

Symphony of the Mind

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In seeing the dance of energies of the brain as represented by the multi-faceted light and sound display on the computer screen, one cannot help thinking of a full orchestral rendition of a musical composition. Sometimes it has the appearance of an energetic Wagnerian opera. At other times, it is reminiscent of a calm Brahms's lullaby. These energies, usually referred to as the electroencephalograph (EEG), have significance in reflecting the physiological health of the brain. This neurophysiological profile is intimately associated with psychological functions such as attention, thinking abilities, learning capacity, sleep patterns, mood, energy levels and overall health. When all of the members of the orchestra are playing in tune, that is the brain is balanced in its energies, normal healthy functioning is expected. However, when one or more of the musicians is playing out of tune, playing too slow, too fast, or out of tune with the rest of the orchestra, the integrity of the symphony is sacrificed. To the listener, the orchestra has moved from the realm of music to that of noise.

In a similar fashion, when parts of the brain are not working in concert with the other areas, normal functioning is disrupted. To the person experiencing these kinds of brain functioning disturbances or fragmentations, a variety of problems are possible, ranging from ADD, learning disabilities, anxiety, depression, thinking deficits, sleep disorders, chronic fatigue, and physical pain, to name a few.

In viewing the EEG patterns from different areas of the brain, as measured by small sensors which sit on the surface of the head, dysfunctional patterns become apparent. Remediation of the problem next takes place with the use of individualized programming of computer software (Neurofeedback) designed to assist the client in modifying the unhealthy brainwave patterns to ones associated with healthy functioning. The treatment usually takes the form of the client learning to play a video game by changing his or her brainwaves to control the outcome of the game. After sufficient Neurofeedback progress is made with the therapist in the clinic, the client may begin to use the new, more effective brain-functioning skills in daily life. The orchestra may once again play its symphony as a harmonious unit!

Neurofeedback has a number of important advantages over pharmaceutical intervention. In the case of ADD, which is often associated with learning disabilities and vice versa, Neurofeedback results tend to hold. That is, once the problem is fixed, it's fixed for good. A problem with psychostimulant treatment is that with discontinuation of the drugs, the client is back to square one. Another more obvious advantage of Neurofeedback is that it has none of the many negative side effects associated with psychostimulants.

In choosing a Neurotherapist, several considerations are important. First, it is important to work with a practitioner with a firm understanding of learning psychology, brain physiology, and an extensive background in working within educational settings with special learning needs populations. Additionally, the practitioner should have a broad clinical training and experience in treating psychological concerns. Finally, the practitioner should have extensive training in Neurofeedback from experts in the field.

Feel free to thoroughly question prospective treatment providers, and remember, just owning Neurofeedback equipment, does not a Neurotherapist make!