EMPIRICAL FOUNDATIONS OF MINDFULNESS MEDITATION

The Mindfulness Meditation program at Stony Brook is part of an emerging fusion between modern psychology and ancient meditation traditions. While modern science has specialized in rigorous observation and analysis of the natural world (physics, astronomy, neurology, etc.), meditative traditions around the world have, for thousands of years, developed systematic methods to observe and study the subjective world- the "inner space" of the human mind.

Both traditions are empirical in that each employs careful, systematic observation and relies on direct sensory experience to gather knowledge. The union of the "objective empiricism" of modern science with the "subjective empiricism" of meditative introspection is an exciting cultural development and one that has great potential for benefiting the lives of our students.

Context

The past decade has seen an explosion of empirical research on the therapeutic value of mindfulness meditation. This explosion was triggered, in large part, by the success of the Mindfulness Based Stress Reduction (MBSR) program developed by Jon Kabat-Zinn at the University of Massachusetts Medical Center. Since then, mindfulness based programs have been implemented at hundreds of hospitals, clinics, university counseling centers, and business settings throughout the world.

The Program at Stony Brook University

The Mindfulness Meditation Program at SBU is rooted in the evidence-based psychological literature on mindfulness and empirically supported treatment programs such as MBSR. In fact, SBU Mindfulness Program has recently begun a research program of our own which seeks to measure the effectiveness of our meditation groups and further the development of mindfulness as a scientific construct.

Active Learning

We encourage students to actively engage in learning about the empirical foundations of mindfulness meditation by reviewing the growing body of research first hand. Our own library is an excellent place to start: http://sunysb.edu/~library/index.html

Recent Scientific Findings


8-week mindfulness training shown to improve attention-related behavioral responses by enhancing functioning of specific subcomponents of attention.


In the treatment group, positive strategies of coping with stress increased and negative strategies of coping decreased.

*Effects of meditation on frontal (alpha) asymmetry in previously suicidal individuals.* Barnhofer, Thorsten; Duggan, Danielle; Crane, Catherine; Neuroreport, 18(7):709-712, May 7, 2007.

Findings suggest that MBCT can help individuals at high risk for suicidal depression to retain a balanced pattern of baseline emotion-related brain activation.

Study found participants in the MBSR program reported significant declines in stress, negative affect, rumination, state and trait anxiety, and significant increases in positive affect and self-compassion


Participants in a 6-week mindfulness skills training showed significantly improved pain tolerance compared to those trained in guided visual imagery techniques.


Compared with a no-treatment control, brief training in mindfulness meditation or somatic relaxation reduces distress and improves positive mood states. However, mindfulness meditation may be specific in its ability to reduce distractive and ruminative thoughts and behaviors


Only participants who received mindfulness meditation training showed improvements in the ability to disengage their attention from unpleasant stimuli, reduced ratings of feelings of intensity in response to unpleasant stimuli, and signs of reduced physiological arousal. Furthermore, the mindfulness meditation group showed increased scores on self-report measures of mindfulness, psychological well-being, and self-compassion. Together, these findings suggest mindfulness meditation may produce an increase in emotional flexibility, which may in turn account for improvements in well-being.


Results indicate that the promotion of mindfulness in therapists in training could positively influence their patients’ therapeutic courses and treatment results.


Pilot study reports encouraging evidence for mindfulness-based treatments as a means of preventing suicidal behaviors.