



RESEARCH REVIEW

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

SEPTEMBER, 2011

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 583 articles, 98 articles have been retained from 62 journals. There are 35 pre-publication citations from 29 journals.

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CONTENTS

Part 1: Articles in Religion, Brain, and Behavior	2
1.1 Scientific Study of Religion: Cognitive Neuroscience.....	2
1.2 Scientific Study of Religion: Evolution	5
1.3 Scientific Study of Religion: Psychology and Culture	5
1.4 Scientific Study of Religion: Method & Theory.....	11
Part 2. Articles in Spirituality & Health Research	13
2.1 Spirituality & Health: General Health & Well-Being	13
2.2 Spirituality & Health: Mental Health	17
2.3 Spirituality & Health: Method and Theory	22
Part 3. Books.....	28
3.1 Scientific Study of Religion, Brain, and Behavior.....	28
3.2 Spirituality & Health Research.....	28
Part 4. Articles in Press.....	29
4.1 Scientific Study of Religion, Brain, and Behavior.....	29
4.2 Spirituality & Health Research.....	30

PART 1: ARTICLES IN RELIGION, BRAIN, AND BEHAVIOR

1.1 SCIENTIFIC STUDY OF RELIGION: COGNITIVE NEUROSCIENCE

Cakmak, Yusuf O., Gazanfer Ekinci, Nazire Afsar & Safiye Cavdar. 2011. Structural cortical plasticity induced by the mindfulness meditation of the Sufi Whirling Derwishes. *Neuroscience Research* 71, Supplement. e96.
doi:10.1016/j.neures.2011.07.412.

Researchers scanned the brains using MRI of 3 Sufi Whirling Derwishes (SWD), who practice a form of meditation that combines whirling with meditation, along with 3 age-matched controls, to perform cortical thickness analysis (CTA). The CTA of the SWD who has 5 years of meditation experience demonstrated a thickened area at the posterior insula but not in the prefrontal cortex. The CTA of the SWD who has 10 years of meditation experience demonstrate thickened cortical areas at anterior insula but also in the prefrontal cortex. The CTA of the most experienced SWD (18 years of meditation experience) demonstrated thickened cortex at anterior insula and at the prefrontal cortex. The CTA of the SWD who has 5 years of meditation experience revealed a thickened area at the posterior insula that is related to the vestibular system (whirling) and control of somatic musculature. The CTA of the SWDs with 10 and 18 years of meditation experience revealed a thickened region at the anterior insula which is related with empathy and feeling pain of others. The increased thickness of dorsomedial prefrontal cortex (area for forgiving and imagine ones position from the point of view of a third emotionally detached person) can only be observed after 10 years of SWD meditation. Researchers conclude that meditation experience can progressively effect cortical thickness in years on the specific regions of the brain which are related with empathy, warmth behavior toward others and also forgiving. Improved cortical thickness at the anterior insula may also have clinical reflections for Migraine, Autism and Alzheimer disease in which anterior insula is gets thinner.

Carrazana, Enrique & Jocelyn Cheng. 2011. St Theresa's Dart and a Case of Religious Ecstatic

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Epilepsy. *Cognitive and Behavioral Neurology: Official Journal of the Society for Behavioral and Cognitive Neurology* 24(3). 152-155.

doi:10.1097/WNN.0b013e318230b1db.

This case report describes a case of ecstatic seizures with religious overtones in a patient whose semiology resembles that of Saint Theresa of Avila (1515 to 1582). Evaluation of the patient demonstrated right temporal encephalomalacia on magnetic resonance imaging of the brain. Electroencephalogram showed focal slowing and poorly defined sharp waves in the right frontotemporal region. This area of pathology concurs with prior studies that localize ecstatic seizures to the anterior insula or temporal lobes. Researchers conclude that ecstatic seizures may involve the right temporal region. Although interpretation of ecstatic seizures is subject to individual variation, a similar localization and our patient's religious background may explain the resemblance between the semiology of his seizures, and that of Saint Theresa's visions as described almost 5 centuries ago.

Frederick, Travis. 2011. Comparison of coherence, amplitude, and eLORETA patterns during Transcendental Meditation and TM-Sidhi practice. *International Journal of Psychophysiology* 81(3). 198-202.

doi:10.1016/j.ijpsycho.2011.06.011.

EEG measurements were recorded from 26 subjects with experience in Transcendental Meditation (TM) who were randomly assigned to either two consecutive 10-min TM sessions or to a 10-min TM session followed by 10-min TM-Sidhi practice. TM involves systematic transcending of contents of experience to a state of pure consciousness; the TM-Sidhi program involves sanyama—the simultaneous experience of dhāraṇā (fixity), dhyāna (transcending) and samādhi (pure consciousness). Compared to TM practice, TM-Sidhi practice was characterized by higher frontal alpha1 and beta1 amplitudes, and eLORETA-identified sources of alpha1 EEG in right-hemisphere object recognition areas including the right parahippocampus gyrus, right fusiform gyrus, lingual gyrus, and inferior and medial temporal cortices. These cortical areas are involved in specific/holistic representation of words. The observed brain patterns support the descriptions of sanyama as including both specificity (sutras or verses), as suggested by higher frontal beta1 EEG amplitude and by eLORETA sources in right-hemisphere object-recognition areas, and holistic experience (pure consciousness) as suggested by higher frontal alpha1 EEG amplitude. These EEG patterns fit the complex description of sanyama.

Giaquinto, S, L Bruti, V Dall'Armi, E Palma & C Spiridigliozzi. 2011. Religious and spiritual beliefs in outpatients suffering from Parkinson Disease. *International Journal of Geriatric Psychiatry* 26(9). 916-922.

doi:10.1002/gps.2624.

Researchers studied eighty-three participants with Parkinson Disease (PD), 79 hypertensive individuals not affected by PD and 88 healthy subjects to evaluate whether religious and spiritual beliefs in PD patients are different from age-matched controls. There was no statistical evidence of a difference between PD participants and the two control groups; the only exception being observed between the left PD onset group and the controls, where the total Royal Free Interview (RFI) score was about 5 points higher. RFI total score was uncorrelated with age, severity of illness and depression, but was strongly dependent on the type of beliefs. The percentage of PD participants suffering from anxiety and depression was high, while only 15.2% of the hypertensive participants, and none of the healthy controls, had a Hospital Anxiety and Depression Scale score above 10 points. Total RFI score was higher in women. The authors conclude that PD participants maintain their faith in spite of the disease severity, though differences are found between right and left onset of PD.

Radin, Dean I., Cassandra Vieten, Leena Michel & Arnaud Delorme. September. Electrocortical Activity Prior to Unpredictable Stimuli in Meditators and Nonmeditators. *EXPLORE: The Journal of Science and Healing* 7(5). 286-299.

doi:10.1016/j.explore.2011.06.004.

In a study of 8 meditators and 8 matched controls, researchers took EEG measurements before, during, and after exposure to unpredictable light and sound stimuli. The experiment postulated that if some aspect of consciousness extends beyond the present moment, then prestimulus electrocortical signals should differ depending on stimuli that were about to be selected by a truly random process, and that if such experiences were catalyzed through meditation practice, then prestimulus differences should be more apparent in meditators than in nonmeditators. Within the control group, no EEG channels showed significant prestimulus differences between light versus sound stimulus conditions, but within the meditator group five of 32 channels resulted in significant differences. Comparisons between control and meditator groups showed significant prestimulus differences prior to audio tone stimuli in 14 of 32 channels. The authors conclude that sometimes the meditators' subjective sense of awareness extending into the future may be ontologically accurate.

Salomons, Tim V. & Aaron Kucyi. 2011. Does Meditation Reduce Pain through a Unique Neural Mechanism? *The Journal of Neuroscience* 31(36). 12705 -12707.
doi:10.1523/jneurosci.2843-11.2011.

The authors review recent literature on the neuroscience of meditation. They find that several studies have demonstrated beneficial effects of mindfulness-based interventions for both chronic and acute pain. Most of these have demonstrated effects of mindfulness on the affective and evaluative components of pain, but some have also demonstrated effects on sensory thresholds and perceived pain intensity. They conclude that exploration of the biological mechanisms of such treatments may increase our ability to treat pain disorders by enhancing our understanding of endogenous pain regulation.

Sobolewski, Aleksander, Ewa Holt, Ewa Kublik & Andrzej Wróbel. 2011. Impact of meditation on emotional processing – a visual ERP study. *Neuroscience Research* 71(1). 44-48.
doi:10.1016/j.neures.2011.06.002.

In this visual event-related potential (ERP) study, researchers investigated whether long-term meditation practitioners (n=13) exhibit different ERP responses to the emotional load of stimuli than control subjects with no experience in meditation (n=13). Differences were observed in the late positive potential (LPP). LPP amplitude is typically greater in ERPs evoked by emotionally arousing scenes, specifically negative images, compared to neutral scenes. This effect was also replicated in this study, but not in case of meditators' frontal scalp regions, who differed significantly in this respect from control subjects. The authors conclude that there is different emotional processing in meditation practitioners: at high levels of processing meditators are less affected by stimuli with adverse emotional load, while processing of positive stimuli remains unaltered.

van Vugt, Marieke K & Amishi P Jha. 2011. Investigating the impact of mindfulness meditation training on working memory: a mathematical modeling approach. *Cognitive, Affective & Behavioral Neuroscience* 11(3). 344-353.
doi:10.3758/s13415-011-0048-8.

After an intensive one-month mindfulness training (MT) retreat, participants displayed faster and significantly less variable response times in a working memory task with complex visual stimuli, than those of a control group, though accuracy did not differ across groups. Mathematical modeling suggested that MT leads to improved information quality and reduced response conservativeness, with no changes in nondecisional factors. Further modeling suggested that the increase in information quality reflected a decrease in encoding noise and not an increase in forgetting.

1.2 SCIENTIFIC STUDY OF RELIGION: EVOLUTION

Liddle, James R., Lance S. Bush & Todd K. Shackelford. 2011. An introduction to evolutionary psychology and its application to suicide terrorism. *Behavioral Sciences of Terrorism and Political Aggression* 3(3). 176-197.
doi:10.1080/19434472.2010.512157.

This article introduces evolutionary psychology to a general readership, with the purpose of applying evolutionary psychology to suicide terrorism. Some of the key concepts related to evolutionary psychology are discussed, as well as several misconceptions associated with this approach to psychology. The authors argue that one of the primary, but insufficient, motivating factors for suicide terrorism is strong religious belief. Evolutionary psychological theories related to religious belief, and supporting empirical work, are described, laying a foundation for examining suicide terrorism.

1.3 SCIENTIFIC STUDY OF RELIGION: PSYCHOLOGY AND CULTURE

Abrams, Daniel M, Haley A Yaple & Richard J Wiener. 2011. Dynamics of social group competition: modeling the decline of religious affiliation. *Physical Review Letters* 107(8). 088701.

When social groups compete for members, the resulting dynamics may be understandable with mathematical models. We demonstrate that a simple ordinary differential equation (ODE) model is a good fit for religious shift by comparing it to a new international data set tracking religious non-affiliation. We then generalize the model to include the possibility of nontrivial social interaction networks and examine the limiting case of a continuous system. Analytical and numerical predictions of this generalized system, which is robust to polarizing perturbations, match those of the original ODE model and justify its agreement with real-world data. The resulting predictions highlight possible causes of social shift and suggest future lines of research in both physics and sociology.

Arthur, James. 2011. Religious and spiritual markers in community involvement. *British Journal of Religious Education* 33(3). 299-312.
doi:10.1080/01416200.2011.595914.

This article reports on some of the research findings of a major, multi-site case study of character formation in young people in England. Religion was not the focus of this research, but emerged as significant in each case study. In particular, the religious and spiritual beliefs and practices of young people were positively connected with their level of community involvement. The research provides evidence that indicates an association between young religious believers and those who are constructively engaged in both their communities as well as being politically minded. The main methods of data collection for this article included semi-structured discussions/interviews together with semi-structured individual and questionnaire surveys.

Corkery, Shannon A., Melissa A. Curran & Amanda Parkman. 2011. Spirituality, Sacrifice, and Relationship Quality for Expectant Cohabitators. *Marriage & Family Review* 47(6). 345-362.
doi:10.1080/01494929.2011.594213.

Given negative effects of cohabitation, we examine negative (ambivalence, conflict) and positive (commitment, satisfaction) relationship quality, as explained by perceptions of ease of relational sacrifices and spirituality, for unmarried cohabitators expecting their first child (46 individuals). Controlling for race/ethnicity and education, perceived ease of relational sacrifice was associated with greater satisfaction and lower ambivalence and conflict, whereas spirituality was not associated with any of the relationship quality variables. Examined together, greater ease of relational sacrifice and higher spirituality were associated with greater commitment and satisfaction and lower ambivalence and conflict. Given that many studies of cohabitation focus on demographic factors and that

many studies of spirituality focus on married couples, the current study expands knowledge regarding relationship quality for nontraditional couples.

Demaris, Alfred, Annette Mahoney & Kenneth I Pargament. 2011. Doing the Scut Work of Infant Care: Does Religiousness Encourage Father Involvement? *Journal of Marriage and the Family* 73(2). 354-368.

doi:10.1111/j.1741-3737.2010.00811.x.

Considerable debate exists regarding whether religiousness promotes or impedes greater father involvement in parenting. Our study addresses this issue using a Midwestern longitudinal dataset that tracks the transition to first parenthood for 169 married couples. We focus on performance of the “messier” tasks of infant care. We find little evidence that religiousness enhances father involvement in this domain. Biblically conservative couples exhibit a greater gender gap in childcare than others, with mothers more involved than fathers. The gender gap is also greater the more fathers work outside the home, the greater mothers’ knowledge of infant development, and the more unadaptable the infant. Average daily childcare is lower the greater spouses’ work hours, but higher with difficult pregnancies or fussy babies.

Ecklund, Elaine Howard, Jerry Z Park & Katherine L Sorrell. 2011. Scientists Negotiate Boundaries Between Religion and Science. *Journal for the Scientific Study of Religion* 50(3). 552-569.

doi:10.1111/j.1468-5906.2011.01586.x.

Analysis of interviews with 275 natural and social scientists at 21 elite U.S. research universities suggests that only a minority of scientists see religion and science as always in conflict. Scientists selectively employ different cultural strategies with regards to the religion-science relationship: redefining categories (the use of institutional resources from religion and from science), integration models (scientists strategically employ the views of major scientific actors to legitimate a more symbiotic relationship between science and religion), and intentional talk (scientists actively engage in discussions about the boundaries between science and religion). Such results challenge narrow conceptions of secularization theory and the sociology of science literature by describing ways science intersects with other knowledge categories. Most broadly the ways that institutions and ideologies shape one another through the agency of individual actors within those institutions is explored.

Farrell, Justin. 2011. The Young and the Restless? The Liberalization of Young Evangelicals. *Journal for the Scientific Study of Religion* 50(3). 517-532.

doi:10.1111/j.1468-5906.2011.01589.x.

This study examines popular and scholarly perceptions that young American evangelicals are becoming more liberal than older evangelicals. Young evangelicals are more likely to have more liberal attitudes on same-sex marriage, premarital sex, cohabitating, and pornography, but not abortion. This analysis is situated within the theoretical context of emerging adulthood, and considers higher education, delayed marriage, and shifts in moral authority as potential mediating factors accounting for age differences. A new method for operationalizing evangelical as a religious identity is suggested and three different classification schemes are examined: religious tradition, self-identified evangelicals, and theologically conservative Protestants. The data come from the 2006 Panel Study of American Religion and Ethnicity.

Fulton, Brad R. 2011. Black Churches and HIV/AIDS: Factors Influencing Congregations’ Responsiveness to Social Issues. *Journal for the Scientific Study of Religion* 50(3). 617-630.

doi:10.1111/j.1468-5906.2011.01579.x.

The ambivalent response of many black churches to current social issues has caused some scholars to question the centrality of black churches within African-American communities. Using a nationally representative sample of black congregations, this study engages the debate about the institutional centrality of black churches by focusing on their response to HIV/AIDS. Although many congregational studies treat black churches as a monolithic whole,

this analysis identifies heterogeneity among black churches that shapes their responsiveness to social issues. Contrary to prior claims, a congregation's liberal-conservative ideological orientation does not significantly affect its likelihood of having an HIV/AIDS program. Beyond assessing churches' internal characteristics, this study uses institutional theory to analyze churches as open systems that can be influenced by their surrounding environment. It demonstrates that externally engaged congregations are significantly more likely to have a program. These results indicate that black churches maintain institutional centrality by engaging their external environment.

Glendinning, Tony & Steve Bruce. 2011. Privatization or Deprivatization: British Attitudes About the Public Presence of Religion. *Journal for the Scientific Study of Religion* 50(3). 503-516.
doi:10.1111/j.1468-5906.2011.01582.x.

Achterberg and colleagues conclude there is in train a significant change toward deprivatization in Europe. In the late 1990s Christians were more pro public religion in countries where they were least numerous and in the Netherlands in particular there had been an increasing difference in attitudes between believers and nonbelievers over 25 years. Examining more recent survey data on British attitudes (1998 and 2008), we find a firm consensus among the nonreligious against religion having a high public profile, while Christians are more likely to object to antireligious sentiment and people belonging to non-Christian religions are more likely to support public religion. Nonreligious people appear to be no more hostile now than in the late 1990s, and where there has been a decrease in sympathy for public religion it is among religious groups.

Hill, Jonathan P. 2011. Faith and Understanding: Specifying the Impact of Higher Education on Religious Belief. *Journal for the Scientific Study of Religion* 50(3). 533-551.
doi:10.1111/j.1468-5906.2011.01587.x.

This study examines the impact of educational enrollment and attainment on several measures of religious belief using nationally representative panel data. Although college does not appear to substantially alter the religious beliefs of most emerging adults, findings do reveal a modest increase in skepticism toward super-empirical religious beliefs among college students and graduates compared to those who have never attended any form of postsecondary education. This effect is dependent on college type, with students attending elite universities exhibiting the greatest increase in skepticism. Apart from changes in super-empirical belief, graduating from college modestly increases preferences for institutionalized religion while simultaneously reducing adherence to exclusivist religious belief. Faculty commitment to secularism, the degree of student academic engagement, and developing social identities may play a role in religious belief change, particularly at elite universities.

van den Hurk, Paul A M, Tom Wiggins, Fabio Giommi, Henk P Barendregt, Anne E M Speckens & Hein T van Schie. 2011. On the Relationship Between the Practice of Mindfulness Meditation and Personality: An Exploratory Analysis of the Mediating Role of Mindfulness Skills. *Mindfulness* 2(3). 194-200.
doi:10.1007/s12671-011-0060-7.

Mindfulness meditation (MM) has often been suggested to induce fundamental changes in the way events in life are experienced and dealt with, presumably leading to alterations in personality. However, the relationship between the practice of MM and personality has not been systematically studied. The aim of this study was to explore this relationship and to investigate the mediating role of mindfulness skills. Thirty-five experienced mindfulness

meditators (age range, 31-75 years; meditation experience range, 0.25-35 years; mean, ~13 years) and 35 age-,

gender-, and ethnicity-matched controls (age range, 27-63 years) without any meditation experience completed a personality and mindfulness questionnaire. The practice of MM was positively related to openness and

extraversion and negatively related to neuroticism and conscientiousness. Thus, the results of the current study associate the practice of MM with higher levels of curiosity and receptivity to new experiences and experience of positive affect and with less proneness toward negative emotions and worrying and a reduced focus on achievements. Furthermore, the mediating role of specific mindfulness skills in the relationship between the practice of MM and personality traits was shown.

- Kastenmüller, Andreas, Tobias Greitemeyer, Amy L. Ai, Gabriele Winter & Peter Fischer. 2011. In the Face of Terrorism: Evidence that Belief in Literal Immortality Reduces Prejudice Under Terrorism Threat. *Journal for the Scientific Study of Religion* 50(3). 604-616.
doi:10.1111/j.1468-5906.2011.01578.x.

Based on terror management theory, previous research has shown that terrorism threat increases prejudice against Muslims and is mediated by death-related thoughts. Because this effect was found on a correlational level, it remains unclear whether terrorism threat increases prejudice against Muslims because of enhanced death-related thoughts or the opposite: terrorism threat increases death-related thoughts because of stronger prejudice against Muslims. To disentangle this shortcoming, we varied death-related thoughts by systematically manipulating the belief in literal immortality. Using two studies, we found that participants exposed to terrorism pictures (vs. controls) had increased prejudice against both Muslims (Study 1) and immigrants (Study 2) when they were led to believe that literal immortality does not exist but not when they were led to believe that it does exist. Mediation analysis indicated that this effect was mediated by death-related thoughts. This provides further evidence that terrorism threat increases prejudice because of death-related thoughts.

- Marsh, Timothy & Jac Brown. 2009. Homonegativity and its Relationship to Religiosity, Nationalism and Attachment Style. *Journal of Religion and Health* 50(3). 575-591.
doi:10.1007/s10943-009-9286-2.

This study investigated the relationships between negative attitudes towards homosexuals and two traditional ideologies: religiosity and nationalism, and explored the link with attachment style. An Internet survey yielded 290 participants, of highly diverse ages, nationalities, and religious backgrounds. The participants provided demographic details, and completed measures of adult attachment, nationalism, religiosity, and both explicit and implicit measures of homonegativity. The results indicated that both nationalism and religiosity were highly significant predictors of homonegativity. In the religious group, homonegativity and religiosity were positively related. This finding was greater for less securely attached individuals. Avoidance moderated the relationship in religious females, while anxiety moderated the relationship in religious males. No significant attachment moderation was found between the nationalism–homonegativity relationships.

- Makowsky, Michael D. 2011. Religion, clubs, and emergent social divides. *Journal of Economic Behavior & Organization* 80(1). 74-87.
doi:10.1016/j.jebo.2011.02.012.

Arguments regarding the existence of an American cultural divide are frequently placed in a religious context. This paper seeks to establish that, all politics aside, the American religious divide is real, that religious polarization is not a uniquely American phenomenon, and that religious divides can be understood as naturally emergent within the club theory of religion. Analysis of the survey data reveals a bimodal distribution of religious commitment in the U.S. International data reveals evidence of bimodal distributions in all twenty-nine surveyed countries. The club theory of religion, applied in an agent-based computational model, generates bimodal distributions of member commitment.

- Massey, Douglas S. & Monica Espinoza Higgins. 2011. The effect of immigration on religious belief and practice: A theologizing or alienating experience? *Social Science Research* 40(5). 1371-1389.
doi:10.1016/j.ssresearch.2010.04.012.

Using data from the New Immigrant Survey, we examine the religious beliefs and practices of new legal immigrants to the United States. We find that Christian immigrants are more Catholic, more Orthodox, and less Protestant than American Christians, and that those immigrants who are Protestant are more likely to be evangelical. In addition to being more Catholic and more Orthodox than American Christians, the new immigrants are also paradoxically less Christian, with a fifth reporting some other faith. Detailed analysis of reported church attendance at places of origin and in the United States suggest that immigration is a disruptive event that alienates immigrants from religious practice rather than “theologizing” them. In addition, our models clearly show that people who join congregations in the United States are highly selected and unrepresentative of the broader population of immigrants in any faith. In general, congregational members were more observant both before and after emigration, were more educated, had more cumulative experience in the United States, and were more likely to have children present in the household and be homeowners and therefore yield biased representations of all adherents to any faith. The degree of selectivity and hence bias also varies markedly both by religion and nationality.

- Olson, Daniel V. A & Paul Perl. 2011. A Friend in Creed: Does the Religious Composition of Geographic Areas Affect the Religious Composition of a Person’s Close Friends? *Journal for the Scientific Study of Religion* 50(3). 483-502.
doi:10.1111/j.1468-5906.2011.01581.x.

Numerous theories of religion rest on the assumption that the religious composition of local populations influences the religious identities of a person’s close friends, but there have been few empirical tests of this assumption. Using a combination of data on the religious identity of close friends (from the 1988 and 1998 General Social Survey) and information on the religious composition of counties (from the U.S. Religious Congregations and Membership Study) we find that despite tendencies toward religious homogeneity, the religious composition of the surrounding population has an effect on the proportion of a respondent’s same-religion friends and on the proportion of friends belonging to specific other religious groups. Local population characteristics are unrelated to the proportion of respondents’ friends known in congregational settings. Results have implications for a broad range of sociological theories of religion as well as research examining the impact of same-congregation and same-religion friends (e.g., health and well-being).

- Phillip, Connor. 2011. Religion as resource: Religion and immigrant economic incorporation. *Social Science Research* 40(5). 1350-1361.
doi:10.1016/j.ssresearch.2010.10.006.

Much of the immigration literature in the United States points toward a positive association between religious activity and immigrant economic adaptation. Immigrant congregations serve as informal job fairs, build social capital for entrepreneurial activity, and provide a locale for leadership skill development. Using the New Immigrant Survey, this hypothesis of religion as economic resource is tested among immigrants receiving permanent residency within the United States in 2003. Somewhat surprisingly, most findings indicate a null relationship between religion and economic outcomes (i.e. employment, occupation status, and earnings). However, in instances where a significant relationship does exist, non-Protestant immigrants suffer the greatest economic penalty, particularly among non-Protestants who are not regularly participating in a religious organization. In contrast, non-Protestants who regularly participate have a higher likelihood of employment and higher earnings than their non-participating counterparts. Therefore, this paper extends previous literature in specifying that the religion as resource hypothesis operates best for non-Protestant immigrants who are actively involved in their religious organizations.

- Scheitle, Christopher P, Jennifer B Kane & Jennifer Van Hook. 2011. Demographic Imperatives and Religious Markets: Considering the Individual and Interactive Roles of Fertility and Switching in Group Growth. *Journal for the Scientific Study of Religion* 50(3). 470-482.

doi:10.1111/j.1468-5906.2011.01580.x.

Two models seeking to explain the growth and decline of religious groups are prevalent in the literature. The religious market approach emphasizes the role of intergroup competition and in doing so focuses on religious switching. Another perspective emphasizes demographic mechanisms, particularly fertility. Research to date has not considered how switching and fertility interact as mechanisms of growth. Switching and fertility share a significant role in the growth trajectory of a religious group. Early success in gaining members through switching has an important long-term impact, which fertility alone cannot produce. The age of those switching into a group can also have significant consequences for the effects of fertility.

Schieman, Scott. 2011. Education and the Importance of Religion in Decision Making: Do Other Dimensions of Religiousness Matter? *Journal for the Scientific Study of Religion* 50(3). 570-587.

doi:10.1111/j.1468-5906.2011.01583.x.

The relationship between education and the importance of religion in everyday decision making is examined using data from two national surveys of American adults. People who have higher levels of education are less likely to rely on the Bible and the teachings of their place of worship for guidance in their decision making. However, previously undocumented contingencies attenuate the effect of education: (1) attending religious services regularly; (2) involvement in religious activities; (3) praying more frequently; (4) believing in the literal interpretation of the Bible; and (5) greater certainty in one's personal faith. These patterns hold net of income, which is also negatively associated with religious-based decision making—and only the socially integrative aspects of religiousness attenuate that association.

Taylor, Robert Joseph, Linda M. Chatters & Sean Joe. 2009. Non-organizational Religious Participation, Subjective Religiosity, and Spirituality among Older African Americans and Black Caribbeans. *Journal of Religion and Health* 50(3). 623-645.

doi:10.1007/s10943-009-9292-4.

This study utilizes data from the National Survey of American Life to examine the sociodemographic and denominational correlates of religious involvement and spirituality among older African Americans and Black Caribbeans. Eleven measures of non-organizational religious participation, subjective religiosity, and spirituality are utilized. The findings indicate significant gender, income, region, marital status, denominational, and immigration status differences in religiosity and spirituality. Among older Black Caribbeans, income was a consistent correlate of religious participation and spirituality. The findings are discussed in relation to prior work in the area of religious involvement among older adults.

Vaidyanathan, Brandon, Jonathan P Hill & Christian Smith. 2011. Religion and Charitable Financial Giving to Religious and Secular Causes: Does Political Ideology Matter? *Journal for the Scientific Study of Religion* 50(3). 450-469.

doi:10.1111/j.1468-5906.2011.01584.x.

Previous research on charitable giving has identified a significant relationship between political conservatism and greater financial giving to charitable causes. Yet that research has not adequately explored the important role of religion in that relationship, nor differences in financial giving targets (i.e., religious congregations, noncongregational religious organizations, and nonreligious organizations). Support for competing theories concerning political ideology, religious practice, and charitable financial giving is assessed using data from the Panel Study on American Ethnicity and Religion (PS-ARE). For both religious and nonreligious giving, the effect of political ideology is completely mediated by participation in religious and civic practices. These findings support recent arguments on “practice theory” in cultural sociology and suggest that it is less the effect of ideology than of active participation in religious, political, and community organizations that explains Americans' financial giving to religious and nonreligious organizations.

Weatherly, Jeffrey & Heather Terrell. 2011. Differences in Delay Discounting of Some Commodities as a Function of Church Attendance. *Current Psychology* 30(3). 258-267.
doi:10.1007/s12144-011-9115-0.

Recent research has suggested that the positive benefits of religiousness that are reported in the literature may be related to 'self-control.' The present study attempted to determine whether religiousness, as measured by self-reporting of regularly attending church services, would be related to how participants discount delayed outcomes. Three hundred one university students completed a delay-discounting task involving five commodities (\$1,000, \$100,000, annual retirement income, federal education legislation, and medical treatment). Participants who reported regularly attending church services discounted both monetary amounts significantly more than did participants who reported not regularly attending church services, indicating that church goers placed less value on those commodities than non-church goers. Rates of delay discounting did not differ between groups for the other commodities. These results suggest that religiousness alters how people frame certain decisions involving delayed outcomes, but not others.

Woolley, Jacqueline D., Chelsea A. Cornelius & Walter Lacy. 2011. Developmental Changes in the Use of Supernatural Explanations for Unusual Events. *Journal of Cognition and Culture* 11(3-4). 311-337.
doi:10.1163/156853711X591279.

The focus of this research is to explore the developmental trajectory of the propensity to see meaning in unexpected or chance events, and more specifically, to explore the origin and development of nonmaterial or supernatural explanations. Sixty-seven children aged 8, 10 and 12, along with 22 adults, were presented with scenarios describing unusual or unexpected events. They were first asked to provide explanations for why they thought the events occurred and then asked to rate different supernatural explanations (moral justice, God and luck) as they pertained to each scenario. Results indicated that adults spontaneously appealed to supernatural explanations more frequently than did children, and that this tendency to appeal to supernatural concepts increased with age. Participants of all ages frequently endorsed multiple explanations for the same events and were more likely to endorse supernatural explanations for positively valenced than for negatively valenced stories. Religiosity affected both spontaneous explanations and ratings. Findings are discussed in terms of how children acquire the explanatory systems of their culture.

1.4 SCIENTIFIC STUDY OF RELIGION: METHOD & THEORY

Cadge, Wendy, Peggy Levitt & David Smilde. 2011. De-Centering and Re-Centering: Rethinking Concepts and Methods in the Sociological Study of Religion. *Journal for the Scientific Study of Religion* 50(3). 437-449.
doi:10.1111/j.1468-5906.2011.01585.x.

The authors outline four conceptual and methodological areas of study located near the boundaries between the sociology of religion and other subfields, in an effort to encourage a wide range of scholars to revisit some central concepts in the sociology of religion. The result would be to re-center debates in new ways, not only broadening and deepening knowledge of the "religious," but also encouraging the reexamination of long-standing conceptual tools, unquestioned assumptions, and accepted methods in the sociology of religion. The authors draw on a review of recent literature and examples drawn from their current empirical projects.

Fleck, Robert K. 2011. Natural Selection And The Problem Of Evil: An Evolutionary Model With Application To An Ancient Debate. *Zygon: Journal of Religion & Science* 46(3). 561-587.
doi:10.1111/j.1467-9744.2011.01199.x.

The author develops a model that illustrates how undesirable characteristics of the world (stylized 'evils') can influence long-run outcomes. The model considers an evolutionary process in which each generation faces a risk from a 'natural evil' (e.g., predation, disease, or a natural disaster) subsequent to a basic resource allocation game. This allows both resource allocation and the natural evil to influence the number of surviving offspring. As the model shows, when the risk from the natural evil can be mitigated through the benevolent behavior of neighbors, the population may have increasing benevolence as a result of (1) greater risk from the natural evil and (2) a greater degree to which selfish individuals transfer resources to themselves in the resource allocation game. The main implication is that a world with evolutionary processes (in contrast to a world of static design) can allow two factors that have traditionally been considered 'evils' – namely, the indiscriminate cruelty of the natural world and the capacity for humans to harm each other – to promote desirable long-run outcomes.

Possamai, Adam & Murray Lee. 2011. Hyper-real religions: Fear, anxiety and late-modern religious innovation. *Journal of Sociology* 47(3). 227-242.
doi:10.1177/1440783311408967.

Census data from 2006 identified 133,800 Australians as being of 'inadequately described religion.' The authors hold that this aggregated category conceals the exponential growth of innovative late-modern religious faiths. For example, leaked 2001 Australian Census data suggests that some 71,000 Australians identified Jediism, as appropriated from the Star Wars films, as their faith. For most respondents to the Census this was no doubt an ironic late-modern play with the Census process as a response to an internet-based meme. However, evidence does suggest that a significant minority of respondents take the religion seriously. Such innovative faiths have raised the ire of some traditional religious practitioners who have responded with expressions of fear and anxiety. From a sociological perspective, this article examines the growth in innovative faiths and the backlash against them, and reports the results of a survey of university staff and students on the topic.

PART 2. ARTICLES IN SPIRITUALITY & HEALTH RESEARCH

2.1 SPIRITUALITY & HEALTH: GENERAL HEALTH & WELL-BEING

Bay, Roohallah & Fatemeh Bay. 2011. Combined Therapy Using Acupressure Therapy, Hypnotherapy, and Transcendental Meditation versus Placebo in Type 2 Diabetes. *Journal of Acupuncture and Meridian Studies* 4(3). 183-186.
doi:10.1016/j.jams.2011.09.006.

This study evaluated the effect of combined therapy using acupressure therapy, hypnotherapy, and transcendental meditation (TM) on the blood sugar (BS) level, in comparison with placebo, in type 2 diabetic patients (n=20). Therapy sessions each lasting 60-90min were carried out on 10 successive days for the experimental group. Two capsules (containing 3g of wheat flour each) were prescribed for each member of the placebo group. Mean BS level in the post-tests and follow-up tests for the experimental group was reduced significantly in comparison with the pre-tests whereas in the placebo group no changes were observed.

Benoff-Nadel, Phyllis. 2011. Hypnosis within a psychospiritual approach in the case of a woman diagnosed with dystonia. *Explore (New York, N.Y.)* 7(5). 326-328.
doi:10.1016/j.explore.2011.06.009.

This case report describes a psychospiritual intervention utilizing hypnosis with a client seeking help for problems with involuntary movement of the right arm and hand, accompanied by a great deal of pain. Doctors had diagnosed her condition as dystonia with the presumption that it was primarily physical in nature. Initial evaluation suggested there might be a psychogenic component to the problem. The client also revealed a spiritual worldview, theistic in nature. Utilizing hypnosis, together with a process the author calls "Centering in Self," the client's spiritual beliefs and resources were accessed and utilized in bringing about resolution of pain and almost complete cessation of involuntary movements.

Deary, Lauri, Joan Roche, Karen Plotkin & Rothlyn Zahourek. 2011. Intentionality and hatha yoga: an exploration of the theory of intentionality, the matrix of healing – a growth model. *Holistic Nursing Practice* 25(5). 246-253.
doi:10.1097/HNP.0b013e31822a02e0.

Hatha yoga increases self-awareness and well-being. Intentionality is creating motivation and then action. This qualitative study explored intentionality during hatha yoga sessions using narrative analysis. The results supported and expanded Zahourek's theory of intentionality, the matrix of healing, and provide new insights into intentionality in healing.

Gonçalves, Leila Castro, Rodrigo Gomes de Souza Vale, Neyber Joaquim Fontes Barata, Ronaldo Vivone Varejão & Estélio Henrique Martin Dantas. 2011. Flexibility, functional autonomy and quality of life (QoL) in elderly yoga practitioners. *Archives of Gerontology and Geriatrics* 53(2). 158-162.
doi:10.1016/j.archger.2010.10.028.

The aim of this study was to assess the levels of flexibility, functional autonomy and QoL in elderly yoga practitioners. The subjects were divided into a yoga group (n=52) and control group (n=31). The yoga program was composed of two 60-min Hatha yoga classes per week for 14 weeks. Post-intervention measurements showed increases in articular range of motion in shoulder abduction, horizontal shoulder extension, lumbar spine flexion, hip flexion, hip extension and knee flexion and in the GDLAM autonomy index in the YG compared to the CG. Quality of life scores increased as well. The authors conclude that the regular practice of yoga may lead to improved range of motion in the performance of activities of daily living in elderly women.

Hodge, David R., F. F. Marsiglia & T. A. Nieri. 2011. Religion and Substance Use among Youths of Mexican Heritage: A Social Capital Perspective. *Social Work Research* 35(3). 137-146.

This prospective study examined the protective influence of religion on substance use among a school-based sample (n=804) of youths of Mexican heritage in the American Southwest. Researchers found that integration into religious networks at time 1 predicted less likelihood of using substances at time 2.

Holt, Cheryl L, Robert A Oster, Kimberly S Clay, Julie Urmie & Mona Fouad. 2011. Religiosity and physical and emotional functioning among African American and White colorectal and lung cancer patients. *Journal of Psychosocial Oncology* 29(4). 372-393.

The present study examined the role of religiosity in functioning among African Americans and Whites with a cancer diagnosis. Patients were recruited from an existing study and mailed a religiosity survey. Analysis of survey and interview data from participants (n=269; 36% African American; 56% women) indicated that in the overall sample religious behaviors were marginally and positively associated with mental health and negatively with depressive symptoms. Among women, religious behaviors were positively associated with mental health and negatively with depressive symptoms. Religiosity was not a predictor of study outcomes for men. Among African Americans, religious behaviors were positively associated with mental health and vitality. Among Whites, religious behaviors were negatively associated with depressive symptoms.

James, Carolyn A, Trevor A Hart, Karen E Roberts, Amrita Ghai, Bojana Petrovic & Michael D Lima. 2011. Religion versus ethnicity as predictors of unprotected vaginal intercourse among young adults. *Sexual Health* 8(3). 363-371.
doi:10.1071/sh09119.

A cross-sectional study of 666 unmarried university students was conducted from 2005 to 2007, with participants completing an anonymous questionnaire on sexual attitudes and health for course credit. Approximately 50% of the respondents had engaged in any vaginal intercourse and 32.2% had engaged in unprotected vaginal intercourse (UVI) in the past 6 months. Analysis showed that increasing age, being in a relationship for more than 6 months, greater HIV knowledge, stronger attitudes supporting the use of condoms, and religion (but not ethnicity) were associated with engaging in UVI. Among the sexually active subset of the sample (n=332), religion was the only predictor of engaging in UVI.

Joshi, Sulabha, Rambhau Khandwe, Dinesh Bapat & Ujwala Deshmukh. 2011. Effect of yoga on menopausal symptoms. *Menopause International* 17(3). 78-81.
doi:10.1258/mi.2011.011020.

Researchers found that a 90 day regimen of yoga resulted in a statistically significant reduction in menopausal symptoms, while a control group showed no difference. Participants had similar scores on day 1.

Koenig, Laura B., Jon Randolph Haber & Theodore Jacob. 2011. Childhood religious affiliation and alcohol use and abuse across the lifespan in alcohol-dependent men. *Psychology of Addictive Behaviors: Journal of the Society of Psychologists in Addictive Behaviors* 25(3). 381-389.
doi:10.1037/a0024774.

The current study examined the relationship between childhood religious affiliation and alcohol use across the life span in a sample of 931 men. Religious affiliations were subdivided into four categories: nonreligious, accommodating (religions that are relatively more accepting of the larger culture), differentiating (religions that set themselves apart from the larger culture), and Catholic. Significant differences were found for abstinence, regular drinking, and current quantity-frequency (QFI) scores, with individuals in differentiating religions having the highest rates of abstinence/non-regular drinking and the lowest consumption levels. When examining QFI and alcohol dependence symptoms and diagnoses over time, the nonreligious group had more alcohol use than the

religious groups, with the differentiating affiliations showing the least alcohol use. The authors conclude that childhood religious affiliation may continue to affect alcohol use even into adulthood.

- McConnell, Timothy R, Kelly M Trevino & Troy A Klinger. 2011. Demographic differences in religious coping after a first-time cardiac event. *Journal of Cardiopulmonary Rehabilitation and Prevention* 31(5). 298-302.
doi:10.1097/HCR.0b013e31821c41f0.

The authors describe characteristics of patients who may use religion as a coping response to a first-time cardiac event. Participants were 105 patients enrolled in cardiac rehabilitation after a first-time myocardial infarction or coronary artery revascularization bypass surgery. Significant differences emerged. Women scored higher than men on spiritually based activities, good deeds, and religious avoidance coping. Participants who claimed no religious affiliation scored lowest on good deeds and interpersonal religious support coping and higher on discontent coping. Single participants scored higher on spiritually based coping than did married participants and lower on discontent coping. Plead coping was an inverse function of education.

- Parshad, O, A Richards & M Asnani. 2011. Impact of yoga on haemodynamic function in healthy medical students. *The West Indian Medical Journal* 60(2). 148-152.

Sixty-four healthy medical students (57 females) attended a Special Study Module 'Role of Dhyana Yoga in Stress Management.' After practicing yoga for 6 weeks, participants showed significant increases in heart rate, stroke volume, cardiac output, arterial compliance, and decreases in total peripheral resistance, interbeat interval, and ascending aorta impedance. No significant differences were observed in systolic or diastolic blood pressure, mean arterial pressure or left ventricular ejection time.

- Posadzki, Paul & Edzard Ernst. 2011. Yoga for low back pain: a systematic review of randomized clinical trials. *Clinical Rheumatology* 30(9). 1257-1262.
doi:10.1007/s10067-011-1764-8.

In this literature review to assess the effectiveness of yoga as a treatment option for low back pain, seven randomized controlled clinical trials (RCTs) met the inclusion criteria. Their methodological quality ranged between 2 and 4 on the Jadad scale. Five RCTs suggested that yoga leads to a significantly greater reduction in low back pain than usual care, education or conventional therapeutic exercises. Two RCTs showed no between-group differences. The authors conclude that yoga has the potential to alleviate low back pain, though definitive claims should be treated with caution.

- Sanchez, Zila M., Emérita Sátiro Opaleye, Tharcila V. Chaves, Ana R. Noto & Solange A. Nappo. 2011. God forbids or mom disapproves? Religious beliefs that prevent drug use among youth. *Journal of Adolescent Research* 26(5). 591-616.
doi:10.1177/0743558411402337.

In this study, researchers utilized participant observation in 21 religious institutions, semi-structured interviews of 37 religious leaders, and 6 focus groups comprised of 55 religious drug-naïve youths. The young people's discourses and the sermons of religious leaders revealed that conceptions about drugs were based on media content, with little religious or scientific context. Catholics and Spiritists considered the consumption of licit drugs less harmful than that of illicit ones and were especially tolerant of the use of alcohol. Protestants were more emphatic when describing all drugs as being harmful to one's health. Findings suggest that young people who practice a religion invoke several religious concepts to justify their choice for not using drugs, and they attribute this position more to the family legacy than to their own religiosity. The authors conclude that the youths' antidrug position was more reflective of family values than religious beliefs.

- Son, Joonmo & John Wilson. 2011. Religiosity, Psychological Resources, and Physical Health. *Journal for the Scientific Study of Religion* 50(3). 588-603.

doi:10.1111/j.1468-5906.2011.01588.x.

Using data from two waves of the National Survey of Midlife in the United States (1995, 2005) and retrospective data on the importance of religion in the home in which respondents were raised, researchers find that psychological resources, operationalized by measures of emotional and psychological well-being, mediate the effect of this early exposure to religion but only on self-rated health and physical symptomatology; chronic illnesses and health limitations on activities of daily living are unaffected.

Steffen, Patrick R. 2009. Spirituality and Severity of Menopausal Symptoms in a Sample of Religious Women. *Journal of Religion and Health* 50(3). 721-729.
doi:10.1007/s10943-009-9271-9.

Questionnaires were administered to 218 women (average age 55, 35% premenopausal, 26% peri-menopausal, 39% postmenopausal) who were members of the Church of Jesus Christ of Latter Day Saints. Regression analyses indicated that higher levels of spiritual strength were related to decreased levels of reported menopausal symptoms. Spiritual strength was also related to increased benefit finding during menopause, decreased concern with body appearance, and increased use of adaptive coping strategies.

Tul, Yvonne, Anita Unruh & Bruce D Dick. 2011. Yoga for chronic pain management: a qualitative exploration. *Scandinavian Journal of Caring Sciences* 25(3). 435-443.
doi:10.1111/j.1471-6712.2010.00842.x.

Researchers engaged in participant observation and in-depth interviews of 7 patients (6 female) with chronic pain who agreed to participate in an 8-week Hatha yoga program.

Data suggested that after the yoga program participants reframed what it meant to live with chronic pain. Some participants reported that the sensory aspects of pain did not change but that pain became less bothersome. They were better able to control the degree to which pain interfered with their daily life. Other participants reported less frequent or less intense pain episodes because they could recognize body signals and adjust themselves to alleviate painful sensations. The findings suggest that patients who benefit from yoga may do so in part because yoga enables changes in cognitions and behaviors towards pain.

Vaughan, Ellen L., Marcel A. de Dios, Jesse A. Steinfeldt & Lisa M. Kratz. 2011. Religiosity, alcohol use attitudes, and alcohol use in a national sample of adolescents. *Psychology of Addictive Behaviors* 25(3). 547-553.
doi:10.1037/a0024660.

Drawing data from 18,314 adolescents who participated in the 2006 and 2007 National Survey on Drug Use and Health, researchers found that alcohol use attitudes partially mediate the relationship between religiosity and frequency of alcohol use. Furthermore, while the pattern of these relationships is similar across racial/ethnic groups, the magnitude of alcohol use attitudes on frequency of alcohol use differed.

Winkelman, William D., Katharine Lauderdale, Michael J. Balboni, Andrea C. Phelps, John R. Petet, Susan D. Block, Lisa A. Kachnic, Tyler J. Vanderweele & Tracy A. Balboni. 2011. The relationship of spiritual concerns to the quality of life of advanced cancer patients: preliminary findings. *Journal of Palliative Medicine* 14(9). 1022-1028.
doi:10.1089/jpm.2010.0536.

This study examines the relationship of spiritual concerns (SCs) to quality of life (QOL) in 69 patients with advanced cancer receiving palliative radiotherapy. Most patients (86%) endorsed one or more SCs, with a median of 4 per patient. Younger age was associated with a greater burden of SCs. Total spiritual struggles, spiritual seeking, and SCs were each associated with worse psychological QOL. One of the most common forms of spiritual seeking (endorsed by 54%), thinking about what gives meaning to life, was associated with worse psychological

and overall QOL. Most patients (86%) believed it was important for health care professionals to consider patient SCs within the medical setting.

Zettergren, Kathleen K, Jennifer M Lubeski & Jaclyn M Viverito. 2011. Effects of a yoga program on postural control, mobility, and gait speed in community-living older adults: a pilot study. *Journal of Geriatric Physical Therapy* (2011) 34(2). 88-94.
doi:10.1519/JPT.0b013e31820aab53.

Researchers examined the effects of an 8-week therapeutic yoga program for 8 female participants (mean age 84), compared to 8 control participants (5 female; mean age 81.3). The intervention was an 8-week, 80-minute, biweekly Kripalu yoga class designed specifically for community-dwelling older adults. Intervention subjects attended at least 10 of the 16 classes. Posttest differences were found for yoga participants in balance scores and fast walking speed.

2.2 SPIRITUALITY & HEALTH: MENTAL HEALTH

Baetz, Marilyn & Rudy Bowen. 2011. Suicidal ideation, affective lability, and religion in depressed adults. *Mental Health, Religion & Culture* 14(7). 633-641.
doi:10.1080/13674676.2010.504202.

In this cross-sectional study of 183 depressed psychiatric patients, researchers found that depression and affective lability both contribute to suicidal ideation. Positive religion/spirituality (RS) is associated with lower suicidal ideation. Negative RS is associated with higher suicidal ideation; however, this occurs through its association with affective lability.

Berg, Gary. 2011. The relationship between spiritual distress, PTSD and depression in Vietnam combat veterans. *The Journal of Pastoral Care & Counseling: JPCC* 65(1-2). 6:1-11.

This study presents empirical data showing the relationship between combat-related posttraumatic stress disorder (PTSD), depression and spiritual distress. A high association was found between spiritual injuries and both PTSD and depression, as well as an inverse relationship between intrinsic religious faith and these two diagnostic categories. An inverse relationship also exists between religious faith as measured by regular worship with a faith community and both depression and PTSD.

Caldwell-Harris, Catherine L., Angela L. Wilson, Elizabeth LoTempio & Benjamin Beit-Hallahmi. 2011. Exploring the atheist personality: well-being, awe, and magical thinking in atheists, Buddhists, and Christians. *Mental Health, Religion & Culture* 14(7). 659-672.
doi:10.1080/13674676.2010.509847.

Atheists (n=42) were recruited from the American atheist website and compared to Christians (n=22) and Buddhists (n=18). Groups were highly similar in their reported well-being, empathy, and other personality scales, but differed strongly on scales assessing Spirituality and Magical Ideation, where atheists rejected the concepts of spirituality and magical beliefs. Responding to the question, "Have you ever felt wonderment or felt as if you were part of something greater than yourself?," 71% said "yes," citing Nature (54%), Science, (30%), Music/Art (12%), and Human cooperation (8%). Respondents explained their lack of belief as deriving from a preference for logic and rationality, suggesting an intellectual component to atheism. The authors conclude that the findings support the stereotype of atheists as logical, skeptical, and non-conformist, but not as cynical and joyless.

Cottam, S., S. N. Paul, O. J. Doughty, L. Carpenter, A. Al-Mousawi, S. Karvounis & D. J. Done. 2011. Does religious belief enable positive interpretation of auditory hallucinations? A comparison of religious voice hearers with and without psychosis. *Cognitive Neuropsychiatry* 16(5). 403-421.

doi:10.1080/13546805.2010.548543.

Researchers divided participants who hear voices into three groups: 20 mentally healthy Christians, 15 Christian patients with psychosis, and 14 nonreligious patients with psychosis. After the administration of questionnaires and structured interviews, researchers found that, while the three groups had perceptually similar experiences when hearing the voices, mentally healthy Christians appeared to assimilate the experience with their religious beliefs (schematic processing) resulting in positive interpretations. Christian patients tended not to assimilate the experience with their religious beliefs, frequently reporting nonreligious interpretations that were predominantly negative. Nearly all participants experienced voices as powerful, but mentally healthy Christians reported the power of voices positively. The authors conclude that religious belief had a profound, beneficial influence on the mentally healthy Christians' interpretation of hearing voices, but had little or no influence in the case of Christian patients.

Cowchock, F Susan, Keith G Meador, Serina E Floyd & Geeta K Swamy. 2011. Spiritual needs of couples facing pregnancy termination because of fetal anomalies. *The Journal of Pastoral Care & Counseling: JPCC* 65(1-2). 4.1-10.

The spiritual needs of couples (9 mothers and 5 fathers) who were planning to terminate wanted second trimester pregnancies because of serious fetal anomalies were surveyed. Their greatest needs were for a "guidance from a higher power" and for "someone to pray for them." Unlike other reported groups of patients, they did not want or expect their healthcare team to discuss their faith, or to pray with them. Most would prefer support from their own pastors, but their religious community was involved to only a small extent. They would welcome support from hospital chaplains, who could play a substantive and unique pastoral role in this clinical context.

Dyslin, Christopher W. & Cynthia Thomsen. 2011. Religiosity of young adults: does childhood maltreatment make a difference? *Mental Health, Religion & Culture* 14(7). 625-631.
doi:10.1080/13674676.2010.501504.

Researchers examined associations between childhood physical, sexual, and emotional abuse and several dimensions of adult religiosity in a large sample of college students (n=763). Associations between child maltreatment and religiosity were weak. After controlling for possible demographic confounds, the only significant association was between childhood emotional abuse and religious questing.

Eaton, Phyllis M, Bertha L Davis, Pamela V Hammond, Esther H Condon & Zina T McGee. 2011. Coping strategies of family members of hospitalized psychiatric patients. *Nursing Research and Practice* 2011. 392705.
doi:10.1155/2011/392705.

In this paper, the coping strategies of 45 family members of hospitalized psychiatric patients were examined. Researchers found that these family members used more emotion-focused coping strategies than problem-focused coping strategies. The common coping strategies used by family members were communicating with immediate family, acceptance of their situation, passive appraisal, avoidance, and spirituality. The family members also utilized resources and support systems, such as their immediate families, mental health care professionals, and their churches.

Eskin, Mehmet, Martin Voracek, Stefan Stieger & Vesile Altinyazar. 2011. A cross-cultural investigation of suicidal behavior and attitudes in Austrian and Turkish medical students. *Social Psychiatry and Psychiatric Epidemiology* 46(9). 813-823.
doi:10.1007/s00127-010-0254-7.

Researchers investigated the prevalence of suicidal behavior and attitudes towards suicide and reactions to suicidal individuals in 320 Austrian and 326 Turkish medical students. More Austrian (37.8%) than Turkish (27.3%) students reported life-time, past 12-month, or current suicidal ideation, while more Turkish (6.4%)

than Austrian (2.2%) students reported life-time or past 12-month suicide attempts. Austrian students had more permissive and liberal attitudes towards suicide, while those of Turkish students were more rejecting. Conversely, attitudes of Turkish medical students towards an imagined suicidal close friend were more accepting than those of Austrian medical students. Comparisons of suicidal versus nonsuicidal students showed that those reporting suicidal ideation or suicide attempts generally were more accepting of suicide and viewed suicide as a solution to a greater extent than the nonsuicidal group.

Fang, Chun-Kai, Hsin-Chin Lu, Shen-ing Liu & Yi-Wen Sun. 2011. Religious beliefs along the suicidal path in northern Taiwan. *Omega* 63(3). 255-269.

Participants in this cross-sectional study were members of Christianity, Catholicism, Buddhism, and Taoism in northern Taiwan. Statistical differences between religious in the case of suicide experiences, suicides among people one knows, and tendency toward compulsion and depression. According to the results, some people with suicidal tendency will attend religious activities; therefore, the authors predict that religious beliefs play an important role in suicide prevention.

Galen, Luke William & James Kloet. 2011. Mental well-being in the religious and the non-religious: evidence for a curvilinear relationship. *Mental Health, Religion & Culture* 14(7). 673-689.
doi:10.1080/13674676.2010.510829.

The present study examined mental well-being, utilizing the full range of certainty of belief or non-belief in God. In the first study, church and secular group members were compared on measures of life satisfaction and emotional stability. The second study used a large survey of the non-religious. A curvilinear relationship was found such that those with higher belief certainty (both confidently religious and atheists) have greater well-being relative to those with low certainty (unsure and agnostics). Multiple regressions controlling for social and demographic variables reduced, but did not eliminate, this curvilinear relationship. The authors suggest that mechanisms of well-being may involve a confident worldview rather than religious beliefs themselves.

Ian Meltzer, Howard, Nisha Dogra, Panos Vostanis & Tamsin Ford. 2011. Religiosity and the mental health of adolescents in Great Britain. *Mental Health, Religion & Culture* 14(7). 703-713.
doi:10.1080/13674676.2010.515567.

Researchers investigated the religiosity correlates of childhood psychopathology: strength of belief, importance of being able to practice one's religion, and worship frequency. Questions on religiosity were included in the mental health survey of 2,992 children, aged 11-19 years, in Great Britain. Young people with a stated religion who had weakly held beliefs or who regarded religious practice as unimportant were those with the greater likelihood of having emotional disorders. Regular attendance at religious services or prayer meetings reduced the likelihood of having a conduct disorder.

Johnson, Michael. 2011. A Randomized Study of a Novel Zen Dialogue Method for Producing Spiritual and Well-Being Enhancement: Implications for End-of-Life Care. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association* 29(3). 201-210.
doi:10.1177/0898010110391265.

A pretest-posttest design was used with participants being randomly assigned to either a treatment or a no-treatment group at a Zen Center. The participants were 14 females and 2 males within each group with no prior formal Zen or meditation training. Those participants in the treatment group received intensive interaction for 1 day with an experienced Zen teacher using a dialogue method to induce a deep meditative state without instruction in formal meditation sitting practice. Statistically significant differences between the treatment and control groups for all parameters measured were found. In addition, the meditative state measure suggested qualities consistent with deep meditation experiences.

Krause, Neal & Elena Bastida-Gonzalez. 2011. Financial Strain, Religious Involvement, and Life Satisfaction Among Older Mexican Americans. *Research on Aging* 33(4). 403-425.
doi:10.1177/0164027511400433.

The authors explored the factors that promote financial strain in a group of older Mexican Americans, using data from a nationwide survey of older Mexican Americans. Support was found for the following core relationships in the study model: (1) older adults who were born in Mexico will have less schooling; (2) less education will be associated with less frequent use of English; (3) less frequent use of English will be associated with greater financial strain; (4) greater financial strain leads to less formal involvement in the church; (5) older people who are less involved in the church will have a diminished sense of religious meaning; and (6) older adults with a lower sense of religious meaning will be less satisfied with life.

Krause, Neal. 2010. Church-Based Emotional Support And Self-Forgiveness in Late Life. *Review of Religious Research* 52(1). 72-89.

Analysis of data from a longitudinal nationwide survey of older adults in the US suggest that older study participants who are more satisfied with the emotional support they have received from the members of their church are more likely to forgive themselves than older people who are not satisfied with the emotional support they have received in church. In contrast, significant effects failed to emerge with the measure of the amount of received emotional support.

Miller, Melissa L & Stephen M Saunders. 2011. A naturalistic study of the associations between changes in alcohol problems, spiritual functioning, and psychiatric symptoms. *Psychology of Addictive Behaviors: Journal of the Society of Psychologists in Addictive Behaviors* 25(3). 455-461.
doi:10.1037/a0022224.

Problem drinkers (n=55; 16 female) in outpatient treatment were administered questionnaires at pretreatment, post treatment, and follow up. Significant improvements in SRF, psychiatric symptoms and alcohol misuse were observed from pretreatment to follow-up. Although SRF scores were significantly correlated with psychiatric symptoms at all three time points, improvement in the former did not predict improvement in the latter. When measured at the same time points, SRF scores were not correlated with the measures of alcohol misuse. However, improvement in SRF (specifically in existential well-being) over the course of treatment was predictive of improvement in the alcohol misuse measures at follow-up.

Parker, Philip D. & Andrew J. Martin. 2009. Clergy Motivation and Occupational Well-being: Exploring a Quadripolar Model and Its Role in Predicting Burnout and Engagement. *Journal of Religion and Health* 50(3). 656-674.
doi:10.1007/s10943-009-9303-5.

Analysis of 200 clergy confirmed a quadripolar motivational profile (success-oriented, over-striving, self-protecting, failure accepting). Using these group profiles as predictors, structural equation modeling identified significant effects on all burnout and engagement factors, with success-oriented, overstriving, self-protecting, and failure accepting groups each reflecting differential occupational well-being profiles.

Piderman, Katherine M, Maria I Lapid, Susanna R Stevens, Susan M Ryan, Kristin J Somers, Matthew T Kronberg, Matthew M Clark & Teresa A Rummans. 2011. Spiritual well-being and spiritual practices in elderly depressed psychiatric inpatients. *The Journal of Pastoral Care & Counseling: JPCC* 65(1-2). 3:1-11.

This study's aims were to describe the spirituality of depressed elderly psychiatric inpatients and to examine associations among spirituality, depression, and quality of life (QOL). Forty-five persons participated. Most reported frequent, stable spiritual practices and experiencing spiritual comfort and guidance. Some reported spiritual distress and changes in spirituality. During hospitalization, participants demonstrated increased spiritual

well-being (SWB) and peacefulness, and reduced hopelessness, worthlessness, and guilt. Positive associations were found between SWB and QOL and negative associations between SWB and depression.

- Plakas, Sotirios, Markella Boudioni, Georgia Fouka & Ann Taket. 2011. The role of religiosity as a coping resource for relatives of critically ill patients in Greece. *Contemporary Nurse: A Journal for the Australian Nursing Profession* 39(1). 95-105.
doi:10.5172/conu.2011.39.1.95.

This article presents the experiences of relatives of patients receiving critical care hospitalization in Greece. Twenty-five relatives participated in 19 interviews. Religiosity was found to be the main source of hope, strength and courage for relatives and was expressed with church/monastery attendance, belief in God, praying, and performing religious rituals.

- Rosmarin, David H., Steven Pirutinsky, Adam B. Cohen, Yardana Galler & Elizabeth J. Krumrei. 2011. Grateful to God or just plain grateful? A comparison of religious and general gratitude. *The Journal of Positive Psychology* 6(5). 389-396.
doi:10.1080/17439760.2011.596557.

Researchers assessed religious and general dimensions of gratitude alongside measures of religious commitment and mental/physical well-being in a sample of 405 adult individuals. Consistent with previous research, gratitude was positively correlated with religious commitment. This relationship, however, was fully mediated by gratitude towards God. Further analysis found that the interaction of religious commitment and religious gratitude added unique variance in predicting mental well-being, over and above general gratitude. The authors conclude that being grateful to God enhances the psychological benefits of gratitude in accordance with one's level of religious commitment.

- Shah, Ruchita, Parmanand Kulhara, Sandeep Grover, Suresh Kumar, Rama Malhotra & Shikha Tyagi. 2011. Relationship between spirituality/religiousness and coping in patients with residual schizophrenia. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation* 20(7). 1053-1060.
doi:10.1007/s11136-010-9839-6.

Researchers measured spirituality/religiousness and its relation to coping skills in 103 patients with residual schizophrenia. Positive reappraisal as a coping strategy had significant positive correlation with increases in quality of life scores relating to spirituality and religiousness. The coping subscales of accepting responsibility, planful problem solving, distancing, confrontive coping, and self-controlling also had significant positive correlations.

- Stewart-Sicking, Joseph A., Joseph W. Ciarrocchi, Elaine C. Hollensbe & Mathew L. Sheep. 2011. Workplace characteristics, career/vocation satisfaction, and existential well-being in Episcopal clergy. *Mental Health, Religion & Culture* 14(7). 715-730.
doi:10.1080/13674676.2010.516428.

Data from 1,202 Episcopal clergy indicated that workplace conditions (meaningfulness; safety; and cognitive, emotional, and physical availability) were strong predictors of well-being. Men reported slightly higher career/vocation satisfaction, and gender also moderated the relationships between workplace conditions and well-being. The authors conclude that perceived workplace conditions, such as meaningfulness, safety, and resource availability can have strong links with career satisfaction and existential well-being, especially in those occupations where work and spirit are intertwined.

- Wetterneck, Chad T., Angela H. Smith, Angela J. Burgess & John M. Hart. 2011. Distress From Sexual Thoughts: Do Religiosity, Emotions, and Thought Appraisal Matter? *Journal of Cognitive Psychotherapy* 25(3). 189-202.
doi:10.1891/0889-8391.25.3.189.

Nonclinical participants (n=291) completed questionnaires about frequency of, and distress from, sexually intrusive thoughts (SITs), thought appraisal, beliefs about sexual desire, and emotions. Distress from SITs was correlated with thought appraisal and beliefs about sexual desire, but not with religiosity. Beliefs about sexual desire and the frequency of SITs each predicted distress from SITs. Although thought appraisal is often implicated in obsessive-compulsive symptoms, these results indicate that beliefs about emotions may have a greater impact on distress.

2.3 SPIRITUALITY & HEALTH: METHOD AND THEORY

Bedford, Elliott Louis. 2011. The core competencies: a Roman Catholic critique. *HEC Forum: An Interdisciplinary Journal on Hospitals' Ethical and Legal Issues* 23(3). 147-169.
doi:10.1007/s10730-011-9169-2.

The author finds that the competencies identified in the Core Competencies for Healthcare Ethics Consultation report cannot serve as the core competencies for Roman Catholic ethical consultants and consultation services. This incongruence stems from divergent concepts of what it means to do ethics consultation, a divergence that is rooted in each perspective's very different visions of autonomy. Because of the constitutive elements of Catholic ethics consultation, the competencies needed for its practice differ in kind from those identified by the report, and the author suggests that the competencies identified by the report should not be adopted uncritically by Catholic healthcare institutions as core competencies for ethical consultation services.

Benedetti, Fabrizio & Martina Amanzio. 2011. The placebo response: how words and rituals change the patient's brain. *Patient Education and Counseling* 84(3). 413-419.
doi:10.1016/j.pec.2011.04.034.

The authors review recent research about the placebo effect, finding that in recent years, different types of placebo responses have been analyzed with sophisticated biological tools that have uncovered specific mechanisms at the anatomical, physiological, biochemical and cellular level. Neurobiologically, opioidergic, dopaminergic and cholecystokinergic networks have been found to be involved in cases where chronic pain was treated; dopaminergic activation in the striatum and neuronal changes in basal ganglia have been described in patients with Parkinson's disease.

Cooper, Paul C. 2011. Total Exertion: Zen, Psychoanalysis, Life. *Journal of Religion and Health* 50(3). 592-601.
doi:10.1007/s10943-011-9506-4.

This paper integrates Zen and psychoanalytic concepts; introduces the Zen concept of total exertion; elaborates the profound implications that the notion of total exertion has for the psychoanalytic encounter and the psychotherapist's capacity for maintaining an optimal attentional stance; addresses anxiety-driven interferences to both the psychoanalytic process and deepened Zen practice.

Gibson, Roger Carl, Alain Jiménez Morgado, Alberto Cutie Brosyle, Elena Hamilton Mesa & Concepción Hechavarría Sánchez. 2011. Afro-centric religious consultations as treatment for psychotic disorders among day hospital patients in Santiago de Cuba. *Mental Health, Religion & Culture* 14(7). 691-701.
doi:10.1080/13674676.2010.511643.

Researchers investigated the utilization of Afro-centric religious treatments for psychotic disorders among a sample of Cuban day hospital patients. Most (55%) had used such treatments and this practice was more common among older persons, although unassociated with any particular religious background or racial heritage. Persons who preferred Afro-centric religious practices to medical ones were more likely to be of African descent or to have received an Afro-centric religious ritual bath as treatment.

Harrigan, John T. 2009. Health Promoting Habits of People Who Pray for Their Health. *Journal of Religion and Health* 50(3). 602-607.
doi:10.1007/s10943-009-9293-3.

To determine the health habits of people who pray for their health, data from the National Health Interview Survey was analyzed for health habits of people who prayed or did not pray for their health. Of the 22,314 respondents, 13,179 (59%) prayed for their health. These individuals saw a physician more frequently, participated more frequently in vigorous exercise and used more relaxation techniques, support groups, meditation and complementary and alternative medicine therapies. People who pray for their health participate in more health promoting behaviors than people who do not pray for their health.

Harun-Or-Rashid, Md, Yoshitoku Yoshida, Md Aminur Rashid, Salmun Nahar & Junichi Sakamoto. 2011. Perceptions of the Muslim Religious Leaders and their attitudes on Herbal Medicine in Bangladesh: A Cross-sectional study. *BMC Research Notes* 4(1). 366.
doi:10.1186/1756-0500-4-366.

Researchers aimed to evaluate 503 Muslim Religious Leaders' (MRLs) perceptions of herbal medicine (HM) in Bangladesh. Overall, respondents exhibited very positive attitude towards HM. The majority believed that HM was effective for all age groups (52.6%) and both sexes (74.5%). One-third felt that HM was more effective for chronic diseases, 68.5% felt that it only promotes health, and 40.8% said it keeps them relaxed. About 98.0% of the respondents experienced 'no harm' but 'benefit' from HM; naturally, they were satisfied with HM and were willing to recommend it to others. Urban, older, and unmarried respondents were more likely to use HM.

Herron, Robert E. 2011. Changes in physician costs among high-cost transcendental meditation practitioners compared with high-cost nonpractitioners over 5 years. *American Journal of Health Promotion* 26(1). 56-60.
doi:10.4278/ajhp.100729-ARB-258.

A 14-year study retrospectively assessed government payments to physicians for treating Transcendental Meditation (TM) and no-treatment (NT) groups in Quebec, Canada. The highest-spending 10% of 1,418 Quebec health insurance enrollees who practiced the TM technique were compared with the highest 10% of 1,418 subjects who were randomly selected from enrollees of the same age, sex, and region. Before starting meditation, the yearly rate of increase in payments to physicians between groups was not significantly different. After commencing meditation, the TM group's mean payments declined \$44.93 annually; the NT group's payments exhibited nonsignificant changes. After 1 year, the TM group's payments decreased 11%, and after 5 years their cumulative reduction was 28%.

Hwang, Karen, Joseph H. Hammer & Ryan T. Cragun. 2009. Extending Religion-Health Research to Secular Minorities: Issues and Concerns. *Journal of Religion and Health* 50(3). 608-622.
doi:10.1007/s10943-009-9296-0.

The authors illustrate the importance of including an atheist control group whenever possible in the religiosity/spirituality and health research and discuss areas for further investigation. While many studies include samples of individuals classified as "low spirituality" or religious "nones", these groups are heterogeneous and contain only a fraction of members who would be considered truly secular.

Inhorn, Marcia C. & Gamal I. Serour. 2011. Islam, medicine, and Arab-Muslim refugee health in America after 9/11. *Lancet* 378(9794). 935-943.
doi:10.1016/S0140-6736(11)61041-6.

Researchers assess how Islam as a religious system shapes medical practice, and how Muslims view and experience medical care in the USA. Since Sept 11, 2001, Arab-Muslim patients, and particularly the growing Iraqi refugee population, face huge challenges in seeking and receiving medical care, including care that is judged to be

religiously appropriate. The authors assess some of the barriers to care, including poverty, language, and discrimination.

- Kerr, Catherine E, Jessica R Shaw, Lisa A Conboy, John M Kelley, Eric Jacobson & Ted J Kaptchuk. 2011. Placebo acupuncture as a form of ritual touch healing: a neurophenomenological model. *Consciousness and Cognition* 20(3). 784-791.
doi:10.1016/j.concog.2010.12.009.

In this qualitative study, researchers asked a subset of patients in a single blind randomized trial in irritable bowel syndrome to describe their treatment experiences while undergoing placebo acupuncture treatment. Analysis focused on patients' unprompted descriptions of any enhanced touch sensations (e.g., warmth, tingling) and any significance patients assigned to the sensations. In 5/6 cases, patients associated sensations including "warmth" and "tingling" with treatment efficacy. The conclusion offers a "neurophenomenological" account of the placebo effect by considering dynamic effects of attentional filtering on early sensory cortices, possibly underlying the phenomenology of placebo acupuncture.

- Laufer, Avital & Zahava Solomon. 2009. The Role of Religious Orientations in Youth's Posttraumatic Symptoms After Exposure to Terror. *Journal of Religion and Health* 50(3). 687-699.
doi:10.1007/s10943-009-9270-x.

This study provided the first examination of the psychometric properties of the 6-item Daily Spiritual Experiences Scale (DSES) in a large African American sample, the Jackson Heart Study (JHS). The JHS included measures of spiritual (DSES) and religious practices. DSES scores reflected frequent daily spiritual experiences and reliability scores were high. The DSES loaded on a single factor, with significant goodness-of-fit scores. Moderate significant correlations were noted among DSES items.

- Lunder, Urška, Maja Furlan & Anja Simonič. 2011. Spiritual needs assessments and measurements. *Current Opinion in Supportive and Palliative Care* 5(3). 273-278.
doi:10.1097/SPC.0b013e3283499b20.

This review discusses the developments in spiritual needs assessments and measurements in end-of-life care. The review considers spiritual needs assessments from the perspective of palliative care patients, their families and caregivers, and healthcare professionals.

- MacDonald, Douglas A. 2011. Studying spirituality scientifically: reflections, considerations, recommendations. *Journal of Management, Spirituality & Religion* 8(3). 195-210.
doi:10.1080/14766086.2011.599145.

In this essay, the author provides an overview of the methodology and philosophy of science issues that accompany the study of spirituality. Thereafter, he proffers an empirically derived descriptive taxonomic model of spirituality for use in research and theory development.

- Maselko, Joanna, Cayce Hughes & Rose Cheney. 2011. Religious social capital: its measurement and utility in the study of the social determinants of health. *Social Science & Medicine (1982)* 73(5). 759-767.
doi:10.1016/j.socscimed.2011.06.019.

This paper introduces a working measure of Religious Social Capital and presents preliminary associations with neighborhood social capital and urban stressors. Religious social capital is defined as the social resources available to individuals and groups through their social connections with a religious community. Domains covered include group membership, social integration, values/norms, bonding/bridging trust as well as social support. Cross-sectional data come from a convenience sample of 104 community dwelling adults residing in a single urban

neighborhood in a large US city, who also provided information on neighborhood social capital, and experiences of urban stressors. Results suggest that religious social capital is a valid construct that can be reliably measured.

Pembroke, Neil. 2011. Space in the Trinity and in pastoral care. *The Journal of Pastoral Care & Counseling: JPCC* 65(1-2). 3.1-10.

It is suggested that space is a crucial metaphor in relation to both the Trinity and pastoral care. In order to develop the argument, use is made of the musical term "polyphony" that Cunningham applies to the Trinity. It is contended that two polyphonic qualities, namely nearness and distance, are central in effective pastoral care and counseling. Good pastoral caregivers know when to move in close, and when to create some distance. A very important pastoral art is managing the interpersonal space. It is argued that an important aspect of this is drawing near through empathy and moving out through confrontation.

Peteet, John R. 2011. Approaching Emptiness: Subjective, Objective and Existential Dimensions. *Journal of Religion and Health* 50(3). 558-563.
doi:10.1007/s10943-010-9443-7.

Clinicians have lacked a coherent approach to emptiness, which is both a pervasive metaphor for loss, deficiency, or alienation and a frequently cited spiritual goal. The author suggests a framework for approaching emptiness that distinguishes among its subjective, objective, and existential dimensions. Clinicians can use psychodynamic and cognitive behavioral approaches to clarify schemas that distort patients' perceptions of others and of themselves, behavioral and relational approaches to help them deal with real deficiency and loss, and spiritually oriented approaches to put these into a larger context.

Proeschold-Bell, Rae Jean, Sara LeGrand, John James, Amanda Wallace, Christopher Adams & David Toole. 2009. A Theoretical Model of the Holistic Health of United Methodist Clergy. *Journal of Religion and Health* 50(3). 700-720.
doi:10.1007/s10943-009-9250-1.

Eleven focus groups with 59 United Methodist Church (UMC) pastors and 29 UMC District Superintendents were conducted in 2008. Participants discussed their conceptualization of health and barriers to, and facilitators of, health promotion. A model of health for UMC clergy is proposed that categorizes 42 moderators of health into each of five levels drawn from the Socioecological Framework: Intrapersonal, Interpersonal, Congregational, United Methodist Institutional, and Civic Community. Clergy health is mediated by stress and self-care and coping practices.

Rodriguez, Elliot, Gary A Johnson, Terry Culbertson & William Grant. 2011. An educational program for spiritual care providers on end of life care in the critical care setting. *Journal of Interprofessional Care* 25(5). 375-377.
doi:10.3109/13561820.2011.573104.

No abstract available.

Sussman, Steve, Michel Reynaud, Henri-Jean Aubin & Adam M. Leventhal. 2011. Drug addiction, love, and the higher power. *Evaluation & the Health Professions* 34(3). 362-370.
doi:10.1177/0163278711401002.

This discussion piece suggests that reliance on a Higher Power in drug abuse recovery programs is entertained among some addicts for its psychobiological effects. Prayer, meditation, early romantic love, and drug abuse may have in common activation of mesolimbic dopaminergic pathways of the brain and the generation of intense emotional states. In this sense, reliance on a Higher Power may operate as a substitute addiction, which replaces the psychobiological functions formerly served by drug use.

Swinton, J., V. Bain, S. Ingram & S. D. Heys. 2011. Moving inwards, moving outwards, moving upwards: the role of spirituality during the early stages of breast cancer. *European Journal of Cancer Care* 20(5). 640-652.
doi:10.1111/j.1365-2354.2011.01260.x.

The paper draws on the thinking of David Hay and Viktor Frankl to develop a model of spirituality that includes, but is not defined by, religion, and that has the possibility to facilitate effective empirical enquiry. It outlines a threefold movement - inwards, outwards and upwards - that emerged from in-depth interviews with women who have breast cancer. This framework captures something of the spiritual movement that women went through on their cancer journeys and offers some pointers and possibilities for better and more person-centered caring approaches that include recognition of the spiritual dimension of women's experiences for the management of those with breast cancer.

Unruh, Anita & Susan Hutchinson. 2011. Embedded spirituality: gardening in daily life and stressful life experiences. *Scandinavian Journal of Caring Sciences* 25(3). 567-574.
doi:10.1111/j.1471-6712.2010.00865.x.

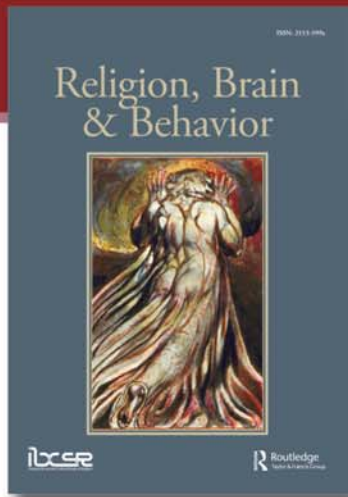
In a year-long study of 42 participants (27 women; 15 diagnosed with cancer; 3 with chronic and progressive disease; 4 grieving the death of a spouse), researchers examined the meaning of gardens and gardening across different life experiences. Participants with religious views saw their garden as an extension of their spirituality and a confirmation of their beliefs. Participants with secular or sacred views of spirituality that was not related to any religious beliefs were more likely to embed their spirituality in their relationship with nature as manifested in their garden.

Vasegh, Sasan. Fall 2011. Cognitive Therapy of Religious Depressed Patients: Common Concepts Between Christianity and Islam. *Journal of Cognitive Psychotherapy* 25(3). 177-187.
doi:10.1891/0889-8391.25.3.177.

This article discusses several religious thoughts and beliefs common to Christianity and Islam that the author has found useful in cognitive therapy of religious depressed patients and offers three case examples to illustrate how to use them. A set of such religious thoughts and concepts has important potential implications: more effective psychotherapy of religious Christian or Muslim patients, decreasing biases towards the patients from the other religion, and designing questionnaires and manuals for assessing the role of these thoughts in treatment or prevention of psychiatric disorders.

Winter-Pfändler, Urs & Christoph Morgenthaler. 2011. Who needs chaplain's visitation in general hospitals? Assessing patients with psychosocial and religious needs. *The Journal of Pastoral Care & Counseling: JPCC* 65(1-2). 2.1-9.

Owing to the declining length of patients' hospital stay in recent years, chaplains need evidence-based criteria to decide which patients are likely to have the greatest psychosocial and/or religious-spiritual needs. Therefore, the present pilot study aims at sorting out evidence-based criteria to assess patients with lack of coping resources. A total of 610 patients in the German-speaking part of Switzerland were surveyed with regard to their psychosocial health. The results suggest that lack of vitality (including health condition), lack of support and lack of faith (including spiritual struggle) are valid and reliable criteria for chaplains as internal triggers for pastoral visitation.



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PART 3. BOOKS

3.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Bellah, Robert N. 2011. *Religion in Human Evolution: From the Paleolithic to the Axial Age*. Belknap Press of Harvard University Press.
- Campbell, Patricia Q. 2011. *Knowing Body, Moving Mind: Ritualizing and Learning at Two Buddhist Centers*. (Oxford Ritual Studies). Oxford University Press.
- Geertz, Armin W. & Jeppe Sinding Jensen (eds.). 2011. *Religious Narrative, Cognition and Culture: Image and Word in the Mind of Narrative*. (Religion, Cognition and Culture). Equinox Publishing.
- Haar, Gerrie Ter (ed.). 2011. *Religion and Development: Ways of Transforming the World*. Columbia University Press.
- Hyland, Terry. 2011. *Mindfulness and Learning: Celebrating the Affective Dimension of Education*. Springer.
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- Kuan, Tse-fu. 2011. *Mindfulness in Early Buddhism: New Approaches Through Psychology and Textual Analysis of Pali, Chinese and Sanskrit Sources*. Routledge.
- Lynch, Gordon, Jolyon Mitchell & Anna Strhan. 2011. *Religion, Media and Culture: A Reader*. Routledge.
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- Martin, Luther H. & Jesper Sorensen. 2011. *Past Minds: Studies in Cognitive Historiography*. (Religion, Cognition and Culture). Equinox Publishing.
- Palmer, David A., Glenn Shive & Philip L. Wickeri. 2011. *Chinese Religious Life*. Oxford University Press.
- Starrs, Roy. 2011. *Politics and Religion in Modern Japan: Red Sun, White Lotus*. Palgrave Macmillan.
- Visala, Aku. 2011. *Naturalism, Theism and the Cognitive Study of Religion: Religion Explained?* (Ashgate Science and Religion Series). Ashgate.
- Walach, Harald, Stefan Schmidt, & Jonas Jonas (eds.). 2011. *Neuroscience, Consciousness and Spirituality*. (Studies in Neuroscience, Consciousness and Spirituality). Springer.

3.2 SPIRITUALITY & HEALTH RESEARCH

- Callahan, Sidney. 2011. *Called to Happiness: Where Faith and Psychology Meet*. Orbis Books.
- Clinton, Tim & Ron Hawkins. 2011. *The Popular Encyclopedia of Christian Counseling: An Indispensable Tool for Helping People with Their Problems*. Harvest House Publishers.
- Kabwe, Kabwe Maybin. 2011. *The Role of Religion in Health Matters: Appreciating intangible religious health assets of local churches*. LAP LAMBERT Academic Publishing.

PART 4. ARTICLES IN PRESS

4.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Berkovich-Ohana, Aviva, Joseph Glicksohn & Abraham Goldstein. 2011. Mindfulness-induced changes in gamma band activity - Implications for the default mode network, self-reference and attention. *Clinical Neurophysiology: Official Journal of the International Federation of Clinical Neurophysiology*.
doi:10.1016/j.clinph.2011.07.048.
- Gahan, Luke Benjamin. 2011. Queer spiritual spaces: sexuality and sacred places. *Culture, Health & Sexuality*.
doi:10.1080/13691058.2011.613566.
- Gervais, Will M. & Ara Norenzayan. Like a camera in the sky? Thinking about God increases public self-awareness and socially desirable responding. *Journal of Experimental Social Psychology*(0).
doi:10.1016/j.jesp.2011.09.006.
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doi:10.1037/a0024931.
- Kulich, Tomáš & Jaroslav Flegr. 2011. Positive effects of multiple gene control on the spread of altruism by group selection. *Journal of Theoretical Biology* 284(1). 1-6.
doi:10.1016/j.jtbi.2011.05.017.
- Le, Christine & Daniel H S Silverman. 2011. Neuroimaging and EEG-based explorations of cerebral substrates for suprapentasensory perception: A critical appraisal of recent experimental literature. *Psychiatry Research*.
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- Lydia K., Manning. Experiences from Pagan women: A closer look at croning rituals. *Journal of Aging Studies*(0).
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- Raab, Gillian & Chris Holligan. 2011. Sectarianism: myth or social reality? Inter-sectarian partnerships in Scotland, evidence from the Scottish Longitudinal Study. *Ethnic and Racial Studies*. 1-21.
doi:10.1080/01419870.2011.607506.
- Shenhav, Amitai, David G Rand & Joshua D Greene. 2011. Divine intuition: Cognitive style influences belief in God. *Journal of Experimental Psychology. General*.
doi:10.1037/a0025391.
- T.A., Mir. The law of the leading digits and the world religions. *Physica A: Statistical Mechanics and its Applications*(0).

doi:10.1016/j.physa.2011.09.001.

Tsang, Jo-Ann, Ashleigh Schulwitz & Robert D. Carlisle. 2011. An experimental test of the relationship between religion and gratitude. *Psychology of Religion and Spirituality*. doi:10.1037/a0025632.

Yonker, Julie E., Chelsea A. Schnabelrauch & Laura G. DeHaan. The relationship between spirituality and religiosity on psychological outcomes in adolescents and emerging adults: A meta-analytic review. *Journal of Adolescence*(0). doi:10.1016/j.adolescence.2011.08.010.

4.2 SPIRITUALITY & HEALTH RESEARCH

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