

RESEARCH REVIEW

A DIGEST OF NEW SCIENTIFIC RESEARCH CONCERNING RELIGION, BRAIN & BEHAVIOR MARCH, 2012

INTRODUCTION

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

Articles for this issue were located by searching the following databases: Applied Science and Technology, ATLA Religion Database, 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 626 articles, 88 articles have been retained from 61 journals. There are 62 pre-publication citations from 37 journals.

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PART 1: ARTICLES IN RELIGION, BRAIN, AND BEHAVIOR

1.1 SCIENTIFIC STUDY OF RELIGION: COGNITIVE NEUROSCIENCE

Doufesh, Hazem, Tarig Faisal, Kheng-Seang Lim & Fatimah Ibrahim. 2012. EEG spectral analysis on Muslim prayers. *Applied Psychophysiology and Biofeedback* 37(1). 11–18. doi:10.1007/s10484-011-9170-1.

This study investigated the proposition of relaxation offered by performing the Muslim prayers by measuring the alpha brain activity in the frontal, central, parietal, and occipital electrode placements. Nine Muslim subjects were asked to perform the four required cycles of movements of Dhuha prayer, and the EEG were subsequently recorded with open eyes under three conditions, namely, resting, performing four cycles of prayer while reciting the specific verses and supplications, and performing four cycles of acted salat condition (prayer movements without any recitations). Analysis revealed that there were no significant difference in the mean alpha relative power (RP(a)) between the alpha amplitude in the Dhuha prayer and the acted conditions in all eight electrode positions. However, the mean RP(a) showed higher alpha amplitude during the prostration position of the Dhuha prayer and acted condition at the parietal and occipital regions in comparison to the resting condition. Findings were similar to other studies documenting increased alpha amplitude in parietal and occipital regions during meditation and mental concentration. The incidence of increased alpha amplitude suggested parasympathetic activation, thus indicating a state of relaxation.

Hasenkamp, Wendy & Lawrence W Barsalou. 2012. Effects of meditation experience on functional connectivity of distributed brain networks. *Frontiers in Human Neuroscience* 6. 38. doi:10.3389/fnhum.2012.00038.

This study sought to examine the effect of meditation experience on brain networks underlying cognitive actions employed during contemplative practice. In a previous study, researchers had proposed a basic model of naturalistic

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Calendar year memberships US\$90 Discounts for retirees and students cognitive fluctuations that occur during the practice of focused attention meditation. This model specifies four intervals in a cognitive cycle: mind wandering (MW), awareness of MW, shifting of attention, and sustained attention. Using subjective input from experienced practitioners during meditation, they identified activity in salience network regions during awareness of MW and executive network regions during shifting and sustained attention. Brain regions associated with the default mode were active during MW. In the present study, the authors reasoned that repeated activation of attentional brain networks over years of practice may induce lasting functional connectivity changes within relevant circuits. To investigate this possibility, seeds were created representing the networks that were active during the four phases of the earlier study, and examined functional connectivity during the resting state in the same participants. Connectivity maps were then contrasted between participants with high vs. low meditation experience. Participants with more meditation experience exhibited increased connectivity within attentional networks, as well as between attentional regions and medial frontal regions. The authors infer that these neural relationships may be involved in the development of cognitive skills, such as maintaining attention and disengaging from distraction, that are often reported with meditation practice. Furthermore, because altered connectivity of brain regions in experienced meditators was observed in a non-meditative (resting) state, this may represent a transference of cognitive abilities "off the cushion" into daily life.

Libby, Daniel J, Patrick D Worhunsky, Corey E Pilver & Judson A Brewer. 2012. Meditation-induced changes in high-frequency heart rate variability predict smoking outcomes. *Frontiers in Human Neuroscience* 6. 54. doi:10.3389/fnhum.2012.00054.

High-frequency heart rate variability (HF-HRV) is a measure of parasympathetic nervous system output that has been associated with enhanced self-regulation. Low resting levels of HF-HRV are associated with nicotine dependence and blunted stress-related changes in HF-HRV are associated with decreased ability to resist smoking. Meditation has been shown to increase HF-HRV. This experiment was designed to investigate the relationship between HF-HRV and subsequent smoking outcomes. HF-HRV during resting baseline and during mindfulness meditation was measured within two weeks of completing a 4-week smoking cessation intervention in a sample of 31 community participants. Self-report measures of smoking were obtained at a follow up 17-weeks after the initiation of treatment. Following intervention, regression analyses indicated that individuals exhibiting acute increases in HF-HRV from resting baseline to meditation smoked fewer cigarettes at follow-up than those who exhibited acute decreases in HF-HRV. The authors conclude that acute changes in HF-HRV in response to meditation may be a useful tool to predict smoking cessation treatment response.

Sperduti, Marco, Pénélope Martinelli & Pascale Piolino. 2012. A neurocognitive model of meditation based on activation likelihood estimation (ALE) meta-analysis. *Consciousness and Cognition* 21(1). 269–276.

doi:10.1016/j.concog.2011.09.019.

Meditation comprises a series of practices mainly developed in eastern cultures aiming at controlling emotions and enhancing attentional processes. Several authors proposed to divide meditation techniques in focused attention (FA) and open monitoring (OM) techniques. Previous studies have reported differences in brain networks underlying FA and OM. On the other hand common activations across different meditative practices have been reported. Despite differences between forms of meditation and their underlying cognitive processes, the authors proposed that all meditative techniques could share a central process that would be supported by a core network for meditation since their general common goal is to induce relaxation, regulating attention and developing an attitude of detachment from one's own thoughts. To test this hypothesis, a quantitative meta-analysis was conducted based on activation likelihood estimation (ALE) of 10 neuroimaging studies (91 subjects) on different meditative techniques to evidence the core cortical network subserving meditation. Results showed activation of basal ganglia (caudate body), limbic system (enthorinal cortex) and medial prefrontal cortex.

1.2 SCIENTIFIC STUDY OF RELIGION: EVOLUTION

Berns, Gregory S. & Scott Atran. 2012. The biology of cultural conflict. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences* 367(1589). 633–639. doi:10.1098/rstb.2011.0307.

The authors note that, although culture is usually thought of as the collection of knowledge and traditions that are transmitted outside of biology, evidence continues to accumulate showing how biology and culture are inseparably intertwined. This paper makes the case that cultural conflict will occur only when the beliefs and traditions of one cultural group represent a challenge to individuals of another. Such a challenge will elicit brain processes involved in cognitive decision-making, emotional activation and physiological arousal associated with the outbreak, conduct and resolution of conflict. Key targets to understand bio-cultural differences include primitive drives-how the brain responds to likes and dislikes, how it discounts the future, and how this relates to reproductive behavior-but also higher level functions, such as how the mind represents and values the surrounding physical and social environment. The authors hold that future cultural wars, while they may bear familiar labels of religion and politics, will ultimately be fought over control of our biology and our environment.

Berns, Gregory S, Emily Bell, C Monica Capra, Michael J Prietula, Sara Moore, Brittany Anderson, Jeremy Ginges & Scott Atran. 2012. The price of your soul: neural evidence for the non-utilitarian representation of sacred values. *Philosophical Transactions of the Royal Society of London. Series B, Biological Sciences* 367(1589). 754–762. doi:10.1098/rstb.2011.0262.

Sacred values, such as those associated with religious or ethnic identity, underlie many important individual and group decisions in life, and individuals typically resist attempts to trade off their sacred values in exchange for material benefits. Deontological theory suggests that sacred values are processed based on rights and wrongs irrespective of outcomes, while utilitarian theory suggests that they are processed based on costs and benefits of potential outcomes, but which mode of processing an individual naturally uses is unknown. The study of decisions over sacred values is difficult because outcomes cannot typically be realized in a laboratory, and hence little is known about the neural representation and processing of sacred values. Researchers used an experimental paradigm that used integrity as a proxy for sacredness and which paid real money to induce individuals to sell their personal values. Using functional magnetic resonance imaging, the authors found that values that people refused to sell (sacred values) were associated with increased activity in the left temporoparietal junction and ventrolateral prefrontal cortex, regions previously associated with semantic rule retrieval. This suggests that sacred values affect behavior through the retrieval and processing of deontic rules and not through a utilitarian evaluation of costs and benefits.

Braswell, Gregory S., Karl S. Rosengren & Howard Berenbaum. 2012. Gravity, God and ghosts? Parents' beliefs in science, religion, and the paranormal and the encouragement of beliefs in their children. *International Journal of Behavioral Development* 36(2). 99–106. doi:10.1177/0165025411424088.

Using a questionnaire, the present study examined parents' beliefs regarding the development of children's beliefs about science, religion, and the paranormal. The study also investigated parental encouragement of children's beliefs, as well as parents' own beliefs within these domains. Results revealed that parents make distinctions between domains in terms of (a) the importance and timing of beliefs in children's lives, (b) their own beliefs, and (c) what they encourage their children to believe. The results also indicated that parents' beliefs were often consistent with the beliefs they encouraged in their children. These findings suggest that parental beliefs provide an important contextual background for children's development.

Coates, Dominiek D. 2012. "Cult commitment" from the perspective of former members: Direct rewards of membership versus dependency inducing practices. *Deviant Behavior* 33(3). 168–184. doi:10.1080/01639625.2010.548302.

The experiences of involvement in a deviant "religious" group such as a cult or new religious movement is not well understood, with few qualitative studies having explored the experiences and perspectives of former members of such groups. To gain a better understanding of what compels individuals to be become committed to a cult or new religious movement, the current study is a qualitative investigation into "cult commitment" from the perspective of former members. Seven participants from four different groups were recruited, and in-depth interviews were conducted to explore the participants' accounts of their experience. This study found that participants' "decision" to remain in the group was influenced by both "direct rewards" of membership and levels of control exercised by the group and its leaders.

Connor, Phillip. 2012. International Migration and Religious Selection. *Journal for the Scientific Study of Religion* 51(1). 184–194. doi:10.1111/j.1468-5906.2011.01631.x.

Using Guatemalan data, this research note tests whether religious affiliation is significantly associated with migration to the United States, net of other competing factors. Results are robust, demonstrating that Protestants are more likely than other religious groups to migrate. Additionally, mediating factors (social networks, cultural norms, and ideological links) are tested to identify social mechanisms behind the Protestant effect. The research note concludes with implications of religious selection and how religious selection can be further examined in migration and religion studies.

van Doorn, Gerrit Sander & Michael Taborsky. 2012. The Evolution Of Generalized Reciprocity On Social Interaction Networks. *Evolution* 66(3). 651–664. doi:10.1111/j.1558-5646.2011.01479.x.

Generalized reciprocity (help anyone, if helped by someone) is a minimal strategy capable of supporting cooperation between unrelated individuals. Its simplicity makes it an attractive model to explain the evolution of reciprocal altruism in animals that lack the information or cognitive skills needed for other types of reciprocity. Yet, generalized reciprocity is anonymous and thus defenseless against exploitation by defectors. Recognizing that animals hardly ever interact randomly, researchers investigate whether social network structure can mitigate this vulnerability. Results show that heterogeneous interaction patterns strongly support the evolution of generalized reciprocity. The future probability of being rewarded for an altruistic act is inversely proportional to the average connectivity of the social network when cooperators are rare. Accordingly, sparse networks are conducive to the invasion of reciprocal altruism. Moreover, the evolutionary stability of cooperation is enhanced by a modular network structure. Communities of reciprocal altruists are protected against exploitation, because modularity increases the mean access time, that is, the average number of steps that it takes for a random walk on the network to reach a defector. Sparseness and community structure are characteristic properties of vertebrate social interaction patterns, as illustrated by network data from natural populations ranging from fish to primates.

Kantner, John & Kevin J. Vaughn. 2012. Pilgrimage as costly signal: Religiously motivated cooperation in Chaco and Nasca. *Journal of Anthropological Archaeology* 31(1). 66–82. doi:10.1016/j.jaa.2011.10.003.

Religiously motivated cooperation in the form of pilgrimage is a neglected element in discussions of the dynamics of cooperative behavior among humans. In this paper, researchers invoke costly signaling theory to propose how pilgrimage centers emerge in some contexts. On one hand, as has been suggested by other scholars, monumental centers are costly signals of the authority and influence of competing centers' leadership, which can include the leaders' influence over supernatural forces. The authors argue that equally important is the pilgrimage itself, which

serves as a costly signal of the pilgrims' commitment to the religious system and the beliefs and values associated with it; this in turn facilitates cooperation and other prosocial behaviors among pilgrims who otherwise might be strangers. To explore the utility of this approach to pilgrimage, Chaco Canyon in the US Southwest, and Cahuachi in the Nasca region of Peru, are compared. These are two pre-state sociocultural settings in which pilgrimage was an important component in maintaining cooperation, group cohesion, and identity. While specific patterns are distinct in each society, the authors argue that pilgrimage had a significant impact in the development of both prosocial behavior and religious leadership in Chaco and Nasca.

Potochnik, Angela. 2012. Modeling social and evolutionary games. *Studies in History and Philosophy of Science Part C: Studies in History and Philosophy of Biological and Biomedical Sciences* 43(1). 202–208. doi:10.1016/j.shpsc.2011.10.035.

When game theory was introduced to biology, the components of classic game theory models were replaced with elements more befitting evolutionary phenomena. The actions of intelligent agents are replaced by phenotypic traits; utility is replaced by fitness; rational deliberation is replaced by natural selection. In this paper, the author argues that this classic conception of comprehensive reapplication is misleading, for it overemphasizes the discontinuity between human behavior and evolved traits. Explicitly considering the representational roles of evolutionary game theory brings to attention areas of overlap that are often neglected, and so a range of evolutionary possibilities that are often overlooked. The clarifications this analysis provides are well illustrated by—and particularly valuable for—game theoretic treatments of the evolution of social behavior.

1.3 SCIENTIFIC STUDY OF RELIGION: PSYCHOLOGY AND CULTURE

Aruguete, Mara S., Alan Goodboy, Daniel Mansson, William J. Jenkins & Lynn E. McCutcheon. 2012. Does Religious Faith Improve Test Performance? *North American Journal of Psychology* 14(1). 185–196.

In two related studies researchers sought to determine if reminding persons of their religious faith would cue an increase in self-efficacy and perseverance, which itself would lead to better performance on an intellectual task. In experiment 1, college students were randomly assigned to a group that filled out a religious orientation scale or one that filled out a distracter scale. Both groups responded to a self-efficacy scale, then took a logical reasoning test. Results showed that completing the religious orientation scale did not influence self-efficacy, perseverance, or logical reasoning. In experiment 2 a stronger religious cue (prayer) was used. Similar to experiment 1, no significant differences among those who did or did not pray on either self-efficacy, perseverance, or logical reasoning was found. Results were discussed from the framework of recent research showing that superstitions "work" by raising task-related self-efficacy, which in turn, leads to greater perseverance and improved performance.

Braunstein, Ruth. 2012. Storytelling in Liberal Religious Advocacy. Journal for the Scientific Study of Religion 51(1). 110–127.

doi:10.1111/j.1468-5906.2012.01634.x.

Previous research suggests liberal religious advocates often find it necessary to use broadly accessible technical or moral language to communicate with policymakers and public audiences, yet this conformity to secular speech norms diminishes the distinctiveness of their religious voices. Communicating through storytelling offers them one way of overcoming this dilemma. This is demonstrated by examining liberal religious advocacy during recent healthcare reform debates in the United States, using data from interviews and public communications by advocates. By embedding stories within religio-political performances that highlight their religious identities, advocates convey policy-relevant information without relying on explicitly religious language that may be inaccessible or unpersuasive to diverse audiences. They also deploy storytelling strategically, bearing witness to injustices experienced firsthand, secondhand, from the pews, and from the past, depending on the context. These

findings have implications for ongoing debates about religious citizens' capacity to communicate across lines of difference in the public sphere.

Fox, Nicole. 2012. "God Must Have Been Sleeping": Faith as an Obstacle and a Resource for Rwandan Genocide Survivors in the United States. *Journal for the Scientific Study of Religion* 51(1). 65–78.

doi:10.1111/j.1468-5906.2011.01624.x.

In 1994, one million Rwandans were violently killed in only 100 days. Devastating for some Rwandan survivors was the significant role that some Catholic parishes and leaders took in ignoring, facilitating, and even perpetuating the genocide. This article seeks to understand how Rwandan genocide survivors draw on religion as they negotiate their post-genocide identities in the United States and comprehend their current faiths, beliefs, and practices. Based on qualitative interviews with Rwandan survivors now located within the United States, the authors argue that the experiences of religiosity post-genocide serve as both an obstacle and a resource in post-genocide life, creating significant individual and local ramifications for community engagement, reconciliation, and trauma recovery.

Krause, Neal. 2012. Feelings of gratitude toward God among older whites, older African Americans, and older Mexican Americans. *Research on Aging* 34(2). 156–173. doi:10.1177/0164027511417884.

The first goal of this study is to see if social relationships in the church influence feelings of gratitude toward God. The second goal is to assess the impact of race and ethnicity on this relationship. The data support the following hypotheses: (1) Older people who go to church more often tend to receive more spiritual support from fellow church members; (2) older adults who receive more spiritual support at church will derive a deeper understanding of themselves and others; (3) older people who develop greater insight into themselves and others will derive a greater sense of religious meaning in life; and (4) older adults who develop a deeper sense of religious meaning in life will feel more grateful to God. The results also indicate that the study model explains how feelings of gratitude toward God arise among older Blacks and Whites, but not older Mexican Americans.

Mulla, Zubin R. & Venkat R. Krishnan. 2012. Transformational leadership and Karma-Yoga: Enhancing followers' duty-orientation and indifference to rewards. *Psychology and Developing Societies* 24(1). 85–117. doi:10.1177/097133361102400104.

This article attempts to validate James MacGregor Burns's hypothesis that transformational leaders raise followers to higher levels of morality. Morality in the Indian context is conceptualized as Karma-Yoga, the Indian work ideal. Karma-Yoga is defined as a technique for performing actions such that the soul is not bound by the results of the actions and is operationalized in the form of three dimensions, viz., duty-orientation, indifference to rewards and equanimity. It was hypothesized that transformational leaders move followers towards the Indian work ideal, that is, Karma-Yoga, and this relationship is moderated by the duration of the leader—follower relationship and the frequency of leader—follower interaction. Researchers studied 329 executives across India. Regression analysis showed that transformational leadership was significantly related to two of the three dimensions of Karma-Yoga (viz., duty-orientation and indifference to rewards). Analysis of split samples of high/low duration of leader—follower relationship and high/low frequency of leader—follower interaction showed that the duration of leader—follower relationship and frequency of leader—follower interaction moderated the relationship between transformational leadership and follower's Karma-Yoga such that high duration of leader—follower relationship and high frequency of leader—follower interaction enhanced the impact of transformational leadership on follower's Karma-Yoga.

Park, Julie J. 2012. When race and religion collide: The effect of religion on interracial friendship during college. *Journal of Diversity in Higher Education* 5(1). 8–21. doi:10.1037/a0026960.

This study analyzes data from the National Longitudinal Study of Freshmen to examine whether religious affiliation and involvement are related to the outcome of interracial friendship in the fourth year of college. When controlling for students' demographic characteristics, institutional characteristics, and previous levels of interracial friendship, being Protestant or Jewish was negatively related to interracial friendship. In addition, students who reported higher levels of religious salience and involvement in campus religious organizations were significantly less likely to have close friends of another race by the fourth year of college.

Pashak, Travis & Tim C. Laughter. 2012. Measuring Service-Mindedness And Its Relationship With Spirituality And Life Satisfaction. *College Student Journal* 46(1). 183–192.

A self-report measure of service-mindedness was designed in order to fill in a gap in the literature and evaluate a potential link between spirituality and satisfaction with life. A sample of 133 undergraduate students at a Catholic university in the Mid-west completed the Service-Mindedness Scale (SMS), along with the Spiritual Involvement and Beliefs Scale and the Satisfaction with Life Scale. The sample consisted of 45 males and 88 females, whose ages ranged from 18 to 24. Results indicated that the SMS has strong internal consistency, and that service-mindedness acts as a significant mediator between spirituality and life satisfaction. Implications involve increasing service-oriented motives in Jesuit education programs to further align with spiritual goals and increase student life satisfaction.

Patterson, Richard & Joseph Price. 2012. Pornography, Religion, and the Happiness Gap: Does Pornography Impact the Actively Religious Differently? *Journal for the Scientific Study of Religion* 51(1). 79–89.

doi:10.1111/j.1468-5906.2011.01630.x.

Club good models developed by economists suggest that the club provides a benefit to members by fostering the provision of semi-public goods. In the case of religion, churches create enforcement mechanisms to reduce free riding. Consequently, the psychic costs of deviant activity should be higher for individuals who belong to religious groups with strong social norms. Data from the General Social Survey are used to examine whether the cost of using pornography is greater for the more religiously involved. We measure the cost of using pornography as the happiness gap or the gap between the average happiness reported by individuals who do and individuals who do not report using pornography. The happiness gap is larger for individuals who regularly attend church and who belong to religious groups with strong attitudes against pornography.

Phipps, Kelly A. 2011. Spirituality and Strategic Leadership: The Influence of Spiritual Beliefs on Strategic Decision Making. *Journal of Business Ethics* 106(2). 177–189. doi:10.1007/s10551-011-0988-5.

This work extends the consideration of spirituality and leadership to the field of strategic leadership. Future development in the field of spirituality and leadership will depend on greater clarity concerning the level of analysis, and will require a distinction between personal and collective spirituality. Toward that end, a framework is proposed that describes how the personal spiritual beliefs of a top level leader operate in strategic decision making like a schema to filter and frame information. This function is mediated by the leader's constructive development and meta-belief and moderated by the organizational context and leadership style. This framework provides a starting point for considering the many expressions of spirituality in organizations and serves as a foundation for a multi-level theory of spirituality and leadership.

Schnall, Eliezer, Solomon Kalkstein, George Fitchett, Elena Salmoirago-Blotcher, Judith Ockene, Hilary Aurora Tindle, Asha Thomas, Julie R Hunt & Sylvia Wassertheil-Smoller. 2012.

Psychological and social characteristics associated with religiosity in Women's Health Initiative participants. *Journal of Religion and Health* 51(1). 20–31. doi:10.1007/s10943-011-9549-6.

Researchers examined cross-sectional data from 92,539 postmenopausal participants of the Women's Health Initiative Observational Study who responded to questions on religious service attendance, psychological characteristics, and social support domains. Women attending services weekly during the past month, compared with those not attending at all in the past month, were less likely to be depressed or characterized by cynical hostility, and more likely to be optimistic. They were also more likely to report overall positive social support, as well as social support of four subtypes (emotional/informational support, affection support, tangible support, and positive social interaction), and were less likely to report social strain. However, those attending more or less than weekly were not less likely to be characterized by cynical hostility, nor were they less likely to report social strain, compared to those not attending during the past month.

1.4 SCIENTIFIC STUDY OF RELIGION: METHOD & THEORY

Kadkhoda, Mohammad & Hoorie Jahani. 2012. Problem-solving capacities of spiritual intelligence for artificial intelligence. *Procedia - Social and Behavioral Sciences* 32(0). 170–175. doi:10.1016/j.sbspro.2012.01.027.

Spiritual intelligence (S-intelligence) is able to engage with problems of meaning and value in order to solve them. In the present work, researchers studied the S-intelligence capacities that can be used to solve artificial intelligence problems. For this purpose, they proposed a new definition of problem solving that can manipulate spiritual aspects of the problems and conform to the requirements, conditions and capacity of S-intelligence models.

Leamaster, Reid J. 2012. A Research Note on English-Speaking Buddhists in the United States. Journal for the Scientific Study of Religion 51(1). 143–155. doi:10.1111/j.1468-5906.2011.01632.x.

Using data from the 2007 Pew Religious Landscape survey, which includes over 650 Buddhist respondents (after weighting), this research note examines the usefulness of previously devised typologies for describing the religious and social characteristics of Buddhists in the United States. Existing "two Buddhisms" typologies capture the category breaks of the U.S. Buddhist landscape, with a couple of exceptions: convert Buddhists report higher rates of belief and higher rates of social activity than do those born into the religion. Analysis also shows that three-group typologics capture additional complexity within the U.S. Buddhist landscape. Examination of the social characteristics of Buddhists in the United States mostly corroborates previous assumptions with one exception: women do not outnumber men.

Meezenbroek, Eltica de Jager, Bert Garssen, Machteld Van den Berg, Gerwi Tuytel, Dirk Van Dierendonck, Adriaan Visser & Wilmar B Schaufeli. 2012. Measuring spirituality as a universal human experience: Development of the Spiritual Attitude and Involvement List (SAIL). *Journal of Psychosocial Oncology* 30(2). 141–167. doi:10.1080/07347332.2011.651258.

Many cancer patients experience spirituality as highly supportive while coping with their disease. Most research as well as most questionnaires in this field is religious orientated. The Spiritual Attitude and Involvement List was developed to enable research on spirituality among religious and nonreligious people. It consists of seven subscales that measure connectedness with oneself, with others and nature, and with the transcendent. Among a student, a healthy population, a healthy interested, a curative cancer, and a palliative cancer sample factorial, convergent and discriminant validity were demonstrated, as well as adequate internal consistency and test-retest reliability.

PART 2. ARTICLES IN SPIRITUALITY & HEALTH RESEARCH

2.1 Spirituality & Health: General Health & Well-Being

Abolfathi Momtaz, Yadollah, Tengku Aizan Hamid, Rahimah Ibrahim, Nurizan Yahaya & Siti Suhailah Abdullah. 2012. Moderating effect of Islamic religiosity on the relationship between chronic medical conditions and psychological well-being among elderly Malays. *Psychogeriatrics: The Official Journal of the Japanese Psychogeriatric Society* 12(1). 43–53. doi:10.1111/j.1479-8301.2011.00381.x.

This study aimed to examine the possible moderating effect of Islamic religiosity on the relationship between chronic medical conditions and psychological well-being in 1415 elderly Malay Muslims. Data collection was performed through face-to-face interviews. Older persons with a high level of religiosity reported significantly higher levels of psychological well-being compared to their counterparts with a low level of religiosity. The negative effect of chronic medical conditions on psychological well-being is reduced by both personal and social religiosity. The depressogenic effect of physical illness is decreased by religiosity in chronically ill elderly people.

Adamczyk, Amy. 2012. Extracurricular activities and teens' alcohol use: The role of religious and secular sponsorship. *Social Science Research* 41(2). 412–424. doi:10.1016/j.ssresearch.2011.11.003.

This study finds that involvement in religion-supported secular activities is associated with less alcohol use for all involved teens. The number of friends who belong to a religious youth group partly explains the relationship. Conversely, network overlap between parents and teens, the number of friends who drink or use drugs, and having an adult confidant from a religious group are not mechanisms that mediate the relationship.

Blom, Kimberly, Maxine How, Monica Dai, Brian Baker, Jane Irvine, Susan Abbey, Beth L Abramson, Martin Myers, Nancy Perkins & Sheldon W Tobe. 2012. Hypertension Analysis of stress Reduction using Mindfulness meditatiON and Yoga (The HARMONY Study): Study protocol of a randomised control trial. *BMJ Open* 2(2). e000848. doi:10.1136/bmjopen-2012-000848.

The HARMONY Study is a pilot randomized controlled trial designed to determine if mindfulness-based stress reduction (MBSR), a standardized group therapy, is an effective intervention for lowering BP in stage 1 unmedicated hypertensives. Men and women unmedicated for hypertension with mean daytime ambulatory blood pressure (ABP) $\geq 135/85$ mm Hg or 24 h ABP $\geq 130/80$ mm Hg are included in the study. Subjects are randomized to receive MBSR immediately or after a wait-list control period. The primary outcome measure is mean awake and 24 h ABP. The primary objective of the HARMONY Study is to compare ABP between the treatment and wait-list control arm at the 12-week primary assessment period. Results from this study will determine if MBSR is an effective intervention for lowering BP in early unmedicated hypertensives.

Debnam, Katrina J, Cheryl L Holt, Eddie M Clark, David L Roth, Herman R Foushee, Martha Crowther, Mona Fouad & Penny L Southward. 2012. Spiritual health locus of control and health behaviors in African Americans. *American Journal of Health Behavior* 36(3). 360–372. doi:10.5993/AJHB.36.3.7.

A cross-sectional survey of a national sample of African Americans assessed spiritual beliefs, fruit and vegetable consumption, physical activity, and alcohol consumption. Active spiritual beliefs were positively associated with fruit consumption and negatively associated with alcohol consumption. Passive spiritual beliefs were associated with lower vegetable and increased alcohol consumption. Among male participants, passive spiritual beliefs were associated with higher alcohol consumption.

Edger, Kailla. 2012. Evangelicalism, sexual morality, and sexual addiction: opposing views and continued conflicts. *Journal of Religion and Health* 51(1). 162–178. doi:10.1007/s10943-010-9338-7.

While much of the Christian evangelical movement fosters judgmental attitudes surrounding sexuality, disapproving of other individuals who exhibit behaviors deemed morally reprehensible, other evangelical denominations embrace different viewpoints about human sexuality. In spite of the existence of ecumenical evangelical groups, the majority defines sexual morality through a narrow and prescriptive outlook and pathologizes certain sexual behaviors. Solutions to identified sexual problems are often provided through restrictive viewpoints despite the existence of largely opposing positions within this movement. Reaction formation and authoritarian personality theory are theorized as the primary explanations for individuals failing to conform to stringent religious sexual expectations.

Frost, Marlene H, Mary E Johnson, Pamela J Atherton, Wesley O Petersen, Ann M Dose, Melanie J Kasner, Kelli N Burger, Jeff A Sloan & Teri Britt Pipe. 2012. Spiritual well-being and quality of life of women with ovarian cancer and their spouses. *The Journal of Supportive Oncology* 10(2). 72–80.

doi:10.1016/j.suponc.2011.09.001.

Researchers compared the quality of life (QOL) and spiritual well-being (SWB) of women diagnosed with ovarian cancer (n=70) and their spouses (n=26) over a 3-year period. Women reported a high level of SWB over time. Spouses' SWB was significantly worse than the women's at 1 and 3 years. Insomnia, fatigue, and outlook/worry were problematic across time, with no significant differences between women and spouses except that women experienced more insomnia through 3 months. Emotional well-being was compromised over time for the women but not their spouses until year 3. Physical and social well-being were compromised in spouses across time, while women's social well-being remained high and physical well-being was problematic only for the first year.

Fulambarker, Ashok, Basheeruddin Farooki, Fayez Kheir, Ahmet Sinan Copur, Lavanya Srinivasan & Stephen Schultz. 2012. Effect of yoga in chronic obstructive pulmonary disease. *American Journal of Therapeutics* 19(2). 96–100. doi:10.1097/MJT.0b013e3181f2ab86.

Researchers prospectively evaluated the effects of yoga training on the quality of life and the parameters of lung function in 33 patients with chronic obstructive pulmonary disease (COPD). All patients received standard COPD care. Patients were taught selected yoga exercises including breathing exercises, meditation, and yoga postures for 1 hour, thrice a week for 6 weeks by a certified yoga therapist. The quality of life and lung function were again assessed at the end of 6 weeks. Twenty-two patients completed the study. Statistically significant improvements were observed for the St. George Respiratory questionnaire, vital capacity, maximal inspiratory pressure, and maximal expiratory pressure. Yoga when practiced by patients with COPD results in improvement in the OOL and lung function on a short-term basis.

Galantino, Mary Lou, Laurie Greene, Laura Daniels, Brandon Dooley, Laura Muscatello & Laura O'Donnell. 2012. Longitudinal Impact of Yoga on Chemotherapy-Related Cognitive Impairment and Quality of Life in Women with Early Stage Breast Cancer: A Case Series. *EXPLORE: The Journal of Science and Healing* 8(2). 127–135. doi:10.1016/j.explore.2011.12.001.

Four women with a diagnosis of early-stage breast cancer prior to chemotherapy treatment were administered physiologic measures at baseline, 6, and 12 weeks during chemotherapy, and at one and three months after the conclusion of the study. Women attended an Iyengar-inspired yoga program twice a week for 12 weeks. Improved balance, flexibility, and QOL were also noted over time. Analysis of qualitative data revealed the yoga classes

were helpful and subjects continued the practice elements of yoga including relaxation, breathing, and stretching. The most challenging aspect of the study was physical limitations due to various medical complications and included fatigue, decreased range of motion, and pain. This case series suggests that yoga may impact various aspects of cognition during and after chemotherapy administration as noted through quantitative measures.

Goldstein, Carly M, Richard Josephson, Susan Xie & Joel W Hughes. 2012. Current perspectives on the use of meditation to reduce blood pressure. *International Journal of Hypertension* 2012. 578397. doi:10.1155/2012/578397.

The authors reviewed landmark studies and recent literature concerning the use of meditation for reducing blood pressure in pre-hypertensive and hypertensive individuals. Meditation techniques appear to produce small yet meaningful reductions in blood pressure either as monotherapy or in conjunction with traditional pharmacotherapy. Transcendental meditation and mindfulness-based stress reduction may produce clinically significant reductions in systolic and diastolic blood pressure.

Khanjari, Sedigheh, Fatemeh Oskouie & Ann Langius-Eklöf. 2012. Lower sense of coherence, negative religious coping, and disease severity as indicators of a decrease in quality of life in Iranian family caregivers of relatives with breast cancer during the first 6 months after diagnosis. *Cancer Nursing* 35(2). 148–156. doi:10.1097/NCC.0b013e31821f1dda.

The objective of the study was to describe quality of life (QoL), well-being, sense of coherence (SOC), spirituality, and religious coping in family caregivers of patients with breast cancer (n=150) at the time of diagnosis (T1) and 6 months after diagnosis (T2) and identify predictive factors of change in QoL. The results showed significant increase in overall QoL and well-being at T2. However, ratings of their SOC, spirituality, and negative religious coping decreased. Analyses revealed the rating of QoL at T1 as the strongest predictor in the rating of quality-of-life change at T2 followed by the degree of SOC, negative religious coping, and patients having more severe breast cancer.

Li, Chia-Chun, Lynn Rew & Shiow-Li Hwang. 2012. The relationship between spiritual well-being and psychosocial adjustment in Taiwanese patients with colorectal cancer and a colostomy. *Journal of Wound, Ostomy, and Continence Nursing: Official Publication of The Wound, Ostomy and Continence Nurses Society / WOCN* 39(2). 161–169; quiz 170–171. doi:10.1097/WON.0b013e318244afe0.

Researchers examined relationships among demographic and clinical characteristics, spiritual well-being, and psychosocial adjustment in Taiwanese patients (n=45) with colorectal cancer and a colostomy using a descriptive, cross-sectional, exploratory study design. Of study participants, 69% reported a moderate level of spiritual well-being. Participants reported strong adjustment to extended family relationships, but poor adjustment in sexual relationships. Spiritual well-being was significantly associated with psychosocial adjustment, and 4 predictors (income change after surgery, self-rated disease severity, time since surgery, and spiritual well-being) accounted for 53% of the variance in psychosocial adjustment.

Marsiglia, Flavio Francisco, Stephanie L Ayers & Steven Hoffman. 2012. Religiosity and adolescent substance use in central Mexico: exploring the influence of internal and external religiosity on cigarette and alcohol use. *American Journal of Community Psychology* 49(1-2). 87–97. doi:10.1007/s10464-011-9439-9.

This study explores the multidimensional nature of religiosity on substance use among adolescents living in central Mexico. From a social capital perspective, this article investigates how external church attendance and internal religious importance interact to create differential pathways for adolescents in Mexico, and how these pathways exert both risk and protective influences on 506 Roman Catholic Mexican youth. Findings indicate that

adolescents who have higher church attendance coupled with higher religious importance have lower odds of using alcohol, while cigarette use is lower among adolescents who have lower church attendance and lower religious importance. Adolescents are most at risk using alcohol and cigarettes when church attendance is higher but religious importance is lower. In conclusion, incongruence between internal religious beliefs and external church attendance places Mexican youth at greater risk of alcohol and cigarette use.

Naewbood, Supaporn, Siroj Sorajjakool & Somporn Kantharadussadee Triamchaisri. 2012. The role of religion in relation to blood pressure control among a Southern California Thai population with hypertension. *Journal of Religion and Health* 51(1). 187–197. doi:10.1007/s10943-010-9341-z.

This qualitative research investigates the role religion plays in relation to blood pressure control among a Southern California Thai population with hypertension. A total of 15 Thai individuals between the ages of 45-95 were interviewed. All participants indicated that stress plays a significant role in determining their ability to manage hypertension. Of the 15 participants, 14 acknowledged that religion plays an important role by helping them manage their stress level and offering them beneficial instruction about health practices such as diet and exercise.

Park, Crystal L, Shane J Sacco & Donald Edmondson. 2012. Expanding coping goodness-of-fit: religious coping, health locus of control, and depressed affect in heart failure patients. *Anxiety, Stress, and Coping* 25(2). 137–153. doi:10.1080/10615806.2011.586030.

The goodness-of-fit coping hypothesis posits that problem-focused (PF) coping is particularly helpful under high controllability conditions, while emotion-focused (EF) coping is more helpful in low controllability situations. Researchers tested coping goodness-of-fit for PF and EF as well as religious coping resources and strategies in 202 congestive heart failure (CHF) patients. Neither religious coping efforts nor religious resources were related to depressed affect. However, when examined in conjunction with internal health locus of control (HLOC), active coping and organized religious commitment were related to less depression for those higher in internal HLOC, while daily spiritual experience was related to less depression for those lower in HLOC. These results partially support the goodness-of-fit hypothesis and indicate a need to consider the perceived controllability of situations when examining the associations of religious coping resources and activities on depressive symptoms in the context of illness.

Puffer, Eve S, Melissa H Watt, Kathleen J Sikkema, Rose A Ogwang-Odhiambo & Sherryl A Broverman. 2012. The protective role of religious coping in adolescents' responses to poverty and sexual decision-making in rural Kenya. *Journal of Research on Adolescence: The Official Journal of the Society for Research on Adolescence* 22(1). 1–7. doi:10.1111/j.1532-7795.2011.00760.x.

Researchers explored how 34 adolescents in rural Kenya apply religious coping in sexual decision-making in the context of high rates of poverty and HIV. In semi-structured interviews, 13 youth reported religious coping related to economic stress, HIV, or sexual decision-making; 29 reported religious coping with these or other stressors. Adolescents reported praying for God to partner with them to engage in positive behaviors, praying for strength to resist unwanted behaviors, and passive strategies characterized by waiting for God to provide resources or protection from HIV.

Reeves, Roy R, Claire E Adams, Patricia M Dubbert, Demarc A Hickson & Sharon B Wyatt. 2012. Are religiosity and spirituality associated with obesity among African Americans in the southeastern United States (the Jackson Heart Study)? *Journal of Religion and Health* 51(1). 32–48. doi:10.1007/s10943-011-9552-y.

This study examined the associations between dimensions of religiosity and spirituality (religious attendance, daily spirituality, and private prayer), health behaviors and weight among 2,378African Americans in central Mississippi. Researchers observed no significant association between religiosity, spirituality, and weight. The relationship between religiosity/spirituality and obesity was not moderated by demographic variables, psychosocial variables, or health behaviors. However, greater religiosity and spirituality were related to lower energy intake, less alcohol use, and less likelihood of lifetime smoking.

Schreiber, Judith A & Dorothy Y Brockopp. 2012. Twenty-five years later--what do we know about religion/spirituality and psychological well-being among breast cancer survivors? A systematic review. *Journal of Cancer Survivorship: Research and Practice* 6(1). 82–94. doi:10.1007/s11764-011-0193-7.

The purpose of this focused review is to critically analyze and synthesize relationships among psychological well-being, religion, and spirituality among women with breast cancer via a literature review. Eighteen quantitative studies were analyzed in order to examine associations among religion, spirituality, and psychological well-being for women diagnosed with breast cancer. These three variables were operationally defined as follows: (a) religious practice, religious coping, and perception of God; (b) spiritual distress, spiritual reframing, spiritual well-being, and spiritual integration; and (c) combined measure of both the religion and spirituality constructs. Results of this review suggest that within this population, limited relationships exist among religion, spirituality, and psychological well-being. Given the various definitions used for the three variables, the strength and clarity of relationships are not clear. In addition, the time of assessment along the course of the disease varies greatly and in some instances is not reported. Diagnosis and/or prognosis, factors that could influence psychological well-being, are frequently not factored into results. There does, however, appear to be sufficient evidence to include a brief, clinically focused assessment of women diagnosed with breast cancer regarding the importance of a given belief system as they face the diagnosis and treatment of their disease.

Sherr, Michael E., David Pooler, James Stamey, Preston Dyer, Everett Smith & Ashley Summers. 2012. The influence of religious participation on sexual activity in a randomized effectiveness trial for minority youth. *Journal of Social Service Research* 38(2). 156–164. doi:10.1080/01488376.2011.615270.

This study examined the influence of religious participation on the outcomes of a comprehensive sex education program for minority youth in Miami, FL. Data collection occurred at pretest and at 3-month and 6-month follow-up. A sample of teenagers was randomly selected from high schools, with a large majority of minority youth, and was assigned into treatment (n=549) and control (n=424) groups. Results indicated religious participation had some influence on predicting teen sexual activity at pretest but did not contribute to teen responses at 3- or 6-month follow-up. Gender and use of alcohol also significantly predicted responses from teens at pretest and at 3-month and 6-month follow-up.

2.2 SPIRITUALITY & HEALTH: MENTAL HEALTH

Abdel-Khalek, Ahmed M & David Lester. 2012. Constructions of religiosity, subjective well-being, anxiety, and depression in two cultures: Kuwait and USA. *The International Journal of Social Psychiatry* 58(2). 138–145.

doi:10.1177/0020764010387545.

The aim of the present study was to explore the associations of religiosity with subjective well-being (SWB) and psychopathology (anxiety and depression) among college students recruited from two different cultures, Kuwait (n=192) and the USA (n=158). The Kuwaiti students obtained higher mean scores on religiosity, religious belief and depression than did their American counterparts, whereas American students had higher mean scores on

- happiness and love of life. Two factors were extracted: "SWB versus psychopathology" and "Religiosity." Researchers conclude that those who consider themselves as religious experienced greater well-being.
- Benavides, Linda E. 2012. A phenomenological study of spirituality as a protective factor for adolescents exposed to domestic violence. *Journal of Social Service Research* 38(2). 165–174. doi:10.1080/01488376.2011.615274.
 - This phenomenological qualitative study was designed to understand how spirituality serves as a protective factor, mediating adverse developmental outcomes, for adolescents exposed to domestic violence. Semi-structured interviews were conducted with 14 adolescents, recruited through an agency for domestic violence survivors. Four significant themes (learning from experiences, self-expression, beliefs, and feelings), through which participants' spirituality manifested as a strength, emerged. This study adds to the growing support spirituality has received as a protective factor for at-risk adolescents and provides several practice implications. Future research is also suggested to better understand the developmental process by which spirituality serves as a protective factor.
- Chan, Christian S, Jean E Rhodes & John E Pérez. 2012. A prospective study of religiousness and psychological distress among female survivors of Hurricanes Katrina and Rita. *American Journal of Community Psychology* 49(1-2). 168–181. doi:10.1007/s10464-011-9445-y.
 - This prospective study examined the pathways by which religious involvement affected the post-disaster psychological functioning of women who survived Hurricanes Katrina and Rita. The participants were 386 low-income, predominantly Black, single mothers. The women were enrolled in the study before the hurricane, providing a rare opportunity to document changes in mental health from before to after the storm, and to assess the protective role of religious involvement over time. Controlling for level of exposure to the hurricanes, pre-disaster physical health, age, and number of children, pre-disaster religiousness predicted higher levels of post-disaster (1) social resources and (2) optimism and sense of purpose. The latter, but not the former, was associated with better post-disaster psychological outcome. Mediation analysis confirmed the mediating role of optimism and sense of purpose.
- Huang, Chiung-Yu, Mei-Chi Hsu & Tai-Jui Chen. 2012. An exploratory study of religious involvement as a moderator between anxiety, depressive symptoms and quality of life outcomes of older adults. *Journal of Clinical Nursing* 21(5-6). 609–619. doi:10.1111/j.1365-2702.2010.03412.x.
 - The aims of this study were to examine the relationships among religion, religious involvement, anxiety, depressive symptoms and quality of life in older adults with psychological problems and whether religious involvement moderated anxiety and depressive symptoms on the outcome of quality of life. The study was conducted in 2007-2008 with a purposive sample of 115 older adults who were 60 years of age or older at a psychiatric center in Taiwan. Approximately 75% of older adults had mild to severe anxiety; 76.5% had depressive symptoms; and 67.8% of participants who had depressive symptoms also had comorbid anxiety. Findings indicated that there was a significant moderating effect for religious involvement on the quality of life outcome. Religious involvement significantly moderated anxiety and depressive symptoms on quality of life. Moreover, religious participants had a better quality of life and had lower anxiety and depressive symptoms than non-religious participants.
- Inozu, Mujgan, David A Clark & A Nuray Karanci. 2012. Scrupulosity in Islam: a comparison of highly religious Turkish and Canadian samples. *Behavior Therapy* 43(1). 190–202. doi:10.1016/j.beth.2011.06.002.
 - In the present study religious school students as well as high- and low-religious university students in Turkey and Canada were compared. Between-group comparisons revealed that the highly religious Turkish sample scored significantly higher than the highly religious Canadian students on the PIOS Fear of God but not the Fear of Sin subscale. Separate multiple regression analyses revealed that the Clark-Beck Obsessive Compulsive Inventory

- (CBOCI) Obsessions subscale, OBQ-44 Importance and Control of Thoughts subscale, and guilt were significant unique predictors of scrupulosity. These findings suggest that subtle differences exist in how scrupulosity is manifested in Islamic and Christian believers.
- Kasen, S, P Wickramaratne, M J Gameroff & M M Weissman. 2012. Religiosity and resilience in persons at high risk for major depression. *Psychological Medicine* 42(3). 509–519. doi:10.1017/S0033291711001516.

High-risk offspring selected for having a depressed parent and control offspring of non-depressed parents were evaluated for psychiatric disorders in childhood/adolescence and at 10-year and 20-year follow-ups. Religious/spiritual importance, services attendance and negative life events (NLEs) were assessed at the 10-year follow-up. Increased attendance was associated with significantly reduced odds for mood disorder (by 43%) and any psychiatric disorder (by 53%) in all offspring; however, odds were significantly lower in offspring of non-depressed parents than in offspring of depressed parents. In analyses confined to offspring of depressed parents, those with high and those with average/low NLE exposure were compared: increased attendance was associated with significantly reduced odds for MDD, mood disorder and any psychiatric disorder (by 76, 69 and 64% respectively) and increased importance was associated with significantly reduced odds for mood disorder (by 74%) only in offspring of depressed parents with high NLE exposure. Moreover, those associations differed significantly between offspring of depressed parents with high NLE exposure and offspring of depressed parents with average/low NLE exposure.

Kelley, Melissa M. & Keith T. Chan. 2012. Assessing the Role of Attachment to God, Meaning, and Religious Coping as Mediators in the Grief Experience. *Death Studies* 36(3). 199–227. doi:10.1080/07481187.2011.553317.

This study examines the roles of attachment to God, meaning, and religious coping as mediators in the grief experience for a sample of 93 individuals who experienced a significant death in the prior year. Results suggest that a more secure style of attachment to God was directly and indirectly associated with lower depression and grief and increased stress-related growth for this sample. Meaning, defined as a sense of purpose and coherence, also emerged as an important construct in this process. Overall goodness-of-fit statistics were examined for competing models using structural equation modeling. Secure attachment to God, meaning, and positive religious coping were found to have significant direct and indirect effects on grief and stress-related growth. For some individuals, attachment to God may be an important construct in the experience of meaning following a significant death and may have tremendous potential in its direct and indirect effects on overall outcomes.

Kinser, Patricia Anne, Lisa Elane Goehler & Ann Gill Taylor. 2012. How Might Yoga Help Depression? A Neurobiological Perspective. *EXPLORE: The Journal of Science and Healing* 8(2). 118–126

doi:10.1016/j.explore.2011.12.005.

Utilizing the Executive Homeostatic Network concept they have recently advanced, the authors provide an integrative overview of biological mechanisms and substrates that may mediate depression, which should be targets for research to evaluate how the practice of yoga can mitigate depressive symptomatology. Most individuals with major depressive disorder report only a 50% decrease in symptoms with the use of the standard allopathic treatments for depression. Stress and depression are clearly linked, as stress may precipitate or exacerbate depressive symptoms and depression may be a cause and/or outcome of acute or chronic stress. Therefore, use of additional therapeutic approaches to address stress and depression, such as complementary therapies including yoga, may contribute importantly to symptom reduction.

Krause, Neal. 2012. Parental Religious Socialization Practices, Connectedness With Others, and Depressive Symptoms in Late Life. *The International Journal for the Psychology of Religion* 22(2). 135–154

doi:10.1080/10508619.2011.638589.

This purpose of this study is to examine two constructs that have been largely overlooked in the study of religious involvement among older people: parental religious socialization practices and feelings of connectedness with others. The data are from an ongoing nationwide survey of older people. Findings from a latent variable model that was designed to examine the two focal constructs provides support for the following relationships: (1) older people whose parents encouraged them to become more involved in religion are more likely to attend worship services; (2) older people whose parents promoted religious involvement and older individuals who attend church more often are more likely to report that they see a fundamental connection among all human beings; (3) older adults who feel more closely connected to others will be more likely to forgive people for the things they have done; and (4) older people who are more forgiving are likely to experience fewer symptoms of depression over time.

Krause, Neal. 2012. Valuing the life experience of old adults and change in depressive symptoms: exploring an overlooked benefit of involvement in religion. *Journal of Aging and Health* 24(2). 227–249.

doi:10.1177/0898264311412598.

Using data from an ongoing nationwide survey (n=501), the author found that: (a) Older people who go to church more often are more likely to feel fellow church members value their life experience; (b) having others value their life experience helps older people feel they belong in their congregation; (c) older individuals who feel they belong in their congregation are likely to have greater feelings of self-worth; and (d) greater self-worth is associated with a fewer symptoms of depression over time.

Lu, Chueh-Fen, Lorraine Nancy Smith & Chen-Huei Gau. 2012. Exploring the Zen meditation experiences of patients with generalized anxiety disorder: a focus-group approach. *The Journal of Nursing Research: JNR* 20(1). 43–51. doi:10.1097/JNR.0b013e3182466e83.

Two groups of adult patients with generalized anxiety disorders (n=9) and without any kind of meditation experience (n=12) enrolled in and attended a Zen meditation program. A major theme, "The process of Zen meditation," emerged. It was underpinned by the three categories: "struggling to reach a state of calm," "signs of improvement," and "an individual process." Signs of improvement included "finding a personal way to enter a state of calm," "changing the sense of time," and "adjusting Zen meditation practice goals."

Maselko, Joanna, R. David Hayward, Alexandra Hanlon, Stephen Buka & Keith Meador. 2012. Religious Service Attendance and Major Depression: A Case of Reverse Causality? *American Journal of Epidemiology* 175(6). 576–583. doi:10.1093/aje/kwr349.

The authors examined whether early onset of a major depressive episode (MDE) predicted a subsequent decrease in religious service attendance. Data came from 3 follow-up studies of the National Collaborative Perinatal Project birth cohort (mean age 37 years at last follow-up; n=2,097). Twenty-seven percent of study participants met the criteria for lifetime MDE (n=567), of whom 31% had their first onset prior to age 18 years. Women with early MDE onset were 1.42 times more likely than women with adult-onset MDE or no lifetime MDE to stop attending religious services by the time of the first adult follow-up wave. No significant associations were observed among men.

Park, Jong-Ik, Jin Pyo Hong, Subin Park & Maeng-Je Cho. 2012. The Relationship between Religion and Mental Disorders in a Korean Population. *Psychiatry Investigation* 9(1). 29–35.

doi:10.4306/pi.2012.9.1.29.

Interviews were conducted with 6,275 people across South Korea in 2001 and the relationship between mental disorders (both current and past) and the types of religion and spiritual values was analyzed. Strong spiritual values were positively associated with increased rates of current depressive disorder and decreased rates of current alcohol use disorder. Using "atheist" as the reference category, Catholics had higher lifetime odds of single episodes of depression whilst Protestants had higher lifetime odds of anxiety disorder and lower lifetime odds of alcohol use disorders. The results of this study suggest that depressive episodes often lead to a search for spirituality and that religion may be helpful in overcoming depression or becoming less vulnerable to relapsing.

Sansone, Randy A, Amy R Kelley & Jeremy S Forbis. 2012. Religion/spirituality status and borderline personality symptomatology among outpatients in an internal medicine clinic. *International Journal of Psychiatry in Clinical Practice* 16(1). 48–52. doi:10.3109/13651501.2011.605956.

Using a cross-sectional consecutive sample of internal medicine outpatients and a self-report survey methodology, we examined religion/spirituality and borderline personality symptomatology. Measures demonstrated an inverse relationship with scores on the individual measures for borderline personality symptomatology as well as a combined measure of such symptoms (individuals who scored positively on both measures). In other words, lower RS was identified in participants with higher levels of borderline personality symptomatology.

Sun, Fei, Nan S. Park, Lucinda L. Roff, David L. Klemmack, Michael Parker, Harold G. Koenig, Patricia Sawyer & Richard M. Allman. 2012. Predicting the trajectories of depressive symptoms among southern community-dwelling older adults: The role of religiosity. *Aging & Mental Health* 16(2). 189–198.

doi:10.1080/13607863.2011.602959.

This study examined the effects of religiosity on the trajectories of depressive symptoms in a sample of 1,000 community-dwelling older adults over a four-year period. Analysis indicated a curvilinear trajectory of depressive symptoms over time. At baseline, participants who attended religious services more frequently tended to report fewer depressive symptoms. Participants with the highest levels of intrinsic religiosity at baseline experienced a steady decline in the number of depressive symptoms over the four-year period, while those with lower levels of intrinsic religiosity experienced a short-term decline followed by an increase in the number of depressive symptoms.

Trevino, Kelly M, Elizabeth Archambault, Jennifer Schuster, Peter Richardson & Jennifer Moye. 2012. Religious coping and psychological distress in military veteran cancer survivors. *Journal of Religion and Health* 51(1). 87–98. doi:10.1007/s10943-011-9526-0.

Forty-eight veteran cancer survivors completed measures of psychological distress, posttraumatic growth, and positive and negative religious coping. Negative religious coping was associated with greater distress and growth. Positive religious coping was associated with greater growth. Gender, race, and religious affiliation were significant predictors of positive and negative religious coping. Veteran cancer survivors who utilize negative religious coping may benefit from referral to clergy or a mental health professional.

Weber, Samuel R., Kenneth I. Pargament, Mark E. Kunik, James W. Lomax, II & Melinda A. Stanley. 2012. Psychological distress among religious nonbelievers: a systematic review. *Journal of Religion and Health* 51(1). 72–86. doi:10.1007/s10943-011-9541-1.

The authors review 14 articles that examine differences between nonbelievers and believers in levels of psychological distress, and potential sources of distress among nonbelievers. Various forms of psychological distress are experienced by nonbelievers, and greater certainty in one's belief system is associated with greater psychological

health. One well-documented source of distress for nonhelievers was found: negative perceptions by others. Recommendations are provided for improving research on nonhelievers and a model analogous to Pargament's tripartite spiritual struggle to understand the stresses of nonhelief is described.

2.3 SPIRITUALITY & HEALTH: METHOD AND THEORY

Barss, Karen Scott. 2012. T.R.U.S.T.: an affirming model for inclusive spiritual care. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association* 30(1). 24–34; quiz 35–37. doi:10.1177/0898010111418118.

The author draws upon interdisciplinary literature to develop the T.R.U.S.T. Model for Inclusive Spiritual Care. emphasizing 'Traditions', 'Reconciliation', 'Understandings', 'Searching', and 'Teachers.' This article introduces the model and its foundational concept of 'inclusive spiritual care': relevant, non-intrusive care which tends to the spiritual dimension of health by addressing universal spiritual needs, honoring unique spiritual worldviews, and helping individuals to explore and mobilize factors that can help them gain/re-gain a sense of trust in order to promote optimum healing. Guidelines are included for using T.R.U.S.T. to enhance holistic health care, with an emphasis on its use in holistic nursing practice.

Buckey, Julia W. 2012. Empirically based spirituality education: Implications for social work research and practice. *Journal of Social Service Research* 38(2). 260–271. doi:10.1080/01488376.2011.647979.

This article provides a review of the empirical literature supporting development of a graduate social work course in spirituality. A total of 493 articles were reviewed, with 8 studies providing recommendations on course content, assignments, best practices or core competencies, and regulatory standards for social work practice. Results of the analysis indicated that undergraduate and graduate social work students and social work practitioners often reported little to no training in this specialty area, although students requested this content be provided.

Cadge, Wendy. 2012. Possibilities And Limits Of Medical Science: Debates Over Double-Blind Clinical Trials Of Intercessory Prayer. *Zygon: Journal of Religion & Science* 47(1). 43–64. doi:10.1111/j.1467-9744.2011.01239.x.

This article traces the intellectual history of scientific studies of intercessory prayer published in English between 1965 and the present by focusing on the conflict and discussion they prompted in the medical literature. These debates are analyzed with attention to how researchers articulate the possibilities and limits medical science has for studying intercessory prayer over time, and three groups of researchers and commentators are delineated: those who think intercessory prayer can and should be studied scientifically; those who are more skeptical and articulate the limits of science around this topic; and those who focus primarily on the pragmatic applications of this knowledge.

Callahan, Ann M. 2012. A qualitative exploration of spiritually sensitive hospice care. *Journal of Social Service Research* 38(2). 144–155. doi:10.1080/01488376.2011.619425.

A qualitative study was conducted to define the relationship factors associated with spiritual care in an effort to further delineate the concept of "spiritually sensitive hospice care." A purposive, snowball sample of six hospice workers was interviewed about how they identified spiritual needs, provided spiritual care, and determined their effectiveness. The results suggested a variety of factors influenced the delivery of spiritually sensitive hospice care. One relationship factor was the degree of interpersonal intimacy cultivated through the helping relationship.

Cotton, Sian, Jerren C Weekes, Meghan E McGrady, Susan L Rosenthal, Michael S Yi, Kenneth Pargament, Paul Succop, Yvonne Humenay Roberts & Joel Tsevat. 2012. Spirituality and religiosity in urban adolescents with asthma. *Journal of Religion and Health* 51(1). 118–131.

doi:10.1007/s10943-010-9408-x.

Predictors of multiple dimensions of spirituality/religiosity (S/R) and adolescents' preferences for having S/R (e.g., prayer) addressed in hypothetical medical settings were assessed in a sample of urban adolescents with asthma. Of the 151 adolescents (mean age 15.8; 60% female; 85% African-American), 81% said that they were religious and spiritual, 58% attended religious services in the past month, and 49% prayed daily. African-American race/ethnicity and having a religious preference were associated with higher levels of S/R. Adolescents' preferences for including S/R in the medical setting increased with the severity of the clinical situation.

Dayringer, Richard. 2012. The image of God in pastoral counseling. *Journal of Religion and Health* 51(1). 49–56. doi:10.1007/s10943-011-9536-y.

This paper is a study of the God image as the concept has developed in the study of psychology and the psychology of religion. Pastoral counselors obviously have had a long-standing interest in these phenomena. A renewed interest in the subject is indicated by the fact that two books have been published recently on the subject.

Dobbs, Debra, Catherine Parsons Emmett, Ashley Hammarth & Timothy P. Daaleman. 2012. Religiosity and death attitudes and engagement of advance care planning among chronically ill older adults. *Research on Aging* 34(2). 113–130. doi:10.1177/0164027511423259.

The aim of this study was to examine the association of religiosity and death attitudes with self-reported advance care planning (ACP) in chronically ill older adults. Survey data were collected for a sample of 157 chronically ill older adults. Logistic regression was used to examine associations of religiosity and death attitudes in the likelihood of engagement in three ACP outcomes: (a) ACP discussions with the doctor, (b) ACP discussions with family, and (c) the completion of a living will. Greater reported religiosity was significantly associated with reported ACP discussions with the doctor. Less fear of death was significantly associated with self-reported completion of a living will. Religiosity and fears of death should be considered in future ACP studies.

Dobkin, Patricia L., Julie A. Irving & Simon Amar. 2012. For whom may participation in a mindfulness-based stress reduction program be contraindicated? *Mindfulness* 3(1). 44–50. doi:10.1007/s12671-011-0079-9.

Researchers reviewed literature pertaining to attrition and adverse effects following participation in MBSR; relatively little was learned in this search. A few clinical trials from Mindfulness-Based Cognitive Therapy provide ideas concerning who may not benefit from this program and who is likely to drop out. There are some case studies of individuals who manifested various mental health issues following experiences with various forms of meditation, but often specifics are missing such that it is not known what type of meditation was practiced or if the individuals in question had previous psychiatric disorders or preexisting conditions that could predispose them to negative outcomes. The authors were not able to provide an empirically based answer to the research question, but seek to open the discussion and offer recommendations, especially with regard to preprogram screening, to guide instructors when they form a new group for an MBSR course.

Frisvold, Melissa H, Ruth Lindquist & Cynthia Peden McAlpine. 2012. Living life in the balance at midlife: lessons learned from mindfulness. *Western Journal of Nursing Research* 34(2). 265–278. doi:10.1177/0193945911424171.

The purpose of this qualitative study was to describe the perceived effects of a Mindfulness-Based Stress Reduction (MBSR) Program on stress and quality of life of women in midlife. A total of 20 nurses, aged 45 to 55 years, who participated in a stress reduction course were contacted for interviews. A total of 9 nurses agreed to be interviewed. The five themes that emerged from the analysis were as follows: strengthening of interpersonal communication through social support, increased personal awareness through becoming more mindful and reflective,

a spiritual awakening, effective ways of dealing with stress, and living life in balance by taking hold of one's life. This study increased the authors' understanding of effects/benefits, adherence, and application of MBSR techniques for women in midlife. It is concluded that MBSR may be a useful intervention for nurses in midlife to develop successful strategies for dealing with stress and to improve their quality of life.

Glick, Laurie H. 2012. Nurturing nursing students' sensitivity to spiritual care in a Jewish Israeli nursing program. *Holistic Nursing Practice* 26(2). 74–78. doi:10.1097/HNP.0b013e31824621e6.

Spirituality is a prominent characteristic of holistic nursing care. This unique course emphasizes issues such as suffering, grieving, and pain from the perspectives of Jewish thought as well as professional nursing. This course provides students with spiritual tools to use during their training and later as nursing professionals.

Güthlin, Corina, Andreas Anton, Jan Kruse & Harald Walach. 2012. Subjective concepts of chronically ill patients using distant healing. *Qualitative Health Research* 22(3). 320–331. doi:10.1177/1049732311421914.

Researchers studied subjective concepts of distant healing in 17 patients suffering from chronic fatigue syndrome and multiple chemical sensitivity who were given distant healing during a randomized controlled trial. The overall theme that emerged was the tension between mainstream medicine and the immaterial healing procedure. Several components highlighted this tension: (a) patterns of legitimizing the use of distant healing, (b) distant healing and the social setting, (c) integrating distant healing into their belief system, and (d) reconstruction of effects by means of hindsight. The interviews showed that patients felt the need to legitimize having tried distant healing. They had to bear the full ambiguity of biomedicine being in competition with distant healing, though also experiencing distant healing as giving support.

Hankerson, Sidney H & Myrna M Weissman. 2012. Church-based health programs for mental disorders among African Americans: a review. *Psychiatric Services* 63(3). 243–249. doi:10.1176/appi.ps.201100216.

A literature review was conducted to identify articles involving church-based health promotion programs for mental disorders among African Americans to assess the feasibility of utilizing such programs to address racial disparities in mental health care. Of 1,451 studies identified, only eight met inclusion criteria. Five studies focused on substance-related disorders, six were designed to assess the effects of a specific intervention, and six targeted adults. One study focused on depression and was limited by a small sample size of seven participants.

Hodge, David R. & Robert J. Wolosin. 2012. Addressing older adults' spiritual needs in health care settings: An analysis of inpatient hospital satisfaction data. *Journal of Social Service Research* 38(2). 187–198.

doi:10.1080/01488376.2011.640242.

This study employed a secondary data analysis to determine the relationship between addressing spiritual needs and overall perceptions of satisfaction with care. The sample consisted of 4,112 adults aged 65 years and older who were consecutively discharged during a 12-month period (July 2007 through June 2008) from hospitals in three geographically diverse regions of the United States: California, Texas, and New England. As hypothesized, higher levels of satisfaction with the degree to which clients' spiritual needs were addressed predicted higher levels of overall client satisfaction.

Levin, Jeff & Jay F Hein. 2012. A faith-based prescription for the Surgeon General: challenges and recommendations. *Journal of Religion and Health* 51(1). 57–71. doi:10.1007/s10943-012-9570-4.

This article summarizes how the Office of the Surgeon General can leverage faith-based resources to fulfill its mission and that of the Surgeon General of the United States. Such resources, personal and institutional, have been utilized historically in health promotion and disease prevention efforts and are a valuable ally for public health, an alliance that continues under the Ohama Administration. This paper outlines the history and mission of the Office; details the recent history of federal faith-based initiatives; and advocates an expanded alliance between the faith-based and public health sectors sensitive to legal and professional boundaries.

Linhares, Carmen Heidi. 2012. The lived experiences of midwives with spirituality in childbirth: mana from heaven. *Journal of Midwifery & Women's Health* 57(2). 165–171. doi:10.1111/j.1542-2011.2011.00133.x.

Interviews with 10 certified nurse-midwives identified 5 theme categories that revealed the essential structure of the midwives' lived experiences of spirituality during childbirth: belief in the existence of a higher power, the essence of spirituality, birth is spiritual, the essence of midwifery, and relationships. The midwives in the study experienced spirituality as an integral and essential component of childbirth. The midwives reported using elements of spirituality as instruments that helped them assist their clients through the process of pregnancy and birth. The midwives also revealed their dependence on spirituality and belief in a higher being who guided their lives and their calling to midwifery.

Lucchetti, Giancarlo, Paulo Rogério D C Aguiar, Camilla Casaletti Braghetta, Candido P Vallada, Alexander Moreira-Almeida & Homero Vallada. 2012. Spiritist psychiatric hospitals in Brazil: integration of conventional psychiatric treatment and spiritual complementary therapy. *Culture, Medicine and Psychiatry* 36(1). 124–135. doi:10.1007/s11013-011-9239-6.

In Brazil, during the twentieth century, dozens of Spiritist psychiatric hospitals emerged seeking to integrate conventional medical treatment with complementary spiritual therapy. The present report describes the use of these spiritual practices, their operating structure, health professionals involved, modalities of care, and institutional difficulties in integrating spiritual practices with conventional treatment in six leading Brazilian Spiritist psychiatric hospitals.

Lucchetti, Giancarlo, Alessandra Lamas Granero Lucchetti & Christina M Puchalski. 2012. Spirituality in medical education: global reality? *Journal of Religion and Health* 51(1). 3–19. doi:10.1007/s10943-011-9557-6.

Researchers evaluated 38 studies dealing with the incorporation of spirituality in medical education. Of the articles, 31 were provided by US medical schools, 3 by Canadian medical schools and 4 from other countries. The studies in this review indicate a predominance of studies related to health/medicine and spirituality in US and Canadian medical schools.

Márquez-González, María, Javier López, Rosa Romero-Moreno & Andrés Losada. 2012. Anger, spiritual meaning and support from the religious community in dementia caregiving. *Journal of Religion and Health* 51(1). 179–186. doi:10.1007/s10943-010-9362-7.

This study explores the relationships between spiritual meaning and social support from the religious community and problem behaviors, anger and depression in 128 dementia caregivers. The results suggest a mediating role of anger in the relationship between the appraisal of problem behaviors and depression. Support from the religious community is directly and negatively associated with anger, but the relationship between spiritual meaning and anger is mediated by caregivers' appraisals of problem behaviors, suggesting that spiritual beliefs might help caregivers to find meaning in caregiving experiences and thus appraise care recipients' behavioral problems as less stressful.

Mrdjenovich, Adam J, Joseph A Dake, James H Price, Timothy R Jordan & Jeanne H Brockmyer. 2012. Providing guidance on the health effects of religious/spiritual involvement: a national assessment of university counseling professionals. *Journal of Religion and Health* 51(1). 198–214. doi:10.1007/s10943-010-9345-8.

This study assessed the perceptions and practices of a national sample of university counseling professionals (n=306) regarding their provision of guidance on the health effects of religious/spiritual involvement. Relatively few (21%) discussed the physical health effects of religiosity/spirituality with their clients. The majority (52%) were unsure that such discussions would result in lower health risks; however, nearly half (48%) indicated that these would promote recovery. Almost two-thirds (64%) indicated that discussions of religious/spiritual involvement and health "should occur only with clients who indicate that religion/spirituality is important to them." A plurality (36%) of the respondents had received no formal training on this topic.

Taunay, Tauily C, Eva D Cristino, Myrela O Machado, Francisco H Rola, José W O Lima, Danielle S Macêdo, Francisco de Assis A Gondim, Alexander Moreira-Almeida & André F Carvalho. 2012. Development and validation of the Intrinsic Religiousness Inventory (IRI). Revista Brasileira De Psiquiatria (São Paulo, Brazil: 1999) 34(1). 76–81.

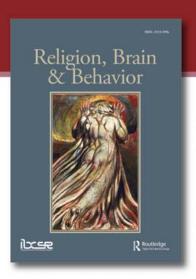
The present study aimed to develop and validate a brief instrument to assess intrinsic religiosity, the Intrinsic Religiousness Inventory (IRI), in two Brazilian samples. After testing with university students (sample 1; n=323) and psychiatric patients (sample 2; n=102), researchers found that the IRI showed adequate internal consistence reliability in both samples. The IRI main component analyses indicated a single factor, which explained 73.7% and 74.9% of variance in samples 1 and 2, respectively. The IRI showed good test-retest reliability as well.

Vallurupalli, Mounica, Katharine Lauderdale, Michael J Balboni, Andrea C Phelps, Susan D Block, Andrea K Ng, Lisa A Kachnic, Tyler J Vanderweele & Tracy A Balboni. 2012. The role of spirituality and religious coping in the quality of life of patients with advanced cancer receiving palliative radiation therapy. *The Journal of Supportive Oncology* 10(2). 81–87. doi:10.1016/j.suponc.2011.09.003.

A multisite, cross-sectional survey of 69 patients with advanced cancer receiving palliative radiation therapy (RT) revealed that most participants (84%) indicated reliance on religious/spiritual beliefs to cope with cancer. Patient spirituality and religious coping were associated with improved QOL in multivariable analyses. Most patients considered attention to spiritual concerns an important part of cancer care by physicians (87%) and nurses (85%).

Zeilani, Ruqayya & Jane E Seymour. 2012. Muslim women's narratives about bodily change and care during critical illness: a qualitative study. *Journal of Nursing Scholarship* 44(1). 99–107. doi:10.1111/j.1547-5069.2011.01427.x.

A purposive sample of 16 Muslim Jordanian women who had spent a minimum of 48 hr in intensive care participated in one to three interviews over a 6-month period, in order for researchers to explore their experiences in relation to bodily change during critical illness. The study illustrates the complex interrelationship between religious beliefs, cultural norms, and the experiences and meanings of bodily changes during critical illness. Three main categories emerged from the analysis: the dependent body; the social body; the cultural body.



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PART 3. BOOKS

3.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Barrett, Justin L. 2012. Born Believers: The Science of Children's Religious Belief. Free Press.
- Bowman, Marion, & Ulo Valk (eds.). 2012. Vernacular Religion in Everyday Life: Expressions of Belief. Equinox Publishing.
- Gelfgren, Stefan, Charles Ess, Pauline Hope Cheong, & Peter Fischer-Nielsen (eds.). 2012. *Digital Religion, Social Media and Culture: Perspectives, Practices and Futures.* (Digital Formations). Peter Lang Publishing.
- Gregor, A. 2012. Totalitarianism and Political Religion: An Intellectual History. Stanford University Press.
- Haidt, Jonathan. 2012. The Righteous Mind: Why Good People Are Divided by Politics and Religion. Pantheon.
- Hill, Peter C., & Bryan J. Dik (eds.). 2012. Psychology of Religion and Workplace Spirituality. Information Age Publishing.
- Lawson, Kevin E. (ed.). 2012. Understanding Children's Spirituality: Theology, Research, and Practice. Cascade Books.
- Luhrmann, T.M. 2012. When God Talks Back: Understanding the American Evangelical Relationship with God. Knopf.
- Luoma-aho, Mika. 2012. God and International Relations: Christian Theology and World Politics. Continuum.
- MacKian, Sara. 2012. Everyday Spirituality: Social and Spatial Worlds of Enchantment. Palgrave Macmillan.
- Mecklenburger, Ralph D. 2012. Our Religious Brains. Jewish Lights Publishing.

3.2 Spirituality & Health Research

- Cayton, Karuna. 2012. The Misleading Mind: How We Create Our Own Problems and How Buddhist Psychology Can Help Us Solve Them. New World Library.
- Gehart, Diane R. 2012. Mindfulness and Acceptance in Couple and Family Therapy. Springer.
- Germer, Christopher K., & Ronald D. Siegel (eds.). 2012. Wisdom and Compassion in Psychotherapy: Deepening Mindfulness in Clinical Practice. The Guilford Press.
- Grainger, Roger. 2012. "Bridging the Gap": The Christian Sacraments and Human Belonging. Sussex Academic Press.
- Kavar, Louis F. 2012. The Integrated Self: A Holistic Approach to Spirituality and Mental Health Practice. John Hunt Publishing.
- Murray, Craig (ed.). 2012. Mental Health and Anomalous Experience. Nova Science Pub Inc.
- Stark, Cleveland A., & Dylan C. Bonner (eds.). 2012. Handbook on Spirituality: Belief Systems, Societal Impact and Roles in Coping. Nova Science Pub Inc.
- Taylor, Elizabeth Johnston. 2012. Religion: A clinical guide for nurses. New York: Springer Pub.
- Timmins, Sue. 2012. My Health My Faith My Culture. M&K Update Ltd.

PART 4. ARTICLES IN PRESS

4.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Cantz, Paul. 2012. A psychodynamic inquiry into the spiritually evocative potential of music. International Forum of Psychoanalysis. 1–13. doi:10.1080/0803706X.2012.657673.
- Cunningham, George B & E Nicole Melton. 2012. The Moderating Effects of Contact with Lesbian and Gay Friends on the Relationships among Religious Fundamentalism, Sexism, and Sexual Prejudice. *Journal of Sex Research*. doi:10.1080/00224499.2011.648029.
- Dickenson, Janna, Elliot T Berkman, Joanna Arch & Matthew D Lieberman. 2012. Neural correlates of focused attention during a brief mindfulness induction. *Social Cognitive and Affective Neuroscience*. doi:10.1093/scan/nss030.
- Exline, Julie J., Kalman J. Kaplan & Joshua B. Grubbs. 2012. Anger, Exit, and Assertion: Do People See Protest Toward God as Morally Acceptable? *Psychology of Religion and Spirituality*. doi:10.1037/a0027667.
- Jong, Jonathan, Jamin Halberstadt & Matthias Bluemke. 2012. Foxhole atheism, revisited: The effects of mortality salience on explicit and implicit religious belief. *Journal of Experimental Social Psychology*. doi:10.1016/j.jesp.2012.03.005.
- Kaufmann, Eric, Anne Goujon & Vegard Skirbekk. 2011. The End of Secularization in Europe?: A Socio-Demographic Perspective. *Sociology of Religion*. doi:10.1093/socrel/srr033.
- Koscik, Timothy R & Daniel Tranel. 2012. Brain Evolution and Human Neuropsychology: The Inferential Brain Hypothesis. *Journal of the International Neuropsychological Society: JINS*. 1–8. doi:10.1017/S1355617712000264.
- Krause, Neal & R David Hayward. 2012. Humility, Lifetime Trauma, and Change in Religious Doubt Among Older Adults. *Journal of Religion and Health*. doi:10.1007/s10943-012-9576-y.
- Lo, Pei-Chen, Buwono Lembono & Wei-Ting Hsu. 2012. The study on Chan-meditation electrocardiogram by pattern analysis of continuous wavelet transform-coefficient map. *Chinese Journal of Integrative Medicine*. doi:10.1007/s11655-011-0941-6.
- Purzycki, Benjamin G, Daniel N Finkel, John Shaver, Nathan Wales, Adam B Cohen & Richard Sosis. 2012. What Does God Know? Supernatural Agents' Access to Socially Strategic and Non-Strategic Information. *Cognitive Science*. doi:10.1111/j.1551-6709.2012.01242.x.
- Taylor, Véronique A, Véronique Daneault, Joshua Grant, Geneviève Scavone, Estelle Breton, Sébastien Roffe-Vidal, Jérôme Courtemanche, et al. 2012. Impact of meditation training on the default mode network during a restful state. *Social Cognitive and Affective Neuroscience*. doi:10.1093/scan/nsr087.

Woo, Jane S T, Negar Morshedian, Lori A Brotto & Boris B Gorzalka. 2012. Sex Guilt Mediates the Relationship Between Religiosity and Sexual Desire in East Asian and Euro-Canadian College-Aged Women. *Archives of Sexual Behavior*. doi:10.1007/s10508-012-9918-6.

4.2 Spirituality & Health Research

- Abdel-Khalek, Ahmed M. 2012. The relationships between subjective well-being, health, and religiosity among young adults from Qatar. *Mental Health, Religion & Culture*. 1–13. doi:10.1080/13674676.2012.660624.
- Ai, Amy L, Daniel Hall, Kenneth Pargament & Terrence N Tice. 2012. Posttraumatic growth in patients who survived cardiac surgery: the predictive and mediating roles of faith-based factors. *Journal of Behavioral Medicine*. doi:10.1007/s10865-012-9412-6.
- Al-Yousefi, Nada A. 2012. Observations of Muslim Physicians Regarding the Influence of Religion on Health and Their Clinical Approach. *Journal of Religion and Health*. doi:10.1007/s10943-012-9567-z.
- Besiroglu, Lutfullah, Sitki Karaca & Ibrahim Keskin. 2012. Scrupulosity and Obsessive Compulsive Disorder: The Cognitive Perspective in Islamic Sources. *Journal of Religion and Health*. doi:10.1007/s10943-012-9588-7.
- Billioux, Veena G, Susan G Sherman & Carl Latkin. 2012. Religiosity and HIV-Related Drug Risk Behavior: A Multidimensional Assessment of Individuals from Communities with High Rates of Drug Use. *Journal of Religion and Health*. doi:10.1007/s10943-012-9587-8.
- Bluthenthal, Ricky N, Kartika Palar, Peter Mendel, David E Kanouse, Dennis E Corbin & Kathryn Pitkin Derose. 2012. Attitudes and beliefs related to HIV/AIDS in urban religious congregations: Barriers and opportunities for HIV-related interventions. *Social Science & Medicine* 74(10). 1520–1527. doi:10.1016/j.socscimed.2012.01.020.
- Bormann, Jill E., Steven R. Thorp, Julie L. Wetherell, Shahrokh Golshan & Ariel J. Lang. 2012. Meditation-Based Mantram Intervention for Veterans With Posttraumatic Stress Disorder: A Randomized Trial. *Psychological Trauma: Theory, Research, Practice, and Policy*. doi:10.1037/a0027522.
- Brierley, Joe, Jim Linthicum & Andy Petros. 2012. Should religious beliefs be allowed to stonewall a secular approach to withdrawing and withholding treatment in children? *Journal of Medical Ethics*. doi:10.1136/medethics-2011-100104.
- Burdette, Amy M, Janet Weeks, Terrence D Hill & Isaac W Eberstein. 2012. Maternal religious attendance and low birth weight. *Social Science & Medicine (1982)*. doi:10.1016/j.socscimed.2012.02.021.
- Cavers, Debbie, Belinda Hacking, Sara E Erridge, Marilyn Kendall, Paul G Morris & Scott A Murray. 2012. Social, psychological and existential well-being in patients with glioma and their caregivers: a qualitative study. *CMAJ: Canadian Medical Association Journal=Journal De l'Association Medicale Canadienne* 184(7). E373–382. doi:10.1503/cmaj.111622.

- Colzato, Lorenza S, Hilmar Zech, Bernhard Hommel, Rinus Verdonschot, Wery P M van den Wildenberg & Shulan Hsieh. 2012. Loving-kindness brings loving-kindness: The impact of Buddhism on cognitive self-other integration. *Psychonomic Bulletin & Review*. doi:10.3758/s13423-012-0241-y.
- Cook, Stephen W., Jamie D. Aten, Michael Moore, Joshua N. Hook & Don E. Davis. 2012. Resource loss, religiousness, health, and posttraumatic growth following Hurricane Katrina. *Mental Health, Religion & Culture*. 1–15. doi:10.1080/13674676.2012.667395.
- Currier, Joseph M., Jesse Mallot, Tiffany E. Martinez, Charlotte Sandy & Robert A. Neimeyer. 2012. Bereavement, Religion, and Posttraumatic Growth: A Matched Control Group Investigation. *Psychology of Religion and Spirituality*. doi:10.1037/a0027708.
- Dennis, Kristopher & Graeme Duncan. 2012. Spiritual care in a multicultural oncology environment. *Current Opinion in Supportive and Palliative Care*. doi:10.1097/SPC.0b013e328352ee4a.
- Dyer, Jennifer E. 2012. Loving Thyself: A Kohutian Interpretation of a "Limited" Mature Narcissism in Evangelical Megachurches. *Journal of Religion and Health*. doi:10.1007/s10943-012-9579-8.
- Edwards, Christopher L, Tracey Vann-Hawkins & Camela McDougald. 2012. It's All Formal: Understanding the Nuances of Mindfulness-Based Practice. *Applied Psychophysiology and Biofeedback*. doi:10.1007/s10484-012-9190-5.
- El Nawawi, Nora M, Michael J Balboni & Tracy A Balboni. 2012. Palliative care and spiritual care: the crucial role of spiritual care in the care of patients with advanced illness. *Current Opinion in Supportive and Palliative Care*. doi:10.1097/SPC.0b013e3283530d13.
- Ford, Jason A & Terrence D Hill. 2012. Religiosity and Adolescent Substance Use: Evidence From the National Survey on Drug Use and Health. *Substance Use & Misuse*. doi:10.3109/10826084.2012.667489.
- Gillespie, Steven M., Ian J. Mitchell, Dawn Fisher & Anthony R. Beech. 2012. Treating disturbed emotional regulation in sexual offenders: The potential applications of mindful self-regulation and controlled breathing techniques. *Aggression and Violent Behavior*. doi:10.1016/j.avb.2012.03.005.
- Goldstein, Carly M, Richard Josephson, Susan Xie & Joel W Hughes. 2012. Current perspectives on the use of meditation to reduce blood pressure. *International Journal of Hypertension* 2012. 578397. doi:10.1155/2012/578397.
- Houck-Loomis, Tiffany. 2012. Good God?!? Lamentations as a Model for Mourning the Loss of the Good God. *Journal of Religion and Health*. doi:10.1007/s10943-012-9581-1.
- Hybels, Celia F, Dan G Blazer, Linda K George & Harold G Koenig. 2012. The Complex Association Between Religious Activities and Functional Limitations in Older Adults. *The Gerontologist*. doi:10.1093/geront/gnr156.

- Inozu, Mujgan, A Nuray Karanci & David A Clark. 2012. Why are religious individuals more obsessional? The role of mental control beliefs and guilt in Muslims and Christians. *Journal of Behavior Therapy and Experimental Psychiatry* 43(3). 959–966. doi:10.1016/j.jbtep.2012.02.004.
- Khamis, Vivian. 2012. Impact of war, religiosity and ideology on PTSD and psychiatric disorders in adolescents from Gaza Strip and South Lebanon. *Social Science & Medicine (1982)*. doi:10.1016/j.socscimed.2012.02.025.
- Lavretsky, H, E S Epel, P Siddarth, N Nazarian, N St Cyr, D S Khalsa, J Lin, E Blackburn & M R Irwin. 2012. A pilot study of yogic meditation for family dementia caregivers with depressive symptoms: effects on mental health, cognition, and telomerase activity. *International Journal of Geriatric Psychiatry*. doi:10.1002/gps.3790.
- Longo, Joseph, N. Eugene Walls & Hope Wisneski. 2012. Religion and religiosity: protective or harmful factors for sexual minority youth? *Mental Health*, *Religion & Culture*. 1–18. doi:10.1080/13674676.2012.659240.
- Lynch, Cheryl P, Melba A Hernandez-Tejada, Joni L Strom & Leonard E Egede. 2012. Association between Spirituality and Depression in Adults with Type 2 Diabetes. *The Diabetes Educator*. doi:10.1177/0145721712440335.
- McClean, Stuart, Leslie Bunt & Norma Daykin. 2012. The healing and spiritual properties of music therapy at a cancer care center. *Journal of Alternative and Complementary Medicine (New York, N.Y.)* 18(4). 402–407. doi:10.1089/acm.2010.0715.
- Monod, Stefanie M, Estelle Martin, Brenda Spencer, Etienne Rochat & Christophe J Bula. 2012. Validation of the Spiritual Distress Assessment Tool in older hospitalized patients. *BMC Geriatrics* 12(1). 13. doi:10.1186/1471-2318-12-13.
- Morris, Douglas N, Jo Stecher, Kayla M Briggs-Peppler, Chelsea M Chittenden, Joseph Rubira & Lindsay K Wismer. 2012. Spirituality in Occupational Therapy: Do We Practice What We Teach? *Journal of Religion and Health*. doi:10.1007/s10943-012-9584-y.
- Nakao, Mutsuhiro & Chisin Ohara. 2012. The Perspective of Psychosomatic Medicine on the Effect of Religion on the Mind-Body Relationship in Japan. *Journal of Religion and Health*. doi:10.1007/s10943-012-9586-9.
- Nurasikin, M S, L A Khatijah, A Aini, M Ramli, S A Aida, N Z Zainal & C G Ng. 2012. Religiousness, religious coping methods and distress level among psychiatric patients in Malaysia. *The International Journal of Social Psychiatry*. doi:10.1177/0020764012437127.
- Obeng Gyimah, Stephen, Ivy Kodzi, Jacques Emina, Jones Adjei & Alex Ezeh. 2012. Adolescent Sexual Risk-Taking in the Informal Settlements of Nairobi, Kenya: Understanding the Contributions of Religion. *Journal of Religion and Health*. doi:10.1007/s10943-012-9580-2.

- Padela, Aasim I, Amal Killawi, Jane Forman, Sonya Demonner & Michele Heisler. 2012a. American Muslim Perceptions of Healing: Key Agents in Healing, and Their Roles. *Qualitative Health Research*.
 - doi:10.1177/1049732312438969.
- Padela, Aasim I, Amal Killawi, Jane Forman, Sonya Demonner & Michele Heisler. 2012b. American Muslim Perceptions of Healing: Key Agents in Healing, and Their Roles. *Qualitative Health Research*.
 - doi:10.1177/1049732312438969.
- Parhami, Iman, Margarit Davtian, Michael Collard, Jean Lopez & Timothy W Fong. 2012. A Preliminary 6-Month Prospective Study Examining Self-reported Religious Preference, Religiosity/Spirituality, and Retention at a Jewish Residential Treatment Center for Substance-Related Disorders. *The Journal of Behavioral Health Services & Research*. doi:10.1007/s11414-012-9279-x.
- Powell-Young, Yolanda M. 2012. Household income and spiritual well-being but not body mass index as determinants of poor self-rated health among african American adolescents. *Research in Nursing & Health*. doi:10.1002/nur.21473.
- Puchalski, Christina M & Margaret Guenther. 2012. Restoration and re-creation: spirituality in the lives of healthcare professionals. *Current Opinion in Supportive and Palliative Care*. doi:10.1097/SPC.0b013e3283522223.
- Puzek, Ivan, Aleksandar Stulhofer & Ivana Božičević. 2012. Is Religiosity a Barrier to Sexual and Reproductive Health? Results from a Population-Based Study of Young Croatian Adults. *Archives of Sexual Behavior*. doi:10.1007/s10508-012-9924-8.
- San-Juan, César. 2012. Rethinking Psychosocial Interventions in Natural Disasters: Lessons from Holistic Ecocentrism and Religious Beliefs. *Journal of Religion and Health*. doi:10.1007/s10943-012-9589-6.
- Sansone, Randy A, Amy R Kelley & Jeremy S Forbis. 2012. Abuse in Childhood and Religious/Spiritual Status in Adulthood Among Internal Medicine Outpatients. *Journal of Religion and Health*. doi:10.1007/s10943-012-9582-0.
- Sauer-Zavala, Shannon, Jessica L Burris & Charles R Carlson. 2012. Understanding the Relationship Between Religiousness, Spirituality, and Underage Drinking: The Role of Positive Alcohol Expectancies. *Journal of Religion and Health*. doi:10.1007/s10943-012-9598-5.
- Sinclair, Shane & Harvey M Chochinov. 2012. The role of chaplains within oncology interdisciplinary teams. *Current Opinion in Supportive and Palliative Care*. doi:10.1097/SPC.0b013e3283521ec9.
- Skinner, Jeff. 2012. Building healthy communities through medical religious partnerships. *Social Work in Public Health* 27(3). 301–306. doi:10.1080/19371911003749016.

- Stratta, Paolo, Cristina Capanna, Ilaria Riccardi, Giulio Perugi, Cristina Toni, Liliana Dell'osso & Alessandro Rossi. 2012. Spirituality and Religiosity in the Aftermath of a Natural Catastrophe in Italy. *Journal of Religion and Health*. doi:10.1007/s10943-012-9591-z.
- Tiew, Lay Hwa. 2012. Singapore Nursing Students' Perceptions and Attitudes About Spirituality and Spiritual Care in Practice: A Qualitative Study. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association*. doi:10.1177/0898010111435948.
- van der Valk, Renate, Susanna van de Waerdt, Carin J Meijer, Ingrid van den Hout & Lieuwe de Haan. 2012. Feasibility of mindfulness-based therapy in patients recovering from a first psychotic episode: a pilot study. *Early Intervention in Psychiatry*. doi:10.1111/j.1751-7893.2012.00356.x
- Whitley, Rob. 2012. Religious competence as cultural competence. *Transcultural Psychiatry* 49(2). 245–260. doi:10.1177/1363461512439088.
- Wilkerson, J Michael, Derek J Smolensk, Sonya S Brady & B R Simon Rosser. 2012. Performance of the Duke Religion Index and the Spiritual Well-Being Scale in Online Samples of Men Who Have Sex with Men. *Journal of Religion and Health*. doi:10.1007/s10943-012-9594-9.
- Wnuk, Marcin & Jerzy Tadeusz Marcinkowski. 2012. Do Existential Variables Mediate Between Religious-Spiritual Facets of Functionality and Psychological Wellbeing. *Journal of Religion and Health*. doi:10.1007/s10943-012-9597-6.