

A Call for the Inclusion of Spirituality in Yoga Research

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Abstract

In this brief article, the author draws attention to the fact that much of the current scientific research on yoga has tended to exclude spirituality as a focus of study. In response, he presents arguments and information regarding the value of incorporating spiritual constructs in yoga investigations and makes suggestions for future studies.

A call for the inclusion of spirituality in yoga research

With its origins tracing back more than two millennia to ancient India, yoga is a popular practice throughout the world in our time. Accompanying this rise in popularity in the past few decades has been a growing interest on the part of scientists and health professionals alike to empirically explore the salubrious effects of yoga on health and to apply it to the amelioration of physical and mental illness. In this vein, available meta-analyses of the investigations done to date suggest that yoga holds excellent potential for the treatment of pain [1,2] and contributes to improved psychological health in a variety of clinical populations including cancer patients [3-5], menopausal women [6], and persons suffering from a range of neuropsychiatric conditions [7,8].

Notwithstanding its promise as a complementary health intervention, one notable trend seen in the literature has been the tendency for practitioners and researchers to define and study yoga without overt consideration and inclusion of its foundational spiritual nature and goals [9-11]. The definition of yoga offered by this journal is a salient example- as stated on the journal webpage, yoga is “the practice of attaining physical and mental health through meditation and physical exercise” (<http://www.omicsonline.org/jypthome.php>; retrieved July 25, 2013). The same trend has been observed in how meditation in general is defined in the current research [12]. Though the exclusion of spirituality is somewhat understandable since it is a construct that historically has been associated with religion which itself has been viewed as falling outside the purview of scientific inquiry [13], such a trend in how yoga is operationalized and investigated may be seen as unfortunate as a burgeoning body of theory and research indicates that spirituality is not only an important component of human functioning that has a substantive impact on health [14] but also that its incorporation into meditative interventions results in improved outcomes above and beyond what is seen with more secularized meditation [15,16]. Given these findings, it would seem important and even prudent for research on yoga to incorporate spirituality so as to best ascertain how it may incrementally contribute to health and well-being. With this in mind, I would like to dedicate the remainder of this short article to an overview of the status of spirituality as a scientific construct with emphasis given to my own research done over the past two decades.

What is Spirituality?

As already noted, spirituality and related concepts such as religion/religiousness have come to be the focus of increasing amounts of research within the health and social sciences (e.g. medicine, nursing, psychology, social work, counseling). As an ostensible manifestation of the empirical work, significant efforts have been put forth to devise scientifically useful definitions and at present there are a wide array of standardized assessment instruments available. For instance, in

literature surveys I completed in the mid-to-late 1990s, my colleagues and I uncovered over 100 measures of spirituality and related concepts [17,18] and several more have appeared since then. However, despite the ready availability of measurement tools, there exists considerable controversy surrounding how to best conceptualize and measure spirituality with the main issues revolving around (a) its relation to religion (e.g., are spirituality and religion the same or different?), (b) the utilization of metaphysical concepts and terms in its definition which cannot be rendered open to conventional modes of inquiry and investigation (e.g., do we need such notions as divine, sacred, and God in order to define spirituality?), (c) its contamination with other health constructs, particularly well-being, (d) whether it is best measured quantitatively or qualitatively, and (e) its universality across cultures [19-25]. Some scholars have been so frustrated with the persistence and seeming intractability of these issues that they have suggested the abandonment of spirituality as a topic of study [26].

I myself have spent the better part of the past 20 years working in the area of spirituality with most of my efforts directed at measurement. While I am very aware of the aforementioned issues (and have been among the more vocal members of the scientific community in highlighting them), this has not discouraged me from advocating for spirituality studies. Rather, these problems have served to motivate me to adopt a thoughtful and methodical stance toward the science and to proffer approaches to research which show sensitivity to the complexities of studying spirituality. Considering the vast number of available instruments and the lack of apparent consensus regarding how to best conceptualize the construct, my efforts have been most centrally directed identifying and operationalizing robust core features of spirituality as they are embodied in existing tests so as to bring some degree of order to what the empirical literature is actually telling us about spirituality. These efforts resulted in the development of a multidimensional measurement model based upon the conjoint statistical analysis of a wide sampling of extant measures [21]. The dimensions themselves appear to embody broad domains of spirituality which have found expression in the scientific, philosophical, and spiritual literature. Succinctly stated, the dimensions are Cognitive Orientation toward Spirituality (i.e., beliefs about the existence and importance

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of spirituality to one's daily living), Experiential/Phenomenological Dimension (i.e., non-ordinary experiences and states of consciousness of a spiritual nature which involve some alteration to one's sense of self), Existential Well-Being (i.e., a perception of self as having meaning and purpose and the capacity to deal with the existential adversities of life), Paranormal Beliefs (i.e., beliefs in the validity of parapsychological phenomena), and Religiousness (i.e., beliefs in the existence of a higher power and involvement in practices and activities typically associated with devout religious life such as meditation and prayer).

To make these dimensions accessible for investigation, I concurrently created a paper-and-pencil self-report measure called the Expressions of Spirituality Inventory (ESI) [21,27] which demonstrates good psychometric properties. To date, the ESI has proven valuable in not only bringing order to the empirical literature [24], but also for validation of other instruments [28,29], empirical examination of the relation of spirituality to personality and psychosocial functioning [21,30-35] and for theory development [36] (also see end note 1). In general, the work done with the ESI strongly suggests that spirituality (a) is a unique domain of human functioning and individual difference that is not reducible to other recognized aspects of functioning (e.g., health, personality) though is related to them, and (b) demonstrates complex and multidirectional relationships to health and pathology across the dimensions with Existential Well-Being, Religiousness, and Cognitive Orientation toward Spirituality showing the most consistently positive associations, the Experiential/Phenomenological Dimension showing mixed relations, and Paranormal Beliefs the most consistent linkages to psychopathology.

What does this mean for yoga research? Some recommendations

In a paper I co-authored for the *International Journal of Yoga* [37], I presented information on a variety of instruments which appear to hold promise for yoga research. The ESI is included among these tests and would be good to use if one wants to measure general dimensions of spirituality. However, in many instances, an investigator is in need of tools that assess more specialized and theory-driven spiritual concepts. In the case of yoga with its grounding in Hindu philosophy, research employing measures of explicitly Hindu concepts would seem to be prime candidates for consideration. As such, tests such as the Hindu Religious Coping Scale [38], Measures of Hindu Pathways [39] and the Vedic Personality Inventory [40,41] may prove valuable.

Regardless of the type of measure used, the incorporation of spiritual variables in yoga research would help to broaden the informativeness of such investigations by fostering greater understanding of the reciprocal influence they have on each other. That is, whether studying yoga practice as part of lifestyle or as a treatment, such studies would permit for greater insight as to how spirituality may contribute to selection (e.g., do people's spirituality influence whether or not they choose to practice yoga and/or show receptiveness to engaging in yoga-based interventions?), outcomes (e.g., does involvement in yoga enhance spirituality in practitioners and vice versa?), and change mechanisms (e.g., does spirituality serve as a mechanism to facilitate therapeutic and/or personological change?). Based upon my own past and ongoing research, some of which is cited earlier, here are three concrete examples of the kind of empirical studies that I am encouraging-(a) explore whether one or more major aspects of spirituality mediate the relation between yogic practice and physical and health outcomes in samples of people participating in yoga-based interventions. Particularly promising dimensions of my ESI for use in such investigations include

Cognitive Orientation toward Spirituality, Religiousness, and the Experiential/Phenomenological Dimension; (b) examine the extent to which spiritual variables moderate the relation of yoga to treatment outcomes through the examination of the interaction effects of one or more ESI dimensions with yoga practice, and; (c) compare pre-versus post-treatment levels of spirituality in both clinical and non-clinical samples of yoga practitioners to ascertain if there are changes in spirituality as a function of yoga practice. A more specific study idea along these lines would be to compare secular versus spiritually-contextualized yoga practice on both health and spiritual outcomes. It is my hope that such research will be energetically pursued by those in the yoga community

Endnote

At the time of writing this article, I am involved with additional investigations examining the generalizability of the ESI across cultures and languages. Preliminary analyses indicate that the instrument shows good structural invariance but that culture needs to be taken into account when studying spirituality. I am also in the early stages of exploring the relation of spirituality assessed via the ESI to resting brain states measured using quantitative EEG. I am expecting to have manuscripts reporting the results of these studies completed in the near future and am hopeful that they find publication.

Author Biographical Statement

Douglas A. MacDonald, Ph.D. is an Associate Professor of Psychology at the University of Detroit Mercy. He has been actively involved in research on spirituality for several years with primary emphasis given to its measurement and explorations of its relations and implications for psychological and social functioning. He is Editor Emeritus of the *International Journal of Transpersonal Studies*, Associate Editor of the *Journal of Transpersonal Psychology*, and Research Editor of the *Journal of Humanistic Psychology*. As well, he is on the editorial board for the *Journal of Management, Religion, and Spirituality*, and the *Australian Gestalt Journal* and serves as an ad hoc reviewer for a variety of other journals specializing in research on religion, spirituality, humanistic and existential psychology, personality psychology, and psychometrics.

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