

exploring the nexus of culture, mind and religion

RESEARCH REVIEW

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

AUGUST, 2012

INTRODUCTION

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

Articles for this issue were located by searching the following databases: Applied Science and Technology, ATLA Religion Database, General Science, PubMed, EBSCO Psychology and Behavioral Sciences Collection, PsycARTICLES, PsycINFO, ScienceDirect, and Web of Science. The search terms were altruism, god, goddess, meditat*, prayer, relig*, ritual, spiritu*, and yoga, tailored to the database being searched. Books were located on Amazon.com. Articles not directly relevant to the scientific study of religion were excluded, as were correspondence and reviews. From a universe of 528 articles, 61 articles have been retained from 46 journals. There are 35 pre-publication citations from 31 journals.

IRR is distributed free of charge via email to those who register at <u>ibcsr.org</u>. Wesley J. Wildman publishes *IRR* on behalf of IBCSR and the editor is Joel Daniels, a doctoral student at Boston University. Please send comments and suggestions to <u>info@ibcsr.org</u>. To unsubscribe, send an email to <u>irr@ibcsr.org</u> with "unsubscribe" in the subject line.

CONTENTS

Part 1: Articles in Religion, Brain, and Behavior	2
1.1 Scientific Study of Religion: Cognitive Neuroscience	2
1.2 Scientific Study of Religion: Evolution	3
1.3 Scientific Study of Religion: Psychology and Culture	5
1.4 Scientific Study of Religion: Method & Theory	9
Part 2. Articles in Spirituality & Health Research	11
2.1 Spirituality & Health: General Health & Well-Being	11
2.2 Spirituality & Health: Mental Health	14
2.3 Spirituality & Health: Method and Theory	16
Part 3. Books	21
3.1 Scientific Study of Religion, Brain, and Behavior	21
3.2 Spirituality & Health Research	21
Part 4. Articles in Press	22
4.1 Scientific Study of Religion, Brain, and Behavior	22
4.2 Spirituality & Health Research	22

PART 1: ARTICLES IN RELIGION, BRAIN, AND BEHAVIOR

1.1 SCIENTIFIC STUDY OF RELIGION: COGNITIVE NEUROSCIENCE

Faber, Pascal L, Dietrich Lehmann, Shisei Tei, Takuya Tsujiuchi, Hiroaki Kumano, Roberto D Pascual-Marqui & Kieko Kochi. 2012. EEG source imaging during two Qigong meditations. *Cognitive processing* 13(3). 255–265. doi:10.1007/s10339-012-0441-4.

Experienced Qigong meditators who regularly perform the exercises "Thinking of Nothing" and "Qigong" were studied with multichannel EEG source imaging during their meditations. The intracerebral localization of brain electric activity during the two meditation conditions was compared using sLORETA functional EEG tomography. Differences between conditions were assessed using t statistics (corrected for multiple testing) on the normalized and log-transformed current density values of the sLORETA images. In the EEG alpha-2 frequency, 125 voxels differed significantly; all were more active during "Qigong" than "Thinking of Nothing," forming a single cluster in parietal Brodmann areas 5, 7, 31, and 40, all in the right hemisphere. In the EEG beta-1 frequency, 37 voxels differed significantly; all were more active during "Thinking of Nothing" than "Qigong," forming a single cluster in prefrontal Brodmann areas 6, 8, and 9, all in the left hemisphere. Compared to combined initial-final no-task resting, "Qigong" showed activation in posterior areas whereas "Thinking of Nothing" and anterior (left) prefrontal areas during "Thinking of Nothing" may reflect a predominance of self-reference, attention and input-centered processing in the "Qigong" meditation, and of control-centered processing in the "Thinking of Nothing" meditation.

Hermanns, Melinda, Belinda Deal & Barbara Haas. 2012. Biopsychosocial and spiritual aspects of Parkinson disease: an integrative review. *The Journal of neuroscience nursing: Journal of the American Association of Neuroscience Nurses* 44(4). 194–205.

The Institute for the Biocultural Study of Religion Membership Benefits

Religion, Brain & Behavior

Discounted annual subscription to the flagship journal in the biocultural study of religion

Contribute to IBCSR.org

Submit events, links, news, and reviews to the leading site for the biocultural study of religion



Research Review Database

Search an online database with all articles ever published in the scientific study of religion

Receive IBCSR Newsletters

Research news in the scientific study of religion, as well as Institute news, delivered to your email inbox

Join today! www.ibcsr.org

Calendar year memberships US\$90 Discounts for retirees and students doi:10.1097/JNN.0b013e3182527593.

This study examined the scientific literature from 1961 to 2011 regarding the biopsychosocial and spiritual aspects of persons with Parkinson disease and their adaptation to the disease. Ninety studies were reviewed. Although numerous medical studies focusing on pharmacological agents for Parkinson disease are reported, there are gaps in the literature on the biopsychosocial, spiritual, and holistic approaches in Parkinson disease care. The authors also discuss methodological challenges associated with researching this phenomenon, and propose future research.

Lee, Tatia M C, Mei-Kei Leung, Wai-Kai Hou, Joey C Y Tang, Jing Yin, Kwok-Fai So, Chack-Fan Lee & Chetwyn C H Chan. 2012. Distinct neural activity associated with focused-attention meditation and loving-kindness meditation. *PloS one* 7(8). e40054. doi:10.1371/journal.pone.0040054.

This study examined the dissociable neural effects of ānāpānasati (focused-attention meditation, FAM) and mettā (loving-kindness meditation, LKM) on BOLD signals during cognitive (continuous performance test, CPT) and affective (emotion-processing task, EPT, in which participants viewed affective pictures) processing. Twenty-two male Chinese expert meditators (11 FAM experts, 11 LKM experts) and 22 male Chinese novice meditators (11 FAM novices, 11 LKM novices) had their brain activity monitored by a 3T MRI scanner while performing the cognitive and affective tasks in both meditation and baseline states. Researchers examined the interaction between state (meditation vs. baseline) and expertise (expert vs. novice) separately during LKM and FAM, using a conjunction approach to reveal common regions sensitive to the expert meditative state. Additionally, exclusive masking techniques revealed distinct interactions between state and group during LKM and FAM. Specifically, it was demonstrated that the practice of FAM was associated with expertise-related behavioral improvements and neural activation differences in attention task performance. However, the effect of state LKM meditation did not carry over to attention task performance. On the other hand, both FAM and LKM practice appeared to affect the neural responses to affective pictures. For viewing sad faces, the regions activated for FAM practitioners were consistent with attention-related processing; whereas responses of LKM experts to sad pictures were more in line with differentiating emotional contagion from compassion/emotional regulation processes. These findings provide the first report of distinct neural activity associated with forms of meditation during sustained attention and emotion processing.

1.2 SCIENTIFIC STUDY OF RELIGION: EVOLUTION

Van Dyken, J. David & Michael J. Wade. 2012. Origins of altruism diversity I: The diverse ecological roles of altruistic strategies and their evolutionary responses to local competition. *Evolution* 66(8). 2484–2497.

doi:10.1111/j.1558-5646.2012.01630.x.

The authors introduce ecological realism into social evolution theory and find evidence of at least four distinct modes of altruism. Contrary to existing theory, they find that altruistic traits contributing to 'resource-enhancement' (e.g., siderophore production, provisioning, agriculture) and 'resource-efficiency' (e.g., pack hunting, communication) are most strongly favored when there is strong local competition. These resource-based modes of helping are 'K-strategies' that increase a social group's growth yield, and should characterize species with scarce resources and/or high local crowding caused by low mortality, high fecundity, and/or mortality occurring late in the process of resource-acquisition. The opposite conditions, namely weak local competition (abundant resource, low crowding), favor survival (e.g., nest defense) and fecundity (e.g., nurse workers) altruism, which are 'r-strategies' that increase a social group's growth rate. Survival altruism is uniquely favored by a novel evolutionary force termed 'sunk cost selection.' Sunk cost selection favors helping that prevents resources from being wasted on individuals destined to die before reproduction. These results contribute to explaining the observed natural diversity

of altruistic strategies, reveal the necessary connection between the evolution and the ecology of sociality, and correct the widespread but inaccurate view that local competition uniformly impedes the evolution of altruism.

Van Dyken, J. David & Michael J. Wade. 2012. Origins of altruism diversity II: Runaway coevolution of altruistic strategies via "reciprocal niche construction." *Evolution* 66(8). 2498–2513.

doi:10.1111/j.1558-5646.2012.01629.x.

Understanding the evolution of altruism requires knowledge of both its constraints and its drivers. In this paper the authors show that, paradoxically, ecological constraints on altruism may ultimately be its strongest driver. They construct a two-trait, coevolutionary adaptive dynamics model of social evolution in a genetically structured population with local resource competition. The intensity of local resource competition, which influences the direction and strength of social selection and which is typically treated as a static parameter, is here allowed to be an evolvable trait. Evolution of survival/fecundity altruism, which requires weak local competition, increases local competition as it evolves, creating negative environmental feedback that ultimately inhibits its further evolutionary advance. Alternatively, evolution of resource-based altruism, which requires strong local competition, weakens local competition as it evolves, also ultimately causing its own evolution to stall. When evolving independently, these altruistic strategies are intrinsically self-limiting. However, the coexistence of these two altruism types transforms the negative ecoevolutionary feedback generated by each strategy on itself into positive feedback on the other, allowing the presence of one trait to drive the evolution of the other. The authors call this feedback conversion 'reciprocal niche construction.' In the absence of constraints, this process leads to runaway coevolution of altruism types. The authors discuss applications to the origins and evolution of eusociality, division of labor, the inordinate ecological success of eusocial species, and the interaction between technology and demography in human evolution. This theory suggests that the evolution of extreme sociality may often be an autocatalytic process.

Gavrilets, Sergey. 2012. On the evolutionary origins of the egalitarian syndrome. *Proceedings of the National Academy of Sciences of the United States of America* 109(35). 14069–14074. doi:10.1073/pnas.1201718109.

The evolutionary emergence of the egalitarian syndrome is one of the most intriguing unsolved puzzles related to the origins of modern humans. Standard explanations and models for cooperation and altruism--reciprocity, kin and group selection, and punishment--are not directly applicable to the emergence of egalitarian behavior in hierarchically organized groups that characterized the social life of our ancestors. In this article the author studies an evolutionary model of group-living individuals competing for resources and reproductive success. In the model, the differences in fighting abilities lead to the emergence of hierarchies where stronger individuals take away resources from weaker individuals and, as a result, have higher reproductive success. First, it is shown that the logic of within-group competition implies under rather general conditions that each individual benefits if the transfer of the resource from a weaker group member to a stronger one is prevented. This effect is especially strong in small groups. Then the author demonstrates that this effect can result in the evolution of a particular, genetically controlled psychology causing individuals to interfere in a bully-victim conflict on the side of the victim. A necessary condition is a high efficiency of coalitions in conflicts against the bullies. The egalitarian drive leads to a dramatic reduction in within-group inequality. Simultaneously it creates the conditions for the emergence of inequity aversion, empathy, compassion, and egalitarian moral values via the internalization of behavioral rules imposed by natural selection. It also promotes widespread cooperation via coalition formation.

Helms, Sara E. & Jeremy P. Thornton. 2012. The influence of religiosity on charitable behavior: A COPPS investigation. *The Journal of Socio-Economics* 41(4). 373–383. doi:10.1016/j.socec.2012.04.003.

Researchers examine the role of religion in charitable giving and find that the religious preference of both the donor and the recipient organization influence giving behavior. By exploiting a panel survey of charitable giving, the authors demonstrate that traditional empirical analysis on charitable giving masks important differences among donor groups. Religious giving by religious individuals is least responsive to changes in price and income, while secular giving by secular individuals has the greatest sensitivity.

Hwang, Sung-Ha & Samuel Bowles. 2012. Is altruism bad for cooperation? Journal of Economic Behavior & Organization 83(3). 330–341. doi:10.1016/j.jebo.2012.06.001.

Some philosophers and social scientists have stressed the importance for good government of an altruistic citizenry that values the well-being of fellow citizens. Economists, however, have emphasized the need for incentives that induce even the self-interested to contribute to the public good. Implicitly most have assumed that these two approaches are complementary or at worst additive. But this need not be the case. Behavioral experiments find that if reciprocity-minded subjects feel hostility towards free riders and enjoy inflicting harm on them, the incentives provided by the anticipated punishment support near efficient levels of contributions to a public good. Cooperation may also be supported if altruistic individuals internalize the group benefits that their contributions produce. But the effects of these two supports for high levels of cooperation may be less than additive. Using a utility function embodying both reciprocity and altruism the authors of the current article show that unconditional altruism attenuates the punishment motive and thus may reduce the level of punishment inflicted on defectors, resulting in lower levels of contribution. Increases in altruism may also reduce the level of benefits from the public project net of contribution costs and punishment costs. The range over which altruism inhibits cooperation and reduces material payoffs is greater, the stronger is the reciprocity motive among group members.

Laurin, Kristin, Azim F. Shariff, Joseph Henrich & Aaron C Kay. 2012. Outsourcing punishment to God: Beliefs in divine control reduce earthly punishment. *Proceedings. Biological sciences / The Royal Society* 279(1741). 3272–3281. doi:10.1098/rspb.2012.0615.

The sanctioning of norm-transgressors is a necessary, though often costly, task for maintaining a well-functioning society. Prior to effective and reliable secular institutions for punishment, large-scale societies depended on individuals engaging in 'altruistic punishment': bearing the costs of punishment individually, for the benefit of society. Evolutionary approaches to religion suggest that beliefs in powerful, moralizing Gods, who can distribute rewards and punishments, emerged as a way to augment earthly punishment in large societies that could not effectively monitor norm violations. In five studies, the authors investigate whether such beliefs in God can replace people's motivation to engage in altruistic punishment, and their support for state-sponsored punishment. Results show that, although religiosity generally predicts higher levels of punishment, the specific belief in powerful, intervening Gods reduces altruistic punishment and support for state-sponsored punishment. Moreover, these effects are specifically owing to differences in people's perceptions that humans are responsible for punishing wrongdoers.

1.3 SCIENTIFIC STUDY OF RELIGION: PSYCHOLOGY AND CULTURE

Armento, Maria E. A., James K. McNulty & Derek R. Hopko. 2012. Behavioral activation of religious behaviors (BARB): Randomized trial with depressed college students. *Psychology of Religion and Spirituality* 4(3). 206–222. doi:10.1037/a0026405.

This randomized study investigated the efficacy of a single-session behavioral activation of religious behaviors (BARB) protocol relative to supportive therapy among mild to moderately depressed undergraduate students (n=50). Clinical outcomes assessed depression, anxiety, environmental reward, and quality of life. Results indicated that BARB successfully increased religious behaviors, attitudes, and coping skills at posttreatment. Hierarchical linear modeling indicated that the BARB group also had significantly greater decreases in depression and anxiety, and increased quality of life at posttreatment. At 1-month follow-up, these treatment gains were

maintained and 84% of BARB participants reported continued religious activation. Finally, mediation analysis indicated that religious behaviors and attitudes were significant mediators of the relation between treatment condition and attenuation of depression. The authors conclude that the study provides encouraging preliminary support for the efficacy of a parsimonious religious-based behavioral activation intervention for depression in college students.

Aten, Jamie D., Patrick R. Bennett, Peter C. Hill, Don Davis & Joshua N. Hook. 2012. Predictors of God concept and God control after Hurricane Katrina. *Psychology of Religion and Spirituality* 4(3). 182–192.

doi:10.1037/a0027541.

This study examined demographic and hurricane-related resource loss predictors on God concepts and God control among Hurricane Katrina survivors (n=142) from Mississippi Gulf Coast communities approximately five months after the storm. The findings from this study of Katrina survivors suggest that significant loss from natural disasters has an impact on one's conception of and beliefs about God. It was found that increased levels of resource loss predicted a more negative conceptual portrayal of God. Greater object resource loss predicted perceptions of less God control over the outcome of events. Further, it was found that the strongest individual predictor of a God concept that was more negative and in less control of event outcomes was the loss of food and water, suggesting the importance of critical resource loss on how one conceives of God. Overall, the findings suggest that, for many people who self-identify as spiritual and / or religious, spiritual resources may be the one explanatory system that is uniquely capable of helping disaster survivors to understand traumatic events, to have a sense of control of such events, and, in the process, to still maintain a healthy picture of one's self.

Van Cappellen, Patty & Vassilis Saroglou. 2012. Awe activates religious and spiritual feelings and behavioral intentions. *Psychology of Religion and Spirituality* 4(3). 223–236. doi:10.1037/a0025986.

In two experiments, researchers investigated the role of awe in activating the association between religiosity/spirituality and related feelings and behavioral intentions. In Experiment 1, the induction of awe (through the recall of a relevant event), but not the induction of pride or a neutral condition, led religious and spiritual participants to endorse a spiritual (Tibet) but not a hedonistic (Haiti) travel destination. In Experiment 2, the induction (through relevant video clips) of (a) awe of nature and (b) awe at childbirth, but not the induction of humor, led religious/spiritual people to express, respectively, feelings of oneness with (a) others in general and (b) friends.

Dahl, Angie L. & Renee V. Galliher. 2012. LGBTQ adolescents and young adults raised within a Christian religious context: Positive and negative outcomes. *Journal of Adolescence*. doi:10.1016/j.adolescence.2012.07.003.

Religious contexts have traditionally been understood as protective for a variety of psychosocial health outcomes. However, the generalizability of these findings to youth who identify as lesbian, gay, bisexual, transgender or queer (LGBTQ) is questioned due to denominational teachings on same-sex attractions and sexual behavior. Eight adolescents (15–17 years) and 11 young adults (19–24 years) who identify as LGBTQ raised in Christian religious affiliations (16 participants raised in the Church of Jesus Christ of Latter Day Saints, 2 participants raised Catholic and 1 participant raised Presbyterian) participated in individual in-depth interviews, journal writings, and focus groups to provide greater insight into the lived experiences of LGBTQ individuals raised within a Christian religious environment. Findings suggest the religious context is related to both positive and negative outcomes. Eight themes are explored using participant's own words and experiences.

Dierendonck, Dirk. 2012. Spirituality as an Essential Determinant for the Good Life, Its Importance Relative to Self-Determinant Psychological Needs. *Journal of Happiness Studies* 13(4). 685–700.

doi:10.1007/s10902-011-9286-2.

This paper investigates the value of spirituality compared to that of the three basic psychological needs of selfdetermination theory: relatedness, competence and autonomy. In a scenario study design, participants in two samples (students and train passengers) were asked to judge a survey on the personal well-being of an imaginary person. The results show that spirituality positively contributes to the qualification of a good life, in terms of desirability and moral goodness. In addition, the crucial role of relatedness was confirmed.

Finseraas, Henning & Niklas1 Jakobsson. 2012. Trust and Ethnic Fractionalization: The Importance of Religion as a Cross-Cutting Dimension. *Kyklos* 65(3). 327–339. doi:10.1111/j.1467-6435.2012.00541.x.

The existing literature on diversity and trust has focused on a unidimensional understanding of diversity. The authors of this article argue that a unidimensional approach is theoretically and empirically problematic and use a recently developed multidimensional measure of social structure to investigate which aspects of diversity are associated with generalized trust. After running cross-country regressions with up to 115 countries to explore the importance of fractionalization for average trust levels 1981-2008, and using several different measures of ethnic fractionalization, no general and robust relationship between ethnic fractionalization and trust was found. In line with expectations, however, they found a negative and significant association between ethnic fractionalization and trust for low levels of ethno-religious cross-cuttingness and cross-fractionalization, illustrating the importance of multidimensionality.

Hardy, Sam A., Lawrence J. Walker, David D. Rackham & Joseph A. Olsen. 2012. Religiosity and adolescent empathy and aggression: The mediating role of moral identity. *Psychology of Religion and Spirituality* 4(3). 237–248. doi:10.1037/a0027566.

The mechanism by which adolescent religiosity might yield positive interactions with others remains unclear. This study examined moral identity as a mediator between adolescent religiosity and adolescent empathy and aggression. Participants were 502 adolescents (10–18 years) who completed an online survey. Structural equation models assessed links between religiosity (commitment and involvement) and interpersonal relationships (aggression and empathy), as well as the role of moral identity as a mediator, and the potential interactions between the two facets of religiosity. The study found indirect relationships between religious commitment and aggression and empathy by way of moral identity. Religious commitment was also directly related to empathy. Additionally, religious commitment and involvement interacted in predicting moral identity. Findings suggest that moral identity may be one mechanism by which religiosity leads to positive social interactions. Further, it may be that religious commitment and religious involvement interact in a way that together more synergistically promote positive development.

Hewson, Paul D. & Jens Rowold. 2012. Do spiritual ceremonies affect participants' quality of life? A pilot study. *Complementary Therapies in Clinical Practice* 18(3). 177–181. doi:10.1016/j.ctcp.2012.03.005.

The present study evaluated the effect of a spiritual ceremony on four independent facets of quality of life in ten participants. Four weeks after a half-day spiritual ceremony, statistical analyses of administered surveys demonstrated that the ceremony had a positive effect on spiritual and mental quality of life. The ceremony did not enhance participants' physical and emotional quality of life.

Kim-Spoon, Jungmeen, Gregory S. Longo & Michael E. McCullough. 2012. Adolescents who are less religious than their parents are at risk for externalizing and internalizing symptoms: The mediating role of parent–adolescent relationship quality. *Journal of Family Psychology* 26(4). 636– 641.

doi:10.1037/a0029176.

Researchers examined the relationships between parents' and adolescents' religiousness, adolescents' ratings of parent-adolescent relationship quality, and adolescents' psychological adjustment, using data from 322 adolescents and their parents. Adolescent boys who had lower organizational and personal religiousness than their parents, and girls who had lower personal religiousness than their parents, had more internalizing and externalizing psychological symptoms than did adolescents whose religiousness better matched their parents'. The apparent effects of subparental religiousness on adolescents' psychological symptoms were mediated by their intermediate effects on adolescents' ratings of the quality of their relationships with their parents. These findings identify religious discrepancies between parents and their children as an important influence on the quality of parent-adolescent relationships, with important implications for adolescents' psychological well-being.

Mange, Jessica, Woo Young Chun, Keren Sharvit & Jocelyn J. Belanger. 2012. Thinking about Arabs and Muslims makes Americans shoot faster: Effects of category accessibility on aggressive responses in a shooter paradigm. *European Journal of Social Psychology* 42(5). 552–556. doi:10.1002/ejsp.1883.

Is the same person perceived as more dangerous if the perceiver is induced to think about Arab and Muslim categories versus no category? Using the shooter paradigm, this study investigated the effects of the accessibility of ethnic (Arab) versus religious (Muslim) categories versus no category on spontaneous aggressive responses toward a target with an ambiguous appearance. Results demonstrated that shooting reactions toward armed targets were faster than non-shooting reactions toward unarmed targets, especially if the target was a man. Despite these main effects, participants made faster decisions to shoot an ambiguous armed target if primed with the category Arab or Muslim (versus no category priming). The findings indicate that the mere priming of these social categories is sufficient to facilitate aggressive responses, even if the targets themselves are ambiguous.

Saghafi, Nazanin, Joy Asamen, Daryl Rowe & Rozalin Tehrani. 2012. The relationship of religious self-identification to cultural adaptation among Iranian immigrants and first-generation Iranians. *Professional Psychology: Research and Practice* 43(4). 328–335. doi:10.1037/a0028822.

This investigation examined whether Iranian or Iranian Americans of either Islamic or Jewish religious selfidentifications significantly differ in their cultural adaptation as demonstrated by their orientation toward the Iranian culture, orientation toward the U.S. culture, multicultural (Iranian–U.S.) orientation, stress related to immersing oneself in the American culture, and stress related to resistance encountered in the American culture. To conduct this investigation, 107 participants were administered the Cultural Lifestyle Inventory and the Kerendi-Kadkhoda Acculturative Stress Scale. Results indicate that religious identificantly higher Iranian orientation of acculturation while participants who self-identified as Islamic reported significantly higher U.S. orientation of acculturation. Furthermore, participants who self-identified as Islamic reported significantly higher U.S. orientation of acculturative stress when compared with their Jewish counterparts. This study revealed the relevance of considering intracultural differences such as religious identification among Iranian immigrants and Iranian Americans.

Shenhav, Amitai, David G. Rand & Joshua D. Greene. 2012. Divine intuition: Cognitive style influences belief in God. *Journal of Experimental Psychology: General* 141(3). 423–428. doi:10.1037/a0025391.

Some have argued that belief in God is intuitive, a natural (by-)product of the human mind given its cognitive structure and social context. If this is true, the extent to which one believes in God may be influenced by one's more general tendency to rely on intuition versus reflection. Three studies support this hypothesis, linking intuitive

cognitive style to belief in God. Study 1 showed that individual differences in cognitive style predict belief in God. Participants completed the Cognitive Reflection Test, which employs math problems that, although easily solvable, have intuitively compelling incorrect answers. Participants who gave more intuitive answers on the CRT reported stronger belief in God. This effect was not mediated by education level, income, political orientation, or other demographic variables. Study 2 showed that the correlation between CRT scores and belief in God also holds when cognitive ability (IQ) and aspects of personality were controlled. Moreover, both studies demonstrated that intuitive CRT responses predicted the degree to which individuals reported having strengthened their belief in God since childhood, but not their familial religiosity during childhood, suggesting a causal relationship between cognitive style and change in belief over time. Study 3 revealed such a causal relationship over the short term: Experimentally inducing a mindset that favors intuition over reflection increases self-reported belief in God.

Stegmueller, Daniel, Peer Scheepers, Sigrid Roßteutscher & Eelke de Jong. 2012. Support for Redistribution in Western Europe: Assessing the role of religion. *European Sociological Review* 28(4). 482–497.

The authors argue that religious individuals, living in increasingly secular societies, differ in political preferences from their secular counterparts. Based on the theory of religious cleavages, they expect that religious individuals will oppose income redistribution by the state. Furthermore, in contexts where the polarization between religious and secular individuals is large, preferences for redistribution will be lower. Predictions were tested using data from the European Social Survey 2002–2006 for 16 Western European countries. After controlling for a wide range of individual socio-economic factors and for welfare-state policies, religion plays an important explanatory role. Both Catholics and Protestants strongly oppose income redistribution by the state. The cleavage between religious and secular individuals is far more important than the difference between denominations. Using a refined measure of religious polarization, it was also found that in more polarized context the overall level of support for redistribution is lower.

Watterson, Kaylyn & R. Brian Giesler. 2012. Religiosity and self-control: When the going gets tough, the religious get self-regulating. *Psychology of Religion and Spirituality* 4(3). 193–205. doi:10.1037/a0027644.

Prior research has indicated that religiosity and the ability to self-regulate are positively associated, but this relationship has yet to be addressed experimentally. To investigate whether and under what conditions higher religiosity may be associated with greater self-regulation, 75 participants either high (n=38) or low (n=37) in level of religiosity undertook a difficult and frustrating task requiring self-control (i.e., an unsolvable anagrams task). Before doing so, half of the participants performed a self-regulatory resource depleting task, whereas the other half proceeded directly to the difficult anagrams task. Time spent persisting on the anagrams task constituted the study's primary dependent variable. Level of religiosity was unrelated to task persistence. However, when participants had not been depleted, level of religiosity was unrelated to task persistence. However, when participants' self-regulatory resources had first been depleted, participants high in religiosity persisted significantly longer on the anagrams task compared with participants low in religiosity, an effect that remained significant even after controlling for potential confounds. This research suggests highly religious individuals possess greater self-regulatory ability, particularly under circumstances of reduced self-regulatory resources. Greater self-regulatory ability, in turn, may help explain the health benefits that religious individuals often enjoy.

1.4 SCIENTIFIC STUDY OF RELIGION: METHOD & THEORY

Edgell, Penny. 2012. A Cultural Sociology of Religion: New Directions. Annual Review of Sociology 38(1). 247–265.

doi:10.1146/annurev-soc-071811-145424.

The author reviews three contemporary streams of scholarship that are revitalizing the cultural analysis of religion, an approach that dates to the discipline's founding. Research from an institutional field perspective focuses on the institutions that shape religious belief, practice, and mobilization. Work on lived religion, including neo-Durkheimian approaches, focuses on religious experience and contested practices of sacralization. Scholarship on religious cultural tools and symbolic boundaries analyzes religion as symbolic legitimation. These three approaches avoid serious problems associated with both market and secularization accounts, in part because of the way they conceptualize religious authority and religious identity, and in part because of their broader scope of inquiry. The author combines the insights from these approaches to articulate a promising agenda for future research, offering a set of focus questions that are relevant to both classical and contemporary concerns about religion's role in modern societies.

Schaefer, Donovan O. 2012. Do Animals Have Religion? Interdisciplinary Perspectives on Religion and Embodiment. *Anthrozoos* 25. S173–S189. doi:10.2752/175303712X13353430377291.

The author addresses the religious experiences of animals, drawing the subsequent questions into methodological conversations within the study of religion generally. This paper surveys a variety of approaches to animal religion from two disciplinary perspectives: comparative religion and cognitive ethology. The paper concludes that the study of animal religion must proceed by thinking along two lines of recurring themes found throughout these accounts: the differences between animal bodies (what Jacques Derrida calls the "heterogeneous multiplicity" of animals) and the orientation of religious bodies to affect. Rather than thinking of religion as one thing, religion must be conceived of as multiple, corresponding to the multiplicity of embodied "lifeways" found among animals. Rather than thinking of religion as inextricable from belief, the field must begin to explore the emotional patterns that make up religion among animals-human and nonhuman. These thematic anchors of animal religion have direct implications for the study of religion itself.

Sendil, Cagla Oneren & Nurten Ozuorcun Kucukertan. 2012. A Qualitative Study about Transmission of Religious Issues. *Procedia: Social and Behavioral Sciences* 47(0). 913–917. doi:10.1016/j.sbspro.2012.06.756.

The purpose of this qualitative study is to discover individuals' constructions of current life experiences, related psychological outcomes and emotions based on the religion education process. University students in Ankara, were interviewed about their current and past life experiences on religion education process. Findings of this study are thought to point out the importance of parents' and educational agencies' religion education practices in relation to individuals' current life experiences and psychological outcomes.

PART 2. ARTICLES IN SPIRITUALITY & HEALTH RESEARCH

2.1 SPIRITUALITY & HEALTH: GENERAL HEALTH & WELL-BEING

Asare, Fredrick, Stine Störsrud & Magnus Simrén. 2012. Meditation over medication for irritable bowel syndrome? On exercise and alternative treatments for irritable bowel syndrome. *Current* gastroenterology reports 14(4). 283–289. doi:10.1007/s11894-012-0268-2.

Complementary alternative treatment regimens are widely used in irritable bowel syndrome (IBS), but the evidence supporting their use varies. For psychological treatment options, such as cognitive behavioral therapy, mindfulness, gut-directed bypnotherapy, and psychodynamic therapy, the evidence supporting their use in IBS patients is strong, but the availability limits their use in clinical practice. Dietary interventions are commonly included in the management of IBS patients, but these are primarily based on studies assessing physiological function in relation to dietary components, and to a lesser degree upon research examining the role of dietary components in the therapeutic management of IBS. Several probiotic products improve a range of symptoms in IBS patients. Physical activity is of benefit for health in general and recent data implicates its usefulness also for IBS patients. Acupuncture does not seem to have an effect beyond placebo in IBS. A beneficial effect of some herbal treatments has been reported.

Bulkley, Joanna, Carmit McMullen, Mark Hornbrook, Andrea Altschuler, Marcia Grant, Lisa Herrinton & Robert Krouse. 2012. PS1-10: Spiritual Well-being and the Challenges of Living With an Ostomy: Resilience, Adaptation and Loss Among Colorectal Cancer Survivors. *Clinical Medicine & Research* 10(3). 146.

doi:10.3121/cmr.2012.1100.ps1-10.

Researchers recruited adult colorectal cancer (CRC) survivors to complete a mailed survey (n=283). The responses of 51% (90 of 176) of participants contained Spiritual well-being (SpWB) content. Seventeen SpWB themes were identified, reflecting positive, negative, and ambivalent dimensions. Some responses contained multiple themes but each theme was coded only once for each person. Fifty-three of 90 people (59%) expressed positive themes which included "positive attitude" "appreciate life more" "helping others helps me" "strength through religious faith" "leading an active life" and "I am fortunate." Negative themes included "struggling to cope" "not feeling 'normal'" and "loss" and were least common, expressed by only 28 of 90 people (31%). Ambivalent themes were most common (67%; 60 of 90 individuals) and included "learning acceptance" "ostomy is the price for survival" "reason to be around despite suffering" and "continuing to cope and function despite challenges."

Fernandes, César A, Yanna K M Nóbrega & C Eduardo Tosta. 2012. Pranic meditation affects phagocyte functions and hormonal levels of recent practitioners. *Journal of Alternative and Complementary Medicine (New York, N.Y.)* 18(8). 761–768. doi:10.1089/acm.2010.0718.

This investigation aimed at evaluating the influence of pranic meditation on the functions of phagocytes, and on the levels of hormones that influence them. Twenty-nine healthy individuals received 3-hour-duration weekly training on pranic meditation during 10 weeks and agreed to engage in daily home practice for 20 minutes. After 10 weeks, participants who meditated for more than 980 minutes showed increased phagocytosis, their monocytes produced higher concentrations of hydrogen peroxide, and their plasma levels of corticotrophin were reduced. The production of nitric oxide by monocytes, and the levels of cortisol and melatonin were not modified by meditation.

Ho, Chih-Te, Hua-Shui Hsu, Chia-Ing Li, Chiu-Shong Liu, Chin-Yu Lin, Cheng-Chieh Lin & Wen-Yuan Lin. 2012. Certain bio-psychosocial-spiritual problems associated with dyspnea among advanced cancer patients in Taiwan. Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer 20(8). 1763–1770. doi:10.1007/s00520-011-1273-y.

Researchers explored the association between bio-psychosocial-spiritual problems and dyspnea among advanced cancer patients in Taiwan, retrospectively analyzing 687 advanced cancer patients admitted to the hospice palliative ward in a tertiary hospital in Taiwan from 2002 to 2005. Results indicate that patients with certain psychosocial and spiritual problems, such as the problem of propriety preparation, fear of death, and anxiety, tended to have dyspnea. Among these factors, propriety preparation played an important role among dyspnea patients.

Jensen, P. S., P. J. Stevens & D. T. Kenny. 2011. Respiratory Patterns in Students Enrolled in Schools for Disruptive Behaviour Before, During, and After Yoga Nidra Relaxation. Journal of Child and Family Studies 21(4). 667–681. doi:10.1007/s10826-011-9519-3.

This study investigated the effects of one session of Yoga Nidra (relaxation technique) on the breathing patterns/respiratory effort in the thoracic and abdominal chest regions of 7 boys with disruptive behavior (DB). Results were compared with three students (one female) aged 15 years without DB. The seven boys had previously participated in a 13-week yoga program. Results indicated that boys with disruptive behavior generally displayed unstable breathing patterns throughout the pre-recording period and showed more stable breathing during Yoga Nidra compared with pre- or post-recording periods. There were also examples of reductions in thoracic dominance during Yoga Nidra. The comparison group's breathing patterns throughout the three phases of the process were found to be stable.

Khianman, Bussarin, Porjai Pattanittum, Jadsada Thinkhamrop & Pisake Lumbiganon. 2012. Relaxation therapy for preventing and treating preterm labour. Cochrane Database of Systematic Reviews (Online) 8. CD007426.

doi:10.1002/14651858.CD007426.pub2.

In this literature review, researchers identified 11 randomized controlled trials (n=833) relevant to investigating the effectiveness of relaxation therapies for preventing or treating preterm labor (PTL). However, the results of this review are based on single studies with small numbers of participants. The majority of included studies reported insufficient information on sequence generation, allocation concealment as well as blinding. There were no included studies that assessed PTL or preterm birth as the primary outcome. The included studies were different in terms of intervention, practice, and time, and there were no clear coherent hypotheses. For women not in PTL, the benefits of relaxation was found in one study for maternal stress at 26 to 29 weeks gestational age. In addition, there were some beneficial effects of relaxation including baby birth weight; type of delivery; maternal anxiety; and stress when applying relaxation therapy together with standard treatment.

Nesvold, Anders, Morten W Fagerland, Svend Davanger, Øyvind Ellingsen, Erik E Solberg, Are Holen, Knut Sevre & Dan Atar. 2012. Increased heart rate variability during nondirective meditation. European journal of preventive cardiology 19(4). 773–780. doi:10.1177/1741826711414625.

After monitoring 27 healthy participants, first during 20 min regular rest with eyes closed, thereafter practicing Acem meditation for 20 min, researchers found that heart rate variability (HRV) increased in the low-frequency (LF) and high-frequency (HF) bands during meditation, compared with rest. They conclude that there is an increased parasympathetic and reduced sympathetic nerve activity and increased overall HRV while practicing the technique. Hence, nondirective meditation by the middle aged may contribute towards a reduction of cardiovascular risk.

Rand, Kevin L, Larry D Cripe, Patrick O Monahan, Yan Tong, Karen Schmidt & Susan M Rawl. 2012. Illness appraisal, religious coping, and psychological responses in men with advanced cancer. Supportive Care in Cancer: Official Journal of the Multinational Association of Supportive Care in Cancer 20(8). 1719–1728.

doi:10.1007/s00520-011-1265-y.

Eighty-six men with advanced cancer completed measures, including constructed Meaning of Illness Scale, Brief Religious Coping Scale, Hospital Anxiety and Depression Scale, mini-Mental Adjustment to Cancer Scale, and Posttraumatic Growth Inventory. Analysis of result found that psychological distress was predicted by prognosis, illness appraisal, and negative religious coping. Negative mental adjustment was predicted by prognosis and illness appraisal. Positive mental adjustment was predicted by illness appraisal and positive religious coping. Posttraumatic growth was predicted by positive religious coping. Illness appraisal was more consistently associated with psychological responses to advanced cancer than patient or disease characteristics.

Ross, Alyson, Erika Friedmann, Margaret Bevans & Sue Thomas. 2012. Frequency of yoga practice predicts health: results of a national survey of yoga practitioners. *Evidence-based complementary and alternative medicine: eCAM* 2012. 983258. doi:10.1155/2012/983258.

Researchers analyzed cross-sectional, anonymous internet surveys that had been completed by 1045 individuals at 5 US Iyengar yoga studios. Frequency of home practice favorably predicted: mindfulness, subjective well-being, BMI, fruit and vegetable consumption, vegetarian status, sleep, and fatigue. Each component of yoga practice (different categories of physical poses, breath work, meditation, philosophy study) predicted at least 1 health outcome. Home practice of yoga predicted health better than years of practice or class frequency.

Stoltzfus, Kenneth M & Kathleen J Farkas. 2012. Alcohol use, daily hassles, and religious coping among students at a religiously affiliated college. *Substance use & misuse* 47(10). 1134–1142. doi:10.3109/10826084.2011.644843.

This study utilized a cross-sectional data collection strategy and convenience sampling to examine the relationship between alcohol use, daily hassles stress, and religious coping among 423 undergraduate students (269 females and 154 males) at a religiously affiliated college in the Midwestern USA. Involvement in positive religious coping was significantly related to lower rates of alcohol use. Hierarchical multiple regression analysis revealed that among women, positive religious coping moderated the relationship between two types of daily hassles stress (academic alienation and romantic problems) and alcohol use.

Toussaint, Loren L, Amy D Owen & Alyssa Cheadle. 2012. Forgive to live: Forgiveness, health, and longevity. *Journal of behavioral medicine* 35(4). 375–386. doi:10.1007/s10865-011-9362-4.

This study examined multiple types of forgiveness as predictors of mortality and potential psychosocial, spiritual, and health mechanisms of the effects of forgiveness on longevity in a sample of 1,232 adults ages 66 and older. God's unconditional forgiveness and conditional forgiveness of others initially emerged as statistically significant predictors of mortality risk. However, only conditional forgiveness of others remained a significant predictor of mortality after controlling for religious, socio-demographic, and health behavior variables. Mediators of the association between conditional forgiveness of others and mortality were examined, and a statistically significant indirect effect was identified involving physical health. These findings suggest that conditional forgiveness of others is associated with risk for all-cause mortality, and that the mortality risk of conditional forgiveness may be conferred by its influences on physical health.

Zini, A., H. D. Sgan-Cohen & W. Marcenes. 2012. Is religiosity related to periodontal health among the adult Jewish population in Jerusalem? *Journal of periodontal research* 47(4). 418–425.

doi:10.1111/j.1600-0765.2011.01447.x.

Religiosity had a protective effect against periodontitis through extrinsic and intrinsic pathways. In a sample of 248 members of the Jerusalem Jewish population, higher levels of religiosity, support of internal life through spirituality, higher family social support and low levels of plaque were related to lower levels of periodontitis. Religiosity led to higher family social support and support of internal life through spirituality, which was related to plaque level and periodontitis.

2.2 Spirituality & Health: Mental Health

Bonelli, Raphael, Rachel E Dew, Harold G Koenig, David H Rosmarin & Sasan Vasegh. 2012. Religious and spiritual factors in depression: review and integration of the research. *Depression research and treatment* 2012. 962860. doi:10.1155/2012/962860.

This paper reviews and synthesizes quantitative research examining relationships between religious/spirituality (R/S) involvement and depressive symptoms or disorders during the last 50 years (1962 to 2011). At least 444 studies have now quantitatively examined these relationships. Of those, over 60% report less depression and faster remission from depression in those more R/S or a reduction in depression severity in response to an R/S intervention. In contrast, only 6% report greater depression. Of the 178 most methodologically rigorous studies, 119 (67%) find inverse relationships between R/S and depression. Religious beliefs and practices may help people to cope better with stressful life circumstances, give meaning and hope, and surround depressed persons with a supportive community. In some populations or individuals, however, religious beliefs may increase guilt and lead to discouragement as people fail to live up to the high standards of their religious tradition.

Bryant-Davis, Thema, Monica U. Ellis, Elizabeth Burke-Maynard, Nathan Moon, Pamela A. Counts & Gera Anderson. 2012. Religiosity, spirituality, and trauma recovery in the lives of children and adolescents. *Professional Psychology: Research and Practice* 43(4). 306–314. doi:10.1037/a0029282.

This literature review explores the role of religion and spirituality in the lives of children and adolescents who have been, or are currently subjected to traumatic experience. It delineates ways to incorporate and acknowledge the religion and spirituality of children and adolescents who are trauma survivors in treatment.

Bullock, Marie, Lucie Nadeau & Johanne Renaud. 2012. Spirituality and Religion in Youth Suicide Attempters' Trajectories of Mental Health Service Utilization: The Year before a Suicide Attempt. Journal of the Canadian Academy of Child and Adolescent Psychiatry = Journal de l'Académie canadienne de psychiatrie de l'enfant et de l'adolescent 21(3). 186–193.

This study explored youths' (n=15) experiences of spirituality/religion as it relates to their help-seeking the year before their suicide attempt. Three themes emerged: religious community members acted as a bridge, step, or provider to mental health services; religious/spiritual discourses were encountered within services; and many youths reported changes in spirituality/religious beliefs the year before their suicide attempt.

Cheung, Chau-kiu & Ping Kwong Kam. 2012. Resiliency in older Hong Kong Chinese: Using the grounded theory approach to reveal social and spiritual conditions. *Journal of Aging Studies* 26(3). 355–367.

doi:10.1016/j.jaging.2012.03.004.

The study conducted personal interviews with 15 older Hong Kong Chinese identified by elderly service workers as resilient to recent adversities. Consequently, the study identifies a grounded, social–spiritual dialectic theory that relates resiliency to its contributors in early living conditions, family socialization, and religious faith. According to

qualitative data, resiliency, which is characterized by self-reliance, openness, and relaxation, turns out to be a result of isolation in living conditions and family socialization. Isolation can also lead to religious faith, which is another contributor to resiliency. These findings are different from existing knowledge that social support is a basis for resiliency. They imply the possibility of converting negative experiences into impetus for generating resiliency.

Chiesa, Alberto, Laura Mandelli & Alessandro Serretti. 2012. Mindfulness-based cognitive therapy versus psycho-education for patients with major depression who did not achieve remission following antidepressant treatment: a preliminary analysis. *Journal of alternative and complementary medicine (New York, N.Y.)* 18(8). 756–760. doi:10.1089/acm.2011.0407.

This randomized controlled study compared mindfulness-based cognitive therapy (MBCT) with a psychoeducational control group designed to be structurally equivalent to the MBCT program but excluding the claimed "active ingredient" of MBCT (i.e., mindfulness meditation practice) for the treatment of patients with major depression (MD) who did not achieve remission following antidepressant treatment. Of 29 screened subjects, 16 received MBCT or psycho-education. Both depression and general well-being scores improved to a significantly higher extent in the MBCT group than in the psycho-educational control group.

Hanwella, Raveen, Varuni de Silva, Alam Yoosuf, Sanjeewani Karunaratne & Pushpa de Silva. 2012. Religious beliefs, possession States, and spirits: three case studies from Sri Lanka. *Case Reports in Psychiatry* 2012. 232740.

doi:10.1155/2012/232740.

The authors describe three patients from different religious backgrounds in Sri Lanka whose possession states were strongly influenced by their religious beliefs. Patient A was a Buddhist who claimed to have special powers given by a local deity named Paththini. Patient B was a Catholic who experienced spirits around her whom she believed were sent by Satan. Patient C was a Muslim and believed she was possessed by spirits. The religious beliefs also influenced the help-seeking behavior and the rituals or treatments to which they responded.

Lotfi, Yaser, Ali Ayar & Simin Shams. 2012. The Relation Between Religious Practice and Committing Suicide: Common and Suicidal People in Darehshahr, Iran. Procedia - Social and Behavioral Sciences 50(0). 1051–1060. doi:10.1016/j.sbspro.2012.08.105.

This article attempts to study the relationship between different dimensions of religiosity (ideological, emotional, ritual, knowledge, and consequential) and committing suicide. Based on theories of Clark, Stark and Meadow on religiosity, as well as theories of Durkheim, Porter Field, Gibbs and Martin on suicide, and by using survey method, descriptive statistics, T- test, and Pearson's correlation coefficient, the study tries to illustrate the relation between different aspects of religiosity and committing suicide in Darehshahr, Iran, 2009. Findings of the research indicate that different dimensions of religiosity among normal individuals (control group) are higher than that among the suicidal people.

McCarney, Robert William, Joerg Schulz & Andrew Robert Grey. 2012. Effectiveness of mindfulness-based therapies in reducing symptoms of depression: A meta-analysis. *European Journal of Psychotherapy & Counselling* 14(3). 279–299. doi:10.1080/13642537.2012.713186.

The authors of this article conducted a meta-analysis which looked at therapies considered to have mindfulness as a major component. They investigated whether this group of therapies was effective in reducing current depressive symptomatology as measured by the Beck depression inventory (BDI). A total of 11 studies were included in the analysis. They found a significant mean reduction score in current depressive symptomatology, as measured by the BDI, of 8.73 points, and evidence was found for the effectiveness of these major-component therapies in reducing levels of active depression.

Sarris, J, S Moylan, D A Camfield, M P Pase, D Mischoulon, M Berk, F N Jacka & I Schweitzer. 2012. Complementary medicine, exercise, meditation, diet, and lifestyle modification for anxiety disorders: a review of current evidence. *Evidence-based complementary and alternative medicine: eCAM* 2012. 809653. doi:10.1155/2012/809653.

doi:10.1155/2012/809655.

This metareview examined evidence across a broad range of CAM and lifestyle interventions in the treatment of anxiety disorders. Research indicated that in respect to treatment of generalized anxiety or specific disorders, CAM evidence revealed current support for the herbal medicine Kava. One isolated study shows benefit for naturopathic medicine, whereas acupuncture, yoga, and Tai chi have tentative supportive evidence which is hampered by overall poor methodology. The breadth of evidence does not support homeopathy for treating anxiety. Strong support exists for lifestyle modifications including adoption of moderate exercise and mindfulness meditation, whereas dietary improvement, avoidance of caffeine, alcohol, and nicotine offer encouraging preliminary data. In conclusion, certain lifestyle modifications and some CAMs may provide a beneficial role in the treatment of anxiety disorders.

Zhao, Jiubo, Xueling Yang, Rong Xiao, Xiaoyuan Zhang, Diane Aguilera & Jingbo Zhao. 2012. Belief system, meaningfulness, and psychopathology associated with suicidality among Chinese college students: a cross-sectional survey. *BMC public health* 12(1). 668. doi:10.1186/1471-2458-12-668.

Using data from 1,168 participants, all first-year college students in mainland China, researchers found that political belief but not religious belief was associated with decreased suicide risk. A significant interactive effect of political belief and religious belief was found, indicating that for political believers, being religious was associated with decreased suicide risk; for non-political believers, being religious was associated suicide risk. Multi-group structural equation modeling showed that meaningfulness completely mediated and psychopathology partially mediated the effect of belief system on suicidality. Gender differences were found in pathways of political belief by religious beliefs to suicidality and political belief to psychopathology. The coefficients were significant for males but not for females.

2.3 SPIRITUALITY & HEALTH: METHOD AND THEORY

Bingaman, Kirk. 2012. Beyond Original Sin: A Paradigm Shift for the Age of Neuroscience. Pastoral Psychology 61(4). 411–422. doi:10.1007/s11089-012-0432-5.

The author explores the implications of Jesus' location of the kingdom of heaven in the lived experience of the individual, and of the findings of neuroscientific research, for a paradigm shift in Christian theology that moves beyond the Adamic myth and belief in original sin. Support for a theological paradigm shift based on lived experience is provided by Capps, and for this particular paradigm shift by Pagels and Ricoeur. The doctrine of original sin supports and fosters the negativity bias of the brain and inhibits the resculpting of the brain. Drawing on Hanson's evidence in support of the brain's neuroplasticity (i.e., its capacity to change itself) and on Brach's critique of the 'trance of unworthiness,' the author makes the case for meditative and mindful awareness practices in Christianity and other religious traditions as proven methods for the goodness of life and of God's creation. A longitudinal neuroscientific research study of Roman Catholic nuns provides evidence in support of the role of contemplative prayer and meditation in generating the joy and serenity that Jesus' allusion to the hidden treasure envisions.

Burke, Adam. 2012. Comparing Individual Preferences for Four Meditation Techniques: Zen, Vipassana (Mindfulness), Qigong, and Mantra. *EXPLORE: The Journal of Science and Healing* 8(4). 237–242.

doi:10.1016/j.explore.2012.04.003.

This pilot study was conducted to compare four meditation techniques for personal preference for a convenience sample of 247 undergraduate university students. After learning about two open observing meditation techniques (Vipassana and Zen), and two focused attention techniques (Mantra and Qigong Visualization), the participants practiced one method per week. At the end of a six-week training period participants ranked the four meditation methods in order of personal preference. A within subjects comparison revealed that significantly more participants chose Vipassana or Mantra meditation as their preferred techniques compared with Qigong Visualization and Zen.

Casarez, Rebecca L. Polzer & Joan C. Engebretson. 2012. Ethical issues of incorporating spiritual care into clinical practice. *Journal of Clinical Nursing* 21(15-16). 2099–2107. doi:10.1111/j.1365-2702.2012.04168.x.

This article analyzes the scholarly discourse on the ethical issues of incorporating spirituality and religion into clinical practice. The discourse analysis uncovered four themes: ethical concerns of omission; ethical concerns of commission; conditions under which health providers prefer to offer spiritual care; and strategies to integrate spiritual care. Ethical concerns of omission of spiritual care include lack of beneficence for not offering holistic care. Ethical concerns of commission are coercion and overstepping one's competence in offering spiritual care. Conditions under which providers are more likely to offer spiritual care are if the patient has a terminal illness, and if the patient requests spiritual care. Strategies for appropriate spiritual care include listening, and remaining neutral and sensitive to spiritual issues

Crook-Lyon, Rachel E., Kari A. O'Grady, Timothy B. Smith, Dallas R. Jensen, Thomas Golightly & Kirti A. Potkar. 2012. Addressing religious and spiritual diversity in graduate training and multicultural education for professional psychologists. *Psychology of Religion and Spirituality* 4(3). 169–181.

doi:10.1037/a0026403.

In this study, 340 psychologists affiliated with the American Psychological Association completed a survey indicating their attitudes toward the inclusion of spirituality and religion in graduate training, specifically within multicultural education. Most respondents took the position that spiritual and religious issues should be included in graduate training (65%), could be considered multicultural issues (77%), and could be included within existing multicultural training sequences (68%). Themes from a qualitative analysis of participants' responses included (a) the significance of religion and spirituality in people's lives, (b) the importance of addressing religion and spirituality in therapy, (c) definitions of multiculturalism and opinions on which issues should be included in multicultural issues for not including spirituality and religious issues in multicultural training focused on philosophical and practical reservations, such as the risk of superficiality of content and possible neglect of more crucial topics within multiculturalism, such as race and racism.

Van Dover, Leslie & Jane Pfeiffer. 2012. Patients of parish nurses experience renewed spiritual identity: a grounded theory study. *Journal of advanced nursing* 68(8). 1824–1833. doi:10.1111/j.1365-2648.2011.05876.x.

This article is a report of a study of the process that patients of parish nurses experience when they are provided spiritual care in Christian churches, a context where patients and nurses share a common set of values. The grounded theory method was used to explore what patients of the parish nurses experienced in spiritual care. Theoretical memos described how the 'main concern' of the patients to resolve their health challenge resulted in changes to their spiritual identity. Phases in the change process included: facing a health challenge, finding a safe place, releasing burdens, changing perspectives and joining or rejoining the family of faith. The essence the patients experienced was an enhanced understanding of who they were in God/Christ.

Hodge, David R. & Fei Sun. 2012. Positive feelings of caregiving among Latino Alzheimer's family caregivers: Understanding the role of spirituality. *Aging & Mental Health* 16(6). 689–698. doi:10.1080/13607863.2012.678481.

This study used structural equation modeling to examine the effects of spirituality on positive aspects of caregiving (PAC) among a sample of American Latino family members caring for a relative with Alzheimer's disease (AD). Participants consisted of 209 Latino caregivers (CGs) drawn from baseline data from the Resources for Enhancing Alzheimer's Caregivers Health II study. The findings indicate that spirituality is positively related to PAC and may partially mediate the effect of subjective stress on PAC. AD CGs typically provide better care when they perceive the caregiving experience to be satisfying and rewarding. Toward this end, gerontological practitioners should adopt a proactive stance to ensure Latino AD CGs can operationalize their spiritual strengths.

Lucchetti, Giancarlo, Alessandra Lg Lucchetti, Daniele Cm Espinha, Leandro R Oliveira, José R Leite & Harold G Koenig. 2012. Spirituality and health in the curricula of medical schools in Brazil. BMC Medical Education 12(1). 78. doi:10.1186/1472-6920-12-78.

In a survey of 86 medical schools in Brazil, researchers found that 10.4 % of Brazilian Medical Schools have a dedicated spirituality and health (S/H) course, and 40.5 % have courses or content on spirituality and health. Only two medical schools have S/H courses that involve hands-on training and three schools have S/H courses that teach how to conduct a spiritual history. The majority of medical directors (54 %) believe that S/H is important to teach in their schools.

Masel, Eva K, Sophie Schur & Herbert H Watzke. 2012. Life is Uncertain. Death is Certain. Buddhism and Palliative Care. *Journal of pain and symptom management* 44(2). 307–312. doi:10.1016/j.jpainsymman.2012.02.018.

The authors note that it is part of a palliative care assessment to identify patients' spiritual needs, and assert that advice on how suffering can be reduced in the course of serious illness might be helpful to patients with incurable and progressive diseases. Specifically, palliative care could benefit from Buddhist insights in the form of compassionate care and relating death to life. Buddhist teachings may lead to a more profound understanding of incurable diseases and offer patients the means by which to focus their minds while dealing with physical symptoms and ailments.

Milevsky, Avidan & Michael Eisenberg. 2012. Spiritually oriented treatment with Jewish clients: Meditative prayer and religious texts. *Professional Psychology: Research and Practice* 43(4). 336–340. doi:10.1037/a0028035.

The current paper examines the limited literature on spiritually oriented treatment with Jewish clients and suggests two novel techniques of integration. The paper reviews the differences that exist between various denominations of Jews and the unique issues that may surface in therapy with Jewish clients based on these denominational variations. The paper suggests some specific applications including integrating meditative prayer and sacred texts in psychotherapy with Jews. Additionally, the paper provides a case study for each of the two application suggestions and concludes with a summary and future direction. Molzahn, Anita, Laurene Sheilds, Anne Bruce, Kelli Stajduhar, Kara Schick Makaroff, Rosanne Beuthin & Sheryl Shermak. 2012. People living with serious illness: Stories of spirituality. *Journal* of Clinical Nursing 21(15-16). 2347–2356. doi:10.1111/j.1365-2702.2012.04196.x.

Researchers conducted in-depth narrative interviews 32 participants: 10 people with cancer, 14 people with end stage renal disease (ESRD) and eight people with HIV/AIDS. The themes identified in the interviews were reflecting on spiritual, religious and personal beliefs, crafting beliefs for their own lives, finding meaning, and transcending beyond words. Participants melded various belief systems to fit their own lives. They also looked to find meaning in their illness experience and described what gave life meaning. For some aspects of these belief systems, participants could not or would not express themselves verbally, and it seemed that aspects of their experience were beyond language.

Richardson, Penny. 2012. Assessment and implementation of spirituality and religiosity in cancer care. *Clinical Journal of Oncology Nursing* 16(4). E150–155. doi:10.1188/12.cjon.e150-e155.

Spirituality and religiosity have been defined by several governing bodies to mean everything from purpose in life, beliefs, faith, and hope, to transcendence with a higher being. The absence of uniformity regarding the components of spirituality and religiosity has created a barrier for professional caregivers in identifying, assessing, and providing spiritual needs. The diagnosis of cancer often leads patients to contemplate their own mortality and frequently presents unique challenges to their belief system. Spirituality is a unique component of holistic care. When appropriately addressed, it may strongly influence positive patient outcomes during the cancer journey. Consequently, nurses should actively participate in and incorporate the provision of spiritual care into the treatment plan for each patient with cancer or at least be able to assess those needs and make sure they are being addressed.

Ronaldson, Susan, Lillian Hayes, Christina Aggar, Jennifer Green & Michele Carey. 2012. Spirituality and spiritual caring: Nurses' perspectives and practice in palliative and acute care environments. *Journal of Clinical Nursing* 21(15-16). 2126–2135. doi:10.1111/j.1365-2702.2012.04180.x.

Palliative care RNs (n=42) from one community palliative care service and three hospices, and acute care RNs (n=50) from three major acute care hospitals completed a research questionnaire. Significant differences were seen between the two RN groups. Palliative care RNs' spiritual caring practice was more advanced and their spiritual perspective stronger; this relationship was positive. Both RN groups identified 'insufficient time' as the most common barrier to spiritual caring practice; 'patient privacy' was also common for acute care RNs.

Religion, Brain & Behavior



Editor

Patrick McNamara, Boston University Richard Sosis, University of Connecticut Wesley J. Wildman, Boston University **Assistant Editor**

James Haag, Suffolk University

James Haag, Sutfolk University International Editorial Board Candace Alcorta, University of Connecticut Nancy Ammerman, Boston University Scott Atran, University of Michigan Nina Azari, University of Michigan Scott Atran, University of Michigan Justin Barrett, Oxford University Jesse Bering, Queen's University, Belfast Paul Bloom, Yale University Descal Boyer, Washington University in St. Louis Warren Brown, Fuller Theological Seminary Joseph Bulbulia, Victoria University Philip Clayton, Claremont Graduate University Daniel Dennett, Tufts University Robert Emmons, University of California, Davis Errst Fehr, University of California, Los Angeles Armin Geertz, Aarhus University William Scott Green, University of Miami Marc Hauser, Harvad University Dominic Johnson, University of Bithish Columbia William Inos, Northweeten University Dominic Johnson, University of Idinburgh Eric Kaufman, University of London Deborah Kelemen, Boston University Lee Kinkpatrick, College of William and Mary Pierre Liemard, University of Rustish Columbia Andrew Newberg, University of Edinski Andrew Newberg, University of Edinski Andrew Newberg, University of Edinski Feter Kaufman, University of Edinski Andrew Newberg, University of Edinski Greenst Ed University Ikka Pysiäinen, University of Edinski Greenst Ed University Ikka Pysiäinen, University of Edinki Greenst Ed University Ikka Pysiäinen, University of Galifornia, Davis Stevens Schachter, Harvard University Ordis Shackeford, Oakland University Idention College International Editorial Board

Steven Schachter, Harvard University Jeffrey Schloss, Westmont College Todd Shackelford, Oakland University Michael L. Spezio, Scripps College, Claremont Ann Taves, University of California, Santa Barbara Robert Trivers, Rutgers University Fraser Watts, Cambridge University Harvey Whitehouse, Oxford University Pavid Sloan Wilson, Binghamton University Paul J. Zak, Claremont Graduate University



INSTITUTE FOR THE BIO-CULTURAL STUDY OF RELIGION 217 High Rock Street, Needham, MA 02492, USA rbbsubmit@ibcsr.org www.ibcsr.org

INVITATION TO SUBMIT

Routledge in 2011

New to

Religion, Brain & Behavior

Published in association with the Institute for the Bio-Cultural Study of Religion www.ibcsr.org

The aim of Religion, Brain & Behavior (RBB) is to provide a vehicle for the advancement of current biological approaches to understanding religion at every level from brain to behavior. RBB unites multiple disciplinary perspectives that share these interests. The journal seeks empirical and theoretical studies that reflect rigorous scientific standards and a sophisticated appreciation of the academic study of religion.

RBB welcomes contributions from a wide array of biological and related disciplines, including:

- cognitive science
- evolutionary psychology
- evolutionary anthropology
- social neuroscience
- demography neuroeconomics
- developmental psychology
- moral psychology
- mimetics
- epidemiology
- cultural evolution

- cognitive neuroscience social psychology
- aenetics
- neurology
- bioeconomics
- physiology
- psychology of religion
- archaeology
- behavioral ecology
- public health
- religious studies

In summary, RBB considers high quality papers in any aspect of the brain-behavior nexus related to religion.

Author Instructions

Papers for consideration should be sent to the Editors at: http://mc.manuscriptcentral.com/rrbb

- Instructions for manuscript preparation
- Authors should format articles using APA Style, being sure to submit a version suitable for blind refereeing.
- Target articles and review articles are maximum 10,000 words in length, including notes and references. Invited commentaries on target articles are at most 1,000 words in length, and author responses are 2,500 words. Research articles and case studies are no longer than 6,000 words in length, including notes and references.
- · Use no more than two layers of headings. Use endnotes rather than footnotes.
- Include an abstract of no more than 200 words, furnishing a summary of background, methods, results, and conclusions, in that order, where applicable.
- . Include 4-8 key words or phrases that will help would-be readers find your article using web searches.
- · Authors are responsible for obtaining permission to reproduce copyright material from other sources

Please visit the journal's website for more information: www.tandf.co.uk/journals/rrbb

www.tandf.co.uk/journals/rrbb



Page 20 of 24

Nash 5 Collec

PART 3. BOOKS

3.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Campion, Nicholas. 2012. Astrology and Popular Religion in the Modern West: Prophecy, Cosmology and the New Age Movement. Ashgate.
- Fawcett, Bruce. 2012. Why Do Young People Decide to Become Christian Ministers?: Applying Psychological Type Theory to Understand the Choices of Vocation by Canadian Baptist Teenagers. Edwin Mellen Press.
- Hoffman, Seymour & Benni Feldman (eds.). 2012. Case Studies of Unorthodox Therapy of Orthodox Patients. Golden Sky.
- Jacobsen, Rhonda Hustedt & Douglas Jacobsen. 2012. No Longer Invisible: Religion in University Education. Oxford University Press
- Wellman, James K. & Clark B. Lombardi (eds.). 2012. Religion and Human Security: A Global Perspective. Oxford University Press.
- Kellerman, Henry. 2012. The Discovery of God: A Psychoevolutionary Perspective. Springer.
- Miller, Lisa J. (ed.). 2012. The Oxford Handbook of Psychology and Spirituality. Oxford University Press, USA.

Trinitapoli, Jenny & Alexander Weinreb. 2012. Religion and AIDS in Africa. Oxford University Press.

3.2 SPIRITUALITY & HEALTH RESEARCH

- Shooter, Susan. 2012. How Survivors of Abuse Relate to God: The Authentic Spirituality of the Annihilated Soul. Ashgate.
- Trommsdorff, Gisela & Xinyin Chen (eds.). 2012. Values, Religion, and Culture in Adolescent Development. Cambridge University Press.
- Whitehead, James D. & Evelyn Eaton Whitehead. 2012. Nourishing the Spirit: The Healing Emotions of Wonder, Joy, Compassion, and Hope. Orbis Books.

PART 4. ARTICLES IN PRESS

4.1 SCIENTIFIC STUDY OF RELIGION, BRAIN, AND BEHAVIOR

- Berry, Devon, Colleen P. Bass, Cecily Shimp-Fassler & Paul Succop. 0. Risk, religiosity, and emerging adulthood: description of Christian, Jewish, and Muslim university students at entering the freshman year. *Mental Health, Religion & Culture* 0(0). 1–16. doi:10.1080/13674676.2012.715145.
- Hayward, R David & Neal Krause. 2012. Trajectories of Late-Life Change in God-Mediated Control. *The Journals of Gerontology. Series B, Psychological Sciences and Social Sciences.* doi:10.1093/geronb/gbs054.
- Hayward, R. David & Neal Krause. Trajectories of change in dimensions of forgiveness among older adults and their association with religious commitment. *Mental Health, Religion & Culture* 0(0). 1–17.

doi:10.1080/13674676.2012.712955.

- Heiphetz, Larisa, Elizabeth S Spelke & Mahzarin R Banaji. 2012. Patterns of Implicit and Explicit Attitudes in Children and Adults: Tests in the Domain of Religion. *Journal of experimental psychology. General.* doi:10.1037/a0029714.
- Hrotic, Steven. 0. A cognitive analysis of the Palestrina Myth. Religion, Brain & Behavior. 1–23. doi:10.1080/2153599X.2012.703007.
- Liu, Wen, Laura Zahner, Molly Cornell, Tung Le, Jessica Ratner, Yunxia Wang, Mamatha Pasnoor, Mazen Dimachkie & Richard Barohn. 2012. Benefit of Qigong Exercise in Patients With Fibromyalgia: A Pilot Study. *The International journal of neuroscience*. doi:10.3109/00207454.2012.707713.
- Mirams, Laura, Ellen Poliakoff, Richard J Brown & Donna M Lloyd. 2012. Brief body-scan meditation practice improves somatosensory perceptual decision making. *Consciousness and cognition*. doi:10.1016/j.concog.2012.07.009.
- Sansone, Randy A, Amy R Kelley & Jeremy S Forbis. 2012. Bullying in childhood and religious/spiritual status in adulthood among internal medicine outpatients. *The International journal of social psychiatry*. doi:10.1177/0020764012454383.

4.2 SPIRITUALITY & HEALTH RESEARCH

- Allen, Rebecca S, Grant M Harris, Martha R Crowther, Joann S Oliver, Ronald Cavanaugh & Laura L Phillips. 2012. Does religiousness and spirituality moderate the relations between physical and mental health among aging prisoners? *International journal of geriatric psychiatry*. doi:10.1002/gps.3874.
- Cone, Pamela H & Tove Giske. 2012. Teaching spiritual care a grounded theory study among undergraduate nursing educators. *Journal of clinical nursing*. doi:10.1111/j.1365-2702.2012.04203.x.

- Davison, Sara N & Gian S Jhangri. 2012. The Relationship Between Spirituality, Psychosocial Adjustment to Illness, and Health-Related Quality of Life in Patients With Advanced Chronic Kidney Disease. *Journal of pain and symptom management*. doi:10.1016/j.jpainsymman.2012.02.019.
- Ellman, Matthew S, Dena Schulman-Green, Leslie Blatt, Susan Asher, Diane Viveiros, Joshua Clark & Margaret Bia. 2012. Using Online Learning and Interactive Simulation To Teach Spiritual and Cultural Aspects of Palliative Care to Interprofessional Students. *Journal of palliative medicine*. doi:10.1089/jpm.2012.0038.
- Fischbeck, Sabine, Bernd-Oliver Maier, Ulrike Reinholz, Cornelia Nehring, Rainer Schwab, Manfred E Beutel & Martin Weber. 2012. Assessing Somatic, Psychosocial, and Spiritual Distress of Patients With Advanced Cancer: Development of the Advanced Cancer Patients' Distress Scale. *The American journal of hospice & palliative care.* doi:10.1177/1049909112453640.
- Garcia, Ginny, Christopher G Ellison, Thankam S Sunil & Terrence D Hill. 2012. Religion and Selected Health Behaviors Among Latinos in Texas. *Journal of religion and health*. doi:10.1007/s10943-012-9640-7.
- Hatami, Hossein, Maryam Hatami & Neda Hatami. 2012. The Religious and Social Principles of Patients' Rights in Holy Books (Avesta, Torah, Bible, and Quran) and in Traditional Medicine. *Journal of religion and health*. doi:10.1007/s10943-012-9619-4.
- Haugan, Gørill, Toril Rannestad, Randi Hammervold, Helge Garåsen & Geir Arild Espnes. 2012. Self-transcendence in cognitively intact nursing-home patients: a resource for well-being. *Journal* of advanced nursing.

doi:10.1111/j.1365-2648.2012.06106.x.

- Holt, Cheryl L, Min Qi Wang, Eddie M Clark, Beverly Rosa Williams & Emily Schulz. 2012. Religious involvement and physical and emotional functioning among African Americans: The mediating role of religious support. *Psychology & health*. doi:10.1080/08870446.2012.717624.
- Jahn, Danielle R, Erin K Poindexter, Ryan D Graham & Kelly C Cukrowicz. 2012. The Moderating Effect of the Negative Impact of Recent Life Events on the Relation between Intrinsic Religiosity and Death Ideation in Older Adults. *Suicide & life-threatening behavior*. doi:10.1111/j.1943-278X.2012.00114.x.
- Kashdan, Todd B & John B Nezlek. 2012. Whether, When, and How Is Spirituality Related to Well-Being? Moving Beyond Single Occasion Questionnaires to Understanding Daily Process. *Personality & social psychology bulletin.* doi:10.1177/0146167212454549.
- Konkolÿ Thege, Barna, János Pilling, András Székely & Mária S Kopp. 2012. Relationship Between Religiosity and Health: Evidence from a Post-communist Country. *International journal of behavioral medicine*.

doi:10.1007/s12529-012-9258-x.

Koslander, Tiburtius, Unni Å Lindström & António Barbosa da Silva. 2012. The human being's spiritual experiences in a mental healthcare context; their positive and negative meaning and impact on health - a hermeneutic approach. *Scandinavian journal of caring sciences*.

doi:10.1111/j.1471-6712.2012.01067.x.

- Leledaki, Aspasia. 0. Body-selves and health-related narratives in modern yoga and meditation methods. *Qualitative Research in Sport, Exercise and Health* 0(0). 1–23. doi:10.1080/2159676X.2012.712994.
- Manning, Lydia K. 2012. Enduring as Lived Experience: Exploring the Essence of Spiritual Resilience for Women in Late Life. Journal of religion and health. doi:10.1007/s10943-012-9633-6.
- McGoldrick, Terence A. 2012. The Spirituality of Human Consciousness: A Catholic Evaluation of Some Current Neuro-Scientific Interpretations. Science and engineering ethics. doi:10.1007/s11948-012-9387-2.
- Nolan, Jennifer A, Joseph P McEvoy, Harold G Koenig, Elizabeth G Hooten, Kathryn Whetten & Carl F Pieper. 2012. Religious Coping and Quality of Life Among Individuals Living With Schizophrenia. Psychiatric services (Washington, D.C.). doi:10.1176/appi.ps.201000208.
- Park, Crystal. 2012. Mind-Body CAM Interventions: Current Status and Considerations for Integration Into Clinical Health Psychology. Journal of clinical psychology. doi:10.1002/jclp.21910.
- Park, Jisung & Soonhee Roh. 2012. Daily spiritual experiences, social support, and depression among elderly Korean immigrants. Aging & mental health. doi:10.1080/13607863.2012.715138.
- Pearce, Michelle & Harold G. Koenig. 0. Cognitive behavioural therapy for the treatment of depression in Christian patients with medical illness. Mental Health, Religion & Culture 0(0). 1–11. doi:10.1080/13674676.2012.718752.
- Pesut, Barbara. 2012. Nursings' need for the idea of spirituality. Nursing inquiry. doi:10.1111/j.1440-1800.2012.00608.x.
- Smolak, A, R E Gearing, D Alonzo, S Baldwin, S Harmon & K McHugh. 2012. Social Support and Religion: Mental Health Service Use and Treatment of Schizophrenia. Community mental health journal.
 - doi:10.1007/s10597-012-9536-8.
- Taylor, Robert Joseph, Linda M Chatters & Ann W Nguyen. 2012. Religious Participation and DSM IV Major Depressive Disorder Among Black Caribbeans in the United States. Journal of immigrant and minority health / Center for Minority Public Health. doi:10.1007/s10903-012-9693-4.
- Zondag, Hessel J. 0. "I want to pray and I don't want to pray": expressive individualism and prayer. Mental Health, Religion & Culture 0(0). 1–13. doi:10.1080/13674676.2012.700923.