

exploring the nexus of culture, mind and religion

**RESEARCH REVIEW** 

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

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# 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, ASFA Biological Sciences, ATLA Religion Database, General Science, PubMed, Psychology and Behavioral Sciences Collection, PsycARTICLES, PsycINFO, ScienceDirect, and Web of Science. The search terms were altruism, meditat\*, prayer, relig\*, 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 550 articles, 89 articles have been retained from 69 journals. There are 45 pre-publication citations from 33 journals.

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

#### 1.1 SCIENTIFIC STUDY OF RELIGION: COGNITIVE NEUROSCIENCE

Cheng, Richard W. F., Donald S. Borrett, Weyland Cheng, Hon C. Kwan & Richard S. S. Cheng. 2010. Human prefrontal cortical response to the meditative state: a spectroscopy study. *The International Journal of Neuroscience* 120 doi:10.3109/00207454.2010.483650.

Researchers showed that Qigong meditation has a significant effect on prefrontal activation in the brain. The effect of Qigong meditation on the hemodynamics of the prefrontal cortex in both practitioners and meditation-naïve subjects was investigated by spectroscopy. Practitioners showed a significant decrease in deoxyhemoglobin levels in both single-wavelength and dual-wavelength probes, suggesting an increase in prefrontal activation during meditation. In the latter, significant differences in the decrease in deoxyhemoglobin and increase in oxyhemoglobin concentrations were observed in practitioners as compared with non-practitioners.

Mathur, V. A., T. Harada, T. Lipke & J. Y. Chiao. 2010. Neural basis of extraordinary empathy and altruistic motivation. *NeuroImage* 51(4). 1468-1475. doi:10.1016/j.neuroimage.2010.03.025.

This study examined the neural basis of extraordinary empathy and altruistic motivation in African-American and Caucasian-American individuals using fMRI. Results indicate that empathy for ingroup members is neurally distinct from empathy for humankind more generally. People showed greater response within anterior cingulate cortex and bilateral insula when observing the suffering of others, but African-American individuals additionally recruit medial prefrontal cortex when observing the suffering of members of their own social group. Moreover, neural activity within medial prefrontal cortex in response to pain expressed by ingroup relative to outgroup members predicted greater empathy and altruistic motivation for one's ingroup, suggesting that neurocognitive processes associated with self identity underlie extraordinary empathy and altruistic motivation for members of one's own social group.

## 1.2 SCIENTIFIC STUDY OF RELIGION: EVOLUTION

Barrett, Justin L. 2010. The relative unnaturalness of atheism: On why Geertz and Markússon are both right and wrong. *Religion* 40(3). 169-172. doi:10.1016/j.religion.2009.11.002.

The author notes that scholars in the cognitive science of religion have advanced the naturalness of religion thesis, that ordinary cognitive resources operating in ordinary human environments typically lead to some kind of belief in supernatural agency and perhaps other religious ideas. In this view, special cultural scaffolding is unnecessary; supernaturalism falls near a natural anchor point. In contrast, widespread conscious rejection of the supernatural, as in atheism, appears to require either special cultural conditions that upset ordinary function, cognitive effort, or a good degree of cultural scaffolding to move people away from their maturationally natural anchor-points. The author finds that Geertz and Markússon identify ways to strengthen cognitive approaches to the study of religion and culture, including atheism, but fail to demonstrate that atheism is as natural in a comparable respect as theism. A response to Geertz and Markússon, below.

Bering, Jesse. 2010. Atheism is only skin deep: Geertz and Markússon rely mistakenly on sociodemographic data as meaningful indicators of underlying cognition. *Religion* 40(3). 166-168. doi:10.1016/j.religion.2009.11.001.

In this response to Geertz and Markússon (below), the author asserts that although they clarify why the naturalness hypothesis does not imply religious determinism, they fail to weigh adequately the more conservative prediction, that of religious probabilism. Further, he holds that, unlike cognitive scientific accounts favoring the naturalness hypothesis, Geertz and Markússon base their arguments for the cultural scaffolding of atheistic cognition on sociodemographic data alone—a source that is unlikely to be a meaningful reflection of "natural" underlying cognitive processes.

Geertz, Armin W. & Guðmundur Ingi Markússon. 2010. Religion is natural, atheism is not: On why everybody is both right and wrong. *Religion* 40(3). 152-165. doi:10.1016/j.religion.2009.11.003.

After discussing evidence of irreligion and the rise of the so-called "New Atheism", the authors refute the claim that this poses a problem for the cognitive science of religion and its hypothesis that religion is natural. The "naturalness hypothesis" is not deterministic but probabilistic and thus leaves room for atheism. This, the authors maintain, is true of both the by-product and adaptationist stances within the cognitive science of religion. In this context the authors also discuss the memetic or "unnaturalness" hypothesis, i.e., that religion is a "virus of the mind." The authors criticize accounts of atheism offered by cognitive scientists of religion as being based on unfounded assumptions about the psychology of atheists, and object to the notion that the natural aspects of religion by corollary make atheism unnatural. By considering human cognition in a semiotic framework and emphasizing its natural ability to take part in semiotic systems of signs, atheism emerges as a natural, cognitive strategy. The authors argue that to reach a fuller account of religion, the cognitive (naturalness) and memetic (unnaturalness) hypotheses of religion must be merged. Finally, a preliminary analysis of the "New Atheism" is offered in terms of semiotic and cognitive dynamics. The target article in this issue of "Religion."

### 1.3 SCIENTIFIC STUDY OF RELIGION: PSYCHOLOGY AND SOCIOLOGY

Barry, Carolyn McNamara, Larry Nelson, Sahar Davarya & Shirene Urry. 2010. Religiosity and spirituality during the transition to adulthood. *International Journal of Behavioral Development* 34(4). 311-324.

doi:<u>10.1177/0165025409350964</u>.

This article reviews the literature regarding the exploration of religiosity and spirituality in emerging adulthood (individuals 18 to 25 years of age). The authors document developmental advances in physical, cognitive, and psychosocial development that support this exploration, and present theoretical and empirical work on how religiosity and spirituality develop during this time period. Second, they examine the research on prevalence rates for, and correlates of, religiosity and spirituality. After examining socializing agents of religiosity and spirituality that document parents' indirect role relative to other adults, peers, and the media, they examine the role that culture, community, and gender play in the development and socialization of religious and spiritual beliefs and practices.

Davidson, Laura A., Clare T. Pettis, Amber J. Joiner, Daniel M. Cook & Craig M. Klugman. 2010. Religion and conscientious objection: a survey of pharmacists' willingness to dispense medications. *Social Science & Medicine* 71(1). 161-165. doi:10.1016/j.socscimed.2010.03.027.

This study examines whether demographics such as age, religion, or gender influence 668 Nevada pharmacists' willingness to dispense or transfer five potentially controversial medications to patients 18 years and older: emergency contraception, medical abortifacients, erectile dysfunction medications, oral contraceptives, and infertility medications. Almost 6% of pharmacists indicated that they would refuse to dispense and refuse to transfer at least one of these medications. Religious affiliation significantly predicted pharmacists' willingness to dispense emergency

contraception and medical abortifacients: evangelical Protestants, Catholics and other-religious pharmacists were significantly more likely to refuse to dispense at least one medication in comparison to non-religious pharmacists.

Ghorpade, Jai, James R. Lackritz & Rebecca Moore. 2010. Intrinsic Religious Orientation: The Conservative Christian Connection. International Journal for the Psychology of Religion 20(3). 201-218. doi:10.1080/10508619.2010.481230.

This study investigated the claim that the measure of intrinsic religious orientation (IRO) has an inherent conservative Christian bias that may be denominationally identified. Using a sample of 546 churchgoers drawn from five congregations representing four denominations, researchers correlated IRO scores with a measure of conservative Christian beliefs (CCBs). A high, significant correlation was obtained suggesting that, in general, high IRO scores go with CCBs. Second, the researchers divided the sample into two groups: those who scored high and those who scored low on four measures of religious commitment: participation in church activities, and frequency of attendance, prayers, and meditation. This comparison also confirmed the IRO and conservative Christian connection: the IRO scores of the Evangelical congregation were significantly higher than those of other congregations in both the high and low religious commitment groups.

Hart, Jonathan T., Alicia Limke & Phillip R. Budd. 2010. Attachment and Faith Development. Journal of Psychology & Theology 38(2). 122-128.

The current project investigated the relationship between adult romantic attachment and Fowler's stages of faith development in an undergraduate sample at a private, religious university (n = 95). Attachment anxiety, but not attachment avoidance, predicted faith development, such that the higher the attachment anxiety, the lower the stage of faith development.

Herzog, T.R., P. Ouellette, J.R. Rolens & A.M. Koenigs. 2010. Houses of Worship as Restorative Environments. *Environment and Behavior* 42(4). 395-419. doi:10.1177/0013916508328610.

Using data from questionnaires from 781 participants, researchers found five recurring motivations for visiting a house of worship, three of which matched those from a previous study (spirituality, beauty, and being away) and two which were new (contemplation and obligation). Factor analysis of activities at a house of worship yielded four factors along a gradient corresponding roughly to degree of organized religious practice: rituals, traditional activities, asking, and nonreligious activities. Spirituality and asking (for help or forgiveness) were the strongest predictors of positive outcomes, whereas nonreligious activities predicted negative outcomes. Researchers conclude that a house of worship can provide a compatible setting for satisfying a spirituality motive and for the cognitive activity of asking which can aid in conserving and restoring directed attention as well as fostering meditation and reflection.

Kim, Christina L., Tamara L. Anderson, M. Elizabeth Lewis Hall & Michele M. Willingham. 2010. Asian and female in the white God's world: a qualitative exploration of discrimination in Christian academia. *Mental Health, Religion & Culture* 13(5). 453-465. doi:10.1080/13674670903384533.

This study is a phenomenological exploration using interviews of discrimination experiences among 11 Asian/Asian-American female faculty at various Christian universities, with a specific focus on the characteristics of the Christian academic environment which contribute to those experiences. Ten of the 11 women described experiences where they perceived being treated differently due to race and/or gender. Qualitative analyses of interview data resulted in the emergence of three themes related to the discrimination context (lack of diversity, naivete and denial, and "missionary mentality").

Krieger, Aliza Y. 2010. The Role of Judaism in Family Relationships. Journal of Multicultural Counseling & Development 38(3). 154-165.

This article explores the religious and social underpinnings of family as a social structure central to Jewish life. Torah and Talmudic sources, conceptual papers, and empirical research that address the relevance of family to Judaism are examined.

Liang, Ming-Yih. 2010. Confucianism and the East Asian Miracle. American Economic Journal: Macroeconomics 2(3). 206-234. doi:10.1257/mac.2.3.206.

The author examines two behavioral traits essential to Confucianism, and put forward hypotheses as to whether these behavioral traits impede or are conducive to "leading" or "follower" mode growth. A dynamic leader-follower general equilibrium model with appropriately specified "Confucian" parameters is shown to generate results that correspond to some of the main features of East Asian economies: their miracle growths, subsequent slowdowns, trade surpluses, and persistent accumulations of foreign exchange reserves. Finally, the author assesses the quantitative importance of these cultural effects and examine their implications for future evolution of these economies.

McGregor, Ian, Kyle Nash & Mike Prentice. 2010. Reactive approach motivation (RAM) for religion. *Journal of Personality and Social Psychology* 99(1). 148-161. doi:10.1037/a0019702.

In 3 experiments, participants reacted with religious zeal to anxious uncertainty threats that have caused reactive approach motivation in the past. In Study 1, results were specific to religious ideals and did not extend to merely superstitious beliefs. Effects were most pronounced among the most anxious and uncertainty-averse participants in Study 1 and among the most approach-motivated participants in Study 2 (i.e., with high Promotion Focus, Behavioral Activation, Action Orientation, and Self-Esteem Scale scores). In Studies 2 and 3, anxious uncertainty threats amplified even the most jingoistic and extreme aspects of religious zeal. In Study 3, reactive religious zeal occurred only among participants who reported feeling disempowered in their everyday goals in life.

Stewart-Thomas, Michelle. 2010. Gendered Congregations, Gendered Service: The Impact of Clergy Gender on Congregational Social Service Participation. *Gender, Work & Organization* 17(4). 406-432.

doi:10.1111/j.1468-0432.2009.00484.x.

Using data from the 1998 National Congregations Study, the author presents empirical evidence that shows that the gender of a congregation's leadership makes a difference in the likelihood that a congregation will participate in a social service program. The odds of congregations with women head clergy participating in a social service program are four times greater than those with men as head clergy. In addition, as the percentage of women on a congregation's governing board increases the probability that a congregation will participate in a service project also increases. The specific types of social service program a congregation pursues also differ by gender of leadership, with women-led congregations significantly more likely to pursue service projects that could be labeled feminine while avoiding programs that are clearly feminist.

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

Bauer, Joachim & Tsvi Blanchard. 2010. In My Flesh I See God: A Neurobiological Perspective on Being Human. *Tikkun* 25(1). 43-73. <u>http://www.tikkun.org/article.php/jan10\_bauer</u>

The authors, the former a brain researcher and the latter a rabbi and clinical psychologist, write that culture bridges the gap between pro-social biology and humans' actual social behavior. They discuss the role of neurobiology in cooperation, sociality, empathy and aggression. They hold that human beings are geared toward social acceptance in their innermost neurobiological drives and motivations; that the brain experiences social exclusion or humiliation as it would physical pain; and that humans have a physically anchored feeling of social fairness.

Brashears, Matthew E. 2010. Anomia and the sacred canopy: Testing a network theory. *Social* Networks 32(3). 187-196.

doi:<u>10.1016/j.socnet.2009.12.003</u>.

This article evaluates the Durkheim/Berger argument that integration in a network of co-religionists protects against anomia. The 1985 General Social Survey network instrument is used to evaluate the effect of integration on anomia and the probability of unhappiness. Results indicate that contact with religiously homogeneous others paired with personal religious belief reduces anomia and the likelihood of unhappiness. Additionally, while ego/alter closeness is important, alter/alter closeness is not. These results suggest that individuals benefit from religious association more than religious community.

Friedlander, Myrna L., Michelle L. Friedman, Matthew J. Miller, Michael V. Ellis, Lee K. Friedlander & Vadim G. Mikhaylov. 2010. Introducing a Brief Measure of Cultural and Religious Identification in American Jewish Identity. *Journal of Counseling Psychology* 57(3). 345-360. doi:10.1037/a0019577.

The authors conducted 3 studies to develop and investigate the psychometric properties of the American Jewish Identity Scales (AJIS), a brief self-report measure that assesses cultural identification and religious identification. Study 1 assessed the content validity of the item pool using an expert panel. In Study 2, 1,884 Jewish adults completed the initial AJIS and various measures of ethnic identity, collective self-esteem, and religiosity. The authors selected and cross-validated 33 items that loaded highly and differentially on the 2 theorized latent factors. Study 3 assessed the AJIS's short-term stability and its relation to social desirability. Tests of reliability and construct validity provided initial psychometric support for the measure and confirmed the theorized primary salience of cultural identification. Participants reported significantly more private than public collective self-esteem, and the most Jewish-identified participants reported greater private self-esteem, acculturative stress, and perceived discrimination than did their more assimilated counterparts.

Milanesi, Pier Giuseppe. 2010. Neurophilosophy and the distal hyperuranic world: Fred Previc's space of the gods (and of men). *Functional Neurology* 25(3). 121-128.

The author highlights the studies of Fred Previc, which have shown that the relationship between consciousness and space is managed by a number of modules, making it possible to categorize spatial interaction on four levels, which correspond to the different ways in which we project our existence in different practical and cultural scenarios. What emerges as particularly important is the fourth level of the management of spatiality, the one that sees human consciousness dealing with the great distances—the heavens, the house of the gods. This module makes use of a neural pathway involving ventral sensory structures that also manage the relationship with religion and transcendence. But these are also the structures that are activated when populations are forced to set out in search of new lands—the quest for the eternal "Promised Land". In this study of infinite spaces, the path of the gods and of men coincide and they are seen to advance along it together.

Nanay, Bence. 2010. Group selection and our obsession with the meaning of life. *Monist* 93(1). 76-95.

The article focuses on the purpose of understanding in the connection between the old question about the meaning of life and some important concepts in philosophy of biology. The author argues that if there is evidence for group selection in the course of human evolution, this may explain not the meaning of life but rather the reason why we are preoccupied with this question.

de Souza, Rogério F., Marcelo de Carvalho, Tiemi Matsuo & Dimas A.M. Zaia. 2010. Study on the opinion of university students about the themes of the origin of Universe and evolution of life. *International Journal of Astrobiology* 9(02). 109-117. doi:10.1017/S1473550410000054.

This paper reports the results of a questionnaire administered to university students involving the origin of the Universe and life and biological evolution, as well as questions related to more common scientific themes. Between 2.4% (philosophy students) and 14% (geography students) did not accept the theory of evolution, because they believed in creation as described in the Bible; however, between 41.5% (philosophy students) and 71.3% (biology students) did not see any conflict between religion and evolution. About 80% of the students believed that the relationship between lung cancer and smoking is well established by science, and 65% believed the same about biological evolution, and 28.9% about the big bang theory.

# PART 2. ARTICLES IN SPIRITUALITY & HEALTH RESEARCH

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

Bahr, Stephen J. & John P. Hoffmann. 2010. Parenting style, religiosity, peers, and adolescent heavy drinking. *Journal of Studies on Alcohol and Drugs* 71(4). 539-543.

In a study of 4,983 adolescents in grades 7-12, researchers found that after controlling for peer use, religiosity, and other relevant variables, adolescents whose parents were authoritative were less likely to drink heavily than adolescents whose parents were authoritarian, indulgent, and neglectful, and they were less likely to have close friends who used alcohol. In addition, religiosity was negatively associated with heavy drinking after controlling for other relevant variables.

Burazeri, Genc & Jeremy D. Kark. 2010. Alcohol intake and its correlates in a transitional predominantly Muslim population in southeastern Europe. *Addictive Behaviors* 35(7). 706-713. doi:10.1016/j.addbeh.2010.03.015.

A sample of 685 Albanian residents aged 35-74 years was interviewed and examined in 2003-2006. In men, frequent drinking was positively associated with age and not receiving financial support from close family emigrants, and was strongly inversely related to religious observance in both Muslims and Christians. In women it was associated with smoking and upward social mobility. Alcohol intake was not associated with religious affiliation in either sex.

Cade, W. T., D. N. Reeds, K. E. Mondy, E. T. Overton, J. Grassino, S. Tucker, C. Bopp et al. 2010. Yoga lifestyle intervention reduces blood pressure in HIV-infected adults with cardiovascular disease risk factors. *HIV Medicine* 11(6). 379-388. doi:10.1111/j.1468-1293.2009.00801.x.

Sixty HIV-infected adults with mild-moderate cardiovascular (CVD) risk were assigned to 20 weeks of supervised yoga practice or standard of care treatment. Resting systolic and diastolic blood pressures improved more in the yoga group than in the standard of care group. However, there was no greater reduction in body weight, fat mass or proatherogenic lipids, or improvements in glucose tolerance or overall QOL after yoga. Immune and virological status was not adversely affected.

Casarez, Rebecca L. Polzer, Joan C. Engebretson & Sharon K. Ostwald. 2010. Spiritual practices in self-management of diabetes in African Americans. *Holistic Nursing Practice* 24(4). 227-237. doi:10.1097/HNP.0b013e3181e903c6.

In this qualitative study, African Americans described 3 orientations about spiritual practices and diabetes selfmanagement: Spiritual practice as effort toward self-management; spiritual practice and self-management as effort toward healing; and spiritual practice as effort toward healing. The authors finds that spiritual practices may influence diabetes self-management in African Americans and be a resource in care.

Clay, Kimberly S., Costellia Talley & Karen B. Young. 2010. Exploring Spiritual Well-Being Among Survivors of Colorectal and Lung Cancer. *Journal of Religion & Spirituality in Social Work: Social Thought* 29(1). 14-32. doi:10.1080/15426430002470247

doi:<u>10.1080/15426430903479247</u>.

The current study explores the role of spiritual well-being in adjustment to life after the cancer diagnosis. Survey data collected from 304 newly diagnosed cancer survivors were analyzed to explore important aspects of spirituality, such as sense of meaning in one's life, harmony, peacefulness, and a sense of strength and comfort from

one's faith. Spiritual well-being scores, particularly meaning/peace, were statistically significant for African Americans, women, and colorectal cancer survivors.

Gyimah, Stephen Obeng, Eric Y. Tenkorang, Baffour K. Takyi, Jones Adjei & Gabriel Fosu. 2010. Religion, HIV/AIDS and sexual risk-taking among men in Ghana. *Journal of Biosocial Science* 42(4). 531-547.

doi:10.1017/S002193201000027.

Researchers found that while results from bivariate analysis of data from the 2003 Ghana Demographic and Health Survey (n = 5,015 men) suggested that Muslims and Traditionalists were significantly less likely to engage in risky sexual behaviour compared with Christians, those differences disappeared once socioeconomic variables were controlled.

Harden, K. Paige. 2010. Does religious involvement protect against early drinking? A behavior genetic approach. *Journal of Child Psychology and Psychiatry, and Allied Disciplines* 51(7). 763-771. doi:10.1111/j.1469-7610.2010.02247.x.

Using data on twin and sibling pairs who were discordant for religiosity, drawn from the National Longitudinal Study of Adolescent Health, researchers found that religious adolescents did not differ from their non-religious siblings in their mean age at first drink. Results from survival models indicate that environmental differences between families completely account for the correlation between religiosity and later age at first drink.

Homan, Kristin J. & Chris J. Boyatzis. 2010. Religiosity, Sense of Meaning, and Health Behavior in Older Adults. *International Journal for the Psychology of Religion* 20(3). 173-186. doi:10.1080/10508619.2010.481225.

Researchers found that in a sample of older adults stronger religiosity and sense of meaning were associated with healthier behaviors; however, extrinsic religious orientation was associated with decreased rates of healthy behavior. In regression analyses that controlled for service attendance, sex, age, and education, sense of meaning in life was the construct most consistently related to health behavior.

Jahnke, Roger, Linda Larkey, Carol Rogers, Jennifer Etnier & Fang Lin. 2010. A Comprehensive Review of Health Benefits of Qigong and Tai Chi. *American Journal of Health Promotion* 24(6). e1e25.

doi:<u>10.4278/ajhp.081013-LIT-248</u>.

In a literature review of 77 articles on randomized controlled trials reporting on the results of Qigong or Tai Chi interventions, and published in peer-reviewed journals from 1993 to 2007, the authors found that research has demonstrated consistent, significant results for a number of health benefits in randomized controlled trials, evidencing progress toward recognizing the similarity and equivalence of Qigong and Tai Chi.

Jung, Ye-Ha, Do-Hyung Kang, Joon Hwan Jang, Hye Yoon Park, Min Soo Byun, Soo Jin Kwon, Go-Eun Jang, Ul Soon Lee, Seung Chan An & Jun Soo Kwon. 2010. The effects of mind-body training on stress reduction, positive affect, and plasma catecholamines. *Neuroscience Letters* 479(2). 138-142.

doi:<u>10.1016/j.neulet.2010.05.048</u>.

This study assessed the association between stress, positive affect and catecholamine levels in experienced meditation (n = 67) and control (n = 57) groups. The meditation group showed higher scores on positive affect and lower scores on stress compared with the control group. Plasma DA levels were also higher in the meditation than in the control group. The control group demonstrated a negative correlation between stress and positive affects, whereas this correlation was not observed in the meditation group.

Kaul, Prashant, Jason Passafiume, R. Craig Sargent & Bruce F. O'Hara. 2010. Meditation acutely improves psychomotor vigilance, and may decrease sleep need. *Behavioral and Brain Functions* 6(1). 47.

doi:<u>10.1186/1744-9081-6-47</u>.

The primary study assessed psychomotor vigilance task (PVT) reaction times in novice meditators (n = 10) before and after mediation, nap, or a control activity. All ten novice meditators improved their PVT reaction times immediately following periods of meditation, and all but one got worse immediately following naps. In a second study, researchers found that sleep duration in experienced meditators (n = 7) was lower than control nonmeditators (n = 23), with no apparent decrements in PVT scores.

Lee, Myeong Soo, Tae-Young Choi & Edzard Ernst. 2010. Tai chi for breast cancer patients: a systematic review. *Breast Cancer Research and Treatment* 120(2). 309-316. doi:10.1007/s10549-010-0741-2.

In a literature review of controlled trials testing tai chi in patients with breast cancer, the authors found that results from the three randomized clinical trials reviewed showed no significant differences between tai chi and control procedures in quality of life and psychological and physical outcome measures, and the meta-analysis also failed to demonstrate significant effects of tai chi compared with control interventions. All of the four non-randomized controlled clinical trials showed favorable effects of tai chi. Three trials suggested effectiveness in psychological and physical outcome measures, whereas one study was too poorly reported to be evaluated in detail.

Leonard, K.C. & D. Scott-Jones. 2010. A Belief-Behavior Gap? Exploring Religiosity and Sexual Activity Among High School Seniors. *Journal of Adolescent Research* 25(4). 578-600. doi:10.1177/0743558409357732.

In a study of 118 high school seniors, the majority reported religion to be important. Most were sexually active and used contraception. Nearly half acknowledged religious teachings on sexual activity, and one third believed premarital sex is proscribed. Religiosity items were negatively correlated with approval of sexual activity in hypothetical relationship scenarios, but religiosity was not related to self-reported sexual activity or contraceptive use. Participants emphasized relationships and physical health, not religious proscriptions, in their standards for sexual activity.

Ljótsson, Brjánn, Lisa Falk, Amanda Wibron Vesterlund, Erik Hedman, Perjohan Lindfors, Christian Rück, Timo Hursti et al. 2010. Internet-delivered exposure and mindfulness based therapy for irritable bowel syndrome - A randomized controlled trial. *Behaviour Research and Therapy* 48(6). 531-539.

doi:<u>10.1016/j.brat.2010.03.003</u>.

Researchers investigated whether cognitive behavior therapy based on exposure and mindfulness exercises delivered via the Internet would be effective in treating participants with irritable bowel syndrome (IBS). Following the intervention, participants in the treatment condition (n = 42), who had utilized the online discussion forum, reported a 42% decrease, and participants in the control group (n = 43) reported a 12% increase, in primary IBS-symptoms. Compared to the control condition, participants in the treatment group improved on all secondary outcome measures with a large between group effect size on quality of life.

Stevens-Watkins, Danelle & Sharon Rostosky. 2010. Binge Drinking in African American Males From Adolescence to Young Adulthood: The Protective Influence of Religiosity, Family Connectedness, and Close Friends' Substance Use. *Substance Use & Misuse* 45(10). 1435-1451. doi:10.3109/10826081003754765.

In a study of 1,599 high school adolescents, drawn from the National Longitudinal Study of Adolescent Health, adolescent binge drinking was associated with adolescent religiosity, family connectedness, and perceived close

friends' substance use. Perceived close friends' substance use in adolescence was a protective factor in later binge drinking during young adulthood, and was moderated by age such that the effect was stronger for younger adolescents.

Sullivan, Bruce M., Bill Wiist & Heidi Wayment. 2010. The Buddhist Health Study: Meditation on Love and Compassion as Features of Religious Practice. *CrossCurrents* 60(2). 185-207. doi:10.1111/j.1939-3881.2010.00119.x.

The authors undertook an internet survey of 775 Buddhist practitioners. Survey data indicate that contemporary Western Buddhist practitioners are more likely to identify themselves as Buddhist than as members of other religious traditions; that they are more likely to engage in meditation than to attend Buddhist religious services; that practitioners who engage in meditation are more likely to engage in a variety of meditative practices; and that engage in conscious efforts to increase loving-kindness and compassion through meditation practices.

Wu, Shr-Da & Pei-Chen Lo. 2010. Cardiorespiratory phase synchronization during normal rest and inward-attention meditation. *International Journal of Cardiology* 141(3). 325-328. doi:10.1016/j.ijcard.2008.11.137.

Researchers found that cardiorespiratory phase synchronization (CRPS) can be enhanced during meditation, compared with normal relaxation. After measuring frequency ratio, lasting length, number of epochs, and total length, they found that normal rest resulted in much weaker CRPS, while the number of synchronous epochs and the total synchronization length significantly increased during meditation.

Yu, Mansoo & Arlene R Stiffman. 2010. Positive family relationships and religious affiliation as mediators between negative environment and illicit drug symptoms in American Indian adolescents. *Addictive Behaviors* 35(7). 694-699. doi:10.1016/j.addbeh.2010.03.005.

Using a random sample of 401 American Indian adolescents, researchers found that positive family relationships mediated the negative impact of addicted family members, violence victimization, and negative school environment on illicit drug abuse/dependence symptoms. Religious affiliation mediated the negative effect of deviant peers on positive family relationships.

#### 2.2 SPIRITUALITY & HEALTH: MENTAL HEALTH

Ahrens, C.E., S. Abeling, S. Ahmad & J. Hinman. 2010. Spirituality and Well-Being: The Relationship Between Religious Coping and Recovery From Sexual Assault. *Journal of Interpersonal Violence* 25(7). 1242-1263. doi:10.1177/0886260509340533.

Researchers found that among 100 sexual assault survivors who believed in God, positive religious coping is related to higher levels of psychological well-being and lower levels of depression, whereas negative religious coping is related to higher levels of depression, regardless of ethnicity. African American survivors were more likely to use both positive and negative religious coping than survivors from other ethnicities.

Akl, Marianne & Etienne Mullet. 2010. Forgivingness: Relationships With Conceptualizations of Divine Forgiveness and Childhood Memories. *International Journal for the Psychology of Religion* 20(3). 187-200.

doi:<u>10.1080/10508619.2010.481226</u>.

Data from 182 participants found people conceptualize God's forgiveness around three aspects: Resentful God, Sensitive God, and Unconditionally Forgiving God; further, they conceptualize their family's around three symmetrical aspects: Resentful Family, Sensitive Family, and Unconditionally Forgiving Family. Sensitivity to circumstances was essentially associated with participants' reports about their parents' sensitivity to circumstances. Unconditional forgiveness was essentially associated with the way participants conceptualize God's forgiveness.

Allen, Deborah & Elaine S. Marshall. 2010. Spirituality as a coping resource for African American parents of chronically ill children. *The American Journal of Maternal Child Nursing* 35(4). 232-237. doi:10.1097/NMC.0b013e3181de3f76.

From a sample of 168 African American parents of chronically ill children, researchers found that the most frequently reported positive coping patterns included "believing in God," "doing things with my children," "believing that my child is getting the best medical care," and "having faith in God." Most frequent coping resources included "having faith in God," "seeking information from the family doctor," and "showing that we are strong." Results revealed a significant positive correlation between positive parental coping patterns and spirituality.

Ando, Michiyo, Ryo Kawamura, Tatsuya Morita, Kei Hirai, Mitsunori Miyashita, Takuya Okamoto & Yasuo Shima. 2010. Value of religious care for relief of psycho-existential suffering in Japanese terminally ill cancer patients: the perspective of bereaved family members. *Psycho-Oncology* 19(7). 750-755. doi:10.1002/pon.1625.

The authors found that of 378 bereaved family members of cancer patients who were admitted to certified palliative care units in Japan, about 25% indicated that the patient had received religious care, whereas 75% had not received it. Families of patients who had received religious care evaluated pastoral care workers (86%), religious services (82%), and religious music (80%) as 'very useful' or 'useful'.

Arch, Joanna J. & Michelle G. Craske. 2010. Laboratory stressors in clinically anxious and nonanxious individuals: The moderating role of mindfulness. *Behaviour Research and Therapy* 48(6). 495-505.

doi:<u>10.1016/j.brat.2010.02.005</u>.

90 participants, including 46 with anxiety disorders and 44 non-anxious controls, were assessed on hyperventilation and relaxation stressors. Trait mindfulness predicted stressor responding in over 80% of measured outcomes, and predicted to a greater extent among high anxiety individuals in 50% of outcomes.

Berman, Noah C., Jonathan S. Abramowitz, Caleb M. Pardue & Michael G. Wheaton. 2010. The relationship between religion and thought-action fusion: use of an in vivo paradigm. *Behaviour Research and Therapy* 48(7). 670-674. doi:10.1016/j.brat.2010.03.021.

The current study examined the relationship between religiosity and thought-action fusion using an in vivo behaviorally-based assessment in which participants thought about and wrote down thoughts of negative events involving loved ones. Results indicated that compared to the non-religious participants (n = 30), those who were highly religious (n = 43) believed that writing and thinking about the negative events was more morally wrong and increased the likelihood of the event.

Bohlmeijer, Ernst, Rilana Prenger, Erik Taal & Pim Cuijpers. 2010. The effects of mindfulnessbased stress reduction therapy on mental health of adults with a chronic medical disease: A meta-analysis. *Journal of Psychosomatic Research* 68(6). 539-544. doi:10.1016/j.jpsychores.2009.10.005.

A review of 8 published, randomized controlled outcome studies that examined the effects of MBSR on depression, anxiety, and psychological distress was undertaken. The authors found an overall effect size on depression of 0.26, indicating a small effect of MBSR on depression, and an effect size for anxiety of 0.47. When studies of lower quality were excluded, an effect size of 0.24 on anxiety was found. A small effect size (0.32) was also found for psychological distress.

Bradshaw, Matt & Christopher G Ellison. 2010. Financial hardship and psychological distress: exploring the buffering effects of religion. *Social Science & Medicine* 71(1). 196-204.

Using data on adults aged 18-59 from the 1998 USNORC General Social Survey, the authors found that both objective and subjective measures of financial hardship are positively associated with distress, and that several different aspects of religious life buffer against these deleterious influences. Specifically, religious attendance and the belief in an afterlife moderate the deleterious effects of financial hardship on both objective and subjective financial hardship, while meditation serves this function only for objective hardship. No interactive relationships were found between frequency of prayer and financial hardship.

Britton, Willoughby B., Patricia L. Haynes, Keith W. Fridel & Richard R. Bootzin. 2010. Polysomnographic and subjective profiles of sleep continuity before and after mindfulness-based cognitive therapy in partially remitted depression. *Psychosomatic Medicine* 72(6). 539-548. doi:10.1097/PSY.0b013e3181dc1bad.

Twenty-six individuals with partially remitted depression were randomized into an 8-week Mindfulness-Based Cognitive Therapy (MBCT) course or a waitlist control condition. MM practice was associated with several indices of increased cortical arousal, including more awakenings and stage 1 sleep and less slow-wave sleep relative to controls, in proportion to amount of MM practice. Subjectively reported sleep improved after the intervention but not above and beyond controls. Depression decreased more in the MBCT group than controls; improvements in depression were associated with increased subjective sleep continuity and increased PSG arousal.

Chou, Hui-Tzu Grace. 2010. The perceived relationship between life events and religiosity among individuals raised in a Mormon community. *Mental Health, Religion & Culture* 13(5). 437-451. doi:10.1080/13674670903381208.

Based on a qualitative survey of undergraduate students in Utah raised by at least one Mormon parent in a Mormon community, the author found that positive life events are more likely than negative life events to increase individuals' level of religiosity in study participants. However negative life events also increased, rather than decreased, respondents' religiosity.

Dermatis, Helen, Tina James, Marc Galanter & Gregory Bunt. 2010. An exploratory study of spiritual orientation and adaptation to therapeutic community treatment. *Journal of Addictive Diseases* 29(3). 306-313. doi:10.1080/10550887.2010.489443.

In this study, researchers found that spiritual orientation was positively correlated with an acceptance of therapeutic community principles and clinical progress.

Ekedahl, M. A. & Y. Wengström. 2010. Caritas, spirituality and religiosity in nurses' coping. European Journal of Cancer Care 19(4). 530-537. doi:10.1111/j.1365-2354.2009.01089.x.

From interviews with 15 Swedish registered oncology nurses, the authors identified dynamic aspects of the nurses' life orientation, such as caritas, religiosity, spirituality and atheism, and found that religiosity can have a protective function that facilitates coping.

Gonsalvez, Craig J., Alex R. Hains & Gerard Stoyles. 2010. Relationship between religion and obsessive phenomena. *Australian Journal of Psychology* 62(2). 93-102. doi:10.1080/00049530902887859. In a study of 179 non-clinical participants, researchers found that religious affiliation was associated with higher levels of obsessive-compulsive (OC) symptoms, and higher levels of personal religiosity (strength of faith) were associated with higher levels of scrupulosity. The main groups (Catholic, Protestant, and no religion) were not different with regard to measures of wellbeing or symptoms of general psychopathology (depression, anxiety, and stress), but were different with regard to OC symptoms.

Grossoehme, Daniel H, Judy Ragsdale, Jamie L Wooldridge, Sian Cotton & Michael Seid. 2010. We Can Handle This: Parents' Use of Religion in the First Year Following Their Child's Diagnosis with Cystic Fibrosis. *Journal of Health Care Chaplaincy* 16(3). 95-108. doi:10.1080/08854726.2010.480833.

In 15 interviews with parents with children with life-shortening diseases, the authors found that parents used religion to make meaning of their child's cystic fibrosis diagnosis. Parents imagined God as active, benevolent, and interventionist; found hope in their beliefs; felt supported by God; and related religion to their motivation to adhere to their child's treatment plan.

Grossoehme, Daniel H., Judy Ragsdale, Sian Cotton, Jamie L. Wooldridge, Lisa Grimes & Michael Seid. 2010. Parents' Religious Coping Styles in the First Year After Their Child's Cystic Fibrosis Diagnosis. *Journal of Health Care Chaplaincy* 16(3). 109-122. doi:10.1080/08854726.2010.480836.

Researchers identified 16 styles of religious coping by parents of children diagnosed with cystic fibrosis (n = 15). Positive religious coping styles were more frequent than negative styles (previously associated with poorer health outcomes), and occurred more frequently than in other studies. Religious coping styles used to make meaning, gain control, or seek comfort/intimacy with God were equally prevalent. The most common styles were: Pleading, Collaboration, Benevolent Religious Reappraisals, and Seeking Spiritual Support. Parents described active rather than passive coping styles. Religious coping involving religious others was rare.

Hsiao, Ya-Chu, Li-Yu Chien, Li-Yu Wu, Chih-Ming Chiang & Song-Yuan Huang. 2010. Spiritual health, clinical practice stress, depressive tendency and health-promoting behaviours among nursing students. *Journal of Advanced Nursing* 66(7). 1612-1622. doi:10.1111/j.1365-2648.2010.05328.x.

In a sample of 1,276 nursing students, researchers found that Spiritual health was negatively associated with clinical practice stress and depressive tendency, and positively associated with health-promoting behaviors. Spiritual health was found to be an important predictive factor for clinical practice stress, depressive tendency and health-promoting behaviors.

Huculak, Susan & John D. McLennan. 2010. "The Lord is my Shepherd": examining spirituality as a protection against mental health problems in youth exposed to violence in Brazil. *Mental Health, Religion & Culture* 13(5). 467-484. doi:10.1080/13674670903406096.

Data from 325 incarcerated adolescents from Sao Paulo City, Brazil revealed some evidence that intrinsic and institutional spirituality/religiosity may buffer the relation between violence exposure and certain mental health problems, and that intrinsic spirituality may mediate the relationship between institutional activities and certain mental well-being outcomes.

Krause, Neal. 2010. Assessing coping responses within specific faith traditions: suffering in silence, stress, and depressive symptoms among older Catholics. *Mental Health, Religion & Culture* 13(5). 513-529.

doi:<u>10.1080/13674670903433686</u>.

Data from an ongoing nationwide survey of older people in the United States show that older Catholics will be more likely than older Protestants to suffer in silence when ongoing economic difficulty is encountered. Further, the potentially deleterious effects of financial problems on depressive symptoms are offset for older adults who prefer to suffer in silence.

Maunu, Aleisha & Catherine H. Stein. 2010. Coping with the personal loss of having a parent with mental illness: young adults' narrative accounts of spiritual struggle and strength. *Journal of Community Psychology* 38(5). 645-655. doi:10.1002/jcop.20385.

Personal accounts from 9 young adults with parents living with mental illness show that young adults who reported experiencing more personal loss due to their parents' mental illness also reported feeling more confused on their faith journey, and reported experiencing more spiritual struggle relative to participants who reported experiencing less personal loss.

Pirutinsky, Steven, Daniel D Rosen, Rachel Shapiro Safran & David H Rosmarin. 2010. Do medical models of mental illness relate to increased or decreased stigmatization of mental illness among orthodox Jews? *The Journal of Nervous and Mental Disease* 198(7). 508-512. doi:10.1097/NMD.0b013e3181e07d99.

Researchers found that biological models of mental illness were associated with greater marriage/family stigma in Orthodox Jewish communities, where mental illness is perceived as a risk to family functioning and future generations. Biological causal attributions often have the opposite effect within the general population.

Thompson, Brian L. & Jennifer Waltz. 2010. Mindfulness and experiential avoidance as predictors of posttraumatic stress disorder avoidance symptom severity. *Journal of Anxiety Disorders* 24(4). 409-415.

doi:10.1016/j.janxdis.2010.02.005.

From self-report measurements by 378 introductory psychology students, researchers found that mindfulness, specifically nonjudgment of experiences, accounted for a unique portion of the variance in posttraumatic stress disorder avoidance symptoms.

Victoroff, Jeff, Samir Quota, Janice R Adelman, Barbara Celinska, Naftali Stern, Rand Wilcox & Robert M Sapolsky. 2010. Support for religio-political aggression among teenaged boys in Gaza: Part I: psychological findings. *Aggressive Behavior* 36(4). 219-231. doi:10.1002/ab.20348.

From self-report measures of life events, emotional status, and political attitudes by fifty-two 14-year-old Palestinian boys in Gaza during the second intifada, researchers found that teenaged boys who reported family members having been wounded or killed by the Israeli Defense Forces expressed greater support for Religio-Political Aggression (RPA). In addition, boys who felt their group was treated unjustly reported greater support for RPA compared with those who did not.

## 2.3 SPIRITUALITY & HEALTH: METHOD AND THEORY

Baig, Arshiya A., Carol M. Mangione, Alice L. Sorrell-Thompson & Jeanne M. Miranda. 2010. A randomized community-based intervention trial comparing faith community nurse referrals to telephone-assisted physician appointments for health fair participants with elevated blood pressure. *Journal of General Internal Medicine* 25(7). 701-709. doi:10.1007/s11606-010-1326-9. One hundred adults with elevated blood pressure were randomized to either referral to a faith community nurse or to a telephone-assisted physician appointment. After 4 months, patients in the faith community nurse referral arm had a 7 + -15 mm Hg drop in SBP versus a 14 + -15 mm Hg drop in the telephone-assisted physician appointment arm. Twenty-seven percent of the patients in the faith community nurse referral arm had medication intensification compared to 32% in the telephone-assisted physician appointment arm.

Cooper, Dan, Michael Aherne & José Pereira. 2010. The competencies required by professional hospice palliative care spiritual care providers. *Journal of Palliative Medicine* 13(7). 869-875. doi:10.1089/jpm.2009.0429.

This article describes a Canadian Community of Practice process to develop an occupational analysis-based competency profile for the Professional Hospice Palliative Care Spiritual Care Provider utilizing a modified Developing a Curriculum (DACUM) methodology.

Florczak, Kristine L. 2010. Gathering information on spirituality: from whose perspective? Nursing Science Quarterly 23(3). 201-205. doi:10.1177/0894318410371836.

The author undertakes a discussion concerning the issues that arise when gathering information about the concept using both quantitative and qualitative methods, offering the use of Parse research methodology as an alternative to current practice.

Frise, Nathan R. & Mark R. McMinn. 2010. Forgiveness and reconcilition: the differing perspectives of psychologists and Christian theologians. *Journal of Psychology & Theology* 38(2). 83-90. <u>http://tinyurl.com/2c2acmu</u>

The authors present the results of two surveys: the first assessed the opinions of academic psychologists and Christian theologians regarding the distinction between forgiveness and reconciliation. The second assessed the opinions of expert psychologists and Christian theologians who have published books on the topic of forgiveness. Analysis revealed that psychologists are more inclined to distinguish between forgiveness and reconciliation than Christian theologians.

Hickey, Wakoh Shannon. 2010. Meditation as Medicine: A Critique. *CrossCurrents* 60(2). 168-184. doi:10.1111/j.1939-3881.2010.00118.x.

The author challenges two ideas of Jon Kabat-Zinn in his research on meditation: first, that the central practice of Buddhism is meditation; second, that Buddhist or Hindu religious ideas or practices are universal, transcending any particular cultural or historical context. She expresses concern that "while a therapeutic approach to meditation is well suited to modern consumer capitalism, it does not necessarily contribute to addressing broader social problems that affect psychological and physical health, or access to medical care."

Jankowski, Katherine R. B., Nava R. Silton, Kathleen Galek & Martin G. Montonye. 2010. Complementary alternative medicine practices used by religious professionals. *Journal of Health Care Chaplaincy* 16(3). 172-182. doi:10.1080/08854726.2010.498694.

An online survey of religious professionals found that the majority of them used at least one complementary and alternative medicine (CAM) practice, most frequently meditation and deep breathing exercises. Female respondents were more likely to use these practices on their own and when helping others than were males, and older respondents were more likely to use multiple CAM practices than their younger counterparts. Other Faith/Humanists used the most CAM practices when alone and Jewish respondents used the fewest.

Jonas-Simpson, Christine. 2010. Awakening to space consciousness and timeless transcendent presence. Nursing Science Quarterly 23(3). 195-200.

#### doi:<u>10.1177/0894318410371848</u>.

Drawing on the work of Eckhart Tolle, the author discusses space consciousness, through which people become aware that we are timeless transcendent presence. This awareness is pronounced when with those who are living dying and their close others who are deeply grieving. Space consciousness and transcendent timeless presence in the context of living dying and deeply grieving are explored using nurse theorists' works in dialogue with Tolle's teachings.

Lawson, Karen. 2010. Spirituality in medicine: What is its role, today and tomorrow? Word & World 30(1). 71-80.

The spiritual care of patients is an interdisciplinary responsibility, increasingly requiring both medical caregivers and religious caregivers to work together and understand one another's work. In this article, readers are given insight into the growing field of spirituality in medicine.

McBrien, Barry. 2010. Nurses' provision of spiritual care in the emergency setting--an Irish perspective. *International Emergency Nursing* 18(3). 119-126. doi:10.1016/j.ienj.2009.09.004.

Data gathered from nurses in emergency room settings reveal that participants regarded spiritual care to be an integral component of their role. In addition, participants reported that they derived positive personal outcomes from providing this aspect of nursing care, though concerns were expressed with regard to its provision.

McBrien, Barry. 2010. Emergency nurses' provision of spiritual care: a literature review. *British Journal* of Nursing 19(12). 768-773.

In this literature review, the author found that while there has been an improvement in clinical and technical management of patients, the caring component of nursing, including spiritual care, has decreased, though nurses spend considerable time in intense interactions with patients. Although advances in technology can enable nurses to objectively measure responses to care, it can also supersede the premise of holistic health care.

McCollum, Eric E & Diane R Gehart. 2010. Using mindfulness meditation to teach beginning therapists therapeutic presence: a qualitative study. *Journal of Marital and Family Therapy* 36(3). 347-360.

doi:<u>10.1111/j.1752-0606.2010.00214.x</u>.

Through thematic analysis of journal entries by therapeutic students who had learned mindfulness meditation, researchers identified as prominent themes the effects of meditation practice, the ability to be present, balancing being and doing modes in therapy, and the development of acceptance and compassion for themselves and for their clients. They conclude that mindfulness meditation may be a useful addition to clinical training.

Mok, Esther, Ka-po Lau, Wai-man Lam, Lai-ngor Chan, Jeffrey S C Ng & Kin-sang Chan. 2010. Healthcare professionals' perceptions of existential distress in patients with advanced cancer. *Journal of Advanced Nursing* 66(7). 1510-1522. doi:10.1111/j.1365-2648.2010.05330.x.

Following focus groups with physicians, nurses, social workers, occupational therapists, physiotherapists, and chaplains working in a palliative care unit (n = 23), the authors found three causal conditions of existential distress in patients: anticipation of a negative future, failure to engage in meaningful activities and relationships, and having regrets. Three basic (caring, relating and knowing) and six intervening strategies were identified.

Paley, John. 2010. Spirituality and reductionism: three replies. Nursing Philosophy: An International Journal for Healthcare Professionals 11(3). 178-190. doi:10.1111/j.1466-769X.2010.00439.x. The author replies to criticisms of his work, made in previous issues of the journal. He argues that the critics have not really understood what reductionism involves; that rejecting reductionism is not the same as providing arguments against it; that the ethical dilemmas allegedly associated with reductionist views are endemic to health care; that 'reifying' is what believers in the spiritual realm do; and that the closed minds belong to those who dismiss reductionist science without having studied its achievements.

Perreira, Todd LeRoy. 2010. "Die before you die": Death Meditation as Spiritual Technology of the Self in Islam and Buddhism. *The Muslim World* 100(2-3). 247-267. doi:10.1111/j.1478-1913.2010.01319.x.

The author reports on the demand of the transformation of the self as a living subject and moral agent at the time of death in Islam and Buddhism. These two call for the acquisition of a certain knowledge of the self, of understanding the spiritual necessity and urgency of "dying" before dying, and the realization that such a "death" must be achieved while one is still very much alive here.

Pesut, Barbara & Sheryl Reimer-Kirkham. 2010. Situated clinical encounters in the negotiation of religious and spiritual plurality: a critical ethnography. *International Journal of Nursing Studies* 47(7). 815-825.

doi:<u>10.1016/j.ijnurstu.2009.11.014</u>.

Researchers found that clinical encounters between care providers (n = 49) and recipients (n = 16) were shaped by how individual identities in relation to religion and spirituality were constructed. Importantly, these identities did not occur in isolation from other lines of social classification such as gender, race, and class. Negotiating difference was a process of seeing spirituality as a point of connection, eliciting the meaning systems of patients and creating safe spaces for the expression of that meaning.

Porter, Steve L. 2010. Theology as Queen and Psychology as Handmaid: The Authority of Theology in Integrative Endeavors. *Journal of Psychology & Christianity* 29(1). 3-14. http://tinyurl.com/23h8lrc

The author discusses the relative epistemic authority of the deliverances of theological method and the deliverances of psychological. He presents an epistemological argument for the higher authority of well-grounded theological claims.

Roura, Maria, Ray Nsigaye, Benjamin Nhandi, Joyce Wamoyi, Joanna Busza, Mark Urassa, Jim Todd & Basia Zaba. 2010. "Driving the devil away": qualitative insights into miraculous cures for AIDS in a rural Tanzanian ward. *BMC Public Health* 10(1). 427. doi:10.1186/1471-2458-10-427.

Qualitative interviews were conducted with 25 Faith Leaders (FLs) and revealed that many FLs simultaneously believed in traditional and faith healing. Praying for the sick was a common practice and over one third of respondents said that prayer could cure HIV. Being HIV-positive was often seen as "a punishment from God" and a consequence of sin. As sinning could result from "the work of Satan", forgiveness was possible, and a "reconciliation with God" deemed as essential for a favorable remission of the disease.

Schuurmans-Stekhoven, James. 2010. "Moved by the spirit": does spirituality moderate the interrelationships between subjective well-being subscales? *Journal of Clinical Psychology* 66(7). 709-725.

doi:<u>10.1002/jclp.20694</u>.

Through investigation into the methodological problems in most research into the link between spirituality and well-being, the author finds that the interrelationship between the subjective well-being subscales were shown to vary in conjunction with spirituality. In all models the spirituality main effect was either nonsignificant or accounted for by other predictors, casting doubt on the previously reported "belief-as-benefit" effect.

Schwartz, Stephan A. 2010. Nonlocality and exceptional experiences: a study of genius, religious epiphany, and the psychic. Explore 6(4). 227-236. doi:10.1016/j.explore.2010.04.008.

The author asserts that the experiences of moments of genius, religious epiphany, and psychic insight are in essence the same experience. The paper surveys research from quantum biology, physics, psychology, medicine, anthropology, and parapsychology, and proposes that meditation research be seen in the context of psychophysical self-regulation, and that it offers one powerful avenue for producing these exceptional experiences.

Streib, Heinz, Ralph W. Hood & Constantin Klein. 2010. The Religious Schema Scale: Construction and Initial Validation of a Quantitative Measure for Religious Styles. International Journal for the Psychology of Religion 20(3). 151-172. doi:10.1080/10508619.2010.481223.

Based on 822 responses from participants in the United States and Germany, researchers created a 15-item Religious Schema Scale (RSS). The authors report correlations of the RSS with the Big Five, Psychological Well-Being, Religious Fundamentalism, and Right-Wing Authoritarianism, and present predictive characteristics of the RSS in regard to Fowler's stages of faith.

Thomas, Jeani C, Mattie Burton, Mary T Quinn Griffin & Joyce J Fitzpatrick. 2010. Selftranscendence, spiritual well-being, and spiritual practices of women with breast cancer. Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association 28(2). 115-122. doi:10.1177/0898010109358766.

In a study of 87 community-residing women who had been diagnosed with breast cancer within the past 5 years, researchers found a significant positive relationship between self-transcendence and spiritual well-being. The women used a mean of 9.72 spiritual practices with the most frequent being exercise, visiting a house of worship, and praying alone.

Weiland, Sandra A. 2010. Integrating spirituality into critical care: an APN perspective using Roy's adaptation model. Critical Care Nursing Quarterly 33(3). 282-291. doi:10.1097/CNQ.0b013e3181ecd56d.

This article describes spiritual care of the critically ill adult patient and the role that the advanced practice nurses must, can, and should take to assimilate spiritual care into care of these patients and their families.

Wilcox, Sara, Marilyn Laken, Allen W Parrott, Margaret Condrasky, Ruth Saunders, Cheryl L Addy, Rebecca Evans, Meghan Baruth & May Samuel. 2010. The faith, activity, and nutrition (FAN) program: design of a participatory research intervention to increase physical activity and improve dietary habits in African American churches. Contemporary Clinical Trials 31(4). 323-335. doi:10.1016/j.cct.2010.03.011.

The authors describe the design of a group randomized trial designed to increase physical activity and nutrition, and reduce blood pressure in African American church members. The faith, activity, and nutrition (FAN) program trains church committee members, pastors, and cooks to learn how to implement physical activity and dietary changes in the church. Monthly mailings and technical assistance calls are delivered over the 15-month intervention.

Winter-Pfandler, Urs & Christoph Morgenthaler. 2010. Are surveys on quality improvement of healthcare chaplaincy emotionally distressing for patients? A pilot study. Journal of Health Care *Chaplaincy* 16(3). 140-148.

doi:10.1080/08854726.2010.480829.

In a survey of 37 patients, 92% reported that the completion of a questionnaire about quality improvement of healthcare chaplaincy was not, or was only slightly, emotionally distressing for them. Analysis showed no effect, except for a significant association with the anxiety scale. Findings from this study suggest that participants found no objective reasons not to do research in healthcare chaplaincy.

## PART 3. BOOKS

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

- Boyd, Gloria. 2010. African American religious experiences in Mississippi County, Arkansas. Newcastle: Cambridge Scholars.
- Christianson, Eric, & Christopher Partridge (eds.). 2010. *Holy terror : understanding religion and violence in popular culture*. London ; Oakville CT: Equinox Pub. Ltd.
- Lash, Scott. 2010. Intensive culture : social theory, religion & contemporary capitalism. London: Sage.
- Leeming, David, Kathryn Madden, & Stanton Marlan (eds.). 2010. *Encyclopedia of psychology and religion*. New York ; London: Springer.
- McCutcheon, Russell. 2009. Religious experience : a reader. London: Equinox.
- Piedmont, Ralph, & Andrew Village (eds.). 2010. Research in the social scientific study of religion. Vol. 21. Leiden: Brill.
- Pyysiainen, Ilkka. 2010. Religion, economy, and cooperation. Berlin ; New York: De Gruyter.
- Riis, Ole & Linda Woodhead. 2010. A sociology of religious emotion. Oxford ; New York: Oxford University Press.
- Turner, Bryan (ed.). 2010. Secularization. 4 vols. London: Sage.
- Weddle, David. 2010. *Miracles : wonder and meaning in world religions*. New York: New York University Press.
- Wilkins, John (ed.). 2010. Intelligent design and religion as a natural phenomenon. (The International Library of Essays on Evolutionary Thought 5). Farnham: Ashgate.

#### 3.2 Spirituality & Health Research

- Plante, Thomas. 2010. Contemplative practices in action : spirituality, meditation, and health. Santa Barbara: Praeger.
- Smalley, Susan. 2010. Fully present : the science, art, and practice of mindfulness. Cambridge Mass.: Da Capo Lifelong.
- Stahl, Bob. 2010. A mindfulness-based stress reduction workbook. Oakland, Calif.: New Harbinger Publications.

# PART 4. ARTICLES IN PRESS

### 4. 1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Carpenter, Jeffrey & Caitlin Knowles Myers. Why Volunteer? Evidence on the role of altruism, image, and incentives. *Journal of Public Economics*. doi:10.1016/j.jpubeco.2010.07.007.
- Colzato, Lorenza S, Ilja van Beest, Wery P M van den Wildenberg, Claudia Scorolli, Shirley Dorchin, Nachshon Meiran, Anna M Borghi & Bernhard Hommel. 2010. God: Do I have your attention? *Cognition.* doi:10.1016/j.cognition.2010.07.003.

Droogers, André. Towards the concerned study of religion: Exploring the double power-play disparity. *Religion*. doi:10.1016/j.religion.2010.07.001.

Dunn, Michael J., Stacey Brinton & Lara Clark. Universal sex differences in online advertisers age preferences: comparing data from 14 cultures and 2 religious groups. *Evolution and Human Behavior*.

doi:10.1016/j.evolhumbehav.2010.05.001.

- Kirschner, Sebastian & Michael Tomasello. Joint music making promotes prosocial behavior in 4year-old children. *Evolution and Human Behavior*. doi:10.1016/j.evolhumbehav.2010.04.004.
- Kramp, Joseph M. 2010. A Psychology of Religious Plurality: From Intra-Religious Dialogue to Intra-Psychic Reality. *Journal of Religion and Health*. doi:10.1007/s10943-010-9371-6.
- Polito, Vince, Robyn Langdon & Jac Brown. The experience of altered states of consciousness in shamanic ritual: The role of pre-existing beliefs and affective factors. *Consciousness and Cognition*. doi:10.1016/j.concog.2010.05.013.
- Rutjens, Bastiaan T., Joop van der Pligt & Frenk van Harreveld. Deus or Darwin: Randomness and belief in theories about the origin of life. *Journal of Experimental Social Psychology*. doi:10.1016/j.jesp.2010.07.009.
- Sharpley, Richard & Deborah Jepson. Rural tourism: A spiritual experience? *Annals of Tourism Research* In Press, Corrected Proof. doi:10.1016/j.annals.2010.05.002.
- Suedfeld, Peter, Katya Legkaia & Jelena Brcic. 2010. Changes in the Hierarchy of Value References Associated With Flying in Space. *Journal of Personality*. doi:10.1111/j.1467-6494.2010.00656.x.

## 4.2 SPIRITUALITY & HEALTH RESEARCH

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