

Meditation

By Bob Marsh, LCSW

An earlier article on this website addressed the subject of mindfulness. The present article expands the scope of the earlier one to address meditation more generally. The objective here will not be to provide meditation instruction, but rather to give a brief overview upon which the interested reader may then follow up. A short list of meditation resources will follow the conclusion of the article.

Meditation as a formal practice or set of practices has existed within human cultures since ancient times. The contexts in which these practices developed and flourished were traditionally religious in nature. Western psychology has, from roughly the last quarter of the 20th century to the present, and with impressively increasing vigor and rigor within the last twenty or so years, extracted meditation from its various spiritual traditions to employ it as a mental health tool for managing stress and improving well-being. The forms of meditation briefly referenced here, while not exclusive to Buddhist traditions, are drawn principally from them, not out of disregard for other traditions, but because an abundance of work and literature has emerged from these sources, providing a large and sturdy base from which to draw, and because they are the ones with which the author of this article is most familiar.

The book, *The Mind's Own Physician: A Scientific Dialogue with the Dalai Lama on the Healing Power of Meditation*, edited by Jon Kabat-Zinn, Ph.D., and Richard J. Davidson, Ph.D., documents the proceedings of a multi-day meeting between expert meditators, including the Dalai Lama, and leading scientists whose work, in part, aims at understanding meditation's effect on the brain. Given the number of distinguished participants in this meeting, the book provides a steady stream of valuable perspectives relevant to meditation and mental health. I would like to share a few of them. (All references to follow in this article and associated page numbers are from the book.)

Matthieu Ricard, Buddhist monk, meditator, writer, and former biologist, says: "One of the first questions we ask ourselves is why bother to meditate, and if we do, on what, and how? The very nature of meditation is mental training, a tool of transformation over the long term of our life." (p.25).

Ajahn Amaro, abbot of Amaravati Buddhist Monastery in England, focuses the discussion as follows: "Sometimes the word 'meditation' can be loaded with all kinds of preconceptions....But from the classical Buddhist perspective, meditation isn't an attempt to have any particularly special experience or strange vision or acquire special abilities. It's more like working with a couple of innate capacities that the mind possesses: the ability to focus the attention and the capacity to investigate, explore, and contemplate the nature of experience itself. These two capacities are natural to us, and meditation develops them, like cultivating a seed and giving it the conditions to grow and flourish. That is the purpose and the nature of meditation." (p. 31).

Whether our state of mind is, at any given time, happy, unhappy, or indifferent, we may have a tendency to think of it as highly dependent upon external conditions. One of the functions of meditation is to regulate emotional states from within, not entirely irrespective of external conditions, but with an inner locus of control. Richard Davidson, professor of psychology and psychiatry at University of Wisconsin-Madison, emphasizes the idea of meditation as a *training* of the mind to function more harmoniously, while decreasing the power of afflictive emotions to have their way with us. He says, "...humans are endowed with the capacity to voluntarily regulate their emotions, and there is evidence to suggest that this competence can be learned. I emphasize the importance of mental training, which involves thinking about happiness and compassion not just as traits but as skills." (p.48).

Jon Kabat-Zinn, professor of medicine emeritus at the University of Massachusetts Medical School and founder of mindfulness-based stress reduction, makes the point that: "...Meditation is not merely a relaxation technique. It is not a technique at all, but a way of being and of seeing, resting on a foundation of deep inquiry into the nature of self, and offering the potential for liberation from the small-mindedness of self-preoccupation." (p. 43).

Nevertheless, to the extent that meditation as a formal practice does include technique, it is not limited to a single one as is sometimes assumed. While it is beyond the scope of this article to explore meditation techniques, per se, I will mention some of the most common forms, followed by their Pali and Sanskrit terms in the Buddhist traditions with which they are associated, as it is not uncommon to hear these terms bandied about in meditation instruction and discussion. They are:

- Concentration (Samatha, Pali; Shamata, Skt.)
- Analysis, or Insight, or "Special Seeing" (Vipassana, Pali; Vipashyana, Skt.) (Mindfulness meditation is included within this category.)
- Loving Kindness (Metta, Pali; Maître, Skt.)
- Open Presence (Also known as shikantaza in Zen; choiceless awareness in Theravada; dzogchen in Vajrayana).
- Visualization (as practiced, for example, in Vajrayana.) (Arguably a form of concentration and not a distinct category.)

These different branches of the tree of meditation are just that, limbs of one body. It is useful to remember that just as different exercises and practices in the study of music, e.g., scales, arpeggios, etudes, ear training, repertoire, etc., are all undertaken to serve the ultimate end of making music, so the aforementioned are to be understood not as separate, unrelated techniques, but as different aspects of a unified practice undertaken toward the end of making the mind more smooth, less brittle; more inclined to well-being, less subject to being dominated by negative emotions. Meditation practice over time improves one's capacity for tolerating adversity without melting down. Again, Ajahn Amaro: "Even when we have a painful experience, whether physical or emotional, a headache or some great loss, the heart and mind can still be completely at peace with it. It can be seen as absolutely okay, with no struggle against it, no resistance or resentment. There is no suffering or dissatisfaction created around it." (p. 31).

In our age of pharmacotherapy, researchers are constantly working to understand how different medications interact with the brain and affect neural functioning. Meditation researchers do the same, trying to understand how meditation works at the neurological level through state of the art brain imaging technology. Professor Davidson is a leading researcher in this area. He says the following: "In our work with long-term Buddhist meditation practitioners, we found that meditation is associated with marked increases in the brain's electrical signs of activation expressed in the fast-frequency oscillation known as gamma, particularly in the prefrontal cortex, which is important for aspects of regulating emotion....We also see an increased synchrony between the prefrontal cortex and other regions of the brain..." (p.51).

Professor Wolf Singer of the Max Planck Institute for Brain Research and his colleagues have concluded that the brain, interestingly and perhaps counter-intuitively, lacks a "convergence center, a singular place where all the information comes together for a coherent interpretation of the world." (p. 67). The question therefore arises, how then does the brain unify complex and distributed mental processes into coherent perceptions? Singer and his colleagues believe it does so through "synchronization of oscillatory activity" (p.66) over various frequency ranges in a manner similar to the way in which a radio tunes into a transmitter. "The sender and the receiver are in the same frequency, so they can resonate with a hand shake, and then transmission of information becomes very selective." (p. 70). While this is a fascinating finding in itself, the relevance to meditation lies in the fact that attentive states are characterized by high synchronization of oscillatory activity while inattentive states by low synchronization, tending toward randomness. "There is evidence that states of meditation are associated with the synchronization of oscillatory activity in a very high-frequency range in the cerebral cortex, the so-called gamma frequencies of around forty hertz." (P. 66). That meditative states were found to generate uniquely identifiable neurological signatures was not necessarily expected. Singer says, "It came as a great surprise to us that there were such clear electrographic correlates of particular meditative states." (p.93). He points out that meditation is not the only means by which synchronization of oscillation in the gamma range is effected, that such is characteristic of highly attentive states in general. However, he maintains that research shows meditation to be particularly effective in accessing and maintaining these states to a marked degree and that, as such, it represents a powerful tool for promoting beneficial neural

synchronization. Significantly, the research suggests that the brains of schizophrenics, for example, suffer from disturbances and deficits in the ability to generate and regulate this synchronous oscillatory activity. Singer concludes, "if it is true that synchronization of these high-frequency rhythms serves to coordinate the many distributed processes in the brain, then a method of mental training like meditation that enhances synchronization should have profound effects on brain functions....developing more synchrony might be highly effective in generating states of consciousness that differ from those we normally have when we act in a disassociated way in our environment." (p.76).

The following meditation resources, it is hoped, may be found useful by those interested in starting a meditation practice, or simply in reading further.

Jack Kornfield books and audio CDs

Meditation for Beginners

Guided Meditations for Difficult Times

<http://www.jackkornfield.com/audiosets/>

Jon Kabat-Zinn books and audio CDs

<http://www.mindfulnesscds.com/books.html>

Richard Davidson's Center for Investigating Healthy Minds
at The University of Wisconsin-Madison

<http://www.investigatinghealthyminds.org/>

Mindfulness Based Stress Reduction Class

<http://www.rush.edu/rumc/page-R12662.html>

Sam Harris on meditation and how to do it

http://www.huffingtonpost.com/sam-harris/how-to-meditate_b_861295.html

Vipassana Resources

<http://www.dharma.org/>

<http://www.vipassana.com/>

<http://www.vipassanadhura.com/whatis.htm>

Free Guided Meditations

<http://marc.ucla.edu/body.cfm?id=22&oTopID=22>