

Perspective

Is the Yoga World Ready? An Academic Perspective

David Shapiro, PhD

Geffen School of Medicine, University of California, Los Angeles

As a long time academic researcher and teacher, and an Iyengar Yoga practitioner for more than ten years, I have been intrigued by the ongoing discussions about Yoga therapy, about what it is and where it is going, and how, or whether, it can be integrated into the healthcare system. My interest in research on Yoga and its clinical potential started with curiosity (sometimes bewilderment) about Yoga teachers' explanations of poses and the claims sometimes made about the effects of certain Yoga practices on bodily organs and systems, such as endocrine glands, the cardiovascular system, the immune system, and mental states. What were these claims based on? Did they make sense in terms of what was already well known in physiology, physical medicine, psychology, and other basic sciences? Or, if such knowledge did not exist, how could we put claims to a test?

We might learn something new and enlightening. The scientific method can be applied to any phenomenon, and I have rarely turned someone away who wanted to convince me of what we now call a New Age idea, as long as there was a way to test it.

A main problem for me, as an adherent to Occam's Razor, the principle of parsimony, is the multiplicity of overlapping concepts and the variety of Yoga "schools" and practices. Nevertheless, one can pose good questions that can be translated into testable hypotheses, and for which there is already a good background of established scientific knowledge.

As a psychologist, I became interested in research on the effects of Yoga poses on mood and emotional states, and the potential benefits of Yoga as a complementary treatment of major depression and generalized anxiety disorder. In planning research on Yoga, I soon realized that there were many difficulties in communicating with Yoga teachers, based on differences in belief systems, frameworks, methods, standards, and goals. Individuals in the Yoga community seemed to view me as allied to the medical profession, and

I became the "enemy" and the "debunker." These difficulties reminded me of earlier experiences in my career when I conducted research on biofeedback and its potential as a therapy. The current discussions about the development and future of Yoga therapy have many elements in common with the broader issues of the biomedical vs. alternative models of the nature of health and of healthcare. Some reflections on the history of these issues may have some bearing on the debates about Yoga therapy.

Thirty years ago, George Engel¹ presented a major critique of the biomedical model, in which disease is accounted for by deviations from norms of measurable biological variables. His position was that the biomedical model leaves no room for social, psychological, and behavioral factors. It also tends to ignore other processes that so far have not been clearly identified or easily evaluated by a simple biological measurement. Anyone who has seen a physician for a health problem knows what this means. The visit usually starts with the taking of weight and vital signs, and then, depending on your complaints and symptoms, it will proceed to other tests to examine the functioning of various organs and systems using methods like blood chemistry and x-rays. Aside from health history, you might be asked about your diet, what vitamins you take, and whether you exercise, but not much about your social and family situation and life stress. If you focus on emotional issues, you may be referred to a psychiatrist or other mental health professional who will consider such issues, usually within a framework of set diagnostic categories. Or you will be given a prescription for a psychoactive drug.

Engel advocated the Biopsychosocial Model as an alternative to the Biomedical Model, not only to achieve integration, but also to consider the role of social-cultural factors, the relationship between the patient and the healthcare system, and the social cultural context of healthcare. He called special attention to the need for a humanistic and

holistic orientation in medicine. Engel regarded the medical model as reductionistic and dualistic, although his critique also implies a dualistic distinction between biological and psychosocial measures. It is convenient to separate mind and body, but they are not really separable.

Engel's critique was a landmark paper, although not the first of its kind. Over the years, the need for integration has led to various movements in research and clinical practice, some affiliated with the mainstream healthcare system, and others in non-medical contexts. For the last hundred years, we have seen a succession of terms for these science-oriented perspectives, such as psychosomatic medicine, social medicine, behavioral medicine, and health psychology.

The publication of Engel's paper in *Science* brought these issues to the fore again, and it encouraged greater efforts at integration, but the message resonated mainly with social and behavioral scientists and clinicians. Its impact on mainstream medicine continues to lag behind, as seen in a recent study by Astin et al.² Astin and colleagues conducted focus groups, composed of medical students, residents, primary care doctors, and medical specialists, on the barriers to integrating mind-body approaches and Western medicine. They identified the following barriers: lack of knowledge of evidence base, inadequate attention to the mind-body area in training, perceived lack of competence to use mind-body methods, inadequate time, lack of economic incentive, the perception that psychosocial factors are beyond their capacity to control, the tendency to perceive conditions as either biological or psychosocial, the perception that patients do not want to address psychosocial/lifestyle issues, and beliefs that the psychosocial domain is not within the purview of physicians. The authors concluded that although psychosocial issues play an important role in health outcomes, the methods to deal with these issues are not given adequate attention in medical training, and physicians feel ill-equipped to deal with them. A "quick-fix" is favored over the more difficult task of examining the role of psychosocial factors.

The same issues serve as barriers to communication and cooperation between the medical establishment and the Yoga community. My hunch is that with the continuing growth of alternative medicine, things will change, if slowly. The establishment of the National Center for Complementary and Alternative Medicine in the National Institutes of Health (NIH) some years ago may help facilitate the further development of Yoga therapy. It is a response to the fact that many, if not most, people are dissatisfied with the health care they are getting—if they are fortunate enough to be covered. Even if they are getting decent care, most people engage in various alternative practices, as shown in the results of

a survey conducted by the Centers of Disease Control and Prevention.³ These practices include prayer, use of natural products, deep breathing exercises, meditation, chiropractic care, Yoga, massage, and diet-based therapies.

Yoga continues to grow rapidly and may be ready for entry into mainstream healthcare as a form of therapy, as biofeedback did years ago, with a wide range of health applications. Newly published papers and research in progress at various centers in the U.S., India, and other countries will eventually provide the body of knowledge to make that happen. The NIH lists 13 research grants now in progress in the U.S. on Yoga processes and meditation, and on evaluations of clinical applications of Yoga to various health problems, including kyphosis, back pain, insomnia, cancer, and HIV.

There are many problems to resolve. Unlike biofeedback, which flowed naturally from established psychology and physiology, the diversity of Yoga schools, methods, and theories is a serious complication. State licensing is a necessity in my opinion, and that means establishing standards of education, training, and clinical experience, as well as procedures for certification by professional Yoga organizations like IAYT. That also means a lot of deliberation and discussion, and the necessity of reaching consensus. Is the Yoga world ready for that?

References

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Direct correspondence to: David Shapiro, PhD, UCLA Department of Psychiatry and Biobehavioral Sciences, Box 95175, Los Angeles, CA, 90095. dshapiro@ucla.edu.