



RESEARCH REVIEW

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

FEBRUARY, 2016

INTRODUCTION

IBCSR Research Review (IRR) is published by the Institute for the Bio-Cultural 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, medicine, 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, 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 789 articles, 124 articles have been retained from 71 journals. There are 59 pre-publication citations from 34 journals.

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PART 1: ARTICLES IN RELIGION, BRAIN, AND BEHAVIOR

1.1 SCIENTIFIC STUDY OF RELIGION: COGNITIVE NEUROSCIENCE

Dentico, Daniela, Fabio Ferrarelli, Brady A. Riedner, Richard Smith, Corinna Zennig, Antoine Lutz, Giulio Tononi & Richard J. Davidson. 2016. Short Meditation Trainings Enhance Non-REM Sleep Low-Frequency Oscillations. *PLoS One* 11(2). e0148961.
doi:10.1371/journal.pone.0148961.

Researchers have recently shown higher parietal-occipital EEG gamma activity during sleep in long-term meditators compared to meditation-naïve individuals. This gamma increase was specific for NREM sleep, was present throughout the entire night and correlated with meditation expertise, thus suggesting underlying long-lasting neuroplastic changes induced through prolonged training. The aim of this study was to explore the neuroplastic changes acutely induced by 2 intensive days of different meditation practices in the same group of practitioners. Baseline recordings were also repeated in a meditation-naïve cohort to account for time effects on sleep EEG activity. High-density EEG recordings of human brain activity were acquired over the course of whole sleep nights following intervention from 24 long-term meditators and 24 meditation-naïve controls. Intervention consisted of two 8-h sessions of either a mindfulness-based meditation or a form of meditation designed to cultivate compassion and loving kindness, hereafter referred to as compassion meditation. Following intervention, researchers found an increase in EEG low-frequency oscillatory activities (1-12 Hz, centered around 7-8 Hz) over prefrontal and left parietal electrodes across whole night NREM cycles. This power increase peaked early in the night and extended during the third cycle to high-frequencies up to the gamma range (25-40 Hz). There was no difference in sleep EEG activity between meditation styles in long-term meditators nor in the meditation naïve group across different time points. Furthermore, the prefrontal-parietal changes were dependent on meditation life experience.

Fingelkurts, Andrew A., Alexander A. Fingelkurts & Tarja Kallio-Tamminen. 2016. Long-term meditation training induced changes in the operational synchrony of default mode network modules during a resting state. *Cognitive Processing* 17(1). 27–37.

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doi:10.1007/s10339-015-0743-4.

Using theoretical analysis of self-consciousness concept and experimental evidence on the brain default mode network (DMN) that constitutes the neural signature of self-referential processes, the present researchers hypothesized that the anterior and posterior subnets comprising the DMN should show differences in their integrity as a function of meditation training. Functional connectivity within DMN and its subnets (measured by operational synchrony) has been measured in ten novice meditators using an electroencephalogram (EEG) recording in a pre-/post-meditation intervention design. It was found that while the whole DMN was clearly suppressed, different subnets of DMN responded differently after 4 months of meditation training: the strength of EEG operational synchrony in the right and left posterior modules of the DMN decreased in resting post-meditation condition compared to a pre-meditation condition, whereas the frontal DMN module on the contrary exhibited an increase in the strength of EEG operational synchrony. These findings combined with published data on functional-anatomic heterogeneity within the DMN and on trait subjective experiences commonly found following meditation allow the authors to propose that the first-person perspective and the sense of agency (the witnessing observer) are presented by the frontal DMN module, while the posterior modules of the DMN are generally responsible for the experience of the continuity of "I" as embodied and localized within bodily space.

Jao, Tun, Chia-Wei Li, Petra E. Vértes, Changwei Wesley Wu, Sophie Achard, Chao-Hsien Hsieh, Chien-Hui Liou, Jyh-Horng Chen & Edward T. Bullmore. 2016. Large-Scale Functional Brain Network Reorganization During Taoist Meditation. *Brain Connectivity* 6(1). 9–24.
doi:10.1089/brain.2014.0318.

Meditation induces a distinct and reversible mental state that provides insights into brain correlates of consciousness. Researchers explored brain network changes related to meditation by graph theoretical analysis of resting-state functional magnetic resonance imaging data. Eighteen Taoist meditators with varying levels of expertise were scanned using a within-subjects counterbalanced design during resting and meditation states. State-related differences in network topology were measured globally and at the level of individual nodes and edges. Although measures of global network topology, such as small-worldness, were unchanged, meditation was characterized by an extensive and expertise-dependent reorganization of the hubs (highly connected nodes) and edges (functional connections). Areas of sensory cortex, especially the bilateral primary visual and auditory cortices, and the bilateral temporopolar areas, which had the highest degree (or connectivity) during the resting state, showed the biggest decrease during meditation. Conversely, bilateral thalamus and components of the default mode network, mainly the bilateral precuneus and posterior cingulate cortex, had low degree in the resting state but increased degree during meditation. Additionally, these changes in nodal degree were accompanied by reorganization of anatomical orientation of the edges. During meditation, long-distance longitudinal (antero-posterior) edges increased proportionally, whereas orthogonal long-distance transverse (right-left) edges connecting bilaterally homologous cortices decreased. These findings suggest that transient changes in consciousness associated with meditation introduce convergent changes in the topological and spatial properties of brain functional networks, and the anatomical pattern of integration might be as important as the global level of integration when considering the network basis for human consciousness.

Manuello, Jordi, Ugo Vercelli, Andrea Nani, Tommaso Costa & Franco Cauda. 2016. Mindfulness meditation and consciousness: An integrative neuroscientific perspective. *Consciousness and Cognition* 40. 67–78.
doi:10.1016/j.concog.2015.12.005.

Although mindfulness meditation has been practiced in the East for more than two millennia, Western scientific research and healthcare programs have only recently drawn their attention to it. Basically, the concept of mindfulness hinges on focusing on one's own awareness at the present moment. In this review the researchers analyze different hypotheses about the functioning and the cerebral correlates of mindfulness meditation. Since mindfulness is strictly associated with a particular state of consciousness, they also examine some of the most relevant theories that have

been proposed as accounts of consciousness. Finally, the authors suggest that consciousness and mindfulness meditation can be integrated within a neuroscientific perspective, by identifying the brain areas which seem to play an essential role in both, namely the anterior cingulate cortex, posterior cingulate cortex, insula and thalamus.

- Rosenkranz, Melissa A., Antoine Lutz, David M. Perlman, David R. W. Bachhuber, Brianna S. Schuyler, Donal G. MacCoon & Richard J. Davidson. 2016. Reduced stress and inflammatory responsiveness in experienced meditators compared to a matched healthy control group. *Psychoneuroendocrinology* 68. 117–125.
doi:10.1016/j.psyneuen.2016.02.013.

Psychological stress is a major contributor to symptom exacerbation across many chronic inflammatory conditions and can acutely provoke increases in inflammation in healthy individuals. With the rise in rates of inflammation-related medical conditions, evidence for behavioral approaches that reduce stress reactivity is of value. Here, researchers compare 31 experienced meditators, with an average of approximately 9000 lifetime hours of meditation practice (M age=51 years) to an age- and sex-matched control group (n=37; M age=48 years) on measures of stress- and inflammatory responsivity, and measures of psychological health. The Trier Social Stress Test (TSST) was used to induce psychological stress and a neurogenic inflammatory response was produced using topical application of capsaicin cream to forearm skin. Size of the capsaicin-induced flare response and increase in salivary cortisol and alpha amylase were used to quantify the magnitude of inflammatory and stress responses, respectively. Results show that experienced meditators have lower TSST-evoked cortisol and perceived stress, as well as a smaller neurogenic inflammatory response, compared to the control group. Moreover, experienced meditators reported higher levels of psychological factors associated with wellbeing and resilience. These results suggest that the long-term practice of meditation may reduce stress reactivity and could be of therapeutic benefit in chronic inflammatory conditions characterized by neurogenic inflammation.

- Saunders, Blair, Achala H. Rodrigo & Michael Inzlicht. 2016. Mindful awareness of feelings increases neural performance monitoring. *Cognitive, Affective & Behavioral Neuroscience* 16(1). 93–105.
doi:10.3758/s13415-015-0375-2.

Mindfulness has been associated with enhanced performance monitoring; however, little is known about the processes driving this apparent neurocognitive benefit. Here, researchers tested whether focusing present-moment awareness toward the nonjudgmental experience of emotion facilitates rapid neural responses to negative performance outcomes (i.e., mistakes). In particular, they compared whether directing present-moment awareness toward emotions or thoughts would enhance the neurophysiological correlates of performance monitoring: the error-related negativity (ERN) and the error positivity (Pe). Participants were randomly assigned to either a thought-focused or an emotion-focused group, and first they completed a preinduction go/no-go task. Subsequently, the groups followed inductions that promoted mindful attention toward either thoughts or emotions, before completing a final postinduction go/no-go session. The results indicated that emotion-focused participants demonstrated higher neural sensitivity to errors in the time course of the ERN, whereas focusing on thoughts had no effect on performance monitoring. In contrast, neither induction procedure altered the amplitude of the later Pe component. Although our manipulations also induced changes in behavior, the ERN effects remained significant after controlling for performance. Thus, these results suggest that mindfulness meditation boosts early neural performance monitoring (ERN amplitude), specifically through meditation's influence on affective processing.

1.2 SCIENTIFIC STUDY OF RELIGION: EVOLUTION

- Ahrenfeldt, Linda J., Rune Lindahl-Jacobsen, Sören Möller, Kaare Christensen, Dorte Hvidtjørn & Niels Christian Hvidt. 2016. Differences in Religiousness in Opposite-Sex and Same-Sex Twins in a Secular Society. *Twin Research and Human Genetics* 19(1). 35–46.
doi:10.1017/thg.2015.92.

Sex differences in religion are well known, with females generally being more religious than males, and shared environmental factors have been suggested to have a large influence on religiousness. Twins from opposite-sex (OS) and same-sex (SS) pairs may differ because of a dissimilar psycho-social rearing environment and/or because of different exposures to hormones in utero. Researchers hypothesized that OS females may display more masculine patterns of religiousness and, vice versa, that OS males may display more feminine patterns. The researchers used a web-based survey conducted in Denmark, which is a secular society. The survey included 2,997 twins aged 20-40 years, identified through the population-based Danish Twin Registry. Differences between OS and SS twins were investigated using logistic regression for each sex. The analyses were adjusted for dependence within twin pairs. No significant differences in religiousness and religious coping were found for OS and SS twins except that more OS than SS females were members of the Danish National Evangelical Lutheran Church and fewer OS than SS females were Catholic, Muslim, or belonged to other religious denominations. Moreover, OS males at age 12 had higher rates of church attendance than did SS males. This study did not provide evidence for masculinization of female twins with male co-twins with regard to religiousness. Nor did it show any significant differences between OS and SS males except from higher rates of church attendance in childhood among males with female co-twins.

Lane, Jonathan D., Liqi Zhu, E. Margaret Evans & Henry M. Wellman. 2016. Developing Concepts of the Mind, Body, and Afterlife: Exploring the Roles of Narrative Context and Culture. *Journal of Cognition and Culture* 16(1-2). 50–82.
doi:10.1163/15685373-12342168.

Children and adults from the US (Study 1) and China (Study 2) heard about people who died in two types of narrative contexts – medical and religious – and judged whether their psychological and biological capacities cease or persist after death. Most 5- to 6-year-olds reported that all capacities would cease. In the U.S., but not China, there was an increase in persistence judgments at 7–8 years, which decreased thereafter. American children’s persistence judgments were influenced by narrative context – occurring more often for religious narratives – and such judgments were made especially for psychological capacities. When participants were simply asked what happens to people following death, in both countries there were age-graded increases in references to burial, religious ritual, and the supernatural.

Maltseva, Kateryna. 2016. Prosocial Morality in Individual and Collective Cognition. *Journal of Cognition and Culture* 16(1-2). 1–36.
doi:10.1163/15685373-12342166.

There has been much interest in understanding the operation of shared collective constructs. Cultural models theory is one of the frameworks in cognitive anthropology engaging the interaction between the individual and collective levels of culture in the process of cultural transmission. The present study attempts to produce the cognitive ethnography focusing on shared understanding of prosocial morality in Sweden. It draws on cognitive data associated with the organization of prosocial ideas (formulated as values) in Swedish society, and uses multi-item scales to explore the distribution of this cultural model across the individual minds and on the group level. The study tests a hypothesis that cultural and individual values priorities have distinct demographic predictors when examined separately, and that these predictors reflect their respective differences in the transmission channels. The author stresses the importance of the interdisciplinary research to account for the process of consolidation of shared collective knowledge into cultural models.

Martin, Justin W. & Fiery Cushman. 2016. Why we forgive what can’t be controlled. *Cognition* 147. 133–143.
doi:10.1016/j.cognition.2015.11.008.

Volitional control matters greatly for moral judgment: Coerced agents receive less condemnation for outcomes they cause. Less well understood is the psychological basis of this effect. Control may influence perceptions of intent for the outcome that occurs or perceptions of causal role in that outcome. Here, researchers show that an agent who chooses

to do the right thing but accidentally causes a bad outcome receives relatively more punishment than an agent who is forced to do the “right” thing but causes a bad outcome. Thus, having good intentions ironically leads to greater condemnation. This surprising effect does not depend upon perceptions of increased intent for harm to occur, but rather upon perceptions of causal role in the obtained outcome. Further, this effect is specific to punishment: An agent who chooses to do the right thing is rated as having better moral character than a forced agent, even though they cause the same bad outcome. These results clarify how, when and why control influences moral judgment.

- Paloutzian, Raymond F. & Travis Chilcott. 2016. Relations between Gauḍīya Vaiṣṇava Devotional Practices and Implicit and Explicit Anthropomorphic Reasoning about Kṛṣṇa. *Journal of Cognition and Culture* 16(1-2). 107–121.
doi:10.1163/15685373-12342170.

Employing a narrative comprehension task procedure, this study tests the hypothesis that engagement in Gauḍīya Vaiṣṇava religious practices, which are aimed at cultivating a personal relationship with the Hindu deity Kṛṣṇa, predict increased implicit attribution of anthropomorphic properties to him. Contrary to the original hypothesis, multiple regression analyses of data from 184 native Krishna devotees in West Bengal, India, indicated that increased engagement in these practices loaded as a tertiary predictor after education and age, such that increased practice predicted a decrease in implicit anthropomorphic reasoning about Kṛṣṇa. Based on these and additional analyses of the data, the authors theorize that these results may be due to the tradition’s emphasis on presenting Kṛṣṇa’s non-anthropomorphic dimensions to neophyte practitioners and the non-Gauḍīya Vaiṣṇava public. One implication of these results is that religious cultures and engagement in religious practices have the potential to significantly affect a human cognitive tendency to implicitly attribute anthropomorphic properties to divine beings. This may result from developing alternative knowledge from which to reason about a deity by engaging in religious practices and beliefs shaped by particular theological, historical, and cultural factors.

- Pfister, Roland, Robert Wirth, Katharina A. Schwarz, Marco Steinhauser & Wilfried Kunde. 2016. Burdens of non-conformity: Motor execution reveals cognitive conflict during deliberate rule violations. *Cognition* 147. 93–99.
doi:10.1016/j.cognition.2015.11.009.

Rule compliance is pivotal for the regulation of social behavior. Still, humans deliberately violate rules at times, be it for personal reasons or for a higher good. Whereas previous research has studied the preconditions and consequences of rule violations, essentially nothing is known about the cognitive processes right at the moment a rule violation takes place. Here researchers show that merely labeling an action as rule violation induces substantial conflict between rule violation and compliance, as revealed by participants’ bias towards rule-complying motor actions. Moreover, conflict that comes with violating a rule was much stronger than conflict that comes with following an alternative rule, even if both decisions result in the same observable behavior. These observations open a new theoretical perspective on rule violation behavior, shifting the focus toward the cognitive processes operating during the very act of rule violation.

- Purzycki, Benjamin Grant, Coren Apicella, Quentin D. Atkinson, Emma Cohen, Rita Anne McNamara, Aiyana K. Willard, Dimitris Xygalatas, Ara Norenzayan & Joseph Henrich. 2016. Moralistic gods, supernatural punishment and the expansion of human sociality. *Nature* 530(7590). 327–330.
doi:10.1038/nature16980.

Since the origins of agriculture, the scale of human cooperation and societal complexity has dramatically expanded. This fact challenges standard evolutionary explanations of prosociality because well-studied mechanisms of cooperation based on genetic relatedness, reciprocity and partner choice falter as people increasingly engage in fleeting transactions with genetically unrelated strangers in large anonymous groups. To explain this rapid expansion of

prosociality, researchers have proposed several mechanisms. Here researchers focus on one key hypothesis: cognitive representations of gods as increasingly knowledgeable and punitive, and who sanction violators of interpersonal social norms, foster and sustain the expansion of cooperation, trust and fairness towards co-religionist strangers. They tested this hypothesis using extensive ethnographic interviews and two behavioral games designed to measure impartial rule-following among people (n=591, from 35,400 observations) from eight diverse communities from around the world: (1) inland Tanna, Vanuatu; (2) coastal Tanna, Vanuatu; (3) Yasawa, Fiji; (4) Lom, Fiji; (5) Pesqueiro, Brazil; (6) Pointe aux Piments, Mauritius; (7) the Tyva Republic (Siberia), Russia; and (8) Hadzaland, Tanzania. Participants reported adherence to a wide array of world religious traditions including Christianity, Hinduism and Buddhism, as well as notably diverse local traditions, including animism and ancestor worship. Holding a range of relevant variables constant, the higher participants rated their moralistic gods as punitive and knowledgeable about human thoughts and actions, the more coins they allocated to geographically distant co-religionist strangers relative to both themselves and local co-religionists. These results support the hypothesis that beliefs in moralistic, punitive and knowing gods increase impartial behavior towards distant co-religionists, and therefore can contribute to the expansion of prosociality.

Watson-Jones, Rachel E. & Cristine H. Legare. 2016. The social functions of group rituals. *Current Directions in Psychological Science* 25(1). 42–46.
doi:10.1177/0963721415618486.

Convergent developments across social scientific disciplines provide evidence that ritual is a psychologically prepared, culturally inherited, behavioral trademark of our species. The present researchers draw on evidence from the anthropological and evolutionary-science literatures to offer a psychological account of the social functions of ritual for group behavior. Solving the adaptive problems associated with group living requires psychological mechanisms for identifying group members, ensuring their commitment to the group, facilitating cooperation with coalitions, and maintaining group cohesion. The intersection of these lines of inquiry yields new avenues for theory and research on the evolution and ontogeny of social group cognition.

Yilmaz, Onurcan & Hasan G. Bahçekapili. 2016. Supernatural and secular monitors promote human cooperation only if they remind of punishment. *Evolution and Human Behavior* 37(1). 79–84.
doi:10.1016/j.evolhumbehav.2015.09.005.

People's large-scale cooperation with genetically unrelated people is widely assumed to lie beyond the scope of standard evolutionary mechanisms like kin selection and reciprocal altruism and to require mechanisms specific to human sociality. The emergence of the idea of being monitored by supernatural agents who can punish social norm violations has been proposed as one solution to this problem. In parallel, secular authorities can have similar functions with those of religious authority based on supernatural agents in today's secularized world. However, it is not clear whether it is the idea of religious or secular authority in general or the punishing aspects of both institutions in particular that leads to increased cooperation and prosociality. Study 1 showed that people reported more prosocial intentions after being implicitly primed with punishing religious and secular authorities (versus non-punishing ones or a neutral one) in a scrambled sentence task. Study 2 showed that explicitly priming the punishing aspects of God (versus the non-punishing aspects or a neutral prime) led to an increase in the level of prosocial intentions. The findings support the supernatural punishment hypothesis and suggest a similar mechanism for the influence of secular authority on prosociality. More generally, the findings are consistent with views that punishment, whether real or imagined, played an important role in the evolution of large-scale cooperation in the human species.

1.3 SCIENTIFIC STUDY OF RELIGION: PSYCHOLOGY AND CULTURE

Agadjanian, Victor & Scott T. Yabiku. 2015. Religious Belonging, Religious Agency, and Women's Autonomy in Mozambique. *Journal for the Scientific Study of Religion* 54(3). 461–476.
doi:10.1111/jssr.12210.

Women's autonomy has frequently been linked with women's opportunities and investments, such as education, employment, and reproductive control. The association between women's autonomy and religion in the developing world, however, has received less attention, and the few existing studies make comparisons across major religious traditions. In this study, researchers focus on variations in levels of female decision-making autonomy within a single religious tradition—Christianity. Using unique survey data from a predominantly Christian area in Mozambique, the authors devise an autonomy scale and apply it to compare women affiliated with different Christian denominations as well as unaffiliated women. In addition to affiliation, they examine the relationship between autonomy and women's religious agency both within and outside their churches. Multivariate analyses show that women belonging to more liberal religious traditions (such as Catholicism and mainline Protestantism) tend to have higher autonomy levels, regardless of other factors. These results are situated within the cross-national scholarship on religion and women's empowerment and are interpreted in the context of gendered religious dynamics in Mozambique and similar developing settings.

- Banyasz, Alissa M., David M. Tokar & Kevin P. Kaut. 2016. Predicting religious ethnocentrism: Evidence for a partial mediation model. *Psychology of Religion and Spirituality* 8(1). 25–34.
doi:10.1037/rel0000020.

This study extended the current understanding of religious ethnocentrism by testing a theoretically and empirically based model in which personality (i.e., right-wing authoritarianism, social dominance orientation) and religious identity (i.e., Christian orthodoxy, religious group identification) variables were related to religious ethnocentrism, and some of those relations were mediated through religious fundamentalism. Path analysis results based on a sample of 156 college students revealed support for most of the hypothesized relations. More specifically, social dominance orientation and religious fundamentalism had direct positive relations with religious ethnocentrism; Christian orthodoxy and religious group identification had indirect (via religious fundamentalism) positive relations with religious ethnocentrism, and right-wing authoritarianism had both direct and indirect (via religious fundamentalism) positive relations with religious ethnocentrism. Contrary to the original hypothesis, the direct positive relation of Christian orthodoxy to religious ethnocentrism was nonsignificant.

- Braun-Lewensohn, Orna & Boaz Kitain. 2016. The “Parent Circle” Peace Education Program: Does it Make Any Change? *Journal of Religion and Health* 55(1). 181–191.
doi:10.1007/s10943-015-0029-2.

This study evaluated a peace education program facilitated by the “parents circle family forum.” The program aims to expose Jewish and Palestinian-Arab adolescents to personal stories of bereavement as a result of the Israeli-Palestinian conflict. One hundred and sixty-four Jewish twelfth-grade adolescents from schools throughout Israel filled out questionnaires before the start of the educational program, and 135 Jewish adolescents filled out the same questionnaire up to a week after it ended. Questionnaires included empathy, anger, and legitimacy toward “self” and “others” narratives. Results indicate that, overall, there were not any significant differences before and after the educational program with regard to adolescents' attitudes toward “self” and “others” narratives. However, when examining differences between subgroups in Israeli society, significant differences between “secular” and “traditional” adolescents emerged. The attitudes of secular adolescents favored narratives of the “others,” while the attitudes of the traditional adolescents favored the “self” narratives. After the program, these differences diminished, meaning that the program had a different impact on each subgroup. The traditional adolescents became more favorable to the “others” narratives, while the secular adolescents became more favorable to their own narratives. Results are discussed on the basis of the theoretical foundation of psychological impacts of intractable conflicts.

- Dariotis, Jacinda K., Roxanne Mirabal-Beltran, Fallon Cluxton-Keller, Laura Feagans Gould, Mark T. Greenberg & Tamar Mendelson. 2016. A qualitative evaluation of student learning and skills use in a school-based mindfulness and yoga program. *Mindfulness* 7(1). 76–89.
doi:10.1007/s12671-015-0463-y.

Previous studies on school-based mindfulness and yoga programs have focused primarily on quantitative measurement of program outcomes. This study used qualitative data to investigate program content and skills that students remembered and applied in their daily lives. Data were gathered following a 16-week mindfulness and yoga intervention delivered at three urban schools by a community non-profit organization. Researchers conducted focus groups and interviews with nine classroom teachers who did not participate in the program and held six focus groups with 22 fifth and sixth grade program participants. This study addresses two primary research questions: (1) What skills did students learn, retain, and utilize outside the program? and (2) What changes did classroom teachers expect and observe among program recipients? Four major themes related to skill learning and application emerged as follows: (1) youths retained and utilized program skills involving breath work and poses; (2) knowledge about health benefits of these techniques promoted self-utilization and sharing of skills; (3) youths developed keener emotional appraisal that, coupled with new and improved emotional regulation skills, helped de-escalate negative emotions, promote calm, and reduce stress; and (4) youths and teachers reported realistic and optimistic expectations for future impact of acquired program skills.

Fennell, Alexander B., Erik M. Benau & Ruth Ann Atchley. 2016. A single session of meditation reduces of physiological indices of anger in both experienced and novice meditators. *Consciousness and Cognition* 40. 54–66.
doi:10.1016/j.concog.2015.12.010.

The goal of the present study was to explore how anger reduction via a single session of meditation might be measured using psychophysiological methodologies. To achieve this, 15 novice meditators (Experiment 1) and 12 practiced meditators (Experiment 2) completed autobiographical anger inductions prior to, and following, meditation training while respiration rate, heart rate, and blood pressure were measured. Participants also reported subjective anger via a visual analog scale. At both stages, the experienced meditators' physiological reaction to the anger induction reflected that of relaxation: slowed breathing and heart rate and decreased blood pressure. Naïve meditators exhibited physiological reactions that were consistent with anger during the pre-meditation stage, while after meditation training and a second anger induction they elicited physiological evidence of relaxation. The current results examining meditation training show that the naïve group's physiological measures mimicked those of the experienced group following a single session of meditation training.

Forrest-Bank, Shandra S. & David R. Dupper. 2016. A qualitative study of coping with religious minority status in public schools. *Children and Youth Services Review* 61. 261–270.
doi:10.1016/j.childyouth.2015.12.025.

The purpose of this qualitative study was to explore coping and impacts of religious difference and discrimination among a sample of 50 middle and high school Catholic, Jewish, Muslim, and Universalist Unitarian adolescent public school students. Content analysis employing grounded theory strategies resulted in 7 themes: 1) Importance of religious affiliation and community; 2) Influence of parental religiosity; 3) Parents as advocates and expert consultants; 4) To have or not to have friends from other religions; 5) Response to negative incidents; 6) Perceptions of teachers; and 7) The school culture needs to change. Implications for interventions aimed at promoting resilience and positive religious identity are discussed in addition to recommendations for making schools a welcoming and safe place for students of all religious backgrounds.

Gallant, Sara N. 2016. Mindfulness meditation practice and executive functioning: Breaking down the benefit. *Consciousness and Cognition* 40. 116–130.
doi:10.1016/j.concog.2016.01.005.

This paper focuses on evidence for mindfulness meditation-related benefits to executive functioning, processes important for much of human volitional behavior. Miyake et al. (2000) have shown that executive functions can be fractionated into three distinct domains including inhibition, working memory updating, and mental set shifting. Considering these separable domains, it is important to determine whether the effects of mindfulness can generalize

to all three sub-functions or are specific to certain domains. To address this, the current review applied Miyake et al.'s fractionated model of executive functioning to the mindfulness literature. Empirical studies assessing the benefits of mindfulness to measures tapping the inhibition, updating, and shifting components of executive functioning were examined. Results suggest a relatively specific as opposed to general benefit resulting from mindfulness, with consistent inhibitory improvement, but more variable advantages to the updating and shifting domains.

- Kristiansen, Maria, Tarek Younis, Amani Hassani & Aziz Sheikh. 2016. Experiencing Loss: A Muslim Widow's Bereavement Narrative. *Journal of Religion and Health* 55(1). 226–240.
doi:10.1007/s10943-015-0058-x.

In this article, researchers explore how Islam, minority status and refugee experiences intersect in shaping meaning-making processes following bereavement. The authors do this through a phenomenological analysis of a biographical account of personal loss told by Aisha, a Muslim Palestinian refugee living in Denmark, who narrates her experience of losing her husband to lung cancer. By drawing on a religious framework, Aisha creates meaning from her loss, which enables her to incorporate this loss into her life history and sustain agency. Her narrative invites wider audiences to witness her tale of overcoming loss, thus highlighting the complex way in which religious beliefs, minority status and migration history come together in shaping meaning-making processes, and the importance of reciprocity in narrative studies.

- Luu, Kimberley & Peter A. Hall. 2016. Hatha Yoga and Executive Function: A Systematic Review. *Journal of Alternative and Complementary Medicine (New York, N.Y.)* 22(2). 125–133.
doi:10.1089/acm.2014.0091.

Recent reviews have documented the beneficial effects of seated meditation on executive function (EF). However, there has yet to be a comprehensive review on the effects of Hatha yoga, a moving meditation, on EF. For this study, databases were searched for experimental studies (between- or within-subject designs) testing the effects of Hatha yoga (acute bouts, short-term interventions, longer-term interventions) on EF. A total of 11 published studies met eligibility criteria: Three studies involved healthy adults, 2 studies involved healthy older adults (n=2), 1 study involved children and adolescents, and 5 studies involved medical (n=4) or forensic (n=1) populations. In healthy adults, 2 of 3 studies suggested that acute bouts of Hatha yoga improved EF. However, 1 study using a short-term intervention found no improvements in EF. Among healthy older adults, 1 study provided evidence that Hatha yoga improves EF. In child/adolescent samples, 1 study supported the contention that Hatha yoga improves EF after short-term interventions. Among medical populations, EF improved in patients with type 2 diabetes mellitus and in 1 of 3 studies involving patients with multiple sclerosis. The sole study involving impulsive prisoners showed positive effects on EF with a short-term intervention. The authors conclude that hatha yoga shows promise of benefit for EF in healthy adults, children, adolescents, healthy older adults, impulsive prisoners, and medical populations (with the exception of multiple sclerosis). However, more good-quality studies that evaluate the efficacy of Hatha yoga's effects on EF are essential to build on this evidence base.

- Stell, Alexander J. & Tom Farsides. 2016. Brief loving-kindness meditation reduces racial bias, mediated by positive other-regarding emotions. *Motivation & Emotion* 40(1). 140–147.
doi:10.1007/s11031-015-9514-x.

The relationship between positive emotions and implicit racial prejudice is unclear. Interventions using positive emotions to reduce racial bias have been found wanting, while other research shows that positive affect can sometimes exacerbate implicit prejudice. Nevertheless, loving-kindness meditation (LKM) has shown some promise as a method of reducing bias despite increasing a broad range of positive emotions. A randomized control trial (n=69) showed that a short-term induction of LKM decreased automatic processing, increased controlled processing, and was sufficient to reduce implicit prejudice towards the target's racial group but not towards a group untargeted by the meditation. Furthermore, the reduction in bias was shown to be mediated by other-regarding positive emotions alongside increased control and decreased automaticity on the IAT. Non-other-regarding positive emotions conversely

showed no correlation with bias. The study is the first to show that a short-term positive emotional induction can reduce racial prejudice, and aids the understanding of how positive emotions functionally differentiate in affecting bias.

- Van Tongeren, Daryl R., Don E. Davis, Joshua N. Hook & Kathryn A. Johnson. 2016. Security versus growth: Existential tradeoffs of various religious perspectives. *Psychology of Religion and Spirituality* 8(1). 77–88.
doi:10.1037/rel0000050.

Religion serves many social and existential functions. In 3 studies (n=1,197), researchers examine how religious belief orientations involve tradeoffs that prioritize either existential security or tolerance toward religiously different groups. In Study 1 (n=205), security-focused beliefs were related to greater meaning in life and lower tolerance, whereas growth-focused religious beliefs were related to lower meaning in life and greater tolerance. In Study 2 (n=298), results indicate that a security-focused religious belief orientation (i.e., defensive theological beliefs) was associated with existential well-being, and religious commitment enhanced this relationship. Finally, in Study 3 (n=694), using an experimental priming manipulation, the researchers found that meaning threats resulted in greater existential anxiety for those with growth-focused beliefs (i.e., quest religion). Together, this research highlights how religious beliefs may prioritize either (a) existential security (i.e., security-oriented), or (b) ability to span ideological differences to form alliances (i.e., growth-oriented).

- Wesselmann, Eric D., Laura E. VanderDrift & Christopher R. Agnew. 2016. Religious commitment: An interdependence approach. *Psychology of Religion and Spirituality* 8(1). 35–45.
doi:10.1037/rel0000024.

In 4 studies using cross-sectional, longitudinal, and experimental methods, researchers applied interdependence theory-based concepts to understand individuals' religious commitment, focusing on 4 distinct targets of commitment: God, denomination, community, and spiritual leader. Researchers specifically examined which individuals were likely to persist in their religious organization membership and belief system, and which individuals were likely to convert. Results suggest that interdependence-based measures demonstrated both good reliability and predictive validity (Study 1). Religious commitment can be manipulated temporarily (Study 2) and also fluctuates over time naturally (Studies 3 and 4). Study 4 also found that our interdependence-based measures were better at predicting persistence and conversion than were other established measures of religious commitment.

- Williams, Patrick B., Heather H. Mangelsdorf, Carly Kontra, Howard C. Nusbaum & Berthold Hoeckner. 2016. The Relationship between Mental and Somatic Practices and Wisdom. *PloS One* 11(2). e0149369.
doi:10.1371/journal.pone.0149369.

In this study researchers sought to explore how experience with specific mental and somatic practices is associated with wisdom, using self-report measures of experience and wisdom. Experts administered standard surveys to measure wisdom and experience among four groups of practitioners of mental and somatic practices, namely, meditators, practitioners of the Alexander Technique, practitioners of the Feldenkrais Method, and classical ballet dancers. Researchers additionally administered surveys of trait anxiety and empathy to all participants to explore possible mediating relationships of experience and wisdom by characteristics thought to be components of wisdom. Wisdom was higher on average among meditation practitioners, and lowest among ballet dancers, and this difference held when controlling for differences in age between practices, supporting the view that meditation is linked to wisdom and that ballet is not. However, the authors found that increased experience with meditation and ballet were both positively associated with wisdom, and that lowered trait anxiety mediated this positive association among meditation practitioners, and, non-significantly, among ballet dancers. These results suggest that not all practices that are purported to affect mental processing are related to wisdom to the same degree and different kinds of experience

appear to relate to wisdom in different ways, suggesting different mechanisms that might underlie the development of wisdom with experience.

1.4 SCIENTIFIC STUDY OF RELIGION: METHOD & THEORY

Bibby, Reginald W. & Andrew Grenville. 2016. What the Polls Do Show: Toward Enhanced Survey Readings of Religion in Canada. *Canadian Review of Sociology* 53(1). 123–136. doi:10.1111/cars.12094.

Over the past two decades or so, survey research findings on religious activities and beliefs have been confusing, with the results of researchers and private pollsters frequently differing from those of Statistics Canada. In this research note, the authors use four national omnibus surveys conducted in 2012 to explore the extent to which such differences are due to measurement variations. Finding few noteworthy differences, they proceed to focus on the samples being used, and draw on illustrative data from 2012 and 2015 to argue that the differences in findings may in large part be due to differences in samples. The resolution of sampling problems, they acknowledge, is extremely difficult, but nonetheless is a goal that has to be pursued.

Franek, Juraj. 2016. Methodological Consilience of Evolutionary Ethics and Cognitive Science of Religion. *Journal of Cognition and Culture* 16(1-2). 144–170. doi:10.1163/15685373-12342173.

For the larger part of modern western intellectual history, it has been assumed that the study of morality and religion requires special methodology, insulated from, and in some important aspects incongruent with, the scientific method commonly used in the realm of natural sciences. Furthermore, even if it would be granted that moral and religious behavior is amendable to scientific analysis, the prospects of using evolutionary theory in particular to do the heavy lifting in explanation of these phenomena have been bleak, since many scholars doubted that a biological theory could possibly offer any valuable contribution. Recent advances in the fields of Evolutionary Ethics and Cognitive Science of Religion disprove both claims, emphasizing empirically founded explanations, demonstrating extraordinarily high degree of methodological consilience, and revealing utmost importance of the application of evolutionary theory in fields of study once deemed to be exclusive domains of social sciences and philosophy.

Shariff, Azim F., Aiyana K. Willard, Teresa Andersen & Ara Norenzayan. 2016. Religious Priming: A Meta-Analysis With a Focus on Prosociality. *Personality and Social Psychology Review* 20(1). 27–48. doi:10.1177/1088868314568811.

Priming has emerged as a valuable tool within the psychological study of religion, allowing for tests of religion's causal effect on a number of psychological outcomes, such as prosocial behavior. As the literature has grown, questions about the reliability and boundary conditions of religious priming have arisen. Researchers use a combination of traditional effect-size analyses, p-curve analyses, and adjustments for publication bias to evaluate the robustness of four types of religious priming (Analyses 1-3), review the empirical evidence for religion's effect specifically on prosocial behavior (Analyses 4-5), and test whether religious-priming effects generalize to individuals who report little or no religiosity (Analyses 6-7). Results across 93 studies and 11,653 participants show that religious priming has robust effects across a variety of outcome measures-prosocial measures included. Religious priming does not, however, reliably affect non-religious participants-suggesting that priming depends on the cognitive activation of culturally transmitted religious beliefs.

PART 2: ARTICLES IN SPIRITUALITY & HEALTH RESEARCH

2.1 SPIRITUALITY & HEALTH: GENERAL HEALTH & WELL-BEING

Bakibinga, Pauline, Namuunda Mutombo, Carol Mukiira, Eva Kamande, Alex Ezeh & Richard Muga. 2016. The Influence of Religion and Ethnicity on Family Planning Approval: A Case for Women in Rural Western Kenya. *Journal of Religion and Health* 55(1). 192–205.
doi:10.1007/s10943-015-0030-9.

The role of sociocultural factors such as religion and ethnicity in aiding or hampering family planning (FP) uptake in rural Western Kenya, a region with persistently high fertility rates, is not well established. Researchers explored whether attitudes towards FP can be attributed to religious affiliation and/or ethnicity among women in the region. Findings show that religion and ethnicity have no impact; the most significant factors are level of education and knowledge about the benefits of FP for the mother. FP interventions ought to include strategies aimed at enhancing women's knowledge about the positive impacts of family planning.

Bhaduri, Anirban & Dipak Ghosh. 2016. Quantitative Assessment of Heart Rate Dynamics during Meditation: An ECG Based Study with Multi-Fractality and Visibility Graph. *Frontiers in Physiology* 7. 44.
doi:10.3389/fphys.2016.00044.

The cardiac dynamics during meditation is explored quantitatively with two chaos-based non-linear techniques, viz; multi-fractal detrended fluctuation analysis and visibility network analysis techniques. The data used are the instantaneous heart rate (in beats/minute) of subjects performing Kundalini Yoga and Chi meditation from PhysioNet. The results show consistent differences between the quantitative parameters obtained by both the analysis techniques. This indicates an interesting phenomenon of change in the complexity of the cardiac dynamics during meditation supported with quantitative parameters. The results also produce a preliminary evidence that these techniques can be used as a measure of physiological impact on subjects performing meditation.

Büssing, Arndt, Eckhard Frick, Christoph Jacobs & Klaus Baumann. 2016. Health and Life Satisfaction of Roman Catholic Pastoral Workers: Private Prayer has a Greater Impact than Public Prayer. *Pastoral Psychology* 65(1). 89–102.
doi:10.1007/s11089-015-0672-2.

Studying 7,390 Roman Catholic pastoral workers (42% priests, 13% deacons, 20% pastoral assistants, 25% parish expert workers), researchers intended to clarify (1) which forms of religious activities were practiced and were thus of importance to them, (2) whether these activities were related to their experience of the transcendent in daily life, and (3) and how these measures were related to their psychosomatic health, stress perception and life satisfaction. The results showed almost equal levels of the experience of the transcendent in daily life (DSES) and in private prayer, but there were differences, particularly with respect to public prayer forms (e.g., the Eucharist, Liturgy of the Hours). The frequency of spiritual practices showed either no significant or only some marginal associations with psychosomatic health, while DSES showed weak to moderate associations. This perception of transcendence was predicted best by private prayer and life satisfaction.

Buttner, Melissa M., Jill E. Bormann, Kimberly Weingart, Taylor Andrews, Marjorie Ferguson & Niloofar Afari. 2016. Multi-site evaluation of a complementary, spiritually-based intervention for Veterans: The Mantram Repetition Program. *Complementary Therapies in Clinical Practice* 22. 74–79.
doi:10.1016/j.ctcp.2015.12.008.

Mental and physical symptoms affect Veterans' quality of life. Despite available conventional treatments, an increasing number of Veterans are seeking complementary approaches to symptom management. Research on the Mantram Repetition Program (MRP), a spiritually-based intervention, has shown significant improvements in

psychological distress and spiritual well-being in randomized trials. However, these findings have not been replicated in real-world settings. In this naturalistic study, researchers analyzed outcomes from 273 Veterans who participated in MRP at six sites and explored outcomes based on facilitator training methods. Measures included satisfaction and symptoms of anxiety, depression, and somatization using the Brief Symptom Inventory-18; Functional Assessment of Chronic Illness Therapy-Spiritual Well-being questionnaire; and the Mindfulness Attention Awareness Scale. Following intervention, there were significant improvements in all outcomes, regardless of how facilitators were trained. Patient satisfaction was high.

- Campbell, Virginia R. & Mary Nolan. 2016. A qualitative study exploring how the aims, language and actions of yoga for pregnancy teachers may impact upon women's self-efficacy for labour and birth. *Women and Birth* 29(1). 3–11.
doi:10.1016/j.wombi.2015.04.007.

As women's anxiety and the rate of medical intervention in labor and birth continue to increase, it is important to identify how antenatal education can increase women's confidence and their ability to manage the intense sensations of labor. This article thus aims to report a grounded theory study of how the aims, language and actions of yoga for pregnancy teachers may impact upon women's self-efficacy for labor and birth. Yoga for pregnancy classes in three locations were filmed. Semi-structured interviews were undertaken with the teachers to explore what they were trying to achieve in their classes, and how. Interviews and classes were transcribed and analyzed using grounded theory. It was found that there was considerable consistency in the teachers' aims, the language they used in classes and in their thinking about class structure. Four main themes emerged: creating a sisterhood, modelling labor, building confidence and enhancing learning. Teachers see yoga for pregnancy as a multi-faceted, non-prescriptive intervention that enhances women's physical, emotional and social readiness for labor and birth, and supports women to make their own decisions across the transition to parenthood.

- Canada, Andrea L., Patricia E. Murphy, George Fitchett & Kevin Stein. 2016. Re-examining the Contributions of Faith, Meaning, and Peace to Quality of Life: A Report from the American Cancer Society's Studies of Cancer Survivors-II (SCS-II). *Annals of Behavioral Medicine* 50(1). 79–86.
doi:10.1007/s12160-015-9735-y.

Prior research on spirituality in cancer survivors has often failed to distinguish the specific contributions of faith, meaning, and peace, dimensions of spiritual well-being, to quality of life (QoL), and has misinterpreted mediation analyses with these indices. Researchers hypothesized a model in which faith would have a significant indirect effect on survivors' functional QoL, mediated through meaning and/or peace. Data were from the American Cancer Society's Study of Cancer Survivors-II (n=8,405). Mediation analyses were conducted with the Functional Assessment of Chronic Illness Therapy-Spiritual Well-being Scale (FACIT-Sp) predicting the mental component summary (i.e., mental functioning) as well as the physical component summary (i.e., physical functioning) of the SF-36. Results indicate that the indirect effect of faith through meaning on mental functioning and the indirect effect of faith through meaning and peace on physical functioning were significant. The study findings suggest that faith makes a significant contribution to cancer survivors' functional QoL.

- Cheung, Corjena, Juyoung Park & Jean F. Wyman. 2016. Effects of Yoga on Symptoms, Physical Function, and Psychosocial Outcomes in Adults with Osteoarthritis A Focused Review. *American Journal of Physical Medicine & Rehabilitation* 95(2). 139–151.
doi:10.1097/PHM.0000000000000408.

Osteoarthritis (OA) is a highly prevalent and disabling chronic condition. Because physical activity is a key component in OA management, effective exercise interventions are needed. Yoga is an increasingly popular multimodal mind-body exercise that aims to promote flexibility, strength, endurance, and balance. Its gentle approach is potentially a safe and effective exercise option for managing OA. The purpose of this focused review is to examine

the effects of yoga on OA symptoms and physical and psychosocial outcomes. A comprehensive search was conducted using seven electronic databases. Twelve reports met inclusion criteria involving a total of 589 participants with OA-related symptoms. A variety of types, frequencies, and durations of yoga interventions were reported; Hatha and Iyengar yoga were the most commonly used types. Frequency of intervention ranged from once a week to 6 days a week. Duration of the interventions ranged from 45 to 90 mins per session for 6 to 12 wks. Yoga intervention resulted in reductions in pain, stiffness, and swelling, but results on physical function and psychosocial wellbeing were inconclusive because of a variety of outcome measures being used.

- Chu, Paula, Rinske A. Gotink, Gloria Y. Yeh, Sue J. Goldie & M. G. Myriam Hunink. 2016. The effectiveness of yoga in modifying risk factors for cardiovascular disease and metabolic syndrome: A systematic review and meta-analysis of randomized controlled trials. *European Journal of Preventive Cardiology* 23(3). 291–307.
doi:10.1177/2047487314562741.

Yoga, a popular mind-body practice, may produce changes in cardiovascular disease (CVD) and metabolic syndrome risk factors. This was a systematic review and random-effects meta-analysis of randomized controlled trials (RCTs). Electronic searches of relevant databases were performed for systematic reviews and RCTs through December 2013. Studies were included if they were English, peer-reviewed, focused on asana-based yoga in adults, and reported relevant outcomes. Two reviewers independently selected articles and assessed quality using Cochrane's Risk of Bias tool. Out of 1,404 records, 37 RCTs were included in the systematic review and 32 in the meta-analysis. Compared to non-exercise controls, yoga showed significant improvement for body mass index, systolic blood pressure, low-density lipoprotein cholesterol, and high-density lipoprotein cholesterol. Significant changes were seen in body weight, diastolic blood pressure, total cholesterol, triglycerides, and heart rate, but not fasting blood glucose nor glycosylated hemoglobin. No significant difference was found between yoga and exercise. One study found an impact on smoking abstinence.

- Cramer, H. 2016. The Efficacy and Safety of Yoga in Managing Hypertension. *Experimental and Clinical Endocrinology & Diabetes* 124(2). 65–70.
doi:10.1055/s-0035-1565062.

Hypertension is a major public health problem and one of the most important causes of premature morbidity and mortality. Yoga is a traditional Indian practice that has been adapted for use in complementary and alternative medicine and mainly includes physical postures, breathing techniques, and meditation. The impact of yoga as a complementary intervention for hypertension has been investigated in a number of randomized controlled trials, with an overall effect of about 10 mmHg reduction in systolic and about 8 mmHg reduction in diastolic blood pressure. Yoga seems to be effective only for hypertension but not for prehypertension; and only as an adjunct to antihypertensive pharmacological treatment but not as an alternative therapy. Breathing and meditation rather than physical activity seem to be the active part of yoga interventions for hypertensive patients. These practices can increase parasympathetic activity and decrease sympathetic activity, arguably mainly by increasing GABA activity, thus counteracting excess activity of the sympathetic nervous system which has been associated with hypertension. Although yoga has been associated with serious adverse events in single case reports, population-based surveys as well as clinical trials indicate that yoga is a relatively safe intervention that is not associated with more adverse events than other forms of physical activity. Yoga can thus be considered a safe and effective intervention for managing hypertension. Given the possibly better risk/benefit ratio, it may be advisable to focus on yogic meditation and/or breathing techniques.

- Cramer, Holger, David Sibbritt, Jon Adams & Romy Lauche. 2016. The association between regular yoga and meditation practice and falls and injuries: Results of a national cross-sectional survey among Australian women. *Maturitas* 84. 38–41.
doi:10.1016/j.maturitas.2015.10.010.

Falls are the leading cause of injuries in women across all ages. While yoga has been shown to increase balance, it has also been associated with injuries due to falls during practice. This study aimed to analyze whether regular yoga or meditation practice is associated with the frequency of falls and fall-related injuries in upper middle-aged Australian women. Women aged 59-64 years from the Australian Longitudinal Study on Women's Health (ALSWH) were queried regarding falls and falls-related injuries; and whether they regularly practiced yoga or meditation. Associations of falls and falls-related injuries with yoga or meditation practice were analyzed using chi-squared tests and multiple logistic regression modelling. Of 10,011 women, 4413 (44.1%) had slipped, tripped or stumbled, 2770 (27.7%) had fallen to the ground, 1398 (14.0%) had been injured as a result of falling, and 901 (9.0%) women had sought medical attention for a fall-related injury within the previous 12 months. Yoga or meditation was practiced regularly by 746 (7.5%) women. No associations of falls, fall-related injuries and treatment due to falls-related injury with yoga or meditation practice were found. The authors conclude that no association between yoga or meditation practice and falls or fall-related injuries have been found. Further studies are warranted for conclusive judgement of benefits and safety of yoga and meditation in relation to balance, falls and fall-related injuries.

Field, Tiffany. 2016. Knee osteoarthritis pain in the elderly can be reduced by massage therapy, yoga and tai chi: A review. *Complementary Therapies in Clinical Practice* 22. 87–92.
doi:10.1016/j.ctcp.2016.01.001.

This is a review of recently published research, both empirical studies and meta-analyses, on the effects of complementary therapies including massage therapy, yoga and tai chi on pain associated with knee osteoarthritis in the elderly. The massage therapy protocols have been effective in not only reducing pain but also in increasing range of motion, specifically when moderate pressure massage was used and when both the quadriceps and hamstrings were massaged. The yoga studies typically measured pain by the Western Ontario and McMaster Universities Arthritis Index (WOMAC). Most of those studies showed a clinically significant reduction in pain, especially the research that focused on poses (e.g., the Iyengar studies) as opposed to those that had integrated protocols (poses, breathing and meditation exercises). The tai chi studies also assessed pain by self-report on the WOMAC and showed significant reductions in pain. The tai chi studies were difficult to compare because of their highly variable protocols in terms of the frequency and duration of treatment. Larger, randomized control trials are needed on each of these therapies using more standardized protocols and more objective variables in addition to the self-reported WOMAC pain scale, for example, range-of-motion and observed range-of-motion pain. In addition, treatment comparison studies should be conducted so, for example, if the lower-cost yoga and tai chi were as effective as massage therapy, they might be used in combination with or as supplemental to massage therapy. Nonetheless, these therapies are at least reducing pain in knee osteoarthritis and they do not seem to have side effects.

He, Jianhui, Sawitri Assanangkornchai, Le Cai & Edward McNeil. 2016. Disparities in drinking patterns and risks among ethnic majority and minority groups in China: The roles of acculturation, religion, family and friends. *Drug and Alcohol Dependence* 159. 198–206.
doi:10.1016/j.drugalcdep.2015.12.028.

Studies investigating alcohol consumption related factors have rarely focused on the relationship between acculturation, religion and drinking patterns. The objective of this study is to explore the predictors of drinking patterns and their mutual relationships, especially acculturation, ethnicity and religion. A cross-sectional household survey using a multistage systematic sampling technique was thus conducted in Yunnan Province of China. A revised Vancouver Index of Acculturation (VIA) and Alcohol Use Disorder Identification Test (AUDIT) Chinese version were used to measure acculturation and drinking patterns. Structural equation modeling (SEM) was used to explore the structures of how predictors affect drinking patterns. A total of 977 subjects aged 12-35 years were surveyed. A higher percentage of binge drinking was found among Lisu people. However, the proportion of drinking until intoxication was highest among Han. Gender and enculturation had both direct and indirect effects on risky drinking pattern; perceived risk of alcohol consumption, family drinking environment, and friend drinking environment

affected risky drinking pattern directly, while education level, ethnicity, acculturation, religious belief, and age group had indirect effects.

- Keosaian, Julia E., Chelsey M. Lemaster, Danielle Dresner, Margo E. Godersky, Ruth Paris, Karen J. Sherman & Robert B. Saper. 2016. "We're all in this together": A qualitative study of predominantly low income minority participants in a yoga trial for chronic low back pain. *Complementary Therapies in Medicine* 24. 34–39.
doi:10.1016/j.ctim.2015.11.007.

The objective of this study is to explore the experiences of low-income minority adults taking part in a yoga dosing trial for chronic low back pain. Individual semi-structured interviews were conducted with nineteen participants recruited from a randomized yoga dosing trial for predominantly low-income minority adults with chronic low back pain. Interviews discussed the impact of yoga on low back pain and emotions; other perceived advantages or disadvantages of the intervention; and facilitators and barriers to practicing yoga. Interviews were audio taped and transcribed, coded using ATLAS.ti software, and analyzed with inductive and deductive thematic analysis methods. Participants viewed yoga as a means of pain relief and attributed improved mood, greater ability to manage stress, and enhanced relaxation to yoga. Overall, participants felt empowered to self-manage their pain. Some found yoga to be helpful in being mindful of their emotions and accepting of their pain. Trust in the yoga instructors was a commonly cited facilitator for yoga class attendance. Lack of time, motivation, and fear of injury were reported barriers to yoga practice.

- Lassiter, Jonathan M. & Jeffrey T. Parsons. 2016. Religion and Spirituality's Influences on HIV Syndemics Among MSM: A Systematic Review and Conceptual Model. *AIDS and Behavior* 20(2). 461–472.
doi:10.1007/s10461-015-1173-0.

This paper presents a systematic review of the quantitative HIV research that assessed the relationships between religion, spirituality, HIV syndemics, and individual HIV syndemics-related health conditions (e.g. depression, substance abuse, HIV risk) among men who have sex with men (MSM) in the United States. No quantitative studies were found that assessed the relationships between HIV syndemics, religion, and spirituality. Nine studies, with 13 statistical analyses, were found that examined the relationships between individual HIV syndemics-related health conditions, religion, and spirituality. Among the 13 analyses, religion and spirituality were found to have mixed relationships with HIV syndemics-related health conditions (6 nonsignificant associations; 5 negative associations; 2 positive associations). Given the overall lack of inclusion of religion and spirituality in HIV syndemics research, a conceptual model that hypothesizes the potential interactions of religion and spirituality with HIV syndemics-related health conditions is presented. The implications of the model for MSM's health are outlined.

- Lindholm, Greg, Judy Johnston, Frank Dong, Kim Moore & Elizabeth Ablah. 2016. Clergy Wellness: An Assessment of Perceived Barriers to Achieving Healthier Lifestyles. *Journal of Religion and Health* 55(1). 97–109.
doi:10.1007/s10943-014-9976-2.

This study sought to obtain a better understanding of how clergy view their health and to investigate their self-reported health status. Additionally, this study sought to explore personal and professional barriers among clergy to living a healthier life. An electronic 32-item survey was sent to all practicing clergy in Kansas East and West conferences of United Methodist church by the Kansas Area Office of the United Methodist Church. Survey items included participants' demographic information and health conditions (e.g., diabetes, heart disease, high blood pressure, high cholesterol). The self-reported general health, mental health, and physical health data were also collected to compare to the general population in Kansas. Clergy were also asked to identify perceived barriers to health. A total of 150 clergy participated in the survey. The majority (93.7 %) self-reported their health as good, very good, or excellent. Participating clergy self-reported a higher prevalence of chronic diseases (diabetes, heart disease, high blood pressure,

and high cholesterol) than the Kansas general population, but those differences were not statistically significant. More than three-fourths (77.4 %) of the participating clergy reported weights and heights that classified them as either overweight or obese. Lack of family time was the most frequently reported personal barrier to achieving a healthier lifestyle. An unpredictable work schedule was reported as the most frequent professional barrier to achieving a healthier lifestyle. This study suggests that Kansas clergy generally view their overall health status favorably despite being overweight or obese. Clergy also self-reported higher prevalence of chronic diseases than the general Kansas population, though the prevalence was not statistically different. This study provides additional insight into clergy health and offers suggestions to address the barriers preventing clergy from working toward better health.

Mahjoob, Monireh, Jalil Nejati, Alireaza Hosseini & Noor Mohammad Bakhshani. 2016. The Effect of Holy Quran Voice on Mental Health. *Journal of Religion and Health* 55(1). 38–42.
doi:10.1007/s10943-014-9821-7.

This study was designed to determine the effect of Quran listening without its musical tone (Tartil) on the mental health of personnel in Zabedan University of Medical Sciences, southeast of Iran. The results showed significant differences between the test and control groups in their mean mental health scores after Quran listening. No significant gender differences in the test group before and after intervention were found. These results suggest that Quran listening could be recommended by psychologists for improving mental health and achieving greater calm.

Mollica, Michelle A., Willie Underwood, Gregory G. Homish, D. Lynn Homish & Heather Orom. 2016. Spirituality is associated with better prostate cancer treatment decision making experiences. *Journal of Behavioral Medicine* 39(1). 161–169.
doi:10.1007/s10865-015-9662-1.

This study examined whether spiritual beliefs are associated with greater decision-making satisfaction, lower decisional conflict and decision-making difficulty with the decision-making process in newly diagnosed men with prostate cancer. Participants were 1114 men diagnosed with localized prostate cancer who had recently made their treatment decision, but had not yet been treated. Researchers used multivariable linear regression to analyze relationships between spirituality and decision-making satisfaction, decisional conflict, and decision-making difficulty, controlling for optimism and resilience, and clinical and sociodemographic factors. Results indicated that greater spirituality was associated with greater decision-making satisfaction, less decisional conflict, and less decision-making difficulty. These results confirm that spiritual beliefs may be a coping resource during the treatment decision-making process. Providing opportunities for patients to integrate their spiritual beliefs and their perceptions of their cancer diagnosis and trajectory could help reduce patient uncertainty and stress during this important phase of cancer care continuum.

Nick, Narjes, Peyman Petramfar, Fariba Ghodsbin, Sareh Keshavarzi & Iran Jahanbin. 2016. The Effect of Yoga on Balance and Fear of Falling in Older Adults. *PM&R* 8(2). 145–151.
doi:10.1016/j.pmrj.2015.06.442.

The objective of this article is to determine the effect of yoga on balance and fear of falling in older adults. The study was a randomized controlled trial performed at the Jahandidegan Center in Shiraz, southern Iran. Participants were forty persons (17 men and 23 women) between the ages of 60-74 years with a Modified Falls Efficacy Scale (MFES) score < 8 and a Berg Balance Scale (BBS) score < 45. After completing the MFES questionnaire and BBS measurement, the participants were divided into intervention and control groups. BBS measurement and the MFES questionnaire were completed again immediately after the intervention. The intervention group participated in 2 yoga practice sessions per week for 8 weeks. The control group received no intervention. Significant changes were found in both variables. Mean differences before and after the intervention for the BBS for yoga and control groups were 10.19 and -1.16, respectively. Mean differences before and after the intervention for the MFES for yoga and control groups were 1.62 and -0.21, respectively.

Niemi, Maria & Goran Stahle. 2016. The use of ayurvedic medicine in the context of health promotion - a mixed methods case study of an ayurvedic centre in Sweden. *BMC Complementary and Alternative Medicine* 16. 62.

doi:10.1186/s12906-016-1042-z.

Ayurveda has its historical roots in India, but has also been internationalized, partly via migration and partly through an increased interest in alternative medicine in the West, where studies point toward increased use. However, there is to date scarce knowledge about the use and experiences of ayurveda in Sweden. For this article, researchers have conducted a case study of a center for ayurvedic healthcare in Sweden. The researchers have collected information on client background data from the center's documentation, and compiled data from all clients who visited the center for ayurvedic consultation during spring 2014. In total, 55 individuals were included in the study, and 18 of them were chosen for individual semi-structured interviews, to gain a deeper understanding of their motives for seeking, and experiences of ayurvedic health care. The material was analyzed and compiled through a mix of qualitative and quantitative methods. Among the 55 clients, 91% were female, the mean age was 47 years, and 64% gave a specific illness as a reason for seeking ayurveda. The most common illnesses were respiratory, musculoskeletal, circulatory, tumor, and cutaneous illnesses. The qualitative results showed that ayurveda was being used in combination with other methods, including various diets, other alternative medicine methods and conventional medicine. Some participants recounted having sought ayurveda as a complement to conventional medicine, or in cases when conventional medicine had been experienced as insufficient in terms of diagnosis or treatment. However, some participants experienced it as difficult to follow the ayurvedic life-style advice in the midst of their everyday life. Many participants reported positive experiences of pulse diagnostics, which was the main diagnostic method used in ayurvedic consultation. Some reported concrete, physical improvement of their symptoms.

Papadakis, G., T. Zampelis, M. Michalopoulou, K. Konstantopoulos, T. Rosenberg & S. Chatzipanagiotou. 2016. Prayer Marks in Immigrants from Bangladesh with Diabetes Who Live in Greece. *Journal of Immigrant and Minority Health / Center for Minority Public Health* 18(1). 274–276. doi:10.1007/s10903-015-0184-2.

Prayer marks (PMs) are commonly occurring dermatologic changes in Muslims who pray and develop over a long period of time as a consequence of repeated and extended pressure. PMs need careful examination especially for patients with diabetes, who are more vulnerable due to predisposing factors such as venous insufficiency and peripheral neuropathy. A total of 166 patients with diabetes (150 males, 16 females) and 65 normal subjects from Bangladesh were examined for the appearance of PMs. Twenty-eight patients (16.9%) and one normal subject (1.5%) had PMs. The marks were not itchy or painful and they were observed on the dorsal aspect of the left foot, which was attributed to a more typical prayer position that placed pressure on the left foot. PMs are not a rare clinical entity among Muslim patients with diabetes and most clinicians should be aware of it as it can be the predominant cause of an ulcer.

Peter, Apor. 2016. Preventive and curative value of yoga in cardiometabolic diseases. *Orvosi Hetilap* 157(9). 323–327.

doi:10.1556/650.2016.30361.

Yoga and other body-mind techniques enjoy an increasing popularity in many fields of health maintaining practices, in prevention of some illnesses and in curative medicine in spite of our incomplete knowledge about its applicability and effects. There are large differences among the various yoga-schools and the heterogeneity of indications etc. In this article a bucket of recent information is offered for the inquirers on the potential advantages of yoga (diet, mind-exercises, asanas, pranayamas) for decreasing cardio-metabolic risk factors, stabilizing mental health, and its addictive use in curative medicine. Few adverse side-effects may occur only in the case of misapplication. Its advantages are low costs, availability for broad population, and very few contraindications. Disadvantages include differences in the ability of yoga instructors and in yoga practices.

Rich, Tyvin A., Robert Pfister, John Alton, David Gerdt & Martin Baruch. 2016. Assessment of Cardiovascular Parameters during Meditation with Mental Targeting in Varsity Swimmers. *Evidence-Based Complementary and Alternative Medicine: eCAM* 2016. 7923234. doi:10.1155/2016/7923234.

Athletes who develop an immunosuppressed state because of intensive training get upper respiratory infections (URIs) and may respond to meditation. Reflective exercise (RE), a westernized form of Qigong, combines meditation, breathing, and targeted mental attention to an internal pulsatile sensation, previously shown to protect varsity swimmers from URIs during the height of training. Researchers report here the evaluation of cardiovascular parameters measured during meditation combined with targeted imagery (interoception) in a cohort of varsity swimmers taught RE. Thirteen subjects were enrolled on a prospective protocol that used the CareTaker, a noninvasive cardiovascular monitor before, during, and after RE training. Questionnaires regarding targeted mental imagery focusing on a pulsatile sensation were collected. The cardiovascular parameters include heart rate, blood pressure, and heart rate variability (HRV). Increased variance in the subjects' BP and HRV was observed over the training period of 8 weeks. In nine subjects there was an increased low frequency (LF) HRV that was significantly associated with the subject's awareness of the pulsatile sensation that makes up a basic part of the RE practice. These data support further evaluation of HRV measurements in subjects while meditating with mental imagery. This direction could contribute to better understanding of neurocardiac mechanisms that relate meditation to enhanced immunity.

Shahabi, Leila, Bruce D. Naliboff & David Shapiro. 2016. Self-regulation evaluation of therapeutic yoga and walking for patients with irritable bowel syndrome: A pilot study. *Psychology, Health & Medicine* 21(2). 176–188. doi:10.1080/13548506.2015.1051557.

With limited efficacy of medications for symptom relief, non-medication treatments may play an important role in the treatment of irritable bowel syndrome (IBS), the most common functional gastrointestinal (GI) disorder. This study aimed to evaluate the efficacy of two self-regulation strategies for symptom relief and mood management in IBS patients. Thirty-five adult participants meeting ROME III criteria for IBS were enrolled, 27 of the 35 participants (77%) completed treatment and pre- and post-treatment visits, and 20 of the 27 (74%) completed a 6-month follow-up. Participants were randomly assigned to 16 biweekly group sessions of Iyengar yoga or a walking program. Results indicated a significant group by time interaction on negative affect with the walking treatment showing improvement from pre- to post-treatment when compared to yoga. There was no significant group by time effect on IBS severity. Exploratory analyses of secondary outcomes examined change separately for each treatment condition. From pre- to post-treatment, yoga showed significant decreases in IBS severity measures, visceral sensitivity, and severity of somatic symptoms. Walking showed significant decreases in overall GI symptoms, negative affect, and state anxiety. At 6-month follow-up, overall GI symptoms for walking continued to significantly decline, while for yoga, GI symptoms rebounded toward baseline levels. When asked about self-regulated home practice at 6 months, significantly more participants in walking than in yoga practiced at least weekly. In sum, results suggest that yoga and walking as movement-based self-regulatory behavioral treatments have some differential effects but are both beneficial for IBS patients, though maintenance of a self-regulated walking program may be more feasible and therefore more effective long term.

Shiraishi, Juliana Costa & Lídia Mara Aguiar Bezerra. 2016. Effects of yoga practice on muscular endurance in young women. *Complementary Therapies in Clinical Practice* 22. 69–73. doi:10.1016/j.ctcp.2015.12.007.

The aim of this study was to verify the effects of a systematized yoga practice on muscular endurance in young women. Twenty-six women participated in six weeks of yoga classes, and twenty-one women participated as the control group. The yoga intervention was composed of eighteen sessions, three times per week, at 1 hour per session. The muscular

endurance of upper limbs (push-up) and abdominal (sit-up) was assessed. To verify the significant differences intra groups and between groups a SPANOVA was performed, and the level of significance was $p \leq 0.05$. The findings suggest that yoga provides improvement in upper limb and in abdominal muscular endurance.

Sotodehasl, Nemat, Raheb Ghorbani, Gholamhosein Mahdavi-Nejad, Saeed Haji-Aghajani & Jamileh Mehdizadeh. 2016. Prayer Attendance and General Health in the Iranian Adult Urban Population. *Journal of Religion and Health* 55(1). 110–118.
doi:10.1007/s10943-014-9980-6.

This study was conducted to determine the relationship between prayer attendance and general health among adult urban population in Iran. A total of 470 males older than 17 years, chosen by multistage sampling, were investigated. The results showed that people who did not perform prayers compared to those who said prayers on time and performed Nafilabs (supererogatory prayers) were 2.87 times at risk of general health problems. In conclusion, the findings show that increasing the degree of people's belief in prayer can lead to improve general health.

Speed, David & Ken Fowler. 2016. What's God Got to Do with It? How Religiosity Predicts Atheists' Health. *Journal of Religion and Health* 55(1). 296–308.
doi:10.1007/s10943-015-0083-9.

The relationship between atheism and health is poorly understood within the Religion/Spirituality-health literature. While the extant literature promotes the idea that Attendance, Prayer, and Religiosity are connected to positive health outcomes, these relationships have not been established when controlling for whether a person is an atheist. Data from the 2008-2012 American General Social Survey (n=3210) were used to investigate this relationship. Results indicated that atheists experienced Religiosity more negatively than non-atheists. Additionally, results demonstrated that non-belief in God was not related to better or worse perceived global health, suggesting that belief in God is not inherently linked to better reported health.

Steenhuis, Laura A., Agna A. Bartels-Velthuis, Jack A. Jenner, André Aleman, Richard Bruggeman, Maaïke H. Nauta & Gerdina H. M. Pijnenborg. 2016. Religiosity in young adolescents with auditory vocal hallucinations. *Psychiatry Research* 236. 158–164.
doi:10.1016/j.psychres.2015.12.014.

The current exploratory study examined the associations between auditory vocal hallucinations (AVH) and delusions and religiosity in young adolescents. Children (n=337) from a population-based case-control study with and without AVH, were assessed after five years at age 12 and 13, on the presence and appraisal of AVH, delusions and religiosity. AVH status (persistent, remittent, incident or control) was examined in relationship to religiosity. Results demonstrated a non-linear association between AVH and religiosity. Moderately religious adolescents were more likely to report AVH than non-religious adolescents. Prospectively, moderately religious adolescents were more likely to have recently developed AVH than non-religious adolescents and strongly religious adolescents. Of the adolescents reporting voices in this sample (16.3%), more than half reported positive voices. Religious beliefs were often described as supportive, useful or neutral (82%), regardless of the level of religiosity, for both adolescents with and without AVH. Co-occurrence of AVH and delusions, and severity of AVH were not related to religiosity. The present findings suggest there may be a non-linear association between religiosity and hearing voices in young adolescents. A speculative explanation may be that religious practices were adopted in response to AVH as a method of coping.

Watkins, Tommie L., Cathy Simpson, Stacey S. Cofield, Susan Davies, Connie Kohler & Stuart Usdan. 2016. The Relationship of Religiosity, Spirituality, Substance Abuse, and Depression Among Black Men Who Have Sex with Men (MSM). *Journal of Religion and Health* 55(1). 255–268.
doi:10.1007/s10943-015-0101-y.

HIV infection rates continue to disproportionately affect Black men who have sex with men (Black MSM) compared to other groups. Research has shown that higher rates of substance use and higher levels of depression are positively correlated with higher sexual risk behavior, and little research has examined relationships between high levels of religiosity and spirituality prevalent in Black culture and issues of substance use and depression among Black MSM. This study did just that and found a relationship between religiosity, spirituality, and risk behavior. These relationships suggest that future HIV prevention models might incorporate religiosity and spirituality to increase the efficacy of risk reduction interventions for Black MSM.

Williams, Terrinieka T., Latrice C. Pichon, Melissa Davey-Rothwell & Carl A. Latkin. 2016. Church Attendance as a Predictor of Number of Sexual Health Topics Discussed Among High-Risk HIV-Negative Black Women. *Archives of Sexual Behavior* 45(2). 451–458.
doi:10.1007/s10508-015-0506-4.

Research suggests that sexual health communication is associated with safer sex practices. In this study, researchers examined the relationship between church attendance and sexual health topics discussed with both friends and sexual partners among a sample of urban Black women. Participants were 434 HIV-negative Black women who were at high risk for contracting HIV through heterosexual sex. They were recruited from Baltimore, Maryland using a network-based sampling approach. Data were collected through face-to-face interviews and Audio-Computer-Assisted Self-Interviews. Fifty-four percent of the participants attended church once a month or more (regular attendees). Multivariate logistic regression analyses revealed that regular church attendance among high-risk HIV-negative Black women was a significant predictor of the number of sexual health topics discussed with both friends and sexual partners. Future efforts to reduce HIV incidence among high-risk Black women may benefit from partnerships with churches that equip faith leaders and congregants with the tools to discuss sexual health topics with both their sexual partners and friends.

Wu, Li-Fen & Malcolm Koo. 2016. Randomized controlled trial of a six-week spiritual reminiscence intervention on hope, life satisfaction, and spiritual well-being in elderly with mild and moderate dementia. *International Journal of Geriatric Psychiatry* 31(2). 120–127.
doi:10.1002/gps.4300.

Reminiscence therapy has been reported to improve the well-being in patients with dementia. However, few studies have examined the effects of spiritual reminiscence, which emphasizes on reconnecting and enhancing the meaning of one's own experience, on patients with dementia. Therefore, this study aimed to investigate the effects of spiritual reminiscence on hope, life satisfaction, and spiritual well-being in elderly Taiwanese with mild or moderate dementia. A randomized controlled trial was conducted on 103 patients with mild or moderate dementia recruited from a medical center in central Taiwan. The patients were randomly assigned to either a 6-week spiritual reminiscence group (n=53) or control group (n=50). The Herth Hope Index, the Life Satisfaction Scale, the Spirituality Index of Well-Being were administered before and after the 6-week period. The interaction terms between group and time for the three outcome measures were found to be significant, indicating that the changes over time in them were different between the intervention and control groups. The authors conclude that hope, life satisfaction, and spiritual well-being of elderly patients with mild or moderate dementia could significantly be improved with a 6-week spiritual reminiscence intervention.

2.2 SPIRITUALITY & HEALTH: MENTAL HEALTH

Aghababaei, Naser, Faramarz Sohrabi, Hossein Eskandari, Ahmad Borjali, Noorali Farrokhi & Zhuo Job Chen. 2016. Predicting subjective well-being by religious and scientific attitudes with hope, purpose in life, and death anxiety as mediators. *Personality and Individual Differences* 90. 93–98.
doi:10.1016/j.paid.2015.10.046.

Much of the research in recent decades has associated religiousness with positive psychological outcomes. Recently, it has been shown that scientific belief can substitute religion as a source of comfort. In a sample of 474 Iranian Muslim university students, RESEARCHERS examined how religious and scientific attitudes predicted life satisfaction, happiness, and self-esteem. Religiosity was positively related to all of these indicators of subjective well-being (SWB). Scientific attitudes too were related to higher levels of SWB. The relationships were fully mediated by hope and purpose in life. The results suggested that, believing either in God or science can contribute to SWB, through hope and purpose in life.

- Alderman, B. L., R. L. Olson, C. J. Brush & T. J. Shors. 2016. MAP training: combining meditation and aerobic exercise reduces depression and rumination while enhancing synchronized brain activity. *Translational Psychiatry* 6. e726.
doi:10.1038/tp.2015.225.

Mental and physical (MAP) training is a novel clinical intervention that combines mental training through meditation and physical training through aerobic exercise. The intervention was translated from neuroscientific studies indicating that MAP training increases neurogenesis in the adult brain. Each session consisted of 30 min of focused-attention (FA) meditation and 30 min of moderate-intensity aerobic exercise. Fifty-two participants completed the 8-week intervention, which consisted of two sessions per week. Following the intervention, individuals with major depressive disorder (MDD; n=22) reported significantly less depressive symptoms and ruminative thoughts. Typical healthy individuals (n=30) also reported less depressive symptoms at follow-up. Behavioral and event-related potential indices of cognitive control were collected at baseline and follow-up during a modified flanker task. Following MAP training, N2 and P3 component amplitudes increased relative to baseline, especially among individuals with MDD. These data indicate enhanced neural responses during the detection and resolution of conflicting stimuli. Although previous research has supported the individual beneficial effects of aerobic exercise and meditation for depression, these findings indicate that a combination of the two may be particularly effective in increasing cognitive control processes and decreasing ruminative thought patterns.

- Anells, S., K. Kho & P. Bridge. 2016. Meditate don't medicate: How medical imaging evidence supports the role of meditation in the treatment of depression. *Radiography* 22(1). e54–e58.
doi:10.1016/j.radi.2015.08.002.

A systematic literature review was performed to determine the value of medical imaging studies in measuring the impact of meditation on depression. Medical imaging studies have successfully demonstrated that meditation may counteract or prevent the physiological cause of depression by decreasing amygdala activity and increasing grey matter volume and activity of the hippocampus, prefrontal cortex and other brain regions associated with attention and emotional self-regulation. Recent advances in functional imaging have enabled visualization of neural plasticity within the brain. This has shown that for meditators, practice-induced alterations could be due to micro-anatomical processes that may represent an increased functional capacity within the brain regions activated. These changes within brain physiology in association with the skills gained during meditation such as self-regulation, mental processing of negative information and relaxation techniques could potentially lead to a permanent cure for depression and thus prevent relapse.

- Besharat, Mohammad Ali & Zeynab Sadat Kamali. 2016. Predicting obsessions and compulsions according to superego and ego characteristics: A comparison between scrupulosity and non-religious obsessive-compulsive symptoms. *Asian Journal of Psychiatry* 19. 73–78.
doi:10.1016/j.ajp.2016.01.003.

Obsessive Compulsive Disorder (OCD) is characterized by intrusive images or impulses and/or ritualistic and rigid behaviors. Symptoms of OCD have different contents including contamination, harming and symmetry. Religion is one of the themes that has been observed in the context of OCD frequently. The aim of the present study was to examine the power of superego and ego characteristics in predicting scrupulosity and non-religious obsessions and

compulsions, as well as comparing the two sets of obsessive-compulsive symptoms. Sixty-six Iranian (19 men, 47 women) participated in the study. All participants were asked to complete Maudsley Obsessive-Compulsive Inventory, Penn Inventory of Scrupulosity, Perfectionism Cognitions Inventory, the Multidimensional Anger Inventory, and Ego Strength Scale. Results showed that perfectionism and anger were positively correlated with scrupulosity and non-religious obsessive-compulsive symptoms. Ego control was negatively correlated with scrupulosity, while ego resiliency was not correlated with any of these two sets of symptoms. Regression analysis indicated that among these variables, anger was the best predictor of non-religious obsessive-compulsive symptoms, while perfectionism and ego control were the best predictors of scrupulosity.

- Bryan, Jennifer L., Sydnee H. Lucas, Michelle C. Quist, Mai-Ly N. Steers, Dawn W. Foster, Chelsie M. Young & Qian Lu. 2016. God, can I tell you something? The effect of religious coping on the relationship between anxiety over emotional expression, anxiety, and depressive symptoms. *Psychology of Religion and Spirituality* 8(1). 46–53.
doi:10.1037/rel0000023.

The current study investigated whether religious coping would moderate the association between ambivalence over emotional expression (AEE) and depressive symptoms and anxiety symptoms such that the positive relationship between AEE and depressive symptoms and anxiety symptoms would be weaker among those higher in religious coping. Three-hundred fifty-two undergraduates completed study materials. Contrary to expectations, results revealed a significant interaction between religious coping and AEE such that religious coping exacerbated the relationship between higher AEE and distress symptoms. The implications of this study suggest that religious coping may not be an ideal coping mechanism for individuals with high levels of AEE. These results indicate the need to further examine the role of AEE in religious coping, and have potential implications for clinicians, health care professionals, and religious mentors who may promote the use of religious coping in treatment.

- Burnett-Zeigler, Inger, Stephanie Schuette, David Victorson & Katherine L. Wisner. 2016. Mind-Body Approaches to Treating Mental Health Symptoms Among Disadvantaged Populations: A Comprehensive Review. *Journal of Alternative and Complementary Medicine (New York, N.Y.)* 22(2). 115–124.
doi:10.1089/acm.2015.0038.

Mind-body approaches are commonly used to treat a variety of chronic health conditions, including depression and anxiety. A substantial proportion of individuals with depression and anxiety disorders do not receive conventional treatment; disadvantaged individuals are especially unlikely to receive treatment. Mind-body approaches offer a potentially more accessible and acceptable alternative to conventional mental health treatment for disadvantaged individuals, who may not otherwise receive mental health treatment. This review examines evidence for the efficacy of mind-body interventions for mental health symptoms among disadvantaged populations. While rates of utilization were relatively lower for racial/ethnic minorities, evidence suggests that significant proportions of racial/ethnic minorities are using complementary health approaches as health treatments, especially prayer/healers and natural or herbal remedies. This review of studies on the efficacy of mind-body interventions among disadvantaged populations found evidence for the efficacy of mind-body approaches for several mental and physical health symptoms, functioning, self-care, and overall quality of life.

- Costa, Sebastiano, Maria C. Gugliandolo, Nadia Barberis & Rosalba Larcán. 2016. The Mediation Role of Psychological Basic Needs in the Relation Between Conception of God and Psychological Outcomes. *Journal of Religion and Health* 55(1). 1–15.
doi:10.1007/s10943-014-9956-6.

Relatively few studies have examined the relationship between conception of God and psychological outcomes in a self-determination theory (SDT) framework. The aim of this study was to examine the role of basic psychological needs as a mediator of the association between conception of God and psychological outcomes. In a sample of 210

religious young adults, researchers found that the concept of a controlling God was positively associated with feelings of need frustration and depression, whilst the concept of an autonomy-supporting God was positively associated with feelings of need satisfaction and vitality. In turn, need satisfaction promoted feelings of vitality, whereas need frustration led to feelings of depression. The satisfaction of needs was a full mediator of the relationship between autonomy-supporting God and vitality, whilst the frustration of needs was a full mediator of the relationship between controlling God and depression. These findings are discussed in terms of SDT. The authors also discuss how future research may further increase an understanding of the dynamics involved in concepts of God and psychological outcomes.

Dimidjian, Sona, Sherryl H. Goodman, Jennifer N. Felder, Robert Gallop, Amanda P. Brown & Arne Beck. 2016. Staying well during pregnancy and the postpartum: A pilot randomized trial of mindfulness-based cognitive therapy for the prevention of depressive relapse/recurrence. *Journal of Consulting and Clinical Psychology* 84(2). 134–145.
doi:10.1037/ccp0000068.

Clinical decision-making regarding the prevention of depression is complex for pregnant women with histories of depression and their health care providers. Pregnant women with histories of depression report preference for nonpharmacological care, but few evidence-based options exist. Mindfulness-based cognitive therapy has strong evidence in the prevention of depressive relapse/recurrence among general populations and indications of promise as adapted for perinatal depression (MBCT-PD). With a pilot randomized clinical trial, our aim was to evaluate treatment acceptability and efficacy of MBCT-PD relative to treatment as usual (TAU). Pregnant adult women with depression histories were recruited from obstetric clinics at 2 sites and randomized to MBCT-PD (n=43) or TAU (n=43). Treatment acceptability was measured by assessing completion of sessions, at-home practice, and satisfaction. Clinical outcomes were interview-based depression relapse/recurrence status and self-reported depressive symptoms through 6 months postpartum. Consistent with predictions, MBCT-PD for at-risk pregnant women was acceptable based on rates of completion of sessions and at-home practice assignments, and satisfaction with services was significantly higher for MBCT-PD than TAU. Moreover, at-risk women randomly assigned to MBCT-PD reported significantly improved depressive outcomes compared with participants receiving TAU, including significantly lower rates of depressive relapse/recurrence and lower depressive symptom severity during the course of the study.

Fishbein, Diana, Shari Miller, Mindy Herman-Stahl, Jason Williams, Bud Lavery, Lara Markovitz, Marianne Kluckman, Greg Mosoriak & Michelle Johnson. 2016. Behavioral and psychophysiological effects of a yoga intervention on high-risk adolescents: A randomized control trial. *Journal of Child and Family Studies* 25(2). 518–529.
doi:10.1007/s10826-015-0231-6.

The purpose of this study was to conduct a pilot randomized control trial to test whether a mindful yoga intervention had a beneficial impact on substance use and its psychological and psychophysiological correlates in high-risk adolescents. Research on yoga has generated growing evidence for its positive effects on physical and emotional health. However, most studies are conducted with adults, with few controlled studies conducted with youth. Researchers designed a 20-session mindful yoga intervention for adolescents attending a school for students at high-risk for dropping out. The 50-min classes were offered three times a week. The participants were randomly assigned to control and intervention groups. Multi-rater (student, teacher), multi-method (survey, cognitive, psychophysiological) data were collected before and after the yoga curriculum. At post-test, students in the yoga condition, as compared to control students, exhibited trends toward decreased alcohol use and improved teacher-rated social skills; and showed a non-significant increase in arousal in response to relevant stimuli as measured in skin conductance. Significant effects were not found on hypothesized proximal measures of self-regulation, mood, mindfulness, or involuntary engagement coping. Future research is needed to replicate and expand upon our findings. Studies are also needed with larger samples to further investigate potential mediators and moderators of yoga's effects.

Harris, Alexis R., Patricia A. Jennings, Deirdre A. Katz, Rachel M. Abenavoli & Mark T. Greenberg. 2016. Promoting stress management and wellbeing in educators: Feasibility and efficacy of a school-based yoga and mindfulness intervention. *Mindfulness* 7(1). 143–154.
doi:10.1007/s12671-015-0451-2.

Researchers evaluated the feasibility and efficacy of the Community Approach to Learning Mindfully (CALM) program for educators. CALM is a brief daily school-based intervention to promote educator social-emotional competencies, stress management, and wellbeing. Two middle schools were randomly assigned to waitlist control condition or the CALM program. Participants included 64 educators. Intervention sessions included gentle yoga and mindfulness practices and were offered 4 days per week for 16 weeks. Pre- and post-test measurements included self-report surveys of social-emotional functioning and wellbeing, blood pressure readings, and diurnal assays of cortisol. Compared to the control condition, CALM had significant benefits for educators' mindfulness, positive affect, classroom management, distress tolerance, physical symptoms, blood pressure, and cortisol awakening response. There were trend-level effects for two measures related to stress and burnout. No impacts were observed for relational trust, perceived stress, or sleep. Effect sizes for significant impacts ranged from 0.52 to 0.80. Educators found the intervention feasible and beneficial as a method for managing stress and promoting wellbeing. Initial evidence suggests that CALM has potential as a strategy to improve educators' social-emotional competence and wellbeing, prevent stress-related problems, and support classroom functioning.

Iqbal, Naved, Archana Singh & Sheema Aleem. 2016. Effect of Dynamic Meditation on Mental Health. *Journal of Religion and Health* 55(1). 241–254.
doi:10.1007/s10943-015-0082-x.

Although traditional meditation has been found to be effective in improving physical and mental health of subjects, there was a paucity of research of the effect of active or dynamic meditation on these variables. Therefore, the present study was aimed at studying the effect of dynamic meditation on mental health of the subjects. Total sample of the present study comprised 60 subjects, 30 each in experimental and control group. Subjects in experimental group were given 21-day training in dynamic meditation. Mental health of the experimental and control group subjects was measured in pre- and post-condition with the help of Mental Health Inventory developed by Jagadish and Srivastava. Obtained data were analyzed with the help of ANCOVA. In post-condition, experimental group scored better than control group on integration of personality, autonomy and environmental mastery. Effect sizes of dynamic meditation on these dimensions of mental health were large. However, experimental group and control group did not differ significantly on positive self-evaluation, perception of reality and group-oriented attitude dimensions of mental health in post-condition. Overall, dynamic meditation training was effective in improving mental health of the subjects.

Kadziolka, Marta J., Emily-Ann Di Pierdomenico & Carlin J. Miller. 2016. Trait-like mindfulness promotes healthy self-regulation of stress. *Mindfulness* 7(1). 236–245.
doi:10.1007/s12671-015-0437-0.

A number of experts have described mindfulness as a naturally occurring quality in the human mind that is present to some degree in all people, even without training in mindfulness or meditation. This study examined whether trait mindfulness is associated with reduced stress response activation and enhanced self-regulatory activity with recurrent stress. Self-ratings of mindfulness and continuous measures of physiological reactivity before, during, and after an interview about a recurrent stressful issue were collected from 47 undergraduate participants to examine our primary objective. Findings indicated that mindful individuals were less likely to engage in metabolically costly physiological activation in response to an emotionally challenging task, but were more likely to engage parasympathetic responding following the task, a response which is associated with effective downregulation following stress. Results from the study suggest that “natively mindful” individuals have the ability to engage self-regulatory physiological responding associated with improved adaptability and flexibility in a changing environment. Thus, mindfulness may be

associated with physical indices of emotional well-being. Furthermore, our data adds evidence for the validity of self-report measures of mindfulness.

- Krause, Neal. 2016. Compassion, Acts of Contrition, and Forgiveness in Middle and Late Life. *Pastoral Psychology* 65(1). 127–141.
doi:10.1007/s11089-015-0669-x.

The purpose of this study is to assess social and psychological factors that have not been examined frequently in studies on forgiving others. A latent variable model is developed that contains the following core relationships: (1) people who attend worship services more often will receive more informal spiritual support from fellow church members; (2) individuals who get more spiritual support will be more compassionate; (3) people who are more compassionate will be less likely to require transgressors to perform acts of contrition; and (4) individuals who do not require transgressors to perform acts of contrition will find it easier to forgive. Data from a nationwide survey of middle-aged and older adults provides support for each of these relationships.

- Lamothe, Martin, Emelie Rondeau, Catherine Malboeuf-Hurtubise, Michel Duval & Serge Sultan. 2016. Outcomes of MBSR or MBSR-based interventions in health care providers: A systematic review with a focus on empathy and emotional competencies. *Complementary Therapies in Medicine* 24. 19–28.
doi:10.1016/j.ctim.2015.11.001.

Emotional competencies are extremely important for healthcare providers exposed to patients' suffering. The effect of mindfulness-based stress reduction (MBSR) has been studied in this population. However, it is unclear whether capacities identified as core for care are modified favorably by this intervention. Thus, the objectives of this study were: to identify outcomes in studies on the effect of MBSR in healthcare providers; to evaluate the impact of MBSR on these outcomes; to assess current knowledge on whether capacities central to care are positively impacted by MBSR: empathy, identification of one's own emotions, identification of other's emotions and emotional acceptance. Researchers performed a systematic review on interventional studies published up to 2015 evaluating the effect of MBSR in healthcare professionals. A subset of studies including empathy and emotional competencies was assessed for bias following current methodological standards. Thirty-nine studies were identified. Fourteen of the studies measured empathy or some form of emotional competence in healthcare providers. Evidence regarding the effects of MBSR in professionals suggests this intervention is associated with improvements in burnout, stress, anxiety and depression. Improvements in empathy are also suggested but no clear evidence is currently available on emotional competencies.

- Meisenhelder, Janice Bell, Charae D'Ambra & Terri Jabaley. 2016. Spiritual Coping at the End of Life A Case Study of a College Student. *Journal of Hospice & Palliative Nursing* 18(1). 66–73.
doi:10.1097/NJH.0000000000000214.

This qualitative case study identified patterns of spiritual coping in a personal prayer journal of a 19-year-old woman fighting terminal cancer. A phenomenological instrumental case study approach with a content analysis identified common themes. Three positive clusters were continuous across the time span with equally strong representation: seeking God (42), asking God (38), and thanking God (39). The seeking cluster included prayers asking for closeness and offering her life to God. The asking cluster included solicitations for an ability to follow God and to help others. The thanking theme included expressions of trust, praise, and thanksgiving. The fourth cluster, questioning (17), represented turmoil and distress, coinciding with discovery of metastatic cancer following previously clear scans. The data provide insight into prayers of a young adult and evidence for positive spiritual coping via the mechanism of written prayers in a journal.

- Metcalf, Olivia, Tracey Varker, David Forbes, Andrea Phelps, Lisa Dell, Ashley DiBattista, Naomi Ralph & Meaghan O'Donnell. 2016. Efficacy of Fifteen Emerging Interventions for the

Treatment of Posttraumatic Stress Disorder: A Systematic Review. *Journal of Traumatic Stress* 29(1). 88–92.

doi:10.1002/jts.22070.

Although there is an abundance of novel interventions for the treatment of posttraumatic stress disorder (PTSD), often their efficacy remains unknown. This systematic review assessed the evidence for 15 new or novel interventions for the treatment of PTSD. Studies that investigated changes to PTSD symptoms following the delivery of any 1 of the 15 interventions of interest were identified through systematic literature searches. There were 19 studies that met the inclusion criteria for this study. Eligible studies were assessed against methodological quality criteria and data were extracted. The majority of the 19 studies were of poor quality, hampered by methodological limitations, such as small sample sizes and lack of control group. There were 4 interventions, however, stemming from a mind-body philosophy (acupuncture, emotional freedom technique, mantra-based meditation, and yoga) that had moderate quality evidence from mostly small- to moderate-sized randomized controlled trials. The active components, however, of these promising emerging interventions and how they related to or were distinct from established treatments remain unclear. The majority of emerging interventions for the treatment of PTSD currently have an insufficient level of evidence supporting their efficacy, despite their increasing popularity. Further well-designed controlled trials of emerging interventions for PTSD are required.

Moore, Jon T. & Mark M. Leach. 2016. Dogmatism and mental health: A comparison of the religious and secular. *Psychology of Religion and Spirituality* 8(1). 54–64.

doi:10.1037/rel0000027.

Religiousness has frequently been found to be associated with higher reported mental health levels than those found in individuals lower in reported religiousness. These results have often been inferred by scholars to mean that secular groups have poorer levels of mental health despite the fact that secular populations have rarely been included in studies. In this study, an ideologically diverse sample of 4,667 respondents was included to determine the relationships among general dogmatism levels, existential dogmatism, religiousness, and 5 indicators of mental health. The sample mainly comprised agnostic, atheist, Buddhist, Christian, Jewish, and spiritual nonreligious participants. Statistical analyses indicated that atheistic and theistic groups showed no significant differences on 4 of the 5 mental health indicators. Existential dogmatism and religiousness had similar positive relationships with mental health, but each had weak predictive strengths. The implications of the current study are that secular and religious adherents have similar levels of mental health, which is contrary to expectations based on the previous literature.

Muse, Stephen, Milton Love & Kyle Christensen. 2016. Intensive Out-Patient Therapy for Clergy Burnout: How Much Difference Can a Week Make? *Journal of Religion and Health* 55(1). 147–158.

doi:10.1007/s10943-015-0013-x.

A pre-test and post-test quasi-experimental matched pairs design was used to assess the effectiveness of a week-long multi-therapist intensive outpatient intervention process with clergy suffering from depression and burnout. Participants (n=23) in the “Clergy in Kairos” program of the Pastoral Institute constituted the experimental variable. Clergy surveyed from United Methodist and Presbyterian denominations (n=121) provided a control group from which 23 respondents were selected whose pre-test scores in depression and burnout were statistically equivalent to those in the experimental group. The treatment group consisted of clergy from three denominations who self-selected (or in some cases were referred by denominational officials) into the program. At the outset, clergy in both groups reported equivalent levels of conflict, emotional exhaustion, depersonalization, and depression. At the 6-months follow-up, clergy in the experimental group showed significant improvement of depression, emotional exhaustion, and depersonalization scores. By contrast, there was no change in the burnout and depression scores in the control group at 6-months post-test. Findings suggest the usefulness of a week-long multi-therapist intensive outpatient intervention in reducing burnout and depression.

- Noh, Hyunkyung, Eunbi Chang, Yoojin Jang, Ji Hae Lee & Sang Min Lee. 2016. Suppressor Effects of Positive and Negative Religious Coping on Academic Burnout Among Korean Middle School Students. *Journal of Religion and Health* 55(1). 135–146.
doi:10.1007/s10943-015-0007-8.

Statistical suppressor effects in prediction models can provide evidence of the interdependent relationship of independent variables. In this study, the suppressor effects of positive and negative religious coping on academic burnout were examined using longitudinal data. First, 388 middle school students reported their type of religion and use of positive and negative religious coping strategies. Four months later, they also reported their level of academic burnout. From structural equation modeling, significant suppressor effects were found among religious students. That is, the coefficients became larger when both positive and negative religious coping predicted academic burnout simultaneously, compared to when each religious coping predicted academic burnout alone. However, suppressor effects were not found among non-religious students.

- O'Mahony, Sean, James I. Gerhart, Johanna Grosse, Ira Abrams & Mitchell M. Levy. 2016. Posttraumatic stress symptoms in palliative care professionals seeking mindfulness training: Prevalence and vulnerability. *Palliative Medicine* 30(2). 189–192.
doi:10.1177/0269216315596459.

Vicarious exposure to trauma is ubiquitous in palliative medicine. Repeated exposure to trauma may contribute to compassion fatigue and posttraumatic stress disorder symptoms in medical and supportive care professionals such as physicians, nurses, and social workers. These symptoms may be intensified among medical and supportive care professionals who use avoidant or rigid coping strategies. This study aimed to provide an estimate of posttraumatic stress disorder symptoms in a sample of professionals who work in palliative care settings, and have already been enrolled in mindfulness-based communication training. Palliative care providers provided self-reported ratings of posttraumatic stress disorder symptoms, depression, and coping strategies using validated measures including the Acceptance and Action Questionnaire, Cognitive Fusion Questionnaire, and the Posttraumatic Stress Disorder Checklist-Civilian Version. A total of 21 professionals working with palliative care patients completed assessments prior to beginning mindfulness-based communication training. Results indicate that posttraumatic stress disorder symptoms were prevalent in this sample of professionals; 42% indicated positive screens for significant posttraumatic stress disorder symptoms, and 33% indicated probable posttraumatic stress disorder diagnosis.

- Pearce, Michelle J., Deborah Medoff, Ryan E. Lawrence & Lisa Dixon. 2016. Religious Coping Among Adults Caring for Family Members with Serious Mental Illness. *Community Mental Health Journal* 52(2). 194–202.
doi:10.1007/s10597-015-9875-3.

This cross-sectional study investigated the use of religious coping strategies among family members of adults with serious mental illness. A sample of 436 individuals caring for a family member with serious mental illness were recruited into a randomized clinical trial for the National Alliance on Mental Illness Family to Family Education Program. Relationships are reported between religious coping and caregiving, care recipient, and mental health services outcomes. Religious coping was associated with more objective caregiving burden, greater care recipient need, less mental health knowledge, and less receipt of mental health services after adjusting for non-religious types of coping. At the same time, religious coping was associated with a positive caregiving experience and greater religious support. Religious coping plays an important role for many caregivers of persons with serious mental illness. Caregivers who use more religious coping may have an especially high need for mental health education and mental health services.

- Scott, Helen. 2016. The importance of spirituality for people living with dementia. *Nursing Standard* 30(25). 41–50.
doi:10.7748/ns.30.25.41.s47.

Spiritual care is an essential aspect of caring for people with dementia. It can improve their quality of life and give them the strength to cope with living with their condition. However, spirituality is a poorly understood concept and healthcare practitioners often lack confidence in assessing and meeting spiritual needs. Therefore, the spiritual needs of people with dementia are often overlooked, which can result in spiritual distress. This article provides an overview of spirituality and spiritual needs. It discusses the potential causes of spiritual distress in people with dementia and provides examples of spiritual care strategies.

Shorey, Ryan C., JoAnna Elmquist, Scott Anderson & Gregory L. Stuart. 2016. The relationship between spirituality and aggression in a sample of men in residential substance use treatment. *International Journal of Mental Health and Addiction* 14(1). 23–30.
doi:10.1007/s11469-015-9565-y.

The current article examines the relationship between spirituality and aggression in a sample of men in residential substance use treatment. Medical records from a private residential substance use treatment facility, which is located in the Southeastern United States, were reviewed for the current study. Specifically, researchers reviewed the treatment records of men in the adult residential program at this facility. Results demonstrated that spirituality was negatively associated with all four indicators of aggression. In addition, age was inversely correlated with all four indicators of aggression. Drug use was positively associated with all four indicators of aggression, whereas alcohol use was not associated with any indicator of aggression. The current study is not without its limitations. The sample was comprised of men who were primarily non-Hispanic Caucasian, which limits the generalizability of our findings to more diverse samples of men in substance use treatment. Future research should also examine the relationship between spirituality and aggression among women in substance use treatment. In summary, this is the first known study to examine the relationship between spirituality and aggression among men in substance use treatment, a population known to have increased rates of aggression. Findings demonstrated that spirituality was negatively associated with all four indicators of aggression, even after controlling for robust predictors of aggression.

Singh, Nirbhay N., Giulio E. Lancioni, Bryan T. Karazsia & Rachel E. Myers. 2016. Caregiver Training in Mindfulness-Based Positive Behavior Supports (MBPBS): Effects on Caregivers and Adults with Intellectual and Developmental Disabilities. *Frontiers in Psychology* 7. 98.
doi:10.3389/fpsyg.2016.00098.

Caregivers often manage the aggressive behavior of individuals with intellectual and developmental disabilities that reside in community group homes. Sometimes this results in adverse outcomes for both the caregivers and the care recipients. Researchers provided a 7-day intensive Mindfulness-Based Positive Behavior Support (MBPBS) training to caregivers from community group homes and assessed the outcomes in terms of caregiver variables, individuals' behaviors, and an administrative outcome. When compared to pre-MBPBS training, the MBPBS training resulted in the caregivers using significantly less physical restraints, and staff stress and staff turnover were considerably reduced. The frequency of injury to caregivers and peers caused by the individuals was significantly reduced. A benefit-cost analysis showed substantial financial savings due to staff participation in the MBPBS program. This study provides further proof-of-concept for the effectiveness of MBPBS training for caregivers, and strengthens the call for training staff in mindfulness meditation.

Verweij, Hanne, Ruth C. Waumans, Danique Smeijers, Peter L. B. J. Lucassen, A. Rogier T. Donders, Henritte E. van der Horst & Anne E. M. Speckens. 2016. Mindfulness-based stress reduction for GPs: results of a controlled mixed methods pilot study in Dutch primary care. *British Journal of General Practice* 66(643). E99–E105.
doi:10.3399/bjgp16X683497.

Burnout is highly prevalent in GPs and can have a negative influence on their wellbeing, performance, and patient care. Mindfulness-based stress reduction (MBSR) may be an effective intervention to decrease burnout symptoms and increase wellbeing. The aim of this study is to gain insight into the feasibility and effectiveness of MBSR on

burnout, empathy, and (work-related) wellbeing in GPs. This was a mixed methods pilot study, including a waiting list-controlled pre-/post-study and a qualitative study of the experiences of participating GPs in the Netherlands. Participants were sent questionnaires assessing burnout, work engagement, empathy, and mindfulness skills, before and at the end of the MBSR training/waiting period. Qualitative data on how GPs experienced the training were collected during a plenary session and with evaluation forms at the end of the course. Fifty Dutch GPs participated in this study. The MBSR group reported a greater decrease in depersonalization than the control group. Dedication increased more significantly in the MBSR group than in the control group. Mindfulness skills increased significantly in the MBSR group compared with the control group. There was no significant change in empathy. The qualitative data indicated that the MBSR course increased their wellbeing and compassion towards themselves and others, including their patients. The study shows that MBSR for GPs is feasible and might result in fewer burnout symptoms and increased work engagement and wellbeing. However, an adequately powered randomized controlled trial is needed to confirm the study's findings.

2.3 SPIRITUALITY & HEALTH: METHOD AND THEORY

Al-Hadethe, Ashraf, Nigel Hunt, Shirley Thomas & Abdulgaffar Al-Qaysi. 2016. Cross-Cultural Validation and Psychometric Properties of the Arabic Brief Religious Coping Scale (A-BRCS). *Journal of Religion and Health* 55(1). 16–25.
doi:10.1007/s10943-014-9963-7.

The aim of this study was to translate and validate the psychometric properties of an Arabic Brief Religious Coping Scale. A descriptive correlational design was used to conduct the study among participants of 403 Iraqi secondary school students. The A-BRCS and both the subscales, positive and negative, had Cronbach's alphas of .70, .86 and .82, respectively. All inter-item and item-to-total correlations for each subscale were above the recommended criteria of .30. Factor loadings of the positive subscale using oblique (oblimin) and orthogonal (varimax) rotations ranged from .72 to .86 and from .71 to .86, respectively. Factor loadings of the negative subscale using oblimin and varimax rotations ranged from .64 to .83 and from .63 to .83, respectively. The A-BRCS was found to be a valid and reliable instrument to measure religious coping among Iraqi secondary school students.

Berger, Daniela, Andreas Fink, Maria Margarita Perez Gomez, Andrew Lewis & Human-Friedrich Unterrainer. 2016. The Validation of a Spanish Version of the Multidimensional Inventory of Religious/Spiritual Well-Being in Mexican College Students. *Spanish Journal of Psychology* 19. E3.
doi:10.1017/sjp.2016.9.

As the Multidimensional Inventory for Religious/Spiritual Well-Being (MI-RSWB) has been validated as a reliable instrument for the Western European context, this study intends to translate the measure into Spanish and adapt it for the Mexican culture. Further, researchers investigate whether spirituality/religiosity has a similar impact on indicators of personality and subjective well-being in Mexico as it does in samples drawn from Western European cultures. Students (n=190) from public and private universities in Guadalajara, all Mexican citizens, were involved in this study. Researchers found strong evidential support for the six factor solution of the Original MI-RSWB in this Mexican population. Mirroring previous research, the measure showed highly satisfying internal consistency. The total RSWB score was observed to be related with Eysenck's personality dimensions Extraversion, and Psychoticism, although not with Neuroticism. There was also a positive correlation with Sense of Coherence. In conclusion, the dimensionality of RSWB and its associations with personality and subjective well-being was well supported in this first application within a Mexican cultural context.

Bibeau, Marc, Frederick Dionne & Jeannette Leblanc. 2016. Can compassion meditation contribute to the development of psychotherapists' empathy? A review. *Mindfulness* 7(1). 255–263.
doi:10.1007/s12671-015-0439-y.

Over the last three decades, a growing number of scientists and clinicians have been investigating the utility of meditative practices as attention and emotion regulation strategies. Many studies have provided evidence that mindfulness meditation can have positive effects on psychotherapists' capacity to offer presence, acceptance and empathy to their clients. More recently, loving-kindness meditation and compassion meditation have become the focus of scientific scrutiny as it has been thought that they could have even more impact on psychotherapists' empathy than mindfulness meditation. This article reviews the scientific literature on loving-kindness and compassion meditation regarding particularly the potential impact of these meditative practices on the development of psychotherapists' empathy. Studies in neuroscience have shown that loving-kindness and compassion meditation actually change the brain in areas associated with positive emotions and empathy. Loving-kindness and compassion meditation training studies have shown positive impacts on a number of empathy-related variables such as altruism, positive regard, prosocial behavior, interpersonal relationships, as well as affective empathy and empathic accuracy. Moreover, loving-kindness and compassion meditation actually reduce negative affect associated with empathy for pain, thus reducing the risk of psychotherapists' burnout and enhancing their self-care. It is concluded that loving-kindness and compassion meditation would constitute an important and useful addition to every counselling or psychotherapy training curriculum.

Brelsford, Gina M. & Kim K. Doheny. 2016. Religious and Spiritual Journeys: Brief Reflections from Mothers and Fathers in a Neonatal Intensive Care Unit (NICU). *Pastoral Psychology* 65(1). 79–87.
doi:10.1007/s11089-015-0673-1.

The birth of a child is often accompanied by elation and celebration, but when a birth results in admittance to the Neonatal Intensive Care Unit (NICU), the typical emotions of joy and celebration may be tempered with anxiety and fear. Parents with a religious and spiritual worldview may find their faith and spiritual lens is an important aspect of coping with their NICU experience. There is a dearth of literature on this issue, and thus a pilot study was implemented that included eight mothers and fathers of babies admitted to the NICU. Parents responded to a brief interview 4 to 6 weeks after discharge that focused on how their religious or spiritual worldview changed as a result of their NICU experience, how they coped with their premature newborn after discharge, and the perceived impact on their spousal/partner relationship. Results indicated that parents who presented to the NICU with a religious or spiritual background indicated their faith grew as a result of their experience in the NICU. Parents without a religious or spiritual worldview also reported being able to adequately manage their NICU experience and reported little to no change in their religious or spiritual lives. Further, parents reported they coped well after their babies' discharge from the NICU and had supportive spousal relationships. This pilot study supported assessment of religious and spiritual experiences as a salient aspect in NICU parents' lives. Further study is necessary to elucidate how religiosity and spirituality can be strengthened for families during this challenging time.

Burrows, Leigh. 2016. Safeguarding mindfulness meditation for vulnerable college students. *Mindfulness* 7(1). 284–285.
doi:10.1007/s12671-015-0434-3.

In the current article the author conducted a qualitative pilot study to explore the experiences of American community college students engaging in mindfulness meditation as part of their communication studies. While students at this community college were required to take a communication course, there was a choice to take a mindful communication option that included regular meditations such as focusing on the breath, loving kindness, and body scan mindfulness activities over a period of 10 weeks. Key elements of these activities involved becoming aware of distracting thoughts, noticing judgments about self and others, noticing sensations, and sitting with discomfort. Results from this small qualitative study showed 12 of the 13 participants who chose to participate reported a range of unusual perceptions, sensations, and altered states and experiences of self as a result of mindfulness meditation. Only one participant reported unambiguously positive effects such as increased relaxation, focused attention, productivity, and reduction in stress and worry. The findings from this small pilot study need to be considered in the light of considerable

limitations. The small number of participants and subjective nature of their reports make any generalization beyond this study impossible.

- Büssing, Arndt, Kazimierz Franczak & Janusz Surzykiewicz. 2016. Spiritual and Religious Attitudes in Dealing with Illness in Polish Patients with Chronic Diseases: Validation of the Polish Version of the SpREUK Questionnaire. *Journal of Religion and Health* 55(1). 67–84.
doi:10.1007/s10943-014-9967-3.

Although providing religious/spiritual (SpR) support to sick has received in Poland growing attention in the scientific literature, little has been written about how to measure whether patients are in search for SpR or may already have trust in such a resource helpful to cope with disease. The Polish version of the SpREUK questionnaire was validated in a sample of 275 patients with chronic diseases. Both explorative and confirmatory factor analysis confirmed the already established three subscales, i.e., Search, Trust, and Reflection, with good internal consistency coefficients. The instrument appears to be a good choice to be used in both secular and religious societies.

- Chan, Choi Wan, Frances Kam Yuet Wong, Siu Ming Yeung & Fok Sum. 2016. Holistic Health Status Questionnaire: developing a measure from a Hong Kong Chinese population. *Health and Quality of Life Outcomes* 14(1). 28.
doi:10.1186/s12955-016-0416-8.

The increased prevalence of chronic diseases is a global health issue. Once chronic disease is diagnosed, individuals face lifelong healthcare treatments, and the disabilities and disturbances resulting from their illness will affect the whole person. A valid tool that can measure clients' holistic care needs is important to enable us to identify issues of concern and address them early to prevent further complications. This study aimed to develop and evaluate the psychometric properties of a scale measuring holistic health among chronically ill individuals. The research was an instrument development and validation study using three samples of Hong Kong Chinese people. The first sample (n=15) consisted of stroke survivors who had experienced disruption of their total being, and was used as a basis for the generation of scale items. In the second and third samples (n=319, n=303), respondents with various chronic illnesses were assessed in order to estimate the psychometric properties of the scale. A total of 52 items were initially generated, and 7 items with a factor loading less than 0.3 were removed in the process, as substantiated by the literature and expert panel reviews. Exploratory factor analysis identified a 45-item, 8-factor Holistic Health Status Questionnaire (HHSQ) that could account for 56.38% of the variance. The HHSQ demonstrated content validity, acceptable internal consistency and satisfactory convergent validity from moderate to high correlation with similar constructs. The HHSQ tapped into the relational experiences and connectedness among the bio-psycho-social-spiritual dimensions of a Chinese person with chronic disease, with acceptable psychometric properties.

- Chittaro, Luca & Andrea Vianello. 2016. Evaluation of a mobile mindfulness app distributed through on-line stores: A 4-week study. *International Journal of Human-Computer Studies* 86. 63–80.
doi:10.1016/j.ijhcs.2015.09.004.

Recently, interactive approaches aimed at helping people practice mindfulness have appeared in the literature. However, the few available user studies for such approaches focus only on short-term effects and are carried out in a lab or in a similar artificial setting. In this study, researchers aim instead at assessing the effectiveness of a mobile mindfulness app when used by people in their everyday contexts and over a prolonged period of time. People could participate in the study by downloading the app from Apple's App Store as well as Google Play and by answering a mindfulness questionnaire at three pre-set times over a 4-week period. Moreover, the app automatically collected usage data each time it was used and qualitative feedback at the end of the study. Results reveal that users with no or minimal experience with meditation significantly increased their level of mindfulness over the 4-week study period. Moreover, the qualitative feedback provided by participants indicates that the app was positively perceived as beautiful and its usage elicited positive feelings in most of them. Researchers discuss possible factors that could have

contributed to the obtained results. Finally, the authors analyze how many users abandoned the study and at what times, comparing such data with other studies based on app stores distribution, and giving possible reasons.

- Collison, Elizabeth A., Sandra E. Gramling & Benjamin D. Lord. 2016. The role of religious affiliation in Christian and unaffiliated bereaved emerging adults' use of religious coping. *Death Studies* 40(2). 102–112.
doi:10.1080/07481187.2015.1077355.

Though research on bereavement has grown, few studies have focused on emerging adults. To add to the literature, the authors administered the RCOPE to a sample of bereaved college students (analyzed sample n=748) and explored the relationship between self-reported religious affiliation and religious coping strategies used and endorsed as “most helpful.” Results highlight the rich topography of bereavement previously unexamined in understudied populations (i.e., emerging adults, religiously unaffiliated). Specifically, the Christians/affiliated used “negative” religious coping strategies most often, yet identified “positive” strategies as “most helpful,” whereas the unaffiliated instead used “positive” strategies most often and identified “negative” strategies as “most helpful.”

- Cramer, Holger, Lesley Ward, Amie Steel, Romy Lauche, Gustav Dobos & Yan Zhang. 2016. Prevalence, Patterns, and Predictors of Yoga Use: Results of a U.S. Nationally Representative Survey. *American Journal of Preventive Medicine* 50(2). 230–235.
doi:10.1016/j.amepre.2015.07.037.

The purpose of this study was to investigate the prevalence, patterns, and predictors of yoga use in the U.S. general population. Using cross-sectional data from the 2012 National Health Interview Survey Family Core, Sample Adult Core, and Adult Complementary and Alternative Medicine questionnaires (n=34,525), weighted frequencies for lifetime and 12-month prevalence of yoga use and patterns of yoga practice were analyzed. Using logistic regression analyses, sociodemographic predictors of lifetime yoga use were analyzed. Analyses were conducted in 2015. Lifetime and 12-month prevalence of yoga use were 13.2% and 8.9%, respectively. Compared with non-practitioners, lifetime yoga practitioners were more likely female, younger, non-Hispanic white, college educated, higher earners, living in the West, and of better health status. Among those who had practiced in the past 12 months, 51.2% attended yoga classes, 89.9% used breathing exercises, and 54.9% used meditation. Yoga was practiced for general wellness or disease prevention (78.4%), to improve energy (66.1%), or to improve immune function (49.7%). Back pain (19.7%), stress (6.4%), and arthritis (6.4%) were the main specific health problems for which people practiced yoga.

- Dobie, Alana, Alison Tucker, Madeleine Ferrari & Jeffrey M. Rogers. 2016. Preliminary evaluation of a brief mindfulness-based stress reduction intervention for mental health professionals. *Australasian Psychiatry* 24(1). 42–45.
doi:10.1177/1039856215618524.

Mental health professionals are particularly susceptible to occupational stress. However, there are limited formal programs to address the problem. This paper discusses the preliminary results of a brief mindfulness-based stress reduction (MBSR) program for practicing professionals in a public hospital mental health unit. A mixed-group of nine mental health professionals participated in eight weeks of daily 15-minute MBSR training interspersed with three 30-minute education sessions developed by the authors (AD and AT). Levels of psychological distress and mindfulness skill were measured before and immediately after participation. Following the brief MBSR program, quantitative and qualitative participant feedback revealed a perceived reduction in psychological distress. A brief MBSR program can be incorporated into the full-time workloads of practicing mental health professionals, potentially addressing a significant unmet workplace need.

- Feagans Gould, Laura, Jacinda K. Dariotis, Mark T. Greenberg & Tamar Mendelson. 2016. Assessing fidelity of implementation (FOI) for school-based mindfulness and yoga interventions: A systematic review. *Mindfulness* 7(1). 5–33.
doi:10.1007/s12671-015-0395-6.

As school-based mindfulness and yoga programs gain popularity, the systematic study of fidelity of program implementation (FOI) is critical to provide a more robust understanding of the core components of mindfulness and yoga interventions, their potential to improve specified teacher and student outcomes, and our ability to implement these programs consistently and effectively. This paper reviews the current state of the science with respect to inclusion and reporting of FOI in peer-reviewed studies examining the effects of school-based mindfulness and/or yoga programs targeting students and/or teachers implemented in grades kindergarten through twelve (K-12) in North America. Electronic searches in PsycInfo and Web of Science from their inception through May 2014, in addition to hand searches of relevant review articles, identified 312 publications, 48 of which met inclusion criteria. Findings indicated a relative paucity of rigorous FOI. Fewer than 10% of studies outlined potential core program components or referenced a formal theory of action, and fewer than 20% assessed any aspect of FOI beyond participant dosage. The emerging nature of the evidence base provides a critical window of opportunity to grapple with key issues relevant to FOI of mindfulness-based and yoga programs, including identifying essential elements of these programs that should be faithfully implemented and how scientists might develop rigorous measures to accurately capture them. Consideration of these questions and suggested next steps are intended to help advance the emerging field of school-based mindfulness and yoga interventions.

- Fitzpatrick, Scott J., Ian H. Kerridge, Christopher F. C. Jordens, Laurie Zoloth, Christopher Tollefsen, Karma Lekshe Tsomo, Michael P. Jensen, Abdulaziz Sachedina & Deepak Sarma. 2016. Religious Perspectives on Human Suffering: Implications for Medicine and Bioethics. *Journal of Religion and Health* 55(1). 159–173.
doi:10.1007/s10943-015-0014-9.

The prevention and relief of suffering has long been a core medical concern. But while this is a laudable goal, some question whether medicine can, or should, aim for a world without pain, sadness, anxiety, despair or uncertainty. To explore these issues, researchers invited experts from six of the world's major faith traditions to address the following question. Is there value in suffering? And is something lost in the prevention and/or relief of suffering? While each of the perspectives provided maintains that suffering should be alleviated and that medicine's proper role is to prevent and relieve suffering by ethical means, it is also apparent that questions regarding the meaning and value of suffering are beyond the realm of medicine. These perspectives suggest that medicine and bioethics have much to gain from respectful consideration of religious discourse surrounding suffering.

- Galiatsatos, Panagis & W. Daniel Hale. 2016. Promoting Health and Wellness in Congregations Through Lay Health Educators: A Case Study of Two Churches. *Journal of Religion and Health* 55(1). 288–295.
doi:10.1007/s10943-015-0069-7.

Religious institutions are in regular contact with people who need education about and support with health issues. Creating lay health educators to serve in these communities can promote health initiatives centered on education and accessing resources. This paper is a prospective observational report of the impact of trained lay health community congregation members in two faith communities based on an urban setting. Researchers describe health efforts made in an African-American Methodist church and in a Latino Spanish-speaking Catholic church. They review the intricacies in establishing trust with the community, the training of lay health educators, and the implementation strategies and outcomes of health initiatives for these communities.

Hayward, R. David & Neal Krause. 2016. Forms of Attrition in a Longitudinal Study of Religion and Health in Older Adults and Implications for Sample Bias. *Journal of Religion and Health* 55(1). 50–66.

doi:10.1007/s10943-014-9949-5.

The use of longitudinal designs in the field of religion and health makes it important to understand how attrition bias may affect findings in this area. This study examines attrition in a 4-wave, 8-year study of older adults. Attrition resulted in a sample biased toward more educated and more religiously involved individuals. Conditional linear growth curve models found that trajectories of change for some variables differed among attrition categories. Ineligibles had worsening depression, declining control, and declining attendance. Mortality was associated with worsening religious coping styles. Refusers experienced worsening depression. Nevertheless, there was no evidence of bias in the key religion and health results.

Hendricks Sloan, Danetta, Theodora Peters, Kimberly S. Johnson, Janice V. Bowie, Yang Ting & Rebecca Aslakson. 2016. Church-Based Health Promotion Focused on Advance Care Planning and End-of-Life Care at Black Baptist Churches: A Cross-Sectional Survey. *Journal of Palliative Medicine* 19(2). 190–194.

doi:10.1089/jpm.2015.0319.

African Americans with serious illnesses receive substandard palliative care (PC) and end-of-life care (EOLC) with a disproportionate number having worse symptom-related suffering, poorer health-related communication and knowledge of advance care planning (ACP) wishes, and increased utilization of hospitals and intensive care units at EOL. Previous research emphasizes the importance of spirituality and the church in African American communities. The present researchers are pioneering an innovative partnership between two Baptist African American churches and an interdisciplinary research team with a goal of developing and implementing a community-based, church-centered ACP program. The authors hypothesize that a church-based approach—which embraces and celebrates religion and spirituality as a means to discuss ACP and EOLC—can improve the quality of EOLC. The aim of the study was to determine parishioner experiences and beliefs about EOLC and their potential desire for a church-based program that would address ACP and EOLC. A cross-sectional survey of parishioners at two large black Baptist churches across four weekend services in December 2014 was conducted using a five-question, Likert-scale survey completed on a note card. There were 930 responses submitted. Approximately 70% of parishioners care, or have cared, for someone with multiple medical problems and/or who is dying, and a vast majority (97%) believed that good EOLC is “important” or “very important.” Only 60% of respondents noted having spoken with someone who could make decisions for them if they are unable to speak for themselves and that number decreased to 28% of respondents between the ages of 65 and 80. A majority (93%) would welcome church-provided information about EOLC. A majority of parishioners care for someone with multiple health problems and believe that good EOLC is important. However, significantly less had designated a surrogate decision maker, particularly in parishioners over the age of 65. Respondents would welcome a church-based program focused on improving EOLC.

Ho, Rainbow Tin Hung, Cheuk Yan Sing, Ted Chun Tat Fong, Friendly So Wah Au-Yeung, Kit Ying Law, Lai Fan Lee & Siu Man Ng. 2016. Underlying spirituality and mental health: the role of burnout. *Journal of Occupational Health* 58(1). 66–71.

doi:10.1539/joh.15-0142-OA.

This study investigated the effects of burnout on the relationship between spirituality and mental health among healthcare workers in Hong Kong. Using a cross-sectional design, 312 healthcare workers in a mental rehabilitation institution completed a self-administered questionnaire on anxiety, depression, burnout, and daily spiritual experiences. Multivariate regressions were used to test the effects of burnout on the relationships between daily spiritual experiences and anxiety and depression. After adjusting for age, education level, marital status, and staff

ranking, higher levels of daily spiritual experience were associated with lower levels of burnout, depression, and anxiety. Burnout was found to have a significant partial mediating effect on the relationship between daily spiritual experiences and depression, accounting for 37.8% of the variation in depression. Burnout also completely mediated the relationship between daily spiritual experiences and anxiety, accounting for 73.9% of the variation in anxiety. The results suggested that the association between spirituality and mental health is influenced by the level of burnout, thereby supporting the role of burnout as a potential mediator. Moreover, day-to-day spiritual practice was found to be potentially protective against burnout and mental health problems. Future interventions could incorporate spirituality training to reduce burnout so as to improve the well-being of healthcare workers.

- Huang, Ivy A., John M. Neuhaus & Winston Chiong. 2016. Racial and Ethnic Differences in Advance Directive Possession: Role of Demographic Factors, Religious Affiliation, and Personal Health Values in a National Survey of Older Adults. *Journal of Palliative Medicine* 19(2). 149–156.
doi:10.1089/jpm.2015.0326.

Black and Hispanic older Americans are less likely than white older Americans to possess advance directives. Understanding the reasons for this racial and ethnic difference is necessary to identify targets for future interventions to improve advance care planning in these populations. The aim of the study was to evaluate whether racial and ethnic differences in advance directive possession are explained by other demographic factors, religious characteristics, and personal health values. A general population survey was conducted in a nationally representative sample using a web-enabled survey panel of American adults aged 50 and older (n=2154). In a sample of older Americans, white participants are significantly more likely to possess advance directives (44.0%) than black older Americans (24.0%) and Hispanic older Americans (29.0%). Gender, age, retired or disabled employment status, educational attainment, religious affiliation, Internet access, preferences for physician-centered decision making, and desiring longevity regardless of functional status were independent predictors of advance directive possession. In fully adjusted multivariable models with all predictors included, black older Americans remained significantly less likely than white older Americans to have an advance directive, whereas the effect of Hispanic ethnicity was no longer statistically significant.

- Hurlbut, Jené & Marcia Ditmyer. 2016. Defining the Meaning of Spirituality Through a Qualitative Case Study of Sheltered Homeless Women. *Nursing for Women's Health* 20(1). 52–62.
doi:10.1016/j.nwh.2015.12.004.

The primary purpose of this case study was to assess the meaning of spirituality in a convenience sample of women located in an urban city in the southwest United States. The secondary purpose was to describe their lived experiences associated with spirituality. From these interviews five themes emerged: Belief in God or a Higher Power, Distinction Between Religion and Spirituality, Belief That There Is a Plan for Their Lives, Spirituality Providing Guidance for What Is Right/Wrong, and Belief That Their Lives Will Improve. These findings support the perceived fundamental importance of spirituality in the lives of homeless women. Nurses and other clinicians can use this information to develop interventions to help support women using spirituality practices and to help improve the outlook of homelessness for these women.

- Jahn Kassim, Puteri Nemie & Fadhlina Alias. 2016. Religious, Ethical and Legal Considerations in End-of-Life Issues: Fundamental Requisites for Medical Decision Making. *Journal of Religion and Health* 55(1). 119–134.
doi:10.1007/s10943-014-9995-z.

Religion and spirituality have always played a major and intervening role in a person's life and health matters. With the influential development of patient autonomy and the right to self-determination, a patient's religious affiliation constitutes a key component in medical decision making. This is particularly pertinent in issues involving end-of-life decisions such as withdrawing and withholding treatment, medical futility, nutritional feeding and do-not-resuscitate orders. These issues affect not only the patient's values and beliefs, but also the family unit and members

of the medical profession. The law also plays an intervening role in resolving conflicts between the sanctity of life and quality of life that are very much pronounced in this aspect of healthcare. Thus, the medical profession in dealing with the inherent ethical and legal dilemmas needs to be sensitive not only to patients' varying religious beliefs and cultural values, but also to the developing legal and ethical standards as well. There is a need for the medical profession to be guided on the ethical obligations, legal demands and religious expectations prior to handling difficult end-of-life decisions. The development of comprehensive ethical codes in congruence with developing legal standards may offer clear guidance to the medical profession in making sound medical decisions.

Jennings, Patricia A. 2016. Mindfulness-based programs and the American public school system: Recommendations for best practices to ensure secularity. *Mindfulness* 7(1). 176–178.
doi:10.1007/s12671-015-0477-5.

It is critical to the success of the mindfulness in education movement that mindful awareness practices (MAPs) delivered in public educational settings conscientiously avoid any elements that are associated with religious and/or spiritual language, trappings, and belief. As the field grows and develops, educators are finding ways to ensure that MAPs are completely secular, based on the most current evidence and introduced in ways that fit the needs and the context of educational settings.

Johnson, Jerry, Tara Hayden, Jennifer True, Daren Simkin, Louis Colbert, Beverly Thompson, Denise Stewart & Latoya Martin. 2016. The Impact of Faith Beliefs on Perceptions of End-of-Life Care and Decision Making among African American Church Members. *Journal of Palliative Medicine* 19(2). 143–148.
doi:10.1089/jpm.2015.0238.

African Americans underuse palliative care and hospice services because of a combination of factors including faith beliefs. As the spiritual family for many African Americans, the church presents an opportunity to improve communication about palliative care and hospice and end-of-life (EOL) decision making. Researchers conducted a focus group study to understand the cultural and spiritual perspectives that influence decisions about palliative care and hospice among African American church members who visit and support persons with life-limiting illnesses. Our specific aims were to elicit their perceptions, beliefs, and attitudes about: (1) the relation between faith beliefs and EOL care; (2) emotional and family influences on EOL decision making; (3) palliative care and hospice resources; and (4) opportunities to improve communication among lay persons and health professionals and within families. Researchers conducted seven focus groups using purposeful sampling, partnering with two African American churches. Of 51 persons, 27 were deacons or deaconesses, 17 were members of health or bereavement ministries, and 7 were other members of the congregations. Results indicate that the faith beliefs of African Americans can support discussions about palliative care and hospice. Participants perceived that many of their congregants harbor beliefs, perceptions, and feelings about death and dying that were often not communicated to family members or to health providers. The authors conclude that, among African Americans, faith beliefs, emotional issues, family dynamics, and insufficient knowledge of palliative care and hospice are intertwined and influence decision making about palliative care and hospice. These findings confirm the influence of faith beliefs of African Americans on decisions about palliative care and hospice and demonstrate the opportunity to improve communication about palliative care and hospice and EOL through collaborations with the African American church.

Krause, Neal. 2016. Assessing Age Differences in the Relationship Between Emotional Support and Health Among Older Mexican Americans. *Journal of Religion and Health* 55(1). 325–340.
doi:10.1007/s10943-015-0135-1.

Research reveals that people tend to place greater value on emotional support as they move through the life course. Older people are likely to do so because emotional support benefits them in some way. The purpose of this study was to see whether there are age differences in the relationship between emotional support and the number of chronic health conditions. In the process, an effort is made to contribute to the literature in three ways. First, an emphasis

placed on assessing the relationship between emotional support and health within late life. Second, variations in the source of support are taken into account by contrasting support within religious institutions with support that is received outside church. Third, these issues are examined with data provided by a nationally representative sample of older Mexican Americans (n=663). The findings suggest that age differences in the relationship between emotional support and health are present within late life. Moreover, the data indicate that this relationship holds for church-based social support but not support that is received outside the church.

- Lewis, Bradley. 2016. Narrative Medicine and Contemplative Care at the End of Life. *Journal of Religion and Health* 55(1). 309–324.
doi:10.1007/s10943-015-0130-6.

*Two important movements leading the way toward a new approach to healthcare are narrative medicine and contemplative care. Despite considerable common ground between these two movements, they have existed largely parallel to each other, with different literatures, different histories, different sub-communities, and different practitioners. This article works toward integration of narrative medicine and contemplative care through a philosophical exploration of key similarities and differences between them. The author starts with an overview of their similar diagnosis of healthcare's problems and then consider their related, but different, responses to these problems. Finally, he uses the example of Margaret Edson's Pulitzer Prize winning drama *W;t* to highlight how these issues can play out at the end of life.*

- Lo, Graciete, Jack Chen, Thomas Wasser, Russell Portenoy & Lara Dhingra. 2016. Initial Validation of the Daily Spiritual Experiences Scale in Chinese Immigrants With Cancer Pain. *Journal of Pain and Symptom Management* 51(2). 284–291.
doi:10.1016/j.jpainsymman.2015.10.002.

Evaluating religious/spiritual influences in the growing Chinese-American population may inform the development of culturally relevant palliative care interventions. Researchers thus assessed the psychometric properties and acceptability of the Daily Spiritual Experiences Scale-Chinese (DSES-C) in Chinese Americans with cancer-related pain. The translated 16-item DSES-C was administered as part of a symptom intervention for Chinese-American cancer patients. Patients were recruited from four New York community oncology practices. Of 321 patients, 78.7% were born in Mainland China, 79.1% spoke Cantonese, and 70.2% endorsed a religious affiliation (Ancestor worship, 31.7%; Chinese God worship, 29.8%; Buddhism, 17.1%; Christianity, 14.0%). In total, 82.6% completed the DSES-C (mean age=57.7 years; 60.8% women) and 17.4% declined (mean age=59.3 years; 52.0% women). Reasons for declining included low religiosity or perceived relevance of the scale items and difficulties separating spirituality from religiosity terms. Individuals having a religious affiliation were more likely to complete the DSES-C, whereas those not engaging in individual spiritual/religious practices or frequent group spiritual/religious practices tended to decline (all P < 0.05). The DSES-C demonstrated high reliability (alpha=0.94). Exploratory factor analysis suggested a one-factor solution, with significant loadings across items except Item 14 ("Accept others"). Construct validity was suggested by a positive association between DSES-C scores and having a religious affiliation.

- Lucchetti, Giancarlo, Parameshwaran Ramakrishnan, Azimatul Karimah, Gabriela R. Oliveira, Amit Dias, Anil Rane, A. Shukla, et al. 2016. Spirituality, Religiosity, and Health: a Comparison of Physicians' Attitudes in Brazil, India, and Indonesia. *International Journal of Behavioral Medicine* 23(1). 63–70.
doi:10.1007/s12529-015-9491-1.

One of the biggest challenges in the spirituality, religiosity, and health field is to understand how patients and physicians from different cultures deal with spiritual and religious issues in clinical practice. The present study aims to compare physicians' perspectives on the influence of spirituality and religion (S/R) on health between Brazil, India, and Indonesia. This is a cross-sectional, cross-cultural, multi-center study carried out from 2010 to 2012,

examining physicians' attitudes from two continents. Participants completed a self-rated questionnaire that collected information on sociodemographic characteristics, S/R involvement, and perspectives concerning religion, spirituality, and health. Differences between physicians' responses in each country were examined using chi-squared, ANOVA, and MANCOVA. A total of 611 physicians (194 from Brazil, 295 from India, and 122 from Indonesia) completed the survey. Indonesian physicians were more religious and more likely to address S/R when caring for patients. Brazilian physicians were more likely to believe that S/R influenced patients' health. Brazilian and Indonesians were as likely as to believe that it is appropriate to talk and discuss S/R with patients, and more likely than Indians. No differences were found concerning attitudes toward spiritual issues.

Niforatos, Joshua D. 2016. The Decent Care Movement: Subsidiarity, Pragmatic Solidarity, and Cross-Cultural Resonance. *Journal of Religion and Health* 55(1). 206–216.
doi:10.1007/s10943-015-0051-4.

Decent Care is the World Health Organization and the Ford Foundation's joint effort to articulate a healthcare paradigm that makes a patient's voice equal to the voice of the healthcare provider. In this article, the six tenants of Decent Care are outlined with particular emphasis on subsidiarity. Liberation theology's preferential option for the poor maxim is presented and compared with other major world religions to demonstrate the cross-cultural focus of "decency." The power of this paradigm is in its emphasis and proclamation of human flourishing in a healthcare setting, generally speaking, and more specifically, human flourishing in the presence of affliction from chronic disease or dying cross-culturally.

Pietkiewicz, Igor J. & Dawid Bachryj. 2016. Help-seeking attitudes and coping strategies among Roman Catholic secular clergy. *Psychology of Religion and Spirituality* 8(1). 13–24.
doi:10.1037/rel0000019.

There is no empirical evidence about how Roman Catholic secular priests cope with stressors. This paper examines help-seeking attitudes and coping strategies used by them. Twelve participants shared their experiences during semi-structured interviews that were subjected to interpretative phenomenological analysis. Although the priests recognized existing resources of social support or professional help, they generally underused them due to various personal and cultural factors. Religious coping was perceived as an expected strategy to maintain emotional balance. Priests reported avoiding disclosing personal problems to lay people in an attempt to maintain a positive image of themselves and of the Church, and to comply with group norms. They only sought professional help with reluctance and as a last resort, associating it with self-stigma. This study alerts mental health professionals to specific challenges and needs experienced by diocesan priests, and common barriers to help seeking. Further research recommendations are also suggested.

Prouty, Anne M., Judith Fischer, Ann Purdom, Everardo Cobos & Karen B. Helmeke. 2016. Spiritual Coping: A Gateway to Enhancing Family Communication During Cancer Treatment. *Journal of Religion and Health* 55(1). 269–287.
doi:10.1007/s10943-015-0108-4.

The researchers examined the spiritual coping, family communication, and family functioning of 95 participants in 34 families by an online survey. Multilevel linear regression was used to test whether individuals' and families' higher endorsement of more use of spiritual coping strategies to deal with a member's cancer would be associated with higher scores on family communication and family functioning, and whether better communication would also be associated with higher family functioning scores. Results revealed that spiritual coping was positively associated with family communication, and family communication was positively associated with healthier family functioning. The researchers provide suggestions for further research.

Rose, E., N. Schreiber-Agus, K. Bajaj, S. Klugman & T. Goldwaser. 2016. Challenges of Pre- and Post-Test Counseling for Orthodox Jewish Individuals in the Premarital Phase. *Journal of Genetic Counseling* 25(1). 18–24.

doi:10.1007/s10897-015-9880-2.

The Jewish community has traditionally taken ownership of its health, and has taken great strides to raise awareness about genetic issues that affect the community, such as Tay-Sachs disease and Hereditary Breast and Ovarian Cancer syndrome. Thanks in part to these heightened awareness efforts, many Orthodox Jewish individuals are now using genetics services as they begin to plan their families. Due to unique cultural and religious beliefs and perceptions, the Orthodox Jewish patients who seek genetic counseling face many barriers to a successful counseling session, and often seek the guidance of programs such as the Program for Jewish Genetic Health (PJGH). In this article, researchers present clinical vignettes from the PJGH's clinical affiliate, the Reproductive Genetics practice at the Montefiore Medical Center. These cases highlight unique features of contemporary premarital counseling and screening within the Orthodox Jewish Community, including concerns surrounding stigma, disclosure, "marriageability," the use of reproductive technologies, and the desire to include a third party in decision making. These vignettes demonstrate the importance of culturally-sensitive counseling. The authors provide strategies and points to consider when addressing the challenges of pre- and post-test counseling as it relates to genetic testing in this population.

Salhofer, Ines, Andrea Will, Ina Monsef & Nicole Skoetz. 2016. Meditation for adults with haematological malignancies. *Cochrane Database of Systematic Reviews* 2. CD011157.

doi:10.1002/14651858.CD011157.pub2.

Malignant neoplasms of the lymphoid or myeloid cell lines including lymphoma, leukemia and myeloma are referred to as hematological malignancies. Complementary and alternative treatment options such as meditation practice or yoga are becoming popular by treating all aspects of the disease including physical and psychological symptoms. However, there is still unclear evidence about meditation's effectiveness, and how its practice affects the lives of hematologically-diseased patients. This review aims to assess the benefits and harms of meditation practice as an additional treatment to standard care for adults with hematological malignancies. After searching relevant databases, the present researchers included randomized controlled trials (RCTs) using meditation practice for adult patients with hematological malignancies. Two review authors independently extracted data from eligible studies and assessed the risk of bias according to predefined criteria. They evaluated quality of life and depression. The other outcomes of overall survival, anxiety, fatigue, quality of sleep and adverse events could not be evaluated, because they were not assessed in the included trial. Only one small trial published as an abstract article was included. The included study investigated the effects of meditation practice on patients newly hospitalized with acute leukemia. Ninety-one participants enrolled in the study, but only 42 participants remained in the trial throughout the six-month follow-up period and were eligible for analysis. There was no information provided about the average age and sex of the study population. The reviewers found a high risk for attrition bias and unclear risk for reporting bias, performance and detection bias because of missing data due to abstract publication only, thus the present authors judged the overall risk of bias as high. According to the GRADE criteria, they judged the overall quality of the body of evidence for all predefined outcomes as "very low" due to the extent of missing data on the study population, and the small sample size. The authors conclude that to estimate the effects of meditation practice for patients suffering from hematological malignancies, more high quality randomized controlled trials are needed. At present there is not enough information available on the effects of meditation in hematologically-diseased patients to draw any conclusion.

Sattin, Richard W., Lovoria B. Williams, James Dias, Jane T. Garvin, Lucy Marion, Thomas V. Joshua, Andrea Kriska, M. Kaye Kramer & K. M. Venkat Narayan. 2016. Community Trial of a Faith-Based Lifestyle Intervention to Prevent Diabetes Among African-Americans. *Journal of Community Health* 41(1). 87–96.

doi:10.1007/s10900-015-0071-8.

About 75% of African-Americans (AAs) ages 20 or older are overweight and nearly 50% are obese, but community-based programs to reduce diabetes risk in AAs are rare. The objective of this study was to reduce weight and fasting plasma glucose (FPG) and increase physical activity (PA) from baseline to week-12 and to month-12 among overweight AA parishioners through a faith-based adaptation of the Diabetes Prevention Program called Fit Body and Soul (FBAS). Researchers conducted a single-blinded, cluster randomized, community trial in 20 AA churches enrolling 604 AAs, aged 20-64 years with BMI \geq 25 kg/m and without diabetes. The church (and their parishioners) was randomized to FBAS or health education (HE). FBAS participants had a significant difference in adjusted weight loss compared with those in HE at 12-weeks and at 12-months and were more likely (13%) than HE participants (3%) to achieve a 7% weight loss at 12-weeks and a 7% weight loss at 12-months. There were no significant differences in FPG and PA between arms. Of the 15.2% of participants with baseline pre-diabetes, those in FBAS had, however, a significant decline in FPG at 12-weeks compared with the 4.22 mg/dl increase in HE, and these differences became larger at 12-months. This faith-based adaptation of the DPP led to a significant reduction in weight overall and in FPG among pre-diabetes participants.

Schonfeld, Toby L., Kendra K. Schmid & Deborah Boucher-Payne. 2016. Incorporating Spirituality into Health Sciences Education. *Journal of Religion and Health* 55(1). 85–96.
doi:10.1007/s10943-014-9972-6.

Researchers are beginning to collect empiric data about coping mechanisms of health science students. Yet, there is an important aspect of coping with stress that is only partially addressed in health sciences curricula: students' spiritual well-being. In this essay, researchers describe a course in spirituality and health care that they offered to fourth-year medical students, as well as a small empirical study conducted to assess students' spiritual needs and practices. The authors then offer reflections on the broad applicability of this work to students in the health sciences more generally, including suggestions for curriculum interventions that may ensure students' success.

Shamsipour, Mansour, Razieh Khajehkazemi, Ali Akbar Haghdoost, Hamidreza Setayesh, Sajjad KarimanMajd & Ehsan Mostafavi. 2016. Knowledge, Attitude, and Practice of Clerical Students with Respect to HIV/AIDS in Iran, 2011. *Journal of Religion and Health* 55(1). 26–37.
doi:10.1007/s10943-014-9964-6.

In this study, knowledge and attitude of Iranian clerical students toward HIV and AIDS was assessed. Through a cross-sectional study, 367 clerical students were surveyed, in convenience sampling method, in the Qom seminary in 2011, utilizing a self-administered structured questionnaire. The questionnaire was piloted on 20 clerical student volunteers; internal consistency measured with Cronbach's alpha was 0.89. Participants' scores of knowledge and attitude were calculated out of 100. The level of knowledge in 37.33% of participants was good (scores >80), whereas 46.05 and 16.62% had moderate (40 < scores \leq 80) and poor (scores \leq 40) levels of knowledge, respectively. The mean score of knowledge and attitude was 58.29 and 77.26 out of 100, respectively. A significant correlation was observed between level of knowledge and attitude. Knowledge score appeared to be significantly higher in women compared to men. With an increase in age, the level of knowledge significantly decreased. Researchers could also detect a statistically significant relationship between attending educational courses on HIV/AIDS and inclusion of HIV/AIDS topics in the individual's sermons. Although clerical students had shown some sort of positive attitudes toward HIV, their knowledge still needs to be improved to enable them to deliver more accurate information to the community during the course of their speeches. Having HIV-related courses as part of their curriculum or aside may contribute to this.

Shonin, Edo & William Van Gordon. 2016. Thupten Jingpa on compassion and mindfulness. *Mindfulness* 7(1). 279–283.
doi:10.1007/s12671-015-0448-x.

The current article presents an interview with Thupten Jingpa principal English translator of the Dalia Lama for the past 30 years. The theme of the interview was the interrelated practices of compassion and mindfulness, including

(i) their role in contemporary society, (ii) the traditional context for learning and applying these techniques, (iii) the utilization of compassion and mindfulness in contemporary behavioral interventions, (iv) issues relating to teacher training, and (v) whether lessons learnt from more than two decades of researching and rolling-out mindfulness-based interventions can be carried forward in order to facilitate the effective integration of interventional approaches based on compassion and loving-kindness meditation.

Taylor, Natalie Zoe & Prudence Marjorie Robina Millar. 2016. Validity of the Five Facet Mindfulness Questionnaire in an Australian, meditating, demographically diverse sample. *Personality and Individual Differences* 90. 73–77.
doi:10.1016/j.paid.2015.10.041.

Mindfulness is a five-facet construct. It consists of observing the present in a non-judgmental and non-reactive manner, describing that environment, and then acting accordingly. When using the Five Facet Mindfulness Questionnaire (FFMQ), high levels of mindfulness have been found to predict positive psychological health. However, the factor structure of FFMQ has not been tested in Australia, and results have been limited to particular demographics and confounded by incentives. Furthermore, the FFMQ has been found to be more valid in samples that meditate (session/s of immobile present focus), but it is not clear how committed to meditation the sample needs to be. The first aim of this study was to test the factor structure of the FFMQ in an Australian sample. The second aim of this study was to test how often participants have to meditate to lead to a significant change in mindfulness. Results found that the five facets in the FFMQ constituted as a sub-scale in an Australian sample. Results also found that everyday meditation significantly increased the five facets of mindfulness when compared to meditators with limited commitment, but only the ‘Observe’ facet of mindfulness significantly increased when compared to meditators with partial commitment. Applications are discussed.

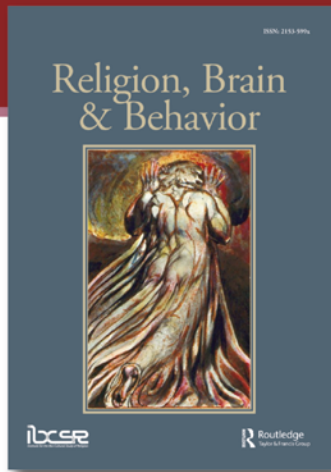
Tsoucalas, Gregory, Marianna Karamanou, Konstantinos Laios, Markos Sgantzios & George Androutsos. 2016. The Forgotten Asclepieion of Peparithos and the Islander Worshippers of the Snake God. *Journal of Religion and Health* 55(1). 43–49.
doi:10.1007/s10943-014-9873-8.

The ancient Asclepieion of the island of Peparithos, modern Skopelos, had been built in an ideal position, one kilometer from the ancient city of Peparithos. The angry north Aegean Sea brought in the surface its north wall at the beginning of the 60s decade. The monument was identified as an Asclepieion from one partially saved ceramic inscription “ASCL...” (Greek: ΑΣΚΛΑ...). The sanctuary was surrounded by covered walkway (Greek: στωά) and it is dated at the early years of the fourth century BC. It is possible that god Apollo and goddess Artemis were worshiped in parallel. The monument reflects the culture of Peparitheans and the importance given toward the holistic treatment for the patients.

Villatoro, Alice P., Elizabeth Dixon & Vickie M. Mays. 2016. Faith-based organizations and the Affordable Care Act: Reducing Latino mental health care disparities. *Psychological Services* 13(1). (Affordable Care Act: Implementing Change). 92–104.
doi:10.1037/a0038515.

The Patient Protection and Affordable Care Act is expected to increase access to mental health care through provisions aimed at increasing health coverage among the nation’s uninsured, including 10.2 million eligible Latino adults. The ACA will increase health coverage by expanding Medicaid eligibility to individuals living below 138% of the federal poverty level, subsidizing the purchase of private insurance among individuals not eligible for Medicaid, and requiring employers with 50 or more employees to offer health insurance. An anticipated result of this landmark legislation is improvement in the screening, diagnosis, and treatment of mental disorders in racial/ethnic minorities, particularly for Latinos, who traditionally have had less access to these services. However, these efforts alone may not sufficiently ameliorate mental health care disparities for Latinos. Faith-based organizations (FBOs) could play an integral role in the mental health care of Latinos by increasing help seeking, providing religion-based mental

health services, and delivering supportive services that address common access barriers among Latinos. Thus, in determining ways to eliminate Latino mental health care disparities under the ACA, examining pathways into care through the faith-based sector offers unique opportunities to address some of the cultural barriers confronted by this population. In this article, the authors examine how partnerships between FBOs and primary care patient-centered health homes may help reduce the gap of unmet mental health needs among Latinos in this era of health reform. They also describe the challenges FBOs and primary care providers need to overcome to be partners in integrated care efforts.



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3.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Decety, Jean & Thalia Wheatley (eds.). 2015. *The Moral Brain: A Multidisciplinary Perspective*. The MIT Press.
- Fehige, Yiftach (ed.). 2015. *Science and Religion: East and West*. Routledge India.
- Ghiloni, Aaron J. (ed.). 2015. *World Religions and Their Missions*. Peter Lang.
- Jikeli, Günther. 2015. *European Muslim Antisemitism: Why Young Urban Males Say They Don't Like Jews*. Indiana University Press.
- Kelly, Edward F., Adam Crabtree & Paul Marshall (eds.). 2015. *Beyond Physicalism: Toward Reconciliation of Science and Spirituality*. Rowman & Littlefield Publishers.
- Laycock, Joseph P. 2015. *Dangerous Games: What the Moral Panic over Role-Playing Games Says about Play, Religion, and Imagined Worlds*. University of California Press.
- Park, Jong Soo. 2015. *Christian Education Curriculum for the Digital Generation: A Case Study of Second-Generation Korean Australian Youth*. Wipf & Stock.
- Timalsina, Sthaneshwar. 2015. *Tantric Visual Culture: A Cognitive Approach*. (Routledge Studies in Tantric Traditions). Routledge.
- Tomlinson, Gary. 2015. *A Million Years of Music: The Emergence of Human Modernity*. New York: Zone Books.

3.2 SPIRITUALITY & HEALTH RESEARCH

- DeLay, Tad. 2015. *God Is Unconscious: Psychoanalysis and Theology*. Wipf & Stock.
- Endelman, Todd. 2015. *Leaving the Jewish Fold: Conversion and Radical Assimilation in Modern Jewish History*. Princeton University Press.
- Ennenbach, Matthias. 2015. *Buddhist Psychotherapy: A Guideline for Positive Changes*. Lotus Press.
- Fitchett, George & Steve Nolan (eds.). 2015. *Spiritual Care in Practice: Case Studies in Healthcare Chaplaincy*. Jessica Kingsley Publishers.
- Gubi, Peter Madsen (ed.). 2015. *Spiritual Accompaniment and Counselling: Journeying with psyche and soul*. Jessica Kingsley Publishers.
- Hessamfar, Elahe. 2015. *In the Fellowship of His Suffering: A Theological Interpretation of Mental Illness*. Lutterworth Press.
- Lou, Vivian W. Q. 2015. *Spiritual Well-Being of Chinese Older Adults: Conceptualization, Measurement and Intervention*. (SpringerBriefs in Well-Being and Quality of Life Research). Springer.

PART 4: ARTICLES IN PRESS

4.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Alda, Marta, Marta Puebla-Guedea, Baltasar Rodero, Marcelo Demarzo, Jesus Montero-Marin, Miquel Roca & Javier Garcia-Campayo. 2016. Zen meditation, length of telomeres, and the role of experiential avoidance and compassion. *Mindfulness*.
doi:10.1007/s12671-016-0500-5.
- Cort, Malcolm A., Octavio Ramirez & Samson Chama. Predicting sexual abstinence among Seventh-day Adventist emerging adults. *The Social Science Journal*.
doi:10.1016/j.soscij.2016.02.010.
- Golubickis, Marius, Lucy B.G. Tan, Johanna K. Falben & C. Neil Macrae. 2016. The observing self: Diminishing egocentrism through brief mindfulness meditation. *European Journal of Social Psychology*.
doi:10.1002/ejsp.2186.
- Kossowska, Malgorzata, Aneta Czernatowicz-Kukuczka & Maciej Sekerdej. 2016. Many faces of dogmatism: Prejudice as a way of protecting certainty against value violators among dogmatic believers and atheists. *British Journal of Psychology*.
doi:10.1111/bjop.12186.
- Kruis, Ayla, Heleen A. Slagter, David R. W. Bachhuber, Richard J. Davidson & Antoine Lutz. 2016. Effects of meditation practice on spontaneous eyeblink rate. *Psychophysiology*.
doi:10.1111/psyp.12619.
- Lowicki, Pawel & Marcin Zajenkowski. 2016. No empathy for people nor for god: The relationship between the dark triad, religiosity and empathy. *Personality and Individual Differences*.
doi:10.1016/j.paid.2016.02.012.
- Luterveld, Remko van, Sean D. Houlihan, Prasanta Pal, Matthew D. Sacchet, Cinque McFarlane-Blake, Payal R. Patel, John S. Sullivan, et al. 2016. Source-space EEG neurofeedback links subjective experience with brain activity during effortless awareness meditation. *NeuroImage*.
doi:10.1016/j.neuroimage.2016.02.047.
- Mayer, Claude-Hélène, Rian Viviers, Aden-Paul Flotman & Detlef Schneider-Stengel. 2016. A Longitudinal Case Study: The Development of Exceptional Human Experiences of Senior Ecclesiastical Professionals in the Catholic Church. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0212-0.
- Omer, Thomas C., Nathan Y. Sharp & Dechun Wang. 2016. The impact of religion on the going concern reporting decisions of local audit offices. *Journal of Business Ethics*.
doi:10.1007/s10551-016-3045-6.
- Van Camp, Debbie, Lloyd R. Sloan & Amanda ElBassiouny. People notice and use an applicant's religion in job suitability evaluations. *The Social Science Journal*.
doi:10.1016/j.soscij.2016.02.006.
- Walsh, Clare F. 2016. "It Really Is Not Just Gay, but African American Gay": The Impact of Community and Church on the Experiences of Black Lesbians Living in North Central Florida. *Journal of Homosexuality*. 1–17.
doi:10.1080/00918369.2016.1151694.

Wilks, Matti, Rohan Kapitány & Mark Nielsen. 2016. Preschool children's learning proclivities: When the ritual stance trumps the instrumental stance. *The British Journal of Developmental Psychology*. doi:10.1111/bjdp.12139.

4.2 SPIRITUALITY & HEALTH RESEARCH

Agoramoorthy, Govindasamy & Minna J. Hsu. 2016. The Suicide Paradigm: Insights from Ancient Hindu Scriptures. *Journal of Religion and Health*. doi:10.1007/s10943-015-0178-3.

Aholou, Tiffany M., Eric Cooks, Ashley Murray, Madeline Y. Sutton, Zaneta Gaul, Susan Gaskins & Pamela Payne-Foster. 2016. "Wake Up! HIV is at Your Door": African American Faith Leaders in the Rural South and HIV Perceptions: A Qualitative Analysis. *Journal of Religion and Health*. doi:10.1007/s10943-016-0193-z.

Baneshi, Mohammad Reza, Ali Akbar Haghdoost, Farzaneh Zolala, Nouzar Nakhaee, Maryam Jalali, Reza Tabrizi & Maryam Akbari. 2016. Can Religious Beliefs be a Protective Factor for Suicidal Behavior? A Decision Tree Analysis in a Mid-Sized City in Iran, 2013. *Journal of Religion and Health*. doi:10.1007/s10943-016-0215-x.

Barrett, Carla J. 2016. Mindfulness and Rehabilitation: Teaching Yoga and Meditation to Young Men in an Alternative to Incarceration Program. *International Journal of Offender Therapy and Comparative Criminology*. doi:10.1177/0306624X16633667.

Biccheri, Eliane, Nicolas Roussiau & Constance Mambet-Doué. 2016. Fibromyalgia, Spirituality, Coping and Quality of Life. *Journal of Religion and Health*. doi:10.1007/s10943-016-0216-9.

Bilican, F. Isil. 2016. The Relationship Between Focused Attention Meditation Practice Habits, Psychological Symptoms, and Quality of Life. *Journal of Religion and Health*. doi:10.1007/s10943-016-0204-0.

Boucher, Nathan A. 2016. Faith, Family, Filiality, and Fate: Dominican and Puerto Rican Elders' Perspectives on End-of-Life Decisions. *Journal of Applied Gerontology: The Official Journal of the Southern Gerontological Society*. doi:10.1177/0733464815627958.

Boughner, Emily, Elizabeth Thornley, Daniel Kharlas & Paul Frewen. 2016. Mindfulness-related traits partially mediate the association between lifetime and childhood trauma exposure and PTSD and dissociative symptoms in a community sample assessed online. *Mindfulness*. doi:10.1007/s12671-016-0502-3.

Carmack, Chakema C. & Rhonda K. Lewis. 2016. Assessing Whether Religious Behaviors and Positive and Negative Affect are Associated with Alcohol Use and Abuse Among a Sample of College Students Living in the Midwest. *Journal of Religion and Health*. doi:10.1007/s10943-016-0214-y.

Cole-Lewis, Yasmin C., Polly Y. Gipson, Kiel J. Opperman, Alejandra Arango & Cheryl A. King. 2016. Protective Role of Religious Involvement Against Depression and Suicidal Ideation Among Youth with Interpersonal Problems. *Journal of Religion and Health*. doi:10.1007/s10943-016-0194-y.

- Deb, Sibnath, Kevin McGirr & Jiandong Sun. 2016. Spirituality in Indian University Students and its Associations with Socioeconomic Status, Religious Background, Social Support, and Mental Health. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0207-x.
- Drabble, Laurie, Karen F. Trocki & Jamie L. Klinger. 2016. Religiosity as a protective factor for hazardous drinking and drug use among sexual minority and heterosexual women: Findings from the national alcohol survey. *Drug and Alcohol Dependence*.
doi:10.1016/j.drugalcdep.2016.01.022.
- Eskin, Mehmet. 2016. Turkish Imams' Experience with and Their Attitudes Toward Suicide and Suicidal Persons. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0217-8.
- Galiatsatos, Panagis, Siddhi Sundar, Adil Qureshi, Gavyn Ooi, Paula Teague & W. Daniel Hale. 2016. Health Promotion in the Community: Impact of Faith-Based Lay Health Educators in Urban Neighborhoods. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0206-y.
- Guthrie, Elspeth, Seri Abraham & Shahzada Nawaz. 2016. Process of determining the value of belief about jinn possession and whether or not they are a result of mental illness. *BMJ case reports* 2016.
doi:10.1136/bcr-2015-214005.
- Hamilton, Jill B., Valarie C. Worthy, Melissa J. Kurtz, Joycelyn Cudjoe & Peter A. Johnstone. 2016. Using Religious Songs as an Integrative and Complementary Therapy for the Management of Psychological Symptoms Among African American Cancer Survivors. *Cancer Nursing*.
doi:10.1097/NCC.0000000000000335.
- Haugan, Gørill, Unni Karin Moksnes & Audhild Løhre. 2016. Intrapersonal self-transcendence, meaning-in-life and nurse-patient interaction: powerful assets for quality of life in cognitively intact nursing-home patients. *Scandinavian Journal of Caring Sciences*.
doi:10.1111/scs.12307.
- Huang, Yueh-Po. 2016. Embracing Ritual Healing: The Case of Sazuke in Tenrikyo in Contemporary Taiwan. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0201-3.
- Ikram, Umar Z., Marieke B. Snijder, Matty A. S. de Wit, Aart H. Schene, Karien Stronks & Anton E. Kunst. 2016. Perceived ethnic discrimination and depressive symptoms: the buffering effects of ethnic identity, religion and ethnic social network. *Social Psychiatry and Psychiatric Epidemiology*.
doi:10.1007/s00127-016-1186-7.
- Imamura, Yoshiomi, Yoshito Mizoguchi, Hiromi Nabeta, Yoshinori Haraguchi, Jun Matsushima, Naoki Kojima, Toshiro Kawashima, Shigeto Yamada & Akira Monji. 2016. An association between belief in life after death and serum oxytocin in older people in rural Japan. *International Journal of Geriatric Psychiatry*.
doi:10.1002/gps.4453.
- Jones, Rachel K., Lori F. Frohwirth & Nakeisha M. Blades. 2016. "If I know I am on the pill and I get pregnant, it's an act of God": women's views on fatalism, agency and pregnancy. *Contraception*.
doi:10.1016/j.contraception.2016.02.005.
- Khalsa, Sat Bir S. & Bethany Butzer. 2016. Yoga in school settings: a research review. *Annals of the New York Academy of Sciences*.

doi:10.1111/nyas.13025.

- Kruizinga, R., E. Helmich, J. B. a. M. Schilderman, M. Scherer-Rath & H. W. M. van Laarhoven. 2016. Professional identity at stake: a phenomenological analysis of spiritual counselors' experiences working with a structured model to provide care to palliative cancer patients. *Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer*. doi:10.1007/s00520-016-3115-4.
- Lai, Carlo, Massimiliano Luciani, Federico Galli, Emanuela Morelli, Francesca Del Prete, Patrizia Ginobbi, Italo Penco, Paola Aceto & Luigi Lombardo. 2016. Spirituality and Awareness of Diagnoses in Terminally Ill Patients With Cancer. *The American Journal of Hospice & Palliative Care*. doi:10.1177/1049909116630985.
- Lawrence, Ryan E., David Brent, J. John Mann, Ainsley K. Burke, Michael F. Grunebaum, Hanga C. Galfalvy & Maria A. Oquendo. 2016. Religion as a Risk Factor for Suicide Attempt and Suicide Ideation Among Depressed Patients. *The Journal of Nervous and Mental Disease*. doi:10.1097/NMD.0000000000000484.
- Leavey, Gerard, Kate Loewenthal & Michael King. 2016. Locating the Social Origins of Mental Illness: The Explanatory Models of Mental Illness Among Clergy from Different Ethnic and Faith Backgrounds. *Journal of Religion and Health*. doi:10.1007/s10943-016-0191-1.
- Lennon-Dearing, Robin & Elena Delavega. 2016. Do Social Workers Apply "Love Thy Neighbor as Thyself" to Gay, Lesbian, Bisexual, and Transpersons in the South? *Journal of Homosexuality*. 1–23. doi:10.1080/00918369.2016.1150058.
- Obong'o, Christopher O., Latrice C. Pichon, Terrinieka W. Powell & Andrea L. Williams. 2016. Strengthening partnerships between Black Churches and HIV service providers in the United States. *AIDS care*. 1–5. doi:10.1080/09540121.2016.1139666.
- Pakpour, A. H., P. Rahnema, H. Saberi, M. Saffari, V. Rahimi-Movaghar, A. Burri & M. Hajiaghababaei. 2016. The relationship between anxiety, depression and religious coping strategies and erectile dysfunction in Iranian patients with spinal cord injury. *Spinal Cord*. doi:10.1038/sc.2016.7.
- Pepping, Christopher A., Benjamin Walters, Penelope J. Davis & Analise O'Donovan. 2016. Why do people practice mindfulness? An investigation into reasons for practicing mindfulness meditation. *Mindfulness*. doi:10.1007/s12671-016-0490-3.
- Peteet, John R., Vithya B. Rodriguez, Marta D. Herschkopf, Alyssa McCarthy, Jennifer Betts, Stephanie Romo & J. Michael Murphy. 2016. Does a Therapist's World View Matter? *Journal of Religion and Health*. doi:10.1007/s10943-016-0208-9.
- Rowe, Angela C., Laura Shepstone, Katherine B. Carnelley, Kate Cavanagh & Abigail Millings. 2016. Attachment security and self-compassion priming increase the likelihood that first-time engagers in mindfulness meditation will continue with mindfulness training. *Mindfulness*. doi:10.1007/s12671-016-0499-7.
- Sampaio, Cynthia Vieira Sanches, Manuela Garcia Lima & Ana Marice Ladeia. 2016. Meditation, Health and Scientific Investigations: Review of the Literature. *Journal of Religion and Health*.

doi:10.1007/s10943-016-0211-1.

Saoji, Apar, Sriloy Mohanty & Suhas A. Vinchurkar. 2016. Effect of a Single Session of a Yogic Meditation Technique on Cognitive Performance in Medical Students: A Randomized Crossover Trial. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0195-x.

Shem, Kazuko, Darlene Karasik, Paul Carufel, Ming-Chih Kao & Patricia Zheng. 2016. Seated Tai Chi to alleviate pain and improve quality of life in individuals with spinal cord disorder. *The Journal of Spinal Cord Medicine*.
doi:10.1080/10790268.2016.1148895.

Soo, Mary Scott, Jennifer A. Jarosz, Anava A. Wren, Adrienne E. Soo, Yvonne M. Mowery, Karen S. Johnson, Sora C. Yoon, et al. 2016. Imaging-Guided Core-Needle Breast Biopsy: Impact of Meditation and Music Interventions on Patient Anxiety, Pain, and Fatigue. *Journal of the American College of Radiology: JACR*.
doi:10.1016/j.jacr.2015.12.004.

Soto-Espinosa, Jesús & Joan D. Koss-Chioino. 2016. Doctors Who Integrate Spirituality and CAM in the Clinic: The Puerto Rican Case. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0198-7.

Steffen, Patrick R., Kevin S. Masters & Scott Baldwin. 2016. What Mediates the Relationship Between Religious Service Attendance and Aspects of Well-Being? *Journal of Religion and Health*.
doi:10.1007/s10943-016-0203-1.

Tajadini, Haleh, Nasser Zangiabadi, Kouros Divsalar, Hossein Safizadeh, Zahra Esmaili & Hossein Rafiei. 2016. Effect of Prayer on Intensity of Migraine Headache: A Randomized Clinical Trial. *Journal of Evidence-Based Complementary & Alternative Medicine*.
doi:10.1177/2156587215627551.

Tettey, Naa-Solo, Pedro A. Duran, Holly S. Andersen, Niajee Washington & Carla Boutin-Foster. 2016. “It’s Like Backing up Science with Scripture”: Lessons Learned from the Implementation of HeartSmarts, a Faith-Based Cardiovascular Disease Health Education Program. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0196-9.

Veloza-Gómez, Mónica, Lucy Muñoz de Rodríguez, Claudia Guevara-Armenta & Sandra Mesa-Rodríguez. 2016. The Importance of Spiritual Care in Nursing Practice. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses’ Association*.
doi:10.1177/0898010115626777.

Vu, Milkie, Alia Azmat, Tala Radejko & Aasim I. Padela. 2016. Predictors of Delayed Healthcare Seeking Among American Muslim Women. *Journal of Women’s Health (2002)*.
doi:10.1089/jwh.2015.5517.

Waelde, Lynn C., Jason M. Thompson, Alicia Robinson & Sierra Iwanicki. 2016. Trauma therapists’ clinical applications, training, and personal practice of mindfulness and meditation. *Mindfulness*.
doi:10.1007/s12671-016-0497-9.

Wilt, Joshua A., Julie J. Exline, Joshua B. Grubbs, Crystal L. Park & Kenneth I. Pargament. 2016. God’s Role in Suffering: Theodicies, Divine Struggle, and Mental Health. *Psychology of Religion and Spirituality*.
doi:10.1037/rel0000058.

- Wolff, Joshua R., Heather L. Himes, Sabrina D. Soares & Ellen Miller Kwon. 2016. Sexual Minority Students in Non-Affirming Religious Higher Education: Mental Health, Outness, and Identity. *Psychology of Sexual Orientation and Gender Diversity*.
doi:10.1037/sgd0000162.
- Ziebarth, Deborah Jean. 2016. Wholistic Health Care: Evolutionary Conceptual Analysis. *Journal of Religion and Health*.
doi:10.1007/s10943-016-0199-6.