spirituality. Raanan Kulka’s work on Buddhism also opens up Kohut’s thought to these dimensions, and greatly increases the possibilities for considering self-psychology in spiritual and ethical terms. The term spiritual is used throughout this essay as a sense of participating in a supraordinate being that grants the self a sense of meaning not explicable through everyday experience.*

Doehring, Carrie. 2014. Emotions and Change in Spiritual Care. *Pastoral Psychology* 63(5/6). 583–596.  
doi:10.1007/s11089-014-0607-3.

*How does spiritual care help people change? What role do emotions play? Intercultural spiritual care helps people change their “lived theology/ orienting system”—an emotionally-charged constellation of values, beliefs, and habitual ways of coping with stress. A case study based on the novel Affliction by Russell Banks and a film by the same title illustrates how trauma-related feelings of fear and shame pull together a lived theology for the protagonist, Wade Whitehouse, shaped by intersecting social systems of classism, sexism, and racism. His story illustrates the challenges of spiritually integrative spiritual care focused on emotionally charged lived theologies.*

Drie, A. van, R. R. Ganzevoort & M. Spiering. 2014. Anonymous pastoral care for problems pertaining to sexuality. *Journal of Religion and Health* 53(6). 1634–1652.  
doi:10.1007/s10943-013-9746-6.

*Anonymous pastoral care is one of the options for help in problems pertaining to sexuality. This paper explores the topics they seek help for, the religious aspects involved, and the relation between the normativity of their church tradition on the one hand and sexual and spiritual health criteria on the other. Researchers analyzed help-seeking questions of two protestant Christian organizations in the Netherlands providing anonymous pastoral care: Refoweb and EO-Nazorg. Sexual themes were addressed in 19% and 2.3% of the submitted questions, respectively. Of the help-seekers, 56 % are female, 15 % male, and 29 % unknown. Questions and problems for which people seek anonymous pastoral care focus primarily on premarital abstinence, gender roles, contraception, sexual orientation,*



*and masturbation. The authority of the Bible seems to be important for questioners, especially when dealing with ethical questions.*

Eriksson, Elisabet, Gunilla Lindmark, Beverley Haddad & Pia Axemo. 2014. Young people, sexuality, and HIV prevention within Christian faith communities in South Africa: a cross-sectional survey. *Journal of Religion and Health* 53(6). 1662–1675.

doi:10.1007/s10943-013-9753-7.

*Faith communities exert a powerful influence on the life of their members, and studies are needed about how they may be able to influence young people's attitudes regarding sexuality and HIV prevention. Data were collected through a self-administered questionnaire from young people (n=811), aged 15-24 years, affiliated with the Roman Catholic Church, the Lutheran Church and the Assemblies of God. The majority of participants perceived themselves at risk of HIV infection (53%). Premarital sexual abstinence was the most frequently (88%) reported prevention message, followed by faithfulness (23%), HIV testing (18%) and condom use (17%). Furthermore, religious affiliation was associated with education on sexuality and HIV in youth groups, with better information given to members of the Lutheran and Catholic churches. Faith communities need to strengthen their capacity to educate young people in a more holistic way about sexuality and HIV prevention.*

Henriksen, Richard C. Jr., Monica A. Polonyi, Jennifer N. Bornsheuer-Boswell, Rena G. Greger & Richard E. Watts. 2015. Counseling students' perceptions of religious/spiritual counseling training: A qualitative study. *Journal of Counseling & Development* 93(1). 59–69.

doi:10.1002/j.1556-6676.2015.00181.x.

*Students' perceptions of their training to incorporate religious and spiritual issues into counseling sessions have received little attention in the counselor education literature. This descriptive phenomenological qualitative study provided counseling students with the opportunity to share their perceptions of their preparation to incorporate religious and spiritual issues into counseling.*

Hodge, David R. 2015. Administering a two-stage spiritual assessment in healthcare settings: A necessary component of ethical and effective care. *Journal of Nursing Management* 23(1). 27–38.

doi:10.1111/jonm.12078.

*This article delineates rationales for administering a spiritual assessment as a universal component of care. The notion that nurses should identify and address patients' spiritual needs remains controversial, particularly in the UK where criticisms derived from secularization theory have appeared in the literature. However, five rationales are posited here to support the concept of universal spiritual assessments: professional ethics, patient autonomy, knowledge of patients' worldviews, the identification of spiritual assets, and accrediting and governmental requirements. Criticisms based on secularization theory are discussed and analyzed. A two-stage spiritual assessment—consisting of a brief preliminary assessment followed, if necessary, by a comprehensive assessment—provides a mechanism to efficiently identify patients' spiritual needs.*

Hogue, David. 2014. Sometimes It Causes Me to Tremble: Fear, Faith, and the Human Brain. *Pastoral Psychology* 63(5/6). 659–671.

doi:10.1007/s11089-013-0593-x.

*This article reviews selected current neuroscientific research on fear and anxiety and sketches three of anxiety's sources: innate/learned, loss of attachment, and symbolic/narrative construction. The article then explores the role of religious communities and practitioners of pastoral care and counseling in offering both antidotes to destructive anxiety and faithful management of normal or "useful" anxiety.*

Holt, Cheryl L., Eddie M. Clark, Min Qi Wang, Beverly Rosa Williams & Emily Schulz. 2015. The religion–health connection among African Americans: What is the role of social capital? *Journal of Community & Applied Social Psychology* 25(1). 1–18.

doi:10.1002/casp.2191.

*Researchers have expressed growing interest in factors that may explain the relationship between religious involvement and health-related outcomes. Faith-based organizations are a significant institution in African American communities, both serving religious/spiritual needs and providing an important source of social capital. These communities often suffer a disproportionate burden of health conditions as well. The present study examined the role of social capital (social support, interconnectedness, and community participation) in the relationship between religious involvement (beliefs and behaviors) and physical and emotional functioning and depressive symptoms, among a national probability sample of African Americans (n=803). Participants completed telephone interviews. Researchers used structural equation modeling to test hypotheses based on the theoretical model. Results indicate that interconnectedness played a modest mediational role in the relationship between religious behaviors/participation and depressive symptoms. Interconnectedness was predictive of fewer depressive symptoms and marginally with better emotional functioning.*

Jafari, Najmeh, Amir Loghmani & Christina M. Puchalski. 2014. Spirituality and health care in Iran: Time to reconsider. *Journal of Religion and Health* 53(6). 1918–1922.  
doi:10.1007/s10943-014-9887-2.

*Spirituality is increasingly recognized as an essential element of care. This article investigates the role of spirituality in Iranian health care system and provides some guidelines to integrate spirituality in routine health care practice in Iran.*

Jankowski, Katherine R. B. & Kevin J. Flannelly. 2015. Measures of central tendency in chaplaincy, health care, and related research. *Journal of Health Care Chaplaincy* 21(1). 39–49.  
doi:10.1080/08854726.2014.989799.

*The three measures of central tendency are discussed in this article: the mode, the median, and the mean. These measures of central tendency describe data in different and important ways, in relation to the level of measurement (nominal, ordinal, interval, or ratio) used to obtain the data. The results of published research studies, thought experiments, and graphs of frequency and percentage distributions of data are used as examples to demonstrate and explain the similarities and differences among these summary measures of data. The examples include the application of nominal, ordinal, interval, and ratios scales to measure pain, anxiety, chaplaincy services, religious behaviors, and treatment-related preferences, and their respective measures of central tendency. Examples of unimodal and bimodal distributions, and differences in the relative locations of the median and mean in symmetrical and skewed distributions are also presented and discussed.*

Kain, Victoria J. 2014. Babies born dying: just bad karma? A discussion paper. *Journal of Religion and Health* 53(6). 1753–1758.  
doi:10.1007/s10943-013-9779-x.

*The paper examines the notion of being born dying and karma. Karma is a belief upheld by Buddhists and non-Buddhists: That is, karma follows people from their previous lives into their current lives. This raises a difficult question: Does karma mean that a baby's death is its own fault? While great peace can be found from a belief in karma, the notion of a baby's karma returning in some sort of retributive, universal justice can be de-emphasized and is considered "un-Buddhist." Having an understanding of karma is intrinsic to the spiritual care for the dying baby, not only from the perspective of parents and families who have these beliefs, but also for reconciling one's own beliefs as a healthcare practitioner.*

Kemper, Kathi J. & Jonathan Yun. 2015. Group online mindfulness training: Proof of concept. *Journal of Evidence-Based Complementary & Alternative Medicine* 20(1). 73–75.  
doi:10.1177/2156587214553306.

*Mindfulness-based stress reduction training is attractive, but training with an expert teacher is often inconvenient and costly. This proof-of-concept project assessed the feasibility of providing a hybrid of free online mindfulness-based stress reduction training with small group peer facilitation. Six medical students asked a family medicine resident with 5 years of meditation experience but no formal training as a teacher to facilitate 8 weekly group sessions using a free online mindfulness-based stress reduction course. They completed pre- and posttraining questionnaires online. Six of the 7 trainees completed at least half the sessions. Completers and noncompleters had similar age (29 years), gender (about half male), and health status. Changes in the expected direction were observed for perceived stress, mindfulness, resilience, and confidence in providing calm, compassionate care. The hybrid of online mindfulness-based stress reduction training with peer support is feasible.*

LaMothe, Ryan. 2014. The Paradox and Tragedy of Helplessness: Freud, Winnicott, and Religion. *Pastoral Psychology* 63(5/6). 673–687.  
doi:10.1007/s11089-014-0598-0.

*This article explores the works of Freud and Winnicott from the prism of the experience of helplessness in everyday life. Their theories provide a framework for and psychological insights into understanding the etiological sources and dynamics of non-traumatic helplessness. In addition, it is argued that Freud's and Winnicott's respective psychological theories manifest and were shaped by their own personal attitudes and responses toward experiences of helplessness, which, in turn, influenced their views regarding the role of religion in human life.*

Lynn, Beverly, Grace J. Yoo & Ellen G. Levine. 2014. “Trust in the Lord”: religious and spiritual practices of African American breast cancer survivors. *Journal of Religion and Health* 53(6). 1706–1716.  
doi:10.1007/s10943-013-9750-x.

*Few studies have examined the role of religion and spirituality among African American breast cancer patients. This study explored how African American women cope with breast cancer through religious and spiritual practices. Forty-seven African American women who had completed treatment for breast cancer participated in in-depth interviews about their experiences. The majority of the women mentioned using both individual and communal religious and spiritual practices to cope with their breast cancer diagnosis and treatment. The main themes that emerged in terms of the types of religious and spiritual practices included: (1) attendance at religious services, (2) comfort through prayers of others, and (3) encouragement through reading Biblical scriptures. These practices helped women “trust in the Lord” throughout the many challenges of cancer from diagnosis through survivorship. Although this study is exploratory, the findings illustrate how African American women with breast cancer use religious and spiritual practices to cope with their diagnosis and treatment. For clinicians, the findings provides an understanding of spiritual and religious needs in diverse populations and the importance of referring patients onto spiritual and religious resources and support.*

Marin, Deborah B., Vanshdeep Sharma, Eugene Sosunov, Natalia Egorova, Rafael Goldstein & George F. Handzo. 2015. Relationship between chaplain visits and patient satisfaction. *Journal of Health Care Chaplaincy* 21(1). 14–24.  
doi:10.1080/08854726.2014.981417.

*This prospective study investigated the relationship between chaplain visits and patient satisfaction, as measured by Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) and Press Ganey surveys from 8,978 patients who had been discharged from a tertiary care hospital. Controlling for patients' age, gender, race, ethnicity, language, education, faith, general health status, and medical conditions, chaplain visits increased the willingness of patients to recommend the hospital. On the Press Ganey survey, patients visited by chaplains were also more likely to endorse that staff met their spiritual needs and their emotional needs. In terms of overall patient satisfaction, patients visited by a chaplain were more satisfied on both the Press Ganey survey and on the HCAHPS survey. Chaplains' integration into the healthcare team improves patients' satisfaction with their hospital stay.*

Pakpour, Amir H., Thomas G. Plante, Mohsen Saffari & Bengt Fridlund. 2014. The Santa Clara Strength of Religious Faith Questionnaire (SCSORF): a validation study on Iranian Muslim patients undergoing dialysis. *Journal of Religion and Health* 53(6). 1885–1897. doi:10.1007/s10943-014-9856-9.

*The Santa Clara Strength of Religious Faith Questionnaire (SCSORF) is an often used and validated scale that is uncommonly utilized in culturally diverse populations. The purpose of this research investigation was to adapt the SCSORF for use among Iranian Muslim patients undergoing dialysis and to examine the reliability and validity of the scale among this population. A total of 428 patients were selected from five dialysis center in Tebran and Qazvin, Iran. A comprehensive forward-backward translation system was used for cross-cultural translation. Patients completed a baseline questionnaire obtaining demographic and clinical information as well as the SCSORF, the Age Universal Religious Orientation Scale (AUROS), the religious life inventory (RLI), and the Duke University religion index (DUREL). Two weeks later, patients were asked to complete the SCSORF once again. Reliability of the SCSORF was examined using internal consistency and test-retest reliability. Convergent validity and factor structure using exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were also examined. Cronbach's  $\alpha$  for the single construct of the SCSORF was 0.89 with adequate test-retest reliability measured over a 2 week period. SCSORF scores were significantly correlated with AUROS, RLI and the DUREL. The EFA generated a single factor solution for the SCSORF while these results were confirmed by the CFA in an independent sample. Findings demonstrated that the SCSORF has favorable reliability, convergent validity, and divergent validity among Iranian Muslim patients undergoing dialysis and is recommended for use by clinicians (e.g., nephrologists) to measure strength of religious faith among patients.*

Plante, Thomas G. 2014. Four steps to improve religious/spiritual cultural competence in professional psychology. *Spirituality in Clinical Practice* 1(4). 288–292. doi:10.1037/scp0000047.

*Professional psychologists pride themselves on their efforts to be on the cutting-edge of multiculturalism in professional training, service, education, and research. However, when it comes to multiculturalism as it relates to religious diversity, too often psychology professionals are silent and uninterested. If practitioners and researchers in psychology truly desire to be attentive to diversity and multiculturalism, broadly defined, then the profession needs to include religion in the list of topics that it purports to attend to and respect in terms of cultural competence training. Ethical and competent professional psychologists may find it useful to follow the following 4 steps in their efforts to increase their cultural competence as it pertains to religious and spiritual multiculturalism. These include (a) being aware of biases, (b) considering religion like any other type of diversity, (c) taking advantage of available resources, and (d) consulting colleagues, including clerics. To do otherwise may not only be unethical, but also lead to malpractice.*

Pop, Cristina A. 2015. Cervical cancer narratives: Invoking “God’s will” to re-appropriate reproductive rights in present-day Romania. *Culture, Health & Sexuality* 17(1). 48–62. doi:10.1080/13691058.2014.948491.

*Drawing from ethnographic fieldwork in contemporary Southern Romania, this paper scrutinizes local moralities governing some women’s refusal to enroll in free reproductive healthcare initiatives targeting cervical cancer through primary and secondary prevention (human papillomavirus [HPV] vaccination and Papanicolaou [Pap] testing, respectively). Women backed up their rejection of participation in official reproductive care programs by mentioning “God’s will” as the ultimate trigger of cervical cancer. They withheld their own and their daughters’ bodies from biomedical intervention and used discursive references to divine logic to imbue their refusal with moral legitimacy. However, “God’s will” is not a mere rhetorical device, since it has a correlate in many of these women’s embodied reproductive experiences. As this paper argues, religious narratives, far from stripping ordinary citizens of their reproductive choices, constitute the medium through which they display individual agency. In fact, invoking “God’s*

*will” empowers Romanian women to challenge state control and it enables them to re-appropriate their bodies by making a counter-intuitive, yet bold, choice.*

- Purcell, Hillary N., Allison Whisenhunt, Joy Cheng, Sophia Dimitriou, Lisa R. Young & Daniel H. Grossoehme. 2015. “A Remarkable Experience of God, Shaping Us as a Family”: Parents’ Use of Faith Following Child’s Rare Disease Diagnosis. *Journal of Health Care Chaplaincy* 21(1). 25–38. doi:10.1080/08854726.2014.988525.

*A child’s chronic illness can lead parents to utilize different types of coping, including religious beliefs and practices. Previous studies have generally focused on life-shortening diagnoses. The present study explored parental use of faith when the diagnosis was not life-shortening, using grounded-theory qualitative methodology. Data were collected using semi-structured telephone interviews with 12 parents of children diagnosed with Neuroendocrine Hyperplasia of Infancy (NEHI); this represents approximately 50% of the diagnosed population in the United States at the time of the interview. Participants used faith to cope and make meaning in five ways: parents believed NEHI happened for a reason; beliefs provided resilience; parents were sustained by faith communities; beliefs affected parents’ behavior; and beliefs developed over time. The results suggest that chaplains develop means for universal screening for spiritual struggle; educating congregational clergy how to support families in which a child has a chronic illness; and assisting parents construct meaning of their experience.*

- Ramakrishnan, P., A. Rane, A. Dias, J. Bhat, A. Shukla, S. Lakshmi, B. K. Ansari, et al. 2014. Indian health care professionals’ attitude towards spiritual healing and its role in alleviating stigma of psychiatric services. *Journal of Religion and Health* 53(6). 1800–1814. doi:10.1007/s10943-014-9822-6.

*Persons with mental illnesses in India and rest of developing world continue to consult religious/spiritual (R/S) healers or traditional, complementary and alternative medicine (TCAM) professionals prior to seeking psychiatric services that are devoid of spiritual components of care. The present authors aim to understand TCAM and allopathic professionals’ perspectives on patients’ R/S needs within mental health services. To that end, a cross-sectional study was conducted at five TCAM and two allopathic tertiary care hospitals in three different Indian states. Participants (n=393) completed RSMPP, a self-administered, semi-structured survey questionnaire. Perspectives on TCAM and allopathic health professionals on role of spirituality in mental health care were compared. A substantial percentage (44% TCAM and 41% allopathic) of participants believe that their patients approach R/S or TCAM practitioners for severe mental illness; 91% of TCAM and 70% of allopaths were satisfied with R/S healers. Furthermore, 91% of TCAM and 73% of allopaths believe that mental health stigma can be minimized by integrating with spiritual care services. Overall, 87% of TCAM and 73% of allopaths agreed to the primary criterion variable: “spiritual healing is beneficial and complementary to psychiatric care.”*

- Riet, Pamela van der, Rachel Rossiter, Dianne Kirby, Teresa Dluzewska & Charles Harmon. 2015. Piloting a stress management and mindfulness program for undergraduate nursing students: student feedback and lessons learned. *Nurse Education Today* 35(1). 44–49. doi:10.1016/j.nedt.2014.05.003.

*Widespread reports of high stress levels and mental health problems among university student populations indicate the use of interventions to facilitate stress reduction and support student resilience and wellbeing. There is growing evidence that regular mindfulness practice may confer positive health benefits and reduced stress levels. The aim of this pilot project was to explore the impact of a seven-week stress management and mindfulness program as a learning support and stress reduction method for nursing and midwifery students. Fourteen first-year undergraduate nursing and midwifery students agreed to attend the program and to participate in a follow-up focus group. Ten students completed the research component of this project by participating in the focus group interview. Three main themes capture the participants’ experience: attending to self, attending to others and attending to program related challenges. Data indicate a positive impact on sleep, concentration, clarity of thought and a reduction in negative cognitions.*

*Participants also identified challenges related to timetabling, program structure and venue. Overall, this pilot program enhanced the participants' sense of well-being. Despite the challenges, benefits were identified on a personal and professional level. Valuable feedback was provided that will be used to further develop and expand stress management and mindfulness programs offered to students attending this university.*

- Ross, Linda & Jacky Austin. 2015. Spiritual needs and spiritual support preferences of people with end-stage heart failure and their carers: implications for nurse managers. *Journal of Nursing Management* 23(1). 87–95.  
doi:10.1111/jonm.12087.

*For this study, researchers identified the spiritual needs and spiritual support preferences of end-stage heart failure patients/carers and developed spiritual support guidelines locally. Semi-structured interviews (totaling 47) were scheduled at 3-monthly intervals up to 1 year with 16 end-stage heart failure patients/carers. Participants were struggling with spiritual/existential concerns alongside the physical and emotional challenges of their illness. These related to: love/belonging; hope; coping; meaning/purpose; faith/belief; and the future. As a patient's condition deteriorated, the emphasis shifted from 'fighting' the illness to making the most of the time left. Spiritual concerns could have been addressed by: having someone to talk to; supporting carers; and staff showing sensitivity/taking care to foster hope. A spiritual support home visiting service would be valued.*

- Siddall, Philip J., Melanie Lovell & Rod MacLeod. 2015. Spirituality: What is Its Role in Pain Medicine? *Pain Medicine* 16(1). 51–60.  
doi:10.1111/pme.12511.

*For many years, spirituality has been regarded as an integral aspect of patient care in fields closely allied to pain medicine such as palliative and supportive care. Despite this, it has received relatively little attention within the field of pain medicine itself. Reasons for this may include a lack of understanding of what spirituality means, doubtfulness of its relevance, an uncertainty about how it may be addressed, or a lack of awareness of how addressing spirituality may be of benefit. For this article, a review of the literature was conducted to determine the changing conceptual frameworks that have been applied to pain medicine, the emergence of the biopsychospiritual approach and what that means as well as evidence for the benefits of incorporation of this approach for the management of pain. Although the concept of spirituality is broad, there is now greater consensus on what is meant by this term. Many authors and consensus panels have explored the concept and formulated a conceptual framework and an approach that is inclusive, accessible, relevant, and applicable to people with a wide range of health conditions. In addition, there is accumulating evidence that interventions that address the issue of spirituality have benefits for physical and emotional health. The authors conclude that, given the firm place that spirituality now holds within other fields and the mounting evidence for its relevance and benefit for people with pain, there is increasing evidence to support the inclusion of spiritual factors as an important component in the assessment and treatment of pain.*

- Timmins, Fiona, Maryanne Murphy, Freda Neill, Thelma Begley & Greg Sheaf. 2015. An exploration of the extent of inclusion of spirituality and spiritual care concepts in core nursing textbooks. *Nurse Education Today* 35(1). 277–282.  
doi:10.1016/j.nedt.2014.05.008.

*The aim of this study is to examine the extent to which spiritual care concepts are addressed in core nursing textbooks. For that reason, 543 books were sampled from the Nursing and Midwifery Core Collection list (UK) representing 94% of the total (n=580). A survey, the Spirituality Textbook Analysis Tool (STAT), was developed and used to collect data. One hundred and thirty of the books included content related to spirituality and religion. However there was little consistency in the core nursing textbooks with regard to direction for providing spiritual care. Thirty eight percent of the books defined spiritual care and 36% provided an outline of the role of the nurse in providing this. While some books advocated the assessment of patients' spiritual needs (32%) few referred specifically to assessment tools.*

Torsknaes, Kristina B., Donia R. Baldacchino, Mary Kalfoss, Tracy Baldacchino, Josette Borg, Marica Falzon & Kenneth Grima. 2015. Nurses' and caregivers' definition of spirituality from the Christian perspective: a comparative study between Malta and Norway. *Journal of Nursing Management* 23(1). 39–53.  
doi:10.1111/jonm.12080.

*The aim of this cross-sectional comparative exploratory study was to explore the term spirituality as defined by four groups of nurses and two groups of caregivers from Malta and Norway. Data were collected from six purposive samples using focus group discussions in Malta and Norway. The Taxonomy of Spirituality guided the study. Four themes defined the term "spirituality." Two differences were found between Malta and Norway. Connectedness with family and nature was emphasized more by the Maltese group while the Norwegian group identified both the positive and the negative energies of spirituality.*

Voltmer, Edgar, Arndt Bussing, Harold G. Koenig & Faten Al Zaben. 2014. Religiosity/spirituality of German doctors in private practice and likelihood of addressing R/S issues with patients. *Journal of Religion and Health* 53(6). 1741–1752.  
doi:10.1007/s10943-013-9776-0.

*This study examined the self-assessed religiosity and spirituality (R/S) of a representative sample of German physicians in private practice (n=414) and how this related to their addressing R/S issues with patients. The majority of physicians (49.3%) reported a Protestant denomination, with the remainder indicating mainly either Catholic (12.5%) or none (31.9%). A significant proportion perceived themselves as either religious (42.8%) or spiritual (29.0%). Women were more likely to rate themselves R/S than did men. Women (compared to men) were also somewhat more likely to attend religious services (7.4 vs. 2.1% at least once a week) and participate in private religious activities (14.9 vs. 13.7%, at least daily), although these differences were not statistically significant. The majority of physicians (67.2%) never/seldom addressed R/S issues with a typical patient. Physicians with higher self-perceived R/S and more frequent public and private religious activity were much more likely to address R/S issues with patients.*

Zeng, Xianglong, Tian P. S. Oei & Xiangping Liu. 2014. Monitoring emotion through body sensation: a review of awareness in Goenka's Vipassana. *Journal of Religion and Health* 53(6). 1693–1705.  
doi:10.1007/s10943-013-9754-6.

*Awareness is one of the two most important abilities cultivated in Goenka's Vipassana meditation, which refers to sensitivity to subtle bodily sensations and the associated psychological processes. This sensitivity and its derived function of monitoring emotion are not of notable concern in modern mindfulness-based psychotherapies. Evidence supports that Vipassana meditation truly enhances sensitivity to bodily sensations, but further study is required to assess the awareness of psychological processes. The value of monitoring mental processing has been widely accepted in psychology, as has enhanced sensitivity along with the potential dangers to mental health.*

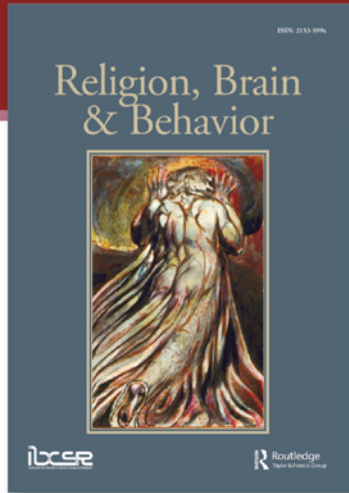
Zhang, Kaili Chen. 2014. Through a spiritual lens: Early childhood inclusive education in Hong Kong. *Journal of Religion and Health* 53(6). 1728–1740.  
doi:10.1007/s10943-013-9771-5.

*The main purpose of this research was to explore early childhood education teachers', principals', and parents' perceptions of the role of spirituality in the lives of children with special needs, and how educators and schools can support the spiritual development of these children. Three preschools, the Buddhist, Christian, and Waldorf schools, were purposefully selected on the basis that each of them reflects a philosophy that includes the spiritual. Three themes emerged from the data analysis: (a) the influence of the schools' religion and/or spiritual orientations on inclusion; (b) support provided for the spiritual development of children with special needs; and (c) the role of spirituality in the lives of children with special needs.*

Ziebarth, Deborah. 2014. Evolutionary conceptual analysis: faith community nursing. *Journal of Religion and Health* 53(6). 1817–1835.  
doi:10.1007/s10943-014-9918-z.

*The aim of the study was to report an evolutionary concept analysis of faith community nursing (FCN). FCN is a source of healthcare delivery in the USA which has grown in comprehensiveness and complexity. With increasing healthcare cost and a focus on access and prevention, FCN has extended beyond the physical walls of the faith community building. Faith communities and healthcare organizations invest in FCN and standardized training programs exist. Using Rodgers' evolutionary analysis, the literature was examined for antecedents, attributes, and consequences of the concept. This design allows for understanding the historical and social nature of the concept and how it changes over time. A search of databases using the keywords FCN, faith community nurse, parish nursing, and parish nurse was done. The concept of FCN was explored using research and theoretical literature. A theoretical definition and model were developed with relevant implications. The search results netted a sample of 124 reports of research and theoretical articles from multiple disciplines: medicine, education, religion and philosophy, international health, and nursing. Theoretical definition: FCN is a method of healthcare delivery that is centered in a relationship between the nurse and client (client as person, family, group, or community). The relationship occurs in an iterative motion over time when the client seeks or is targeted for holistic health care with the goal of optimal holistic health functioning. Faith integrating is a continuous occurring attribute. Health promoting, disease managing, coordinating, empowering and accessing health care are other essential attributes. All essential attributes occur with intentionality in a faith community, home, health institution and other community settings with fluidity as part of a community, national, or global health initiative. A new theoretical definition and corresponding conceptual model of FCN provides a basis for future nursing knowledge and model-based applications for evidence-based practice and research.*





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## PART 3: BOOKS

### ***3.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR***

Martin, Luther H. 2015. *The Mind of Mithraists: Historical and Cognitive Studies in the Roman Cult of Mithras*. New York: Bloomsbury Academic.

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### ***3.2 SPIRITUALITY & HEALTH RESEARCH***

Brown, Kirk Warren, J. David Creswell & Richard M. Ryan (eds.). 2015. *Handbook of mindfulness: theory, research, and practice*. New York: The Guilford Press.

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## PART 4: ARTICLES IN PRESS

### 4.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

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