

INTRODUCTION

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

Articles for this issue were located by searching the following databases: H. W. Wilson Applied Science and Technology, ATLA Religion Database, H. W. Wilson General Science, PubMed, EBSCO Psychology and Behavioral Sciences Collection, PsycARTICLES, PsycINFO, ScienceDirect, and Web of Science. The search terms were altruism, god, goddess, meditat*, prayer, relig*, ritual, spiritu*, and yoga, tailored to the database being searched. Books were located on Amazon.com. Articles not directly relevant to the scientific study of religion were excluded, as were correspondence and reviews. From a universe of 1,090 articles, 93 articles have been retained from 68 journals. There are 43 pre-publication citations from 28 journals.

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PART 1: ARTICLES IN RELIGION, BRAIN, AND BEHAVIOR

1.1 SCIENTIFIC STUDY OF RELIGION: COGNITIVE NEUROSCIENCE

Fan, Yaxin, Yi-Yuan Tang, Rongxiang Tang & Michael I. Posner. 2014. Short term integrative meditation improves resting alpha activity and stroop performance. *Applied Psychophysiology and Biofeedback* 39(3-4). 213–217.
doi:10.1007/s10484-014-9258-5.

Previous research has shown that short term meditation training reduces the time to resolve conflict in the flanker task. Studies also show that resting alpha increases with long term meditation practice. The aim of this study is to determine whether short term meditation training both increases resting alpha activity and reduces the time to resolve conflict in the Stroop task and whether these two effects are related. Forty-three Chinese undergraduates were randomly assigned an experiment group given 5 days meditation training using integrative body-mind training (IBMT) and a relaxation training control. After training, only the IBMT group showed decreased conflict reaction time (RT), and increased resting mean alpha power. Moreover, the higher the enhancement of resting alpha power, the stronger the improvement of conflict RT. The results indicate that short term meditation diffusely enhances alpha and improves the ability to deal with conflict and moreover these two effects are positively related.

Nakata, Hiroki, Kiwako Sakamoto & Ryusuke Kakigi. 2014. Meditation reduces pain-related neural activity in the anterior cingulate cortex, insula, secondary somatosensory cortex, and thalamus. *Frontiers in Psychology* 5. 1489.
doi:10.3389/fpsyg.2014.01489.

Recent studies have shown that meditation inhibits or relieves pain perception. To clarify the underlying mechanisms for this phenomenon, neuroimaging methods, such as functional magnetic resonance imaging, and neurophysiological methods, such as magnetoencephalography and electroencephalography, have been used. However, it has been difficult to interpret the results, because there is some paradoxical evidence. For example, some studies reported increased neural responses to pain stimulation during meditation in the anterior cingulate cortex (ACC) and insula, whereas

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others showed a decrease in these regions. There have been inconsistent findings to date. Moreover, in general, since the activities of the ACC and insula are correlated with pain perception, the increase in neural activities during meditation would be related to the enhancement of pain perception rather than its reduction. These contradictions might directly contribute to the “mystery of meditation.” In this review, the authors presented previous findings for brain regions during meditation and the anatomical changes that occurred in the brain with long-term meditation training. They then discussed the findings of previous studies that examined pain-related neural activity during meditation. Also described are the brain mechanisms responsible for pain relief during meditation, and possible reasons for paradoxical evidence among previous studies. By thoroughly reviewing previous findings, the authors hypothesized that meditation reduces pain-related neural activity in the ACC, insula, secondary somatosensory cortex, and thalamus. It is suggested that the characteristics of the modulation of this activity may depend on the kind of meditation and/or number of years of experience of meditation, which were associated with paradoxical findings among previous studies that investigated pain-related neural activities during meditation.

1.2 SCIENTIFIC STUDY OF RELIGION: EVOLUTION

Chapais, Bernard. 2014. Complex Kinship Patterns as Evolutionary Constructions, and the Origins of Sociocultural Universals. *Current Anthropology* 55(6). 751–783.
doi:10.1086/678972.

Human societies share a large number of complex social traits relating to kinship, which together constitute what is called here the human kinship configuration. The author uses a comparative phylogenetic approach to show that each of the traits making up that configuration has an evolutionary history and hence a biological foundation. The origin of many complex traits may be explained in terms of emergent products of the combination of more elementary features present in other primate species, whereas other traits appear to emerge from the combination of primate features with uniquely human cognitive abilities. The resulting composite traits thus have a compounded biological foundation, but at the same time they are always manifest under specific cultural (formal and semantic) expressions in any society. The traits may thus be seen as open-ended, culturally polymorphic and polysemous categories, or sociocultural categories, with the categories themselves having a biological foundation while their contents are culturally defined. Importantly, those categories need not be cross-culturally universal even though they are natural; their presence or absence in a given society is culturally modulated. The author argues that a large number of such categories operate as an interface that helps bridge the gap between human biology and the sociocultural realm and that information on that interface is required for understanding how human nature structures cultural diversity.

Chuah, Swee-Hoon, Robert Hoffmann, Bala Ramasamy & Jonathan H. W. Tan. 2014. Religion, ethnicity and cooperation: An experimental study. *Journal of Economic Psychology* 45. 33–43.
doi:10.1016/j.joep.2014.07.002.

The authors investigate how cross-cutting ethnic and religious identities as well as the strength of individual religiosity and fundamentalism affect individual cooperation. In a repeated prisoner's dilemma experiment, information about subjects' religious and ethnic identities was either revealed or concealed to examine the individual and joint effects of these influences on subject decisions. While subjects' knowledge of others' religious and ethnic difference has no net effect on their cooperativeness, the awareness of similarity increases it. Subject religiosity and fundamentalism have no independent effect on cooperation, but they enhance ethnic and religious intergroup effects.

McCall, Cade, Nikolaus Steinbeis, Matthieu Ricard & Tania Singer. 2014. Compassion meditators show less anger, less punishment, and more compensation of victims in response to fairness violations. *Frontiers in Behavioral Neuroscience* 8. 424.
doi:10.3389/fnbeh.2014.00424.

Fairness violations elicit powerful behavioral and affective responses. Indeed, people are willing to incur costs to sanction unfair behavior. Here the authors study the possible impact of long-term mental training in socio-affective

capacities such as compassion on altruistic punishment and compensatory behavior in economic games. To this end a group of long-term meditation practitioners (LTPs) were recruited who had engaged in an average of 40,000 hours of mental training exercises including compassion-related meditation, along with a group of meditation-naïve controls. Participants played several adaptations of the dictator game in which they had the opportunity to punish the dictator both when they were the recipients of the dictator's offer and when they were third-party witnesses to the dictator's treatment of an anonymous second player. Compared to controls, LTPs were less likely to punish when they were the victims of fairness violations. However, both groups punished equivalently when they witnessed others receiving unfair treatment. In post-task questionnaires, controls reported significantly more anger in response to unfair offers than LTPs, although fairness judgments did not differ between groups. These data suggest that because the LTPs were less angered by unfair treatment of themselves, they punished that behavior less. However, when they witnessed the unfair treatment of others, they engaged in norm-reinforcing punishment. Finally, when participants played an additional game which included the opportunity to recompense victims, LTPs were more likely to do so. Together these data point to differential approaches to justice whereby LTPs engaged less in vengeful, retributive justice and focused more on norm reinforcement and the restoration of equity. These differences suggest that social preferences are plastic and that altruistic responses to unfairness may be shaped by the prolonged cultivation of prosocial motivation, altruism, and compassion.

Raynold, Prosper. 2014. Sacrifice and Stigma: Managing Religious Risk. *Journal for the Scientific Study of Religion* 53(4). 826–847.
doi:10.1111/jssr.12153.

This article develops a theoretical explanation for the incidence of sacrifice and stigma or “strictness” that, unlike the extant literature, explicitly incorporates a supernatural motive for religiosity. This innovation permits a precise delineation of religious risks and leads to the critical insight that “strictness” is an instrument of mutually beneficial risk mitigation. The theory yields alternative explanations for all empirical regularities on the incidence of strictness that the club model explains, including the seemingly anomalous labor market behavior of Ultra-Orthodox Jews in Israel, the high lethality of extremist religious sects, and the positive correlation between strictness and social service provision. Among the attributes that distinguish the risk mitigation approach from the club model are: its explanation of observed income dispersion within strictness categories that is substantially greater than that implied by the club model; its prediction that the positive correlation between strictness and exclusivity is a causal relationship in which exclusivity is causally prior to strictness; and its demonstration that variation in the risk mitigation benefits members derive from strictness is at least as important as variation in the opportunity costs of strictness in explaining variation in the levels of strictness employed across denominations and sects.

Sablosky, Roy. 2014. Does religion foster generosity? *Social Science Journal* 51(4). 545–555.
doi:10.1016/j.soscij.2014.03.012.

This paper reviews recent studies that claim to provide support, through statistical analysis of survey data, for the traditional proposition that being religious makes people more generous. The studies have serious shortcomings. First, the data consist exclusively of self-reports. Second, the dependent and independent variables are conceptually problematic and ill-defined. Third, even if there is a positive correlation between religious involvement and personal generosity, it may be due to selection bias. Thus, these studies do not provide serious evidence for the traditional hypothesis. Moreover, it has been directly controverted by experimental studies of economic and other behaviors.

Whitehouse, Harvey & Jonathan A. Lanman. 2014. The Ties That Bind Us: Ritual, Fusion, and Identification. *Current Anthropology* 55(6). 674–695.
doi:10.1086/678698.

Most social scientists endorse some version of the claim that participating in collective rituals promotes social cohesion. The systematic testing and evaluation of this claim, however, has been prevented by a lack of precision regarding the nature of both “ritual” and “social cohesion” as well as a lack of integration between the theories and findings of

the social and evolutionary sciences. By directly addressing these challenges, the present authors argue that a systematic investigation and evaluation of the claim that ritual promotes social cohesion is achievable. In this article, a general and testable theory of the relationship between ritual, cohesion, and cooperation is presented. This theory more precisely connects particular elements of “ritual,” such as causal opacity and emotional arousal, to two particular forms of “social cohesion”: group identification and identity fusion. Further, the authors ground this theory in an evolutionary account of why particular modes of ritual practice would be adaptive for societies with particular resource-acquisition strategies. In setting out our conceptual framework, the authors report numerous ongoing investigations that test this hypotheses against data from controlled psychological experiments as well as from the ethnographic, archaeological, and historical records.

1.3 SCIENTIFIC STUDY OF RELIGION: PSYCHOLOGY AND CULTURE

Ammann, Sky L. 2014. Creating Partisan “Footprints”: The Influence of Parental Religious Socialization on Party Identification. *Social Science Quarterly* 95(5). 1360–1380.
doi:10.1111/ssqu.12097.

No studies in the American context have considered the influence of parental religious socialization on the development of individuals’ party identifications (PIDs). This study attempts to fill the gap. The theory posits that parental religious socialization plays an important developmental role in shaping a child’s PID. However, the precise relationship between a parent’s religion and the child’s PID may vary over time and across generations in response to changing religio-partisan conflicts. In this article, the expectations are tested using child-parent pairs from the Youth-Parent Socialization Panel Study. Conventional bivariate and multivariate techniques are employed to estimate a child’s seven-point PID. Measures of parental religious belonging, beliefs, and behaviors, as well as a parent’s PID, other parental sociodemographic controls, and measures of a child’s religion are included in the multivariate models. In the 1960s, 1970s, and 1980s, a pre-Boomer parent’s religious belonging and to a very limited extent religious behavior are more influential for the Baby Boomer child’s PID than religious beliefs. However, for the younger generation included in the study, in the 1990s, a Baby Boomer parent’s religious beliefs become more influential to his or her post-Boomer child’s PID than does the parent’s religious belonging or behavior. The findings imply an important and evolving role of parental religious socialization in shaping individuals’ PIDs.

Anderson, Joel & Radka Antalíková. 2014. Framing (implicitly) matters: The role of religion in attitudes toward immigrants and Muslims in Denmark. *Scandinavian Journal of Psychology* 55(6). 593–600.
doi:10.1111/sjop.12161.

Denmark is currently experiencing the highest immigration rate in its modern history. Population surveys indicate that negative public attitudes toward immigrants actually stem from attitudes toward their (perceived) Islamic affiliation. The present authors used a framing paradigm to investigate the explicit and implicit attitudes of Christian and Atheist Danes toward targets framed as Muslims or as immigrants. The results showed that explicit and implicit attitudes were more negative when the target was framed as a Muslim, rather than as an immigrant. Interestingly, implicit attitudes were qualified by the participants’ religion. Specifically, analyses revealed that Christians demonstrated more negative implicit attitudes toward immigrants than Muslims. Conversely, Atheists demonstrated more negative implicit attitudes toward Muslims than Atheists. These results suggest a complex relationship between religion, and implicit and explicit prejudice. Both the religious affiliation of the perceiver and the perceived religious affiliation of the target are key factors in social perception.

Bok, Jared. 2014. Symbolic Filtering: Selectively Permeable Evangelical Boundaries in an Age of Religious Pluralism. *Journal for the Scientific Study of Religion* 53(4). 808–825.
doi:10.1111/jssr.12145.

Since Peter Berger's early work on the sacred canopy, scholars have debated the effects of increased diversity on religious belief and vitality. Christian Smith, in particular, has suggested that subcultures like American evangelicalism can thrive in a religiously pluralistic environment by both engaging with the world while remaining symbolically distinct from it. This article builds on this work as well as recent scholarship on boundary permeability by exploring the mechanisms by which American evangelicals negotiate their boundaries as they adapt to their surroundings. Based on a qualitative content analysis of 109 articles from two evangelical missionary periodicals published over a period of over 20 years, the author examines the use of both boundary-strengthening and boundary-weakening processes employed by evangelical missionaries and missiologists (or "boundary agents"). It is found that almost every instance of boundary weakening is also accompanied by boundary strengthening, suggesting that symbolic boundaries are becoming selectively permeable through a process identified as "symbolic filtering." In conclusion, the article briefly considers the implications of these findings for the broader discussion of symbolic boundaries and religious pluralism.

Browne, Matthew, Gordon Pennycook, Belinda Goodwin & Melinda McHenry. 2014. Reflective minds and open hearts: Cognitive style and personality predict religiosity and spiritual thinking in a community sample. *European Journal of Social Psychology* 44(7). 736–742.
doi:10.1002/ejsp.2059.

Researchers examined associations between two psychological constructs—analytic cognitive style and the personality facet "Openness to Experience"—and several dimensions of religiosity: religious affiliation, strength of faith and spiritual epistemology. In a relatively large (n=1,093), older community sample (M=55.4 years), analytic cognitive style was associated with a lower probability of affiliating with a religious denomination and a higher probability of possessing strong religious faith. Overall, openness was also associated with a lack of religious affiliation but was positively related to possessing a spiritual epistemology. A path-analytic model revealed that openness had a positive relationship to both faith and religious denomination that was mediated by spiritual epistemology, but negative direct relationships with religiosity after the meditational effects were taken into account. Taken together, these results extend previous findings on the effect of cognitive style on religiosity and provide a new perspective on the complex relationship between cognitive and personality factors and different dimensions of religiosity.

Cassaniti, Julia L. & Tanya Marie Luhrmann. 2014. The Cultural Kindling of Spiritual Experiences. *Current Anthropology* 55(S10). S333–S343.
doi:10.1086/677881.

In this paper the authors suggest that it is important for the anthropology of Christianity and the anthropology of religion more generally to develop a comparative phenomenology of spiritual experience. The present method is to distinguish between a named phenomenon without fixed mental or bodily events (phenomena that have specific local terms but are recognized by individuals by a broad and almost indiscriminate range of physical events); bodily affordances (events of the body that happen in social settings but are only identified as religious in those social settings when they afford, or make available, an interpretation that makes sense in that setting); and striking anomalous events. The researchers demonstrate that local cultural practices shift the pattern of spiritual experiences, even those such as sleep paralysis and out-of-body experiences that might be imagined in some ways as culture free, but that the more the spiritual experience is constrained by a specific physiology, the more the frequency of the event will be constrained by an individual's vulnerability to those experiences.

Chaves, Mark & Shawna L. Anderson. 2014. Changing American Congregations: Findings from the Third Wave of the National Congregations Study. *Journal for the Scientific Study of Religion* 53(4). 676–686.
doi:10.1111/jssr.12151.

The third wave of the National Congregations Study (NCS-III) was conducted in 2012. The 2012 General Social Survey asked respondents who attend religious services to name their religious congregation, producing a nationally

representative cross-section of congregations from across the religious spectrum. Data about these congregations were collected via a 50-minute interview with one key informant from 1,331 congregations. Information was gathered about multiple aspects of congregations' social composition, structure, activities, and programming. Approximately two-thirds of the NCS-III questionnaire replicates items from 1998 or 2006-2007 NCS waves. Each congregation was geocoded, and selected data from the 2010 U.S. Census or American Community Survey have been appended. In this article, researchers describe NCS-III methodology and use the cumulative NCS dataset (containing 4,071 cases) to describe five trends: more ethnic diversity, greater acceptance of gays and lesbians, increasingly informal worship styles, declining size (but not from the perspective of the average attendee), and declining denominational affiliation.

- Cutright, Keisha M., Tülin Erdem, Gavan J. Fitzsimons & Ron Shachar. 2014. Finding brands and losing your religion? *Journal of Experimental Psychology. General* 143(6). 2209–2222.
doi:10.1037/a0037876.

Religion is a powerful force in many people's lives, impacting decisions about life, death, and everything in between. It may be difficult, then, to imagine that something as seemingly innocuous as the usage of brand name products might influence individuals' commitment to religion. However, researchers demonstrate across 6 studies that when brands are a highly salient tool for self-expression, individuals are less likely to report and demonstrate strong religious commitment. The authors suggest that a desire to maintain consistency among self-identities is one important driver of this relationship and find that the effect is mitigated when the perceived distance between brands and religious values is minimized.

- Du, Xingqiang. 2014. Does religion mitigate tunneling? Evidence from Chinese Buddhism. *Journal of Business Ethics* 125(2). 299–327.
doi:10.1007/s10551-013-1917-6.

In the Chinese stock market, controlling shareholders often use inter-corporate loans to expropriate a great amount of cash from listed firms, through a process called "tunneling." Using a sample of 10,170 firm-year observations from the Chinese stock market for the period of 2001–2010, the author examined whether and how Buddhism, China's most influential religion, can mitigate tunneling. In particular, using firm-level Buddhism data, measured as the number of Buddhist monasteries within a certain radius around Chinese listed firms' registered addresses, this study provides strong evidence that Buddhism intensity is significantly negatively associated with tunneling. This finding is consistent with the view that Buddhism has important influence on corporate behavior and can serve as a set of social norms and/or an alternative mechanism to mitigate controlling shareholders' unethical tunneling behavior. In addition, these findings also reveal that the negative association between Buddhism intensity and tunneling is attenuated for firms that have high analyst coverage. The results are robust to various measures of Buddhism intensity and a variety of sensitivity tests.

- Franceschelli, Michela & Margaret O'Brien. 2014. "Islamic capital" and family life: The role of Islam in parenting. *Sociology* 48(6). 1190–1206.
doi:10.1177/0038038513519879.

Much sociological research using Bourdieu's theory to analyze intergenerational reproduction tends to focus on the educational rather than the familial aspect of this process. Instead, this article explores habitus and the family field within South Asian Muslim communities in the UK as the site of intergenerational transmission and seeks to understand how these parents pass on values to their children. Based on 52 semi-structured interviews with 15 South Asian Muslim families, the findings suggest that Islam was mobilized by parents to inform the transmission of a sense of morality, support children's education, and reinforce family ties. The concept of "Islamic capital" was developed to add specificity to Bourdieu's ideas of family spirit and cultural capital in order to capture the dynamics between parents and their children. In the context of multicultural Britain, these findings shed light on the diversity of parenting to inform family support grounded in the understanding of different communities.

Gebauer, Jochen E., Wiebke Bleidorn, Samuel D. Gosling, Peter J. Rentfrow, Michael E. Lamb & Jeff Potter. 2014. Cross-cultural variations in big five relationships with religiosity: A sociocultural motives perspective. *Journal of Personality and Social Psychology* 107(6). 1064–1091. doi:10.1037/a0037683.

In this article a sociocultural motives perspective (SMP) on Big Five relationships is introduced. According to the SMP, Agreeableness and Conscientiousness elicit assimilation to sociocultural norms, Openness elicits contrast from these norms, and Extraversion and Neuroticism are independent of sociocultural assimilation and contrast. Due to sociocultural assimilation, then, relationships of Agreeableness and Conscientiousness with an outcome wax (become more positive or less negative) with that outcome's increasing sociocultural normativeness. Due to sociocultural contrast, relationships of Openness with an outcome wane (become less positive or more negative) with that outcome's increasing sociocultural normativeness. The present team of researchers tested the SMP using religiosity as the outcome. Study 1 included 4 cross-sectional self-report data sets across 66 countries (n=1,129,334), 50 U.S. states (n=1,057,342), 15 German federal states (n=20,885), and 121 British urban areas (n=386,315). Study 2 utilized informant-report data across 37 countries (n=544,512). Study 3 used longitudinal data across 15 German federal states (n=14,858). Results consistently supported the SMP. Relationships of Agreeableness and Conscientiousness with religiosity were more positive in religious sociocultural contexts than in secular contexts. Relationships of Openness with religiosity were more negative in religious sociocultural contexts than in secular contexts. At a more general level, the SMP offers theory-driven explanations for cross-cultural variations in Big Five relationships with their outcomes.

Genty, Nick, A. Christon Adedoyin, Mary S. Jackson & Mark Jones. 2014. Does religion matter? A study of the impact of religion on female incarcerated gang members in a Bible belt state. *Journal of Gang Research* 21(2). 1–16.

Knowledge about gang membership and activities substantially burgeoned in the last two decades. However, little attention has been focused on female gangs compared to male gang membership. Furthermore, literature is sparse on the role that religion and living in a religious environment plays in the decision making and gang membership proclivity of incarcerated females. This study seeks to close this gap in extant literature. To this end, the current study investigated the role of religion in the lives of 185 self-reported female gang members in a female correctional facility in North Carolina. Chi-Square analysis shows that a statistically significant relationship was observed between gang membership and belief in God/Supreme Being/Higher Power. However, regression analysis indicated that religiosity was an insignificant predictor of gang membership.

Hayward, R. David & Neal Krause. 2014. Changes in Religious Group Affiliation During Older Adulthood: Evidence from an 11-year Longitudinal Study. *Review of Religious Research* 56(4). 539–554. doi:10.1007/s13644-014-0151-8.

Although older adults tend to be among the most religiously-involved groups of people, and are more likely to be affiliated with a religious group in comparison with their younger counterparts, very little is known about the extent to which older adults change their affiliations from one group to another, or what factors are associated with likelihood of changing religion during this part of the life span. This study uses longitudinal data covering a period of between 3 and 12 years from a survey of religion and health in older adults to describe changes in reported religious group affiliation and to examine the demographic and religious factors that predict these changes. The extent of change observed depended on how religious affiliation was coded. 69% of older adults changed some element of their response regarding religious affiliation during the course of the study, but once responses were classified more broadly by religious tradition, the proportion changing was 27%. There were also significant changes between Protestant denominations, and between specific organizations within Protestant denominations. Catholics and members of historically Black Protestant groups were less likely to change affiliations than Mainline Protestants or Conservative

Protestants. Greater frequency of religious service attendance was related to lower likelihood of changing religious affiliation. Results indicate that religious affiliation change continues to occur in a significant proportion of individuals during the span of older adulthood, and that many of those who change tend to do so repeatedly.

Hettinger, Vanessa E. & Joseph A. Vandello. 2014. Balance without equality: Just world beliefs, the gay affluence myth, and support for gay rights. *Social Justice Research* 27(4). 444–463.
doi:10.1007/s11211-014-0226-2.

The harmfulness of negative stereotypes toward gay and lesbian people has been established, but the effect of positive stereotypes has not been thoroughly examined. Gay and lesbian Americans continue to struggle against interpersonal and institutionalized discrimination, yet many people do not see them as a politically disadvantaged group, and voter support for gay rights has been inconsistent and somewhat unpredictable. Drawing on previous research regarding reactions to disadvantaged and advantaged targets, researchers examined the social cognitive underpinnings of support for gay rights. After accounting for general anti-gay attitudes and degree of religious affiliation, the authors found that global endorsement of just world beliefs negatively predicted support for gay rights, and that this effect was mediated by an inclination to perceive discrimination against gay and lesbian people as less of an issue in American society. Additionally, researchers found that endorsement of the “gay affluence” stereotype also negatively predicted support of gay rights, particularly among non-student adults, and that this effect was moderated by character beliefs about gay and lesbian people pertaining to wealth-deservingness.

Khandelwal, Kanika, Megha Dhillon, Kalyani Akalamkam & Deepika Papneja. 2014. The ultimate attribution error: Does it transcend conflict? The case of Muslim adolescents in Kashmir and Delhi. *Psychological Studies* 59(4). 427–435.
doi:10.1007/s12646-014-0240-3.

This study examined the attribution style, religious stereotypes and the strength of religious identity in Muslim adolescents in a conflict zone (Kashmir) and a non-conflict zone (Delhi). The sample comprised of 321 adolescents. The results showed that the attributions made by Kashmiri adolescents were more ethnocentric in the case of judging socially desirable behaviors by in-group members, though were not so in the case of judging socially desirable behaviors by out group members. No differences were found between Kashmiri and Delhi students in the attributions made for socially undesirable behaviors by the in-group or out-group. Further, the adolescents in Kashmir held more positive perceptions of both the in-group and out-group as compared to adolescents in Delhi. Finally, the adolescents in Kashmir displayed stronger religious identity than adolescents in Delhi.

Kim, Young-Il & W. Bradford Wilcox. 2014. Religious Identity, Religious Attendance, and Parental Control. *Review of Religious Research* 56(4). 555–580.
doi:10.1007/s13644-014-0167-0.

Using a national sample of adolescents aged 10–18 years and their parents (n=5,117), this article examines whether parental religious identity and religious participation are associated with the ways in which parents control their children. Researchers hypothesize that both religious orthodoxy and weekly religious attendance are related to heightened levels of three elements of parental control: monitoring activities, normative regulations, and network closure. Results indicate that an orthodox religious identity for Catholic and Protestant parents and higher levels of religious attendance for parents as a whole are associated with increases in monitoring activities and normative regulations of American adolescents.

Martinovic, Borja & Maykel Verkuyten. 2014. The political downside of dual identity: Group identifications and religious political mobilization of Muslim minorities. *The British Journal of Social Psychology* 53(4). 711–730.
doi:10.1111/bjso.12065.

Research on the political mobilization of ethnic minorities has shown that dual ethno-national identification facilitates involvement in political action on behalf of the ethnic group. This study extends this research by proposing that a dual identity can impede political mobilization on behalf of another relevant in-group—the religious community—especially if this in-group is not accepted by the wider society. Using a sample of 641 Muslims of Turkish origin living in Germany and the Netherlands, dual ethno-national identity (Turkish-German/Turkish-Dutch) was examined in relation to religious Muslim identification and religious political mobilization. Dual identity was expected to be indirectly related to lower mobilization via decreased religious group identification. Further, this mediating process was predicted to be stronger for Turkish Muslims who perceived relatively high religious group discrimination. In both countries researchers found support for the mediating hypothesis, however, the moderating role of discrimination was confirmed only for the Netherlands. Turkish-Dutch identification was associated with lower support for religious political mobilization because of lower Muslim identification only for Turkish-Dutch participants who perceived high levels of discrimination. These findings indicate that a strong dual (ethno-national) identity can undermine minority members' support for political rights and actions on behalf of a third relevant in-group, and therefore qualify the social psychological benefits of the dual identity model.

McCutcheon, Lynn E., Robert Lowinger, Maria Wong & William Jenkins. 2014. Is analytic thinking related to celebrity worship and disbelief in religion? *North American Journal of Psychology* 16(3). 453–462.

For this article researchers administered the Celebrity Attitude Scale, the intrinsic subscale from the Age-Universal I-E scale-12 and an Analytic Thinking Task to 164 undergraduates from three institutions. An expanded version of the Analytic Thinking Task correlated negatively with Celebrity Attitude Scale scores, as predicted, but not with the intrinsic subscale from the Age-Universal I-E scale-12. Results were discussed in light of a previous study by Gervais and Norenzayan (2012) in which scores on the Analytic Thinking Task were negatively related to three measures of religiosity. Suggestions were made for the further study of the relationships among celebrity worship, religious values, and analytical thinking.

Mooney, Margarita A. & Nicolette D. Manglos-Weber. 2014. Prayer and liturgy as constitutive-ends practices in Black immigrant communities. *Journal for the Theory of Social Behaviour* 44(4). 459–480. doi:10.1111/jtsb.12066.

Much social theory tends to emphasize the external goods of social practices, often neglecting the internal goods of those practices. For example, many analyses of religious rituals over-emphasize the instrumental and individualistic ends of prayer and liturgy by describing such religious practices as effective means for achieving external ends like positive emotions, psychological benefits, social status, or social capital. By contrast, the present authors use a neo-Aristotelian virtue ethics perspective to analyze the relational goods, such as trust and intimacy, which are expressed and sustained through ritualized social practices. Using ethnographies of Haitian and Ghanaian Christians in the U.S., the researchers demonstrate that prayer and liturgy can also be understood as constitutive-ends practices, practices in which human persons engage to sustain relations with others because there are goods inherent to those relationships. The authors further argue that in many religious practices, the end goals and the means—i.e., specific aspects of the practice—are inseparable. This approach to developing theory combines critical engagement with numerous other theorists and also exploring how well various theories can explain the motivations and experiences of participants in the religious rituals where the researchers conducted ethnographies.

Müller, Tim S., Nan Dirk De Graaf & Peter Schmidt. 2014. Which Societies Provide a Strong Religious Socialization Context? Explanations Beyond the Effects of National Religiosity. *Journal for the Scientific Study of Religion* 53(4). 739–759. doi:10.1111/jssr.12147.

Religious socialization occurs within the immediate family as well as in the broader social context. Previous research has shown that parents' religiosity matters less for the transmission of religious beliefs in devout than in secular

nations, implying smaller costs of religious socialization. In this article researchers test which other societal factors affect the transmission of religious beliefs: anti-religious policies in formerly socialist countries, economic development, and income inequality. Results indicate that societies with high levels of income inequality seem to provide the most favorable context for religious socialization. Individuals develop strong religious beliefs even if they only received little religious socialization within the family. Formerly socialist nations increased socialization costs through the overall suppression of religious practice. Economic development has no impact on socialization effects, suggesting that inequality is a more important driver of religious change than previously thought.

Paxton, Pamela, Nicholas E. Reith & Jennifer L. Glanville. 2014. Volunteering and the Dimensions of Religiosity: A Cross-National Analysis. *Review of Religious Research* 56(4). 597–625.
doi:10.1007/s13644-014-0169-y.

Religion and volunteerism are closely linked, but which aspects of religiosity matter most for volunteering? This article predicts volunteering with a multi-dimensional model of private and public religiosity using a sample of 9,464 respondents from 15 Western European countries. An interaction between private and public religiosity is also theorized and tested. Three dimensions of private religiosity (religious salience, prayer, and belief) are significant in predicting volunteering, and each has a significant interaction effect with public religiosity, measured by religious attendance. The influence of public and private religiosity on volunteering, and their interaction, differ by religious affiliation.

Petts, Richard J. 2014. Family, religious attendance, and trajectories of psychological well-being among youth. *Journal of Family Psychology* 28(6). (Special Section: Spirituality and Religion in Family Life: Pathways Between Relational Spirituality, Family Relationships, and Personal Well-Being). 759–768.
doi:10.1037/a0036892.

Despite numerous studies on adolescent well-being, longitudinal research on the influence of religion on well-being is lacking, and limited studies have looked at how family and religion may work in conjunction with one another to influence adolescent well-being. This study addresses these limitations by using longitudinal data on 5,739 youth to explore whether family structure, changes in family structure, parent-child relationship quality, and religious attendance (overall and with parents) influence trajectories of psychological well-being independently and in conjunction with one another. Results support previous research in showing that parental interaction and attending religious services with parent(s) in late childhood are associated with higher psychological well-being, whereas conflict with parents and residing in a nontraditional family in late childhood are associated with lower well-being among youth. Finally, there is evidence suggesting that attending religious services with parent(s) amplifies the positive influence of parental interaction on psychological well-being, and overall levels of religious attendance over time are less likely to increase well-being among adolescents raised by single parents than for adolescents raised by married parents.

Phipps, Kelly A. & Gina S. Matkin. 2014. Same direction, different paths: A phenomenological study of employees who are religious yet open to religious pluralism. *Employee Responsibilities and Rights Journal* 26(4). 279–295.
doi:10.1007/s10672-014-9241-6.

While there is a growing interest in workplace spirituality, much of that focus excludes religion even though the vast majority of people are affiliated with a religious tradition. Attempts to bring one's "whole self" to work can be problematic for those who are religious because of concerns of offense or proselytizing. This phenomenological study explored the lived experience of a group of 15 professional employees who were personally religious while also remaining open to religious pluralism in the workplace. This group was largely Christian, and was chosen from participants in leadership seminars and graduate courses in the United States. Analysis revealed four different

postures used by participants to express openness toward religious difference. These approaches are described in detail, and the implications of these findings for the advancement of pluralism in the workplace are considered.

Schwadel, Philip. 2014. Birth Cohort Changes in the Association Between College Education and Religious Non-Affiliation. *Social Forces* 93(2). 719–746.

This article examines the changing association between higher education and reporting no religious affiliation in the United States. The author argues that increases in higher education have led to a decline in the individual-level effect of college education on religious non-affiliation. Results from hierarchical age-period-cohort models using more than three and a half decades of repeated cross-sectional survey data demonstrate that the strong, positive effect of college education on reporting no religious affiliation declines precipitously across birth cohorts. Specifically, a bachelor's degree has no effect on non-affiliation by the 1965–69 cohort, and a negative effect for the 1970s cohorts. Moreover, these across-cohort changes are strongly associated with aggregate growth in college education, and they vary considerably by religious origin. The article concludes with a discussion of how the results relate to changes among the college-educated population, the religious deinstitutionalization of the non-college-educated, cultural diffusion across social statuses, and other cohort-appropriate social and cultural changes.

Sharp, Shane. 2014. Resisting religious coercive control. *Violence Against Women* 20(12). 1407–1427. doi:10.1177/1077801214557956.

Religious coercive control refers to the use of religious beliefs and doctrine as means to coercively control intimate partners. Scholars have shown that some abusive partners use the Christian doctrine of submission as a means of religious coercive control. The present author explores how victims who experience the doctrine of submission qua religious coercive control actively resist it. He argues that victims' successful resistance of the doctrine is contingent on their religious capital and interpretative capital. The first is the knowledge and mastery that people have of a particular religious culture. The second is people's subjective confidence in their interpretations of religious culture.

Silver, Christopher F., Thomas J. Coleman, Ralph W. Hood & Jenny M. Holcombe. 2014. The six types of nonbelief: a qualitative and quantitative study of type and narrative. *Mental Health, Religion & Culture* 17(10). 990–1001. doi:10.1080/13674676.2014.987743.

Extensive research has been conducted in exploration of the American religious landscape; however, only recently has social science research started to explore nonbelief in any detail. Research on nonbelief has been limited as most research focuses on the popularity of the religious “nones” or the complexities of alternative faith expressions such as spirituality. Through two studies, one qualitative and one quantitative, this research explored how nonbelievers' self-identify. Study 1 (the qualitative study) discovered that individuals have shared definitional agreement but use different words to describe different types of nonbelief. Through thematic coding, a typology of six different types of nonbelief was observed. Those are Academic Atheists, Activist Atheist/Agnostics, Seeker Agnostics, Antitheists, Non-Theists, and the Ritual Atheists. Study 2 explored the empirical aspects of these types related to the Big Five Domain, Ryff Psychological Well-Being, Narcissistic Personality Inventory, Multidimensional Anger Inventory, Rokeach Dogmatism Scale, and intersections related to religious and spiritual ontology.

Tamburello, Jeffrey A., Kyle Irwin & Martha Gault Sherman. 2014. Religious Coping: The Role of Religion in Attenuating the Effect of Sexual Victimization of College Women on Trust. *Review of Religious Research* 56(4). 581–595. doi:10.1007/s13644-014-0165-2.

Recent reports concerning violence against women estimate that over 3 % of female college students are sexually assaulted each year. If other forms of non-consensual sexual contact are included in these numbers, the estimates climb to upwards of 20 %. With such high victimization rates, there is a resounding call for study of both offenders and victims in an effort to decrease these rates and to mitigate the social effects of being victimized. The present

research focuses specifically on the latter, using a victimology-based approach. Using data from a longitudinal study of female college students, this paper outlines the effects of victimization on the generalized trust held by the victims. It is proposed that religion may serve as a means to attenuate these negative effects. Using ordered logistic regressions, religious service attendance is tested as a potential medium for the proposed attenuation.

Taylor, Robert Joseph, Linda M. Chatters & R. Khari Brown. 2013. African American Religious Participation. *Review of Religious Research* 56(4). 513–538.
doi:10.1007/s13644-013-0144-z.

This study examines the socio-demographic correlates of religious participation using data from the African American sub-sample of the National Survey of American Life (NSAL, 2001–2003). Twelve indicators of organizational religiosity, non-organizational religiosity, subjective religiosity, religious non-involvement and religious identity are examined. Both standard (e.g., age, gender) and novel (e.g., incarceration history, military service, welfare history, co-habitation, remarriage) demographic variables are utilized. Female gender, older age, being in a first marriage, and Southern residency are consistently associated with higher religious involvement. Three significant differences between urban Southerners and rural Southerners indicate that rural Southerners were more likely to be official members of their church, read religious materials more frequently, and felt that religion was more important in their home during childhood than their urban Southern counterparts. Persons in cohabiting relationships and those who have been incarcerated report lower levels of organizational religious participation and feel less close to religious people (but are similar to their counterparts for non-organizational and subjective religiosity). Persons with previous military service read religious materials, pray, and request prayer from others less frequently (but are similar to their counterparts for organizational and subjective religiosity). Findings suggest that for stigmatized life circumstances (incarceration and cohabitation), social processes within religious institutions may inhibit organizational religious participation. This study contributes to the broader literature by focusing on subgroup differences in diverse forms of religious involvement within a large and nationally representative sample of African Americans and provides a more nuanced portrait of African American religious participation.

Wang, Qunyong & Xinyu Lin. 2014. Does religious beliefs affect economic growth? Evidence from provincial-level panel data in China. *China Economic Review* 31. 277–287.
doi:10.1016/j.chieco.2014.10.006.

More and more literature on economic growth and development has increasingly focused on long-run effects of geographic, historical, and cultural factors on productivity and income per capita. This paper investigates the effect of religious beliefs on economic growth using provincial panel data from 2001 to 2011 in China. It is very meaningful to study the role of religion playing in economic development since religion has influence on political preference, human capital and work ethic, especially in current China which is faced with income disparity, environmental pollution, and official corruption. Results reveal that, among the different religions, Christianity has the most significant effect on economic growth. This conclusion is consistent among different estimators and robust with stability over time. However, no consistent or robust conclusions can be drawn for other religions. Different estimation methods give different signs or significance. Given the very few studies and limited data resources about China in this field, the paper as a tentative study provides a new viewpoint.

Yukich, Grace & Ruth Braunstein. 2014. Encounters at the Religious Edge: Variation in Religious Expression Across Interfaith Advocacy and Social Movement Settings. *Journal for the Scientific Study of Religion* 53(4). 791–807.
doi:10.1111/jssr.12142.

In a time of increasing religious diversity, interfaith political coalitions have become important settings for interreligious interaction, but little research has explored the types of religious expression that are generated therein. Prevailing theories in the sociology of religion indicate that interaction with religious others results in dilution of traditional religious commitments or production of stronger boundaries. But emerging perspectives in cultural sociology

shift attention from individual religious commitments to the ways in which settings shape different styles of religious expression. Insights about edge spaces drawn from urban theory suggest that religiously diverse settings can be generative of new types of religious practices. In this article researchers apply these insights to the study of interfaith activism by drawing on interviews and ethnographic fieldwork with religious advocacy professionals and activists working in interfaith coalitions. Conceptualizing the sites of these interfaith encounters as edge spaces, the researchers analyze variation in the types of religious expression that occur in interfaith settings. It is found that both aggregative and integrative practices are produced, but these vary depending on the goals and structure of the setting, as well as participants' accountability to outside religious gatekeepers.

1.4 SCIENTIFIC STUDY OF RELIGION: METHOD & THEORY

Bialecki, Jon. 2014. After the Denominozoic: Evolution, Differentiation, Denominationalism. *Current Anthropology* 55(S10). S193–S204.
doi:10.1086/678284.

This paper argues that sociological denomination theory, despite its success in describing historic denomination cycles, has limits to its contemporary use and does not match the ethnographic description of the variety of ways in which denominationalism is expressed in anthropological ethnographies of Christianity. The cause of this mismatch is placed at the feet of unilinear models of denominational evolution. In its place, a differential model of autopoietic denominational evolution is suggested, where denominations are seen as different and differing solutions to an insistent Christian problematic. The capacities of this model are explored through the Vineyard, an association of charismatic churches that originated in Southern California.

García Palacios, Mariana & José Antonio Castorina. 2014. Studying Children's Religious Knowledge: Contributions of Ethnography and the Clinical-Critical Method. *Integrative Psychological & Behavioral Science* 48(4). 462–478.
doi:10.1007/s12124-014-9268-0.

In this article the authors analyze different methodological and conceptual contributions of anthropology and psychogenetic theory to the research of children's religious knowledge. They argue that for the study of children's points of view it is possible to build an approach that links aspects studied by both disciplinary fields. With this aim, the authors revise some of their basic theoretical assumptions and recent reviews as well as their methodological proposals. Then the core characteristics of ethnography and the clinical-critical method is reviewed, with the goal of stressing their potentialities as well as their limitations in research. It is argued that within an ethnographic approach, researchers must establish certain restrictions on the clinical-critical method following basic premises of social anthropology. This approach allows for the demonstration of the importance of understanding children's constructions by placing them within social relations that children produce and update in everyday interactions.

Haynes, Naomi. 2014. Affordances and Audiences: Finding the Difference Christianity Makes. *Current Anthropology* 55(S10). S357–S365.
doi:10.1086/678285.

The author recognizes the extraordinary variety of Christian adherence around the world. In the light of this multiplicity, it has become increasingly important to develop frameworks that will allow us to conceptualize Christianity as a multifaceted, labile, but nevertheless identifiable object. Drawing together the concept of affordances, as well as what the author calls "audiences," this article outlines a comparative framework for the study of Christianity. This framework is focused on Christian adherence as a form of value creation, worked out in contested social space. The article begins by applying this model to some of the author's own material from the Zambian Copperbelt, showing how Pentecostalism and the prosperity gospel afford claims on audiences that include God, the state, and the wider social world. Then the author turns her attention to the affordances and audiences that emerge in the articles collected in the special issue. She concludes by suggesting that the framework of affordances and

audiences developed here helps to address one of the most vexing problems in the anthropology of Christianity, namely, how the subfield defines its object of study.

Manongi, Freddy S. & Peter J. Balint. 2014. Prayer Behavior in Rural Kilimanjaro, Tanzania. *Journal for the Scientific Study of Religion* 53(4). 760–774.
doi:10.1111/jssr.12146.

Theories and empirical evidence regarding prayer behavior generally emerge from studies of survey respondents in developed countries. The research that is described here adds to the literature by exploring links between demographic characteristics and the frequency and content of prayers for respondents in rural Tanzania. Researchers surveyed 349 Christian households from six villages in the country's Kilimanjaro region. In some aspects the findings match results from survey research conducted elsewhere, and in other aspects these results differ from those commonly reported in the literature. The authors suggest that local cultural and socioeconomic conditions may account for the differences in outcomes. These results suggest a need for caution in applying to poor countries theories and expectations drawn from the developed country context.

Sharp, Shane. 2014. Monotheistic theodicy as imaginary face-work. *Sociological Forum* 29(4). 873–892.
doi:10.1111/socf.12124.

In this article, the author outlines the cognitive process involved in accomplishing monotheistic theodicy, or the act of reconciling the belief in an omnipotent and morally perfect God with personal experiences of suffering. Based on in-depth interviews with intimate partner violence victims, the author argues that believers accomplish monotheistic theodicy by performing imaginary face-work—or protective face-work on the behalf of significant imagined others—which saves God's face as a morally perfect being. Believers perform this imaginary face-work by constructing accounts that portray God as morally innocent of their suffering. These accounts fall into three main types: (1) fidelity to a higher principle; (2) ultimate benefit; and (3) shifting blame. These accounts serve as new cognitions that resolve the cognitive dissonance and concomitant negative emotions believers experience because of their suffering. Overall, the findings and analysis contribute to sociological theory by further extending the concepts of face and face-work to imagined others.

Warner, R. Stephen. 2014. In Defense of Religion: The 2013 H. Paul Douglass Lecture. *Review of Religious Research* 56(4). 495–512.
doi:10.1007/s13644-014-0187-9.

This article argues that the concept of “religion” retains its theoretical value despite claims that religion has been eclipsed by “spirituality.” Presupposing that both religion and spirituality are valuable concepts in themselves, the article begins by reviewing critical literature that examines recent claims on behalf of spirituality and the spiritual. The article then presents case studies based on three recent monographs to illustrate the continued viability of the concept of religion.

PART 2: ARTICLES IN SPIRITUALITY & HEALTH RESEARCH

2.1 SPIRITUALITY & HEALTH: GENERAL HEALTH & WELL-BEING

Beiranvand, Siavash, Morteza Noparast, Nasrin Eslamizade & Saeed Saeedikia. 2014. The effects of religion and spirituality on postoperative pain, hemodynamic functioning and anxiety after cesarean section. *Acta Medica Iranica* 52(12). 909–915.

This double-blinded randomized clinical trial was conducted to assess the effect of prayer meditation on postoperative pain reduction and physiologic responds among Muslim patients who underwent cesarean surgery under spinal anesthesia. The patients were randomly divided into interventional group (n=80) and control group (n=80). Members of the intervention group listened on a disposable phone to a prayer meditation. No statistically significant improvement in pain score was found before and during pray meditation, 30, 60 minutes after pray meditation. Statistically significant improvement in pain score was found at 3 and 6 hours after pray meditation than control group. However, there was no significant difference in the physiological responses (systolic and diastolic blood pressure, respiration, and heart rate) any time between the groups.

Bergen-Cico, Dessa, Kyle Possemato & Wilfred Pigeon. 2014. Reductions in cortisol associated with primary care brief mindfulness program for veterans with PTSD. *Medical Care* 52(12 Supplement 5). S25–31.

doi:10.1097/MLR.000000000000224.

Patients with posttraumatic stress disorder (PTSD) have significant medical morbidity, which may be mediated by hypothalamic pituitary axis (HPA) dysfunction and reflected in cortisol output. Many veterans with PTSD are hesitant to engage in trauma-focused exposure treatments; therefore briefer, non-exposure-based treatments are needed; one such promising approach is an abbreviated Primary Care brief Mindfulness Program (PCbMP). This study investigated the relationship between dose-response to participation in a veterans PCbMP program and diurnal cortisol. Veterans with PTSD were identified in PC and randomly assigned to treatment as usual (TAU, n=21) or participation in brief 4-week Mindfulness Based Stress Reduction program (n=19). Analyses revealed that significant changes in cortisol were associated with PCbMP treatment engagement and dosing (number of mindfulness program sessions completed). Veterans completing 4 mindfulness-based meditation sessions significantly reduced their cortisol awakening response and had significant changes in cortisol area under the curve increase compared with TAU participants. Results indicate that PCbMP has a beneficial physiological impact on veterans with PTSD with a minimum of 4 weeks of practice.

Bezerra, Lidia Aguiar, Helton Fabricio de Melo, Ana Paula Garay, Victor Machado Reis, Felipe Jose Aidar, Ana Rita Bodas, Nuno Domingos Garrido & Ricardo Jaco de Oliveira. 2014. Do 12-Week Yoga Program Influence Respiratory Function of Elderly Women? *Journal of Human Kinetics* 43(1). 177–184.

doi:10.2478/hukin-2014-0103.

Aging produces several respiratory limitations and reduces tolerance to physical efforts, sometimes leading to pulmonary diseases in the elderly. The literature draws attention to the possible benefits of Yoga practice among the elderly, presenting evidence for significant improvements in quality of life. It was hypothesized that yoga practice can improve respiratory function in the elderly. The effects of a yoga program on pulmonary volumes and respiratory muscle strength were verified in 36 elderly women divided into a yoga group [YG] and a control group. Maximal inspiratory and expiratory pressure (MIP and MEP) were assessed by a manovacuometer and tidal volume (VT), vital capacity (VC) and minute ventilation (VE) were measured by a ventilometer. The program comprised 65 min sessions, 3 times/week during 12 weeks. The heart rate and respiratory rate decreased significantly in the YG. In the YG, VT and VE increased significantly. Improvements were also found in MIP and MEP in the YG. It was concluded that a 12-week yoga program significantly improves pulmonary function of aged women.

Bishop, Alex J., G. Kevin Randall & Michael J. Merten. 2014. Consideration of forgiveness to enhance the health status of older male prisoners confronting spiritual, social, or emotional vulnerability. *Journal of Applied Gerontology* 33(8). 998–1017.
doi:10.1177/0733464812456632.

Participants in this study included 261 men, aged 45 and older, residing within state-managed correctional facilities in Oklahoma. Path analysis was used to examine an integrated mediation model. Spiritual ambivalence, loneliness, and depressive affect had direct negative associations with forgiveness, controlling for age, race, education, and type of crime. Forgiveness also maintained a direct positive association with perceived health status, whereas depressive affect maintained a direct negative association with perceived health status. In addition, a significant indirect effect of depressive affect on perceived health through forgiveness emerged. Overall, the model explained 38% of the variance in forgiveness and 23% in perceived health. Greater spiritual ambivalence, loneliness, and depressive affect diminish forgiveness among older male prisoners, yet higher levels of forgiveness, are associated with greater perceived health.

Bliddal, Henning, Robin Christensen, Lars Højgaard, Else Marie Bartels, Karen Ellegaard, Robert Zachariae & Bente Danneskiold-Samsøe. 2014. Spiritual healing in the treatment of rheumatoid arthritis: An exploratory single centre, parallel-group, double-blind, three-arm, randomised, sham-controlled trial. *Evidence-Based Complementary and Alternative Medicine: eCAM* 2014. 269431.
doi:10.1155/2014/269431.

The objective for this article was to investigate the efficacy of “energy/spiritual healing” in rheumatoid arthritis (RA). Eligible patients were women with RA on stable medication. The design was a randomized, blinded, sham-controlled trial; the third group included an external unblinded control of the natural course of RA. Participants in both groups received 8 sessions with “perceived healing” over 21 weeks with 8 weeks of follow-up. Active healing (AH) treatment comprised healing with no physical contact, and sham healing (SH) included exactly the same healing with a sham healer. During intervention, participants wore hearing protectors and were blindfolded. No healing (NH) only had their outcomes assessed. All 96 patients randomized were handled as the intention-to-treat population, using a baseline-carried forward approach to replace the missing data. Eighty-two participants completed the 29-week trial. At end point (week 29), mean difference in DAS28 between AH versus SH was statistically but not clinically significant in favor of AH, while no differences between groups occurred in Doppler ultrasound. There are no clear physiological or psychological explanations for the findings in this tightly controlled study. The trial data indicates a need for independent replication.

Chaoul, Alejandro, Kathrin Milbury, Anil K. Sood, Sarah Prinsloo & Lorenzo Cohen. 2014. Mind-Body Practices in Cancer Care. *Current Oncology Reports* 16(12). 417.
doi:10.1007/s11912-014-0417-x.

Being diagnosed with a life-threatening disease such as cancer and undergoing treatment can cause unwanted distress and interferes with quality of life. Uncontrolled stress can have a negative effect on a number of biological systems and processes leading to negative health outcomes. While some distress is normal, it is not benign and must be addressed, as failure to do so may compromise health and QOL outcomes. In this paper researchers present the evidence for the role of stress in cancer biology and mechanisms demonstrating how distress is associated with worse clinical outcomes. The National Comprehensive Cancer Network states that all patients be screened with the single-item distress thermometer and to also indicate the source of distress and to get appropriate referral. In addition to the many conventional approaches for managing distress from the fields of psychology and psychiatry, many patients are seeking strategies to manage their distress that are outside conventional medicine such as mind-body techniques. Mind-body techniques such as meditation, yoga, tai chi, and qigong have been found to lower distress and lead to improvements in different aspects of quality of life. It is essential that the standard of care in oncology include distress screening and the delivery of different techniques to help patients manage the psychosocial challenges of diagnosis and treatment of cancer.

- Galante, Julieta, Ignacio Galante, Marie-Jet Bekkers & John Gallacher. 2014. Effect of kindness-based meditation on health and well-being: a systematic review and meta-analysis. *Journal of Consulting and Clinical Psychology* 82(6). 1101–1114.
doi:10.1037/a0037249.

Kindness-based meditation (KBM) is a rubric covering meditation techniques developed to elicit kindness in a conscious way. Some techniques, for example, loving-kindness meditation and compassion meditation, have been included in programs aimed at improving health and well-being. The aim of this study was to systematically review and meta-analyze the evidence available from randomized controlled trials (RCTs) comparing the effects of KBM on health and well-being against passive and active control groups in patients and the general population. Twenty-two studies were included. The methodological quality of the reports was low to moderate. KBM showed evidence of benefits for the health of individuals and communities through its effects on well-being and social interaction.

- Goodman, Fallon R., Todd B. Kashdan, Travis T. Mallard & Mary Schumann. 2014. A brief mindfulness and yoga intervention with an entire NCAA Division I athletic team: An initial investigation. *Psychology of Consciousness: Theory, Research, and Practice* 1(4). 339–356.
doi:10.1037/cns0000022.

Whereas traditional sports psychology interventions emphasize controlling or reducing distress, mindfulness-based interventions teach tolerance and acceptance of negative thoughts, feelings, and emotions. In the present pilot study, an entire men's Division I athletic team (n=13) provided voluntary consent and participated in a brief mindfulness-based intervention. Over 5 weeks, the team attended eight 90-min group intervention sessions immediately followed by 1-hr Hatha yoga sessions. Completer analyses showed that following the intervention, participants reported greater mindfulness, greater goal-directed energy, and less perceived stress than before the intervention. Compared with a nonrandomized control group (student athletes from various club sports; n=13), intervention participants reported greater goal-directed energy and mindfulness.

- Hartley, Louise, Angelique Mavrodaris, Nadine Flowers, Edzard Ernst & Karen Rees. 2014. Transcendental meditation for the primary prevention of cardiovascular disease. *The Cochrane Database of Systematic Reviews* 12. CD010359.
doi:10.1002/14651858.CD010359.pub2.

A major determinant in cardiovascular disease (CVD) is stress. As transcendental meditation (TM) is thought to help in lowering negative stress indicators, it may be a beneficial strategy for the primary prevention of CVD. A team of researchers conducted a literature review for research on this topic. Researchers identified four trials (four papers) (430 participants) for inclusion in this review. The included trials were small, short term (three months) and at risk of bias. In all studies, TM was practiced for 15 to 20 minutes twice a day. None of the included studies reported all-cause mortality, cardiovascular mortality or non-fatal endpoints as trials were short term, but one study reported survival rate three years after the trial was completed. Currently, there are few trials with limited outcomes examining the effectiveness of TM for the primary prevention of CVD. Due to the limited evidence to date, the authors could draw no conclusions as to the effectiveness of TM for the primary prevention of CVD. There was considerable heterogeneity between trials and the included studies were small, short term and at overall serious risk of bias.

- Hawkes, Teresa D., Wayne Manselle & Marjorie H. Woollacott. 2014. Tai Chi and meditation-plus-exercise benefit neural substrates of executive function: a cross-sectional, controlled study. *Journal of Complementary & Integrative Medicine* 11(4). 279–288.
doi:10.1515/jcim-2013-0031.

In this article researchers report the first controlled study of Tai Chi effects on the P300 event-related potential, a neuroelectric index of human executive function. This cross-sectional, controlled study utilized the P300 event-related

potential (ERP) to compare executive network neural function between self-selected long-term Tai Chi, meditation, aerobic fitness, and sedentary groups. Researchers hypothesized that because Tai Chi requires moderate aerobic and mental exertion, this group would show similar or better executive neural function compared to meditation and aerobic exercise groups. Fifty-four volunteers (Tai Chi, n=10; meditation, n=16; aerobic exercise, n=16; sedentary, n=12) were tested. Following intervention, only Tai Chi and meditation plus exercise groups demonstrated larger P3b ERP switch trial amplitudes compared to sedentary controls. The authors conclude that long-term Tai Chi practice, and meditation plus exercise may benefit the neural substrates of executive function.

Headey, Bruce, Gerhard Hoehne & Gert G. Wagner. 2014. Does religion make you healthier and longer lived? Evidence for Germany. *Social Indicators Research* 119(3). 1335–1361.
doi:10.1007/s11205-013-0546-x.

Researchers in the US have consistently reported substantial—not just statistically significant—links between religious belief and practice, and improved health and longevity. In this paper researchers report evidence for Germany, using data from the long-running, nationally representative German Socio-Economic Panel (SOEP 1984). The SOEP dataset includes multiple measures of health, plus many “controls” which it is appropriate to use in assessing links between religious practice, health and longevity. These controls include personality traits known to be associated with better health (notably conscientiousness), and also the age of death of parents of the survey respondents. Initial results suggested that religious practice (church attendance) may be linked only to subjective (self-rated) measures of health, not to more objective measures. It seemed possible that results in some previous research could be due to what may be termed satisfaction bias or positivity bias; the known tendency of religious people to report higher than average satisfaction with almost all aspects of life. Further investigation indicated that relationships between church attendance and subjective measures of health were weaker, when a control for satisfaction bias was in place. However, there was countervailing evidence that the subjective measures in SOEP may actually be more not less valid than the objective measures; they are better not worse predictors of mortality. It was also clear that religious belief and church attendance are associated with health-protective behaviors and attitudes, including taking more exercise, not smoking and higher life satisfaction. At the end of the paper the authors estimate a structural equation model which maps links between religious practice, these protective behaviors and attitudes, and improved health outcomes.

Hur, Sun, Gun-Soo Han & Byung-Jun Cho. 2014. Changes in Glucose, TNF- α and IL-6 Blood Levels in Middle-aged Women Associated with Aerobic Exercise and Meditation Training. *Journal of Physical Therapy Science* 26(12). 1933–1936.
doi:10.1589/jpts.26.1933.

The purpose of this study was to investigate the effects of exercise therapy on glucose, TNF-a and IL-6 blood levels in middle-aged women. A total of 46 participants were assigned to four groups: Type D personality + Exercise (n=12); Type D + no-Exercise (n=12); not-Type D + Exercise (n=12); and not-Type D + no-Exercise (n=10). Fasting glucose showed a significant interaction effect among groups, group \times time, and post-test. TNF-a showed a significant difference among groups, and was lower in the not-Type D personality + Exercise group than in the other three groups. IL-6 showed a significant difference among the groups. The authors conclude that personality may affect the established effect of exercise on cytokine activity. Type D personality was independently associated with significant immune activation, and increase in TNF-a activity was observed among Type D participants.

Im, Hwi-Jin, Yoon-Jung Kim, Hyeong-Geug Kim, Hyo-Seon Kim & Chang-Gue Son. 2014. Kouksundo, a traditional Korean mind-body practice, regulates oxidative stress profiles and stress hormones. *Physiology & Behavior* 141C. 9–16.
doi:10.1016/j.physbeh.2014.12.049.

In this article researchers investigated the effects of Kouksundo on oxidative stress-related biomarkers and stress hormones. A single-arm observational study was conducted on 57 Kouksundo trainees (34 males and 23 females).

Blood samples were collected 30min before and after Kouksundo practice (25min for warm-up, 45min for breathing meditation, and 20min for cool-down). Kouksundo significantly reduced serum levels of oxidant markers, including reactive oxygen species, nitric oxide, and malondialdehyde, induced elevation of superoxide dismutase, and reduction of catalase. No significant changes were observed in total antioxidant capacity or total glutathione content levels. Kouksundo practice also significantly reduced the serum level of cortisol, norepinephrine, and dopamine, and significantly increased serum epinephrine concentrations.

- Kelley, Kathleen K., Dana Aaron, Kimberly Hynds, Emily Machado & Michelle Wolff. 2014. The Effects of a Therapeutic Yoga Program on Postural Control, Mobility, and Gait Speed in Community-Dwelling Older Adults. *Journal of Alternative and Complementary Medicine* 20(12). 949–954.
doi:10.1089/acm.2014.0156.

Researchers examined the effects of a 12-week therapeutic yoga program on gait speed, postural control, and mobility in community-dwelling older adults (n=13). Following intervention, improvements in postural control and mobility as measured by the MBT and Timed Up and Go gait as measured by fast gait speed indicate that research participants benefitted from the therapeutic yoga intervention. The yoga program designed for this study included activities in standing, sitting, and lying on the floor and may be effective in improving mobility, postural control, and gait speed in community-dwelling older adults.

- Kim, Sang Dol. 2014. Effects of yogic exercises on life stress and blood glucose levels in nursing students. *Journal of Physical Therapy Science* 26(12). 2003–2006.
doi:10.1589/jpts.26.2003.

This study was performed to investigate the effects of yogic exercises on life stress and blood glucose levels in nursing students. The study was a randomized controlled trial. Twenty-seven undergraduate nursing students were randomly selected, with 12 assigned to an exercise group and 15 assigned to a control group. The yogic exercises intervention was undertaken for 60 minutes one day a week for 12 weeks. It consisted of physical exercise (surya namaskara) combined with relaxation and meditation (shavasana and yoga nidra). Following intervention the exercise group measurements were significantly decreased in both life stress and postprandial blood glucose levels compared with the control group. These findings indicate that yogic exercises would reduce life stress and lower postprandial blood glucose levels in nursing students.

- Kim-Spoon, Jungmeen, Julee P. Farley, Christopher J. Holmes & Gregory S. Longo. 2014. Does adolescents' religiousness moderate links between harsh parenting and adolescent substance use? *Journal of Family Psychology* 28(6). (Special Section: Spirituality and Religion in Family Life: Pathways Between Relational Spirituality, Family Relationships, and Personal Well-Being). 739–748.
doi:10.1037/a0037178.

Researchers examined whether religiousness moderates the links between parents' psychological and physical aggression and adolescent substance use directly and indirectly through adolescent self-control. The sample comprised adolescents (n=220, 45% female) and their primary caregivers. Structural equation modeling analyses suggested that adolescents with low religiousness were likely to engage in substance use when subjected to harsh parenting, but there was no association between harsh parenting and substance use among adolescents with high religiousness. Furthermore, although harsh parenting was related to poor adolescent self-control regardless of religiousness levels, poor self-control was significantly related to substance use for adolescents with low religiousness, whereas the link between poor self-control and substance use did not exist for adolescents with high religiousness. The findings present the first evidence that adolescent religiousness may be a powerful buffering factor that can positively alter pathways to substance use in the presence of risk factors such as harsh parenting and poor self-control.

Rusa, Suzana Gabriela, Gabriele Ibanhes Peripato, Sofia Cristina Iost Pavarini, Keika Inouye, Marisa Silvana Zazzetta & Fabiana de Souza Orlandi. 2014. Quality of life/spirituality, religion and personal beliefs of adult and elderly chronic kidney patients under hemodialysis. *Revista Latino-Americana De Enfermagem* 22(6). 911–917.
doi:10.1590/0104-1169.3595.2495.

Researchers assessed the quality of life of chronic kidney patients undergoing hemodialysis. A descriptive and cross-sectional study was undertaken at a kidney replacement therapy service. The 110 subjects who complied with the inclusion criteria answered the Subject Characterization Instrument, the WHOQOL-bref and WHOQOL-SRPB. The respondents showed high quality of life scores, specifically in the dimensions related to spirituality, religion and personal beliefs. Losses were evidenced in the physical domain of quality of life, possibly due to the changes resulting from the chronic kidney disease and hemodialysis treatment.

Schmid, Arlene A., Kristine K. Miller, Marieke Van Puymbroeck & Erin DeBaun-Sprague. 2014. Yoga leads to multiple physical improvements after stroke, a pilot study. *Complementary Therapies in Medicine* 22(6). 994–1000.
doi:10.1016/j.ctim.2014.09.005.

The authors of this article assessed the change in physical functioning (pain, range of motion (ROM), strength, and endurance) after 8 weeks of therapeutic-yoga. Participants were people with chronic stroke (n=47), randomized to therapeutic-yoga (n=37) or wait-list control (n=10). The yoga group engaged in 16 sessions of therapeutic yoga (twice a week/ 8 weeks). Yoga was delivered in a standardized and progressive format with postures, breathing, and meditation, and relaxation in sitting, standing, and supine. Following intervention, pain, neck ROM, hip passive ROM, upper extremity strength, and the 6-min walk scores all significantly improved after 8 weeks of engaging in yoga. No changes occurred in the wait-list control group.

2.2 SPIRITUALITY & HEALTH: MENTAL HEALTH

Bormann, Jill E., Doug Oman, Kristen H. Walter & Brian D. Johnson. 2014. Mindful attention increases and mediates psychological outcomes following mantram repetition practice in veterans with posttraumatic stress disorder. *Medical Care* 52(12: Supplement 5). S13–18.
doi:10.1097/MLR.0000000000000200.

The current study explored whether (1) a mantram repetition program (MRP) increased mindful attention among veterans with PTSD, (2) mindful attention mediated reduced PTSD symptom severity and enhanced psychological well-being, and (3) improvement in mindful attention was due to the frequency of mantram repetition practice. A total of 146 veterans with PTSD from military-related trauma were recruited from a Veterans Affairs outpatient PTSD clinic (71 MRP+TAU; 75 TAU). Following intervention, mindful attention gains mediated previously reported treatment effects on reduced PTSD symptoms, reduced depression, and improved psychological well-being. Frequency of mantram repetition practice in turn mediated increased mindful attention.

Crane, Catherine, Rebecca S. Crane, Catrin Eames, Melanie J. V. Fennell, Sarah Silverton, J. Mark G. Williams & Thorsten Barnhofer. 2014. The effects of amount of home meditation practice in Mindfulness Based Cognitive Therapy on hazard of relapse to depression in the Staying Well after Depression Trial. *Behaviour Research and Therapy* 63. 17–24.
doi:10.1016/j.brat.2014.08.015.

Few empirical studies have explored the associations between formal and informal mindfulness home practice and outcome in Mindfulness-based Cognitive Therapy (MBCT). In this study ninety-nine participants randomized to MBCT in a multi-center randomized controlled trial completed self-reported ratings of home practice over 7 treatment weeks. Recurrence of Major Depression was assessed immediately after treatment, and at 3, 6, 9, and 12-months

post-treatment. Results identified a significant association between mean daily duration of formal home practice and outcome and additionally indicated that participants who reported that they engaged in formal home practice on at least 3 days a week during the treatment phase were almost half as likely to relapse as those who reported fewer days of formal practice. These associations were independent of the potentially confounding variable of participant-rated treatment plausibility. The current study identified no significant association between informal home practice and outcome, although this may relate to the inherent difficulties in quantifying informal home mindfulness practice.

- Dick, Alexandra M., Barbara L. Niles, Amy E. Street, Dawn M. DiMartino & Karen S. Mitchell. 2014. Examining Mechanisms of Change in a Yoga Intervention for Women: The Influence of Mindfulness, Psychological Flexibility, and Emotion Regulation on PTSD Symptoms. *Journal of Clinical Psychology* 70(12). 1170–1182.
doi:10.1002/jclp.22104.

This study explored possible mechanisms through which symptoms of posttraumatic stress disorder (PTSD) were reduced in a randomized controlled trial comparing the effect of a yoga intervention with an assessment control. Researchers examined whether changes in psychological flexibility, mindfulness, and emotion regulation strategies (expressive suppression and reappraisal) were associated with posttreatment PTSD symptoms for 38 women with Diagnostic and Statistical Manual of Mental Disorders Fourth Edition full or subthreshold PTSD. Hierarchical linear regression models revealed that expressive suppression significantly decreased for the yoga group relative to the assessment control. Psychological flexibility increased significantly for the control but not yoga group. However, increases in psychological flexibility were associated with decreases in PTSD symptoms for the yoga but not control group.

- Drumm, René, Marciana Popescu, Laurie Cooper, Shannon Trecartin, Marge Seifert, Tricia Foster & Carole Kilcher. 2014. “God just brought me through it”: Spiritual coping strategies for resilience among intimate partner violence survivors. *Clinical Social Work Journal* 42(4). 385–394.
doi:10.1007/s10615-013-0449-y.

This study highlights the spiritual coping processes for surviving and healing used by Christian women in a conservative faith community who experienced intimate partner violence (IPV). Using data from 42 in-depth qualitative interviews of survivors of IPV, the findings reveal a pattern of spiritually-based survival and resilience strategies women used while coping with and eventually escaping their traumatic lives. The analysis notes the central role of spirituality as a means women used to move from coping for survival to resilient self-efficacy and healing.

- Every, Danielle & Richard Perry. 2014. The relationship between perceived religious discrimination and self-esteem for Muslim Australians. *Australian Journal of Psychology* 66(4). 241–248.
doi:10.1111/ajpy.12067.

Muslim Australians represent one of the fastest growing migrant groups in Australia. They are also the group who, after Indigenous Australians, experience the most discrimination. Previous research on the minority stress model confirms a link between such discrimination and mental health. However, in relation to self-esteem and discrimination, the results are mixed, potentially reflecting whether people reject or identify with prejudiced views of them and also the type of discrimination being measured. To explore this issue further in an Australian context, researchers asked 49 Australian Muslims to complete Rosenberg’s Self-esteem Scale and the Perceived Religious Discrimination Scale. In support of both the minority stress model and the rejection-identification model, it was found that perceived interpersonal and systemic discrimination accounts for a small but significant variation in self-esteem. Interpersonal discrimination was negatively related to self-esteem, and systemic discrimination positively related. The effects of interpersonal discrimination on self-esteem can guide therapists to interventions that help clients resist internalizing discrimination experiences. The effects of institutional discrimination support therapists becoming part of the resistance to and challenging of discrimination and inequality.

- Fernandez, Alejandra & Alexandra Loukas. 2014. Acculturation and religious coping as moderators of the association between discrimination and depressive symptoms among Mexican-American vocational students. *Journal of Immigrant and Minority Health / Center for Minority Public Health* 16(6). 1290–1293.
doi:10.1007/s10903-013-9952-z.

Although perceived discrimination has been associated with depressive symptoms among Hispanic adults, not all individuals who report discrimination will report elevated levels of depression. This study examined whether acculturation and religious coping would moderate the association between past-year perceived discrimination and depressive symptoms in a sample of 247 Mexican-American post-secondary vocational students. Results from hierarchical regression analyses indicated that perceived discrimination, positive religious coping, and negative religious coping were significantly associated with depressive symptoms. Further analyses indicated that positive religious coping moderated the perceived discrimination-depressive symptoms association. Students reporting using positive religious coping were protected from experiencing heightened levels of depressive symptoms when faced with discrimination. Acculturation was not directly associated with depressive symptoms nor did it function as a moderator.

- Goeke-Morey, Marcie C., Laura K. Taylor, Christine E. Merrilees, Peter Shirlow & E. Mark Cummings. 2014. Adolescents' relationship with God and internalizing adjustment over time: The moderating role of maternal religious coping. *Journal of Family Psychology* 28(6). (Special Section: Spirituality and Religion in Family Life: Pathways Between Relational Spirituality, Family Relationships, and Personal Well-Being). 749–758.
doi:10.1037/a0037170.

A growing literature supports the importance of understanding the link between religiosity and youths' adjustment and development, but in the absence of rigorous, longitudinal designs, questions remain about the direction of effect and the role of family factors. This paper investigates the bidirectional association between adolescents' relationship with God and their internalizing adjustment. Results from 2-wave, SEM cross-lag analyses of data from 667 mother/adolescent dyads in Belfast, Northern Ireland supports a risk model suggesting that greater internalizing problems predict a weaker relationship with God 1 year later. Significant moderation analyses suggest that a stronger relationship with God predicted fewer depression and anxiety symptoms for youth whose mothers used more religious coping.

- Gutierrez, Ian A., Lucas J. Goodwin, Katherine Kirkinis & Jacqueline S. Mattis. 2014. Religious socialization in African American families: The relative influence of parents, grandparents, and siblings. *Journal of Family Psychology* 28(6). (Special Section: Spirituality and Religion in Family Life: Pathways Between Relational Spirituality, Family Relationships, and Personal Well-Being). 779–789.
doi:10.1037/a0035732.

The family is the principal context for religious and spiritual socialization. Although religion remains a central force in the lives of most African Americans, research has failed to explore the role and impact of family on religious socialization within this population. This study addresses that gap in the literature by 1) exploring adults' perceptions of the influence of their parents, grandparents, and siblings on their religious and spiritual lives, and 2) examining the extent to which those perceptions are associated with subjective religiosity, subjective spirituality, religious importance, and commitment to religious socialization among a community sample of urban-residing African American adults in the Midwest and Northeast (n=319). Findings revealed that, on average, parents, grandparents, and siblings positively influenced adults' religious commitment and values. However, mothers had the greatest positive influence on these outcomes. Religious commitment and values were differentially associated with family members as a function of the generation and gender of the family member.

Homan, Kristin J. 2014. A mediation model linking attachment to God, self-compassion, and mental health. *Mental Health, Religion & Culture* 17(10). 977–989.
doi:10.1080/13674676.2014.984163.

Attachment theory posits that insecure attachment is a risk factor for the development of anxiety and depression and ample evidence supports this idea. Research has also demonstrated links between attachment to God and mental health, but little is known about the emotion regulatory mechanism that underlies this relationship. The present study explored the explanatory role of self-compassion in the relation between attachment to God and anxiety, depression, and life satisfaction in a sample of 181 adults who completed an online survey. Elevated attachment anxiety and avoidance were associated with higher depression and anxiety, and lower life satisfaction. Self-compassion mediated these associations (in an inverse direction for anxiety and depression), suggesting that people who feel uncomfortable depending on God, or who fear God's rejection, have difficulty extending kindness to themselves.

Kearney, David J., Carolyn McManus, Carol A. Malte, Michelle E. Martinez, Benjamin Felleman & Tracy L. Simpson. 2014. Loving-kindness meditation and the broaden-and-build theory of positive emotions among veterans with posttraumatic stress disorder. *Medical Care* 52(12: Supplement 5). S32–38.
doi:10.1097/MLR.0000000000000221.

Loving-kindness meditation (LKM) is a practice intended to enhance feelings of kindness and compassion for self and others. The researchers sought to determine whether participation in a 12-week course of LKM for 42 veterans with posttraumatic stress disorder (PTSD) is associated with improved positive emotions, decentering, and personal resources. Significant increases in unactivated pleasant, but not activated pleasant, emotions were found over time. Activated and unactivated unpleasant emotions decreased over time. There were also increases in environmental mastery, personal growth, purpose in life, self-acceptance, and decentering at 3-month follow-up.

Kiken, Laura G. & Natalie J. Shook. 2014. Does mindfulness attenuate thoughts emphasizing negativity, but not positivity? *Journal of Research in Personality* 53. 22–30.
doi:10.1016/j.jrp.2014.08.002.

The current research investigated whether mindfulness is differentially associated with thoughts that emphasize positive or negative valence. In Study 1, trait mindfulness was inversely associated with negative rumination but unassociated with positive rumination, controlling for state affect. In Study 2, participants completed either a mindful breathing meditation or a comparable control exercise, followed by a thought listing while viewing affective images. Compared to the control condition, the mindfulness condition listed proportionately fewer negative thoughts, particularly in response to negative images, and more non-valenced thoughts. The conditions did not differ in their proportions of positive thoughts. These results suggest that mindfulness may attenuate thoughts that emphasize negativity but not those that emphasize positivity.

Lamis, Dorian A., Christina K. Wilson, Nicholas Tarantino, Jennifer E. Lansford & Nadine J. Kaslow. 2014. Neighborhood disorder, spiritual well-being, and parenting stress in African American women. *Journal of Family Psychology* 28(6). (Special Section: Spirituality and Religion in Family Life: Pathways Between Relational Spirituality, Family Relationships, and Personal Well-Being). 769–778.
doi:10.1037/a0036373.

Using a culturally informed risk-protective framework, the purpose of this study was to examine spiritual well-being (existential, religious) as a moderator (protective factor) in the relation between neighborhood disorder (risk factor) and parenting stress in a high-risk sample of low-socioeconomic status (SES) African American women (n=144). These women, who were primary caregivers of children between 8 and 12 years old, reported on disorder in their

existential and religious well-being, neighborhoods, and 3 types of parenting stress. Women who perceived more disorder in their neighborhood had more parenting stress, and women who reported more existential and religious well-being had less parenting stress. Existential (characterized by a sense of purpose in life), but not religious (characterized by a sense of life in relation with God) well-being moderated the relation between neighborhood disorder and all types of parenting stress, such that women with medium or high levels of existential well-being had low levels of parenting stress at low levels of neighborhood disorder, but higher levels of parenting stress at higher levels of neighborhood disorder. No moderation effects were found at low levels of existential well-being. Results are framed in a context that emphasizes their relevance to incorporating family interventions that bolster culturally relevant resilience factors, such as spirituality, pertinent to low-SES African American families.

- Li, Yingjie, Qian Su, Hui Guo, Hongmei Wu, Huanmin Du, Guang Yang, Ge Meng, Changping Li, Ryoichi Nagatomi & Kaijun Niu. 2014. Long-term Tai Chi training is related to depressive symptoms among Tai Chi practitioners. *Journal of Affective Disorders* 169. 36–39.
doi:10.1016/j.jad.2014.07.029.

Due to the close association with physical and psychological health and quality of life, mood disorders, especially depressive symptoms, are an important global public-health issue. It is hypothesized that long-term physical training and mood adjustment may have a beneficial effect on the prevention of the onset of depressive symptoms. The aim of this study was to investigate the relationship between long-term Tai Chi training and depressive symptoms among 529 Tai Chi practitioners. It was found that long-term Tai Chi training is independently related to a lower prevalence of depressive symptoms. These results suggest that long-term Tai Chi training may have a beneficial effect on the prevention of depressive symptoms.

- Ofir-Eyal, Shani, Ilanit Hasson-Ohayon & Shlomo Kravetz. 2014. Affective and cognitive empathy and social quality of life in schizophrenia: A comparison between a parallel process model and an integrative meditation model. *Psychiatry Research* 220(1-2). 51–57.
doi:10.1016/j.psychres.2014.06.049.

Two alternative models of impaired cognitive and affective processing that may underlie reduced social quality of life (SQoL) of persons with schizophrenia, were examined. According to the parallel process model, impaired cognitive empathy and affective empathy make relatively independent contributions to the symptoms of schizophrenia and to the consequent reduction in SQoL. According to the integrative mediation model, the symptoms of schizophrenia and the reduction in SQoL associated with these symptoms are the products of a process by which impairments of cognitive empathy are contingent on impairments of affective empathy. 90 persons with schizophrenia were assessed for SQoL, symptoms and cognitive and affective empathy. Results support the integrative mediation model only for cognitive empathy and negative psychiatric symptoms. Only the negative links between cognitive empathy and negative symptoms served to mediate the positive relation between affective empathy and SQoL. Positive symptoms had a limited negative impact on SQoL and did not play a role in the paths that linked affective empathy to SQoL. Age had a statistically significant and negative indirect relationship to SQoL. Results are consistent with recent approach that distinguish between cognitive and affective empathy and specify how these two processes are integrated.

- Sapkota, Ram P., Dristy Gurung, Deepa Neupane, Santosh K. Shah, Hanna Kienzler & Laurence J. Kirmayer. 2014. A village possessed by “witches”: a mixed-methods case-control study of possession and common mental disorders in rural Nepal. *Culture, Medicine and Psychiatry* 38(4). 642–668.
doi:10.1007/s11013-014-9393-8.

In Nepal, spirit possession is a common phenomenon occurring both in individuals and in groups. To identify the cultural contexts and psychosocial correlates of spirit possession, researchers conducted a mixed-method study in a village in central Nepal experiencing a cluster of spirit possession events. The study was carried out in three stages: (1) a pilot study consisting of informal interviews with possessed individuals, observations of the possession spells,

and video recording of possession events; (2) a case-control study comparing the prevalence of symptoms of common mental disorders in women who had and had not experienced possession; and (3) a follow-up study with focus group discussions and in-depth interviews with possessed and non-possessed men and women, and key informants. Quantitative results indicated that possessed women reported higher rates of traumatic events and higher levels of symptoms of mental disorder compared to non-possessed women. However, qualitative interviews with possessed individuals, family members, and traditional healers indicated that they did not associate possession states with mental illness. Spirit possession was viewed as an affliction that provided a unique mode of communication between humans and spirits. As such, it functioned as an idiom of distress that allowed individuals to express suffering related to mental illness, socio-political violence, traumatic events, and the oppression of women. The study results clearly indicate that spirit possession is a multi-dimensional phenomenon that cannot be mapped onto any single psychiatric or psychological diagnostic category or construct.

Serpa, J. Greg, Stephanie L. Taylor & Kirsten Tillisch. 2014. Mindfulness-based stress reduction (MBSR) reduces anxiety, depression, and suicidal ideation in veterans. *Medical Care* 52(12: Supplement 5). S19–24.
doi:10.1097/MLR.000000000000202.

Anxiety, depression, and pain are major problems among veterans, despite the availability of standard medical options within the Veterans Health Administration. Complementary and alternative approaches for these symptoms have been shown to be appealing to veterans. One such complementary and alternative approach is mindfulness-based stress reduction (MBSR), a brief course that teaches mindfulness meditation with demonstrated benefits for mood disorders and pain. The authors prospectively collected data on MBSR's effectiveness among 79 veterans at an urban Veterans Health Administration medical facility. The MBSR course had 9 weekly sessions that included seated and walking meditations, gentle yoga, body scans, and discussions of pain, stress, and mindfulness. Pre-MBSR and post-MBSR questionnaires investigating pain, anxiety, depression, suicidal ideation, and physical and mental health functioning were obtained and compared for individuals. Significant reductions in anxiety, depression, and suicidal ideation were observed after MBSR training. Mental health functioning scores were improved. Also, mindfulness interacted with other outcomes such that increases in mindfulness were related to improvements in anxiety, depression, and mental health functionality. Pain intensity and physical health functionality did not show improvements.

2.3 SPIRITUALITY & HEALTH: METHOD AND THEORY

Cooper, Paul. 2014. Zen meditation, reverie, and psychoanalytic listening. *Psychoanalytic Review* 101(6). 795–813.
doi:10.1521/prev.2014.101.6.795.

The author reviews the literature on the relation between Buddhist meditation and psychoanalytic listening and argues that the influence of the dynamic unconscious is not addressed in this literature, which engenders a pragmatic overvaluation of attention and an accompanying unexamined devaluation of the analyst's experiences of inattention. The article emphasizes contemporary psychoanalytic theories that are consistent with basic Buddhist principles and their influences on recommendations for psychoanalytic listening. The author also examines the role of intention as a guiding principle in psychoanalytic listening by elaborating the issues at hand in terms of both Zen Buddhist and contemporary psychoanalytic conceptualizations of various fluctuating mind states, such as reverie.

Creswell, J. David & Emily K. Lindsay. 2014. How does mindfulness training affect health? A mindfulness stress buffering account. *Current Directions in Psychological Science* 23(6). 401–407.
doi:10.1177/0963721414547415.

Initial well-controlled studies have suggested that mindfulness training interventions can improve a broad range of mental and physical health outcomes (e.g., HIV pathogenesis, depression relapse, inflammation, drug abuse), yet

the underlying pathways linking mindfulness and health are poorly understood. In this article, the authors offer a mindfulness stress buffering account to explain these health outcomes, which posits that mindfulness-based health effects are mostly likely to be observed in high-stress populations for which stress is known to affect the onset or exacerbation of disease pathogenic processes. The authors then offer an evidence-based biological model of mindfulness, stress buffering, and health.

- Dhamani, Khairunnisa Aziz. 2014. Spirituality and nursing: An Ismaili perspective on holistic nursing care. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association* 32(4). 341–346.
doi:10.1177/0898010114527183.

This article seeks to describe a professional, personal, and cultural understanding of spirituality in nursing care. It revisits and refines the many concept clarifications of spirituality in our practice discipline, while reflecting on the potential meanings and learnings from Ismaili tenets and principles within a personal nursing practice. Through a review of mainstream literature in conjunction with nontraditional literature, the implicit is made explicit in terms of similarities and differences, as well as opportunities for further exploration. The summary brings forward the persistent gaps and questions on critical areas such as creating the “place” and “operationalizing” of spirituality. These continue to challenge and intrigue nurses seeking spiritual comfort for both themselves and their clients.

- Hunt, Julie. 2014. Bio-psycho-social-spiritual assessment? Teaching the skill of spiritual assessment. *Social Work & Christianity* 41(4). 373–384.

The inclusion of spiritual assessment is vital to holistic, culturally competent work with clients and yet it is oftentimes overlooked in agency settings and in academic training. Educating students regarding how to broach the subject of faith and tactfully assess spirituality is vital to ethical and skillful practice. This process must be learned and practiced in order to do so thoughtfully, ethically, and respectfully. One approach, drawn from an undergraduate Spirituality in Social Work course, which the author teaches, is shared. The teaching strategies utilized, assignments given, and lessons learned are discussed. The aim is that students are well prepared to thoughtfully evaluate a client's identified faith significance and subsequently to meaningfully integrate spiritual content into their work.

- Kim, Daniel T., Farr A. Curlin, Kelly M. Wolenberg & Daniel P. Sulmasy. 2014. Back to the Future: The AMA and Religion, 1961-1974. *Academic Medicine* 89(12). 1603–1609.
doi:10.1097/ACM.0000000000000370.

U.S. medical scholarship and education regarding religion and spirituality has been growing rapidly in recent years. This rising interest, however, is not new; it is a renewal of significant interweavings that date back to the mid-20th century. In this article, the authors draw attention to the little-known history of organized medicine's engagement with religion from 1961 to 1974. Relying on primary source documents, they recount the dramatic rise and fall of the Committee on Medicine and Religion (CMR) at the American Medical Association (AMA). At its height, there were state-level committees on medicine and religion in 49 states, the District of Columbia, and Puerto Rico, and there were county-level committees in over 800 county medical societies. Thousands of physicians attended annual conferences for clinicians and clergy, and direct outreach to patients included a film viewed by millions. The CMR arose in the context of rapid medical advances, the growth of professional chaplaincy, and concern for declining “humanism” in medicine-conditions with parallels in medicine today. The CMR was brought to a puzzling end in 1972 by the AMA's Board of Trustees. The authors argue that this termination was linked to the AMA's long and contentious debate on abortion. They conclude with the story's significance for today's explorations of the intersection of spirituality, religion, and medicine, focusing on the need for mutual respect, transparency, and dialogue around the needs of patients and physicians.

- McGeorge, Christi R., Thomas Stone Carlson & Russell B. Toomey. 2014. The Intersection of Spirituality, Religion, Sexual Orientation, and Gender Identity in Family Therapy Training: An Exploration of Students' Beliefs and Practices. *Contemporary Family Therapy* 36(4). 497–506. doi:10.1007/s10591-014-9312-8.

This study explored the relationship between the level of clinical training that family therapy students receive related to spirituality and/or religion and their beliefs about providing therapy to lesbian, gay, bisexual, and transgender (LGBT) clients. The sample consists of 341 students in family therapy programs who completed an online survey assessing the level of training on spirituality and/or religion that students received as well as indicators assessing the level of congruence between students' spiritual and/or religious beliefs and the practices of LGBT affirmative and reparative therapies. The findings highlight a number of significant associations between the training students receive on spirituality and/or religion and their beliefs about therapy with LGBT clients.

- Nieuwsma, Jason A., George L. Jackson, Mark B. DeKraai, Denise J. Bulling, William C. Cantrell, Jeffrey E. Rhodes, Mark J. Bates, et al. 2014. Collaborating across the Departments of Veterans Affairs and Defense to integrate mental health and chaplaincy services. *Journal of General Internal Medicine* 29 Supplement 4. 885–894. doi:10.1007/s11606-014-3032-5.

Recognizing that clergy and spiritual care providers are a key part of mental health care systems, the Department of Veterans Affairs (VA) and Department of Defense (DoD) jointly examined chaplains' current and potential roles in caring for veterans and service members with mental health needs. A 38-member multidisciplinary task group partnered with researchers in designing, implementing, and interpreting a mixed methods study that included: 1) a quantitative survey of 2,163 VA and DoD chaplains; and 2) qualitative interviews with 291 mental health providers and chaplains. Key results include that, when included on interdisciplinary mental health care teams, chaplains feel understood and valued. However, findings from the survey and site visits suggest that integration of services is often lacking and can be improved.

- Reblin, Maija, Shirley Otis-Green, Lee Ellington & Margaret F. Clayton. 2014. Strategies to support spirituality in health care communication: a home hospice cancer caregiver case study. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association* 32(4). 269–277. doi:10.1177/0898010114531856.

Although there is growing recognition of the importance of integrating spirituality within health care, there is little evidence to guide clinicians in how to best communicate with patients and family about their spiritual or existential concerns. Using an audio-recorded home hospice nurse visit immediately following the death of a patient as a case-study, the authors identify spiritually-sensitive communication strategies. The nurse incorporates spirituality in her support of the family by 1) creating space to allow for the expression of emotions and spiritual beliefs and 2) encouraging meaning-based coping, including emphasizing the caregivers' strengths and reframing negative experiences.

- Richards, Arnold D. 2014. Freud's Jewish Identity and Psychoanalysis as a Science. *Journal of the American Psychoanalytic Association* 62(6). 987–1003. doi:10.1177/0003065114559835.

Ludwik Fleck, the Polish philosopher of science, maintained that scientific discovery is influenced by social, political, historical, psychological, and personal factors. The determinants of Freud's Jewish identity are examined from this Fleckian perspective, as is the impact of that complex identity on his creation of psychoanalysis as a science. Three strands contributing to his Jewish identity are identified and explored: his commitment to the ideal of Bildung, the anti-Semitism of the times, and his "godlessness." Finally, the question is addressed of what it means that psychoanalysis was founded by a Jew. For Freud, psychoanalysis was a kind of liberation philosophy, an attempt to

break free of his ethnic and religious inheritance. Yet it represented at the same time his ineradicable relationship with that inheritance. It encapsulated both the ambivalence of his Jewish identity and the creativity of his efforts to resolve it.

- Romain, Marc & Charles L. Sprung. 2014. Approaches to patients and families with strong religious beliefs regarding end-of-life care. *Current Opinion in Critical Care* 20(6). 668–672.
doi:10.1097/MCC.000000000000148.

End-of-life (EOL) decisions with limitations are made daily in ICUs around the world and may involve between 2 and 22% of patients admitted to an ICU. EOL decisions may be affected by numerous factors, including location and religion. This review aims to determine an approach to patients and families with strong religious views. Different religions have different approaches and beliefs regarding EOL care. Religious people choose more active life-sustaining measures than would nonreligious people. The patient's views on EOL care should be understood, although this is often not possible and the family members' or surrogates' understanding of the patient's wishes is relied upon. This is problematic as the family's wishes may differ from those of the patient. Family members may also have different religious beliefs or have different expressions of their beliefs. Through an open communication with the patient and/or family members, an understanding of the patient's views can be obtained and decisions regarding their involvement in decision making can be taken. Conflicts can be resolved by an interdisciplinary team approach including religious leaders.

- Russell, Glenda M. & Janis S. Bohan. 2014. Toward a contextual understanding of psychology trainees' religious conflicts. *Psychology of Sexual Orientation and Gender Diversity* 1(4). 293–301.
doi:10.1037/sgd0000072.

This article examines the broader sociobistorical context that surrounds questions of conflicts between the diversity requirements of psychology training programs and students' religious beliefs. The authors suggest that a clearer understanding of such conflicts emerges when the historical trajectories of both the evolution of LGBT rights and the changing status of conservative Christianity and its attendant privilege in this country is studied. To elucidate the intersection of these two trajectories, the authors employ concepts from systems theory, focusing on deviation-amplifying and deviation-counteracting processes—roughly equivalent to social change and the backlash it often evokes. The authors explore the potential value of this analysis by means of a hypothetical case involving an interpersonal interaction between a trainee and an educator that depicts how this broader context may influence communication in educational settings.

- Sax, William. 2014. Ritual healing and mental health in India. *Transcultural Psychiatry* 51(6). 829–849.
doi:10.1177/1363461514524472.

Ritual healing is very widespread in the Indian state of Uttarakhand, and is by far the most common option for those with serious behavioral disturbances. Although ritual healing thus accounts for a very large part of the actual health care system, the state and its regulatory agencies have, for the most part, been structurally blind to its existence. A decade of research in this region, along with a number of shorter research trips to healing shrines and specialists elsewhere in the subcontinent, and a thorough study of the literature, suggest that such techniques are often therapeutically effective. However, several considerations suggest that ritual healing may not be usefully combined with mainstream “Western” psychiatry: (a) psychiatry is deeply influenced by the ideology of individualism, which is incompatible with South Asian understandings of the person; (b) social asymmetries between religious healers and health professionals are too great to allow a truly respectful relationship between them; and (c) neither the science of psychiatry nor the regulatory apparatus of the state can or will acknowledge the validity of “ritual therapy”—and even if they did so, regulation would most likely destroy what is most valuable about ritual healing. This suggests that it is best if the state maintain its structural blindness to ritual healing.

Seitz, Jr., Charles R. 2014. Utilizing a spiritual disciplines framework for faith integration in social work: A competency-based model. *Social Work & Christianity* 41(4). 334–354.

A spiritual disciplines model for faith integration utilizing a competency-based framework in social work education is presented. An eleventh competency is developed connecting the College's context as a Christian institution of higher learning with accreditation standards related to ethical and competent social work practice. Examples are provided to show how faith development principles were incorporated into specific courses and to demonstrate how related practice behaviors were connected with assignments and assessment tools. The model has implications for how both religious and secular institutions incorporate religious and spirituality content into their curriculum.

Sharabi, Asaf. 2014. Deep healing: Ritual healing in the teshuvah movement. *Anthropology & Medicine* 21(3). 277–289.

doi:10.1080/13648470.2014.907023.

Based on an ethnographic analysis of religious healing rituals in Israel, this paper addresses the question of how healer-client relations are structured on these rituals. An examination of what takes place at the rallies held by Rabbi Amnon Yitzhak indicates that, apart from the regular blessings, which can be referred to as ordinary healing, there are some ritual events that can be referred to as "deep healing." The current paper demonstrates how deep healing rituals are generally conducted in severe cases through give-and-take between the rabbi and the person upon whom the blessing is bestowed, and that they are linked to relationships between people and the ethic of mutual support.

Steen, Jenny T. van der, Marie-José He Gijssberts, Cees Mpm Hertogh & Luc Deliens. 2014. Predictors of spiritual care provision for patients with dementia at the end of life as perceived by physicians: A prospective study. *BMC palliative care* 13(1). 61.

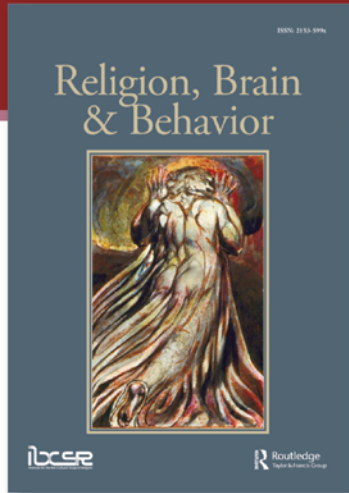
doi:10.1186/1472-684X-13-61.

Spiritual caregiving is part of palliative care and may contribute to well being at the end of life. However, it is a neglected area in the care and treatment of patients with dementia. The authors of this article aimed to examine predictors of the provision of spiritual end-of-life care in dementia as perceived by physicians coordinating the care. The researchers used data of the Dutch End of Life in Dementia study, in which data were collected prospectively in 28 Dutch long-term care facilities. It was found that palliative care indicators were not predictive of spiritual end-of-life care; palliative care in dementia may need better defining and implementation in practice. Physician-family communication upon admission may be important to optimize spiritual caregiving at the end of life.

Yilmaz, Meryem & Hesna Gurler. 2014. The efficacy of integrating spirituality into undergraduate nursing curricula. *Nursing Ethics* 21(8). 929–945.

doi:10.1177/0969733014521096.

The objective of this study was to identify the impact of two different curricula, used to teach undergraduate nursing students, on increasing nursing student awareness of spirituality in the care of patients. A quasi-experimental post-intervention two-group design was conducted in 2009–2010 and 2010–2011 academic years. A total of 130 volunteer senior-year students were assigned as "the intervention group/integrated system" that were informed about spirituality or as "the control group/traditional system" that received no information on spirituality. Data were collected via a personal information form and the Spirituality and Spiritual Care Rating Scale was used to assess responses. The results revealed that the intervention group had a higher mean score on the Spirituality and Spiritual Care Rating Scale than did the control group. The students in the intervention group defined the terms of spirituality and spiritual care more accurately than did the control group students.



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PART 3: BOOKS

3.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

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