Alpha-Theta Neurofeedback Training

The Alpha-Theta Training is a form of neurofeedback where you train alpha (8–12 Hz) and theta (4–8 Hz) brainwaves, reinforcing alpha and theta while inhibiting faster beta brainwave activity. These two frequencies are best known for their relaxation and creative qualities. In Alpha-Theta training the sensors are traditionally placed on the occipital lobe, but nowadays they are mainly placed on the upper back part of the scalp. With eyes closed, you listen to a reward for the measured alpha and theta frequencies your brain produces. You actually train the ability to shape the brainwaves, to get in and out of different mental states. The skills can be taught step-by-step with the assistance of computer-based tools with which the learner navigates toward inner states. This triggers a decrease in the level of stress-related endorphins in the bloodstream. It's very calming and soothing for most people.

Originally this neurofeedback training was designed to induce hypnogogia, a state historically associated with creativity. Another outcome was reduced depression and anxiety in alcoholism and resolved post traumatic stress syndrome (PTSD). But the positive effects are even larger: meditative concentration, reduced sympathetic autonomic activation, improved focussed and sustained attention, better working memory, and having implications for synaptic plasticity. Alpha-Theta Neurofeedback Training affects various neuroanatomical circuitries, involving arousal system, limbic circuits, affective/motivational and cognitive functions. How its effects are mediated is not yet clear.

Alpha-Theta-training is also used in peak performance where you alter your state of mind at will in order to most effectively meet any challenges before you. For centuries this type of high-performance mind was laboriously cultivated over a lifetime of experience with various forms of meditation, mystical practice and martial art. Western society, however, prefers rapid development as opposed to a lifetime of disciplined practice. It is in this milieu that creative minds decided to apply neurofeedback (EEG biofeedback) – especially Alpha-Theta Neurofeedback Training - to the realm of performance enhancement training or stress management as a means of optimizing personal growth. This serves the creative professional whether you are a musician, athlete, executive, scientist or artist.

In a study at the London's Royal College of Music a group received Alpha-Theta Neurofeedback sessions and learned to train and modulate their brain activity. Compared to other techniques (as yoga, autogenetic training) the students who trained their brain with alpha-theta waves for only five weeks were judged to have improved the most in interpretation, creativity and other performance parameters.

Other studies showed the Alpha-Theta Neurofeedback Training resulting in significant increases in warmth, abstract-thinking, stability, conscientiousness, boldness, imaginativeness and self-control. But benefits go even further: improved mental health as inner calm and awareness, ability to tolerate upsetting thoughts, fewer binge eating episodes, producing more antibodies which improves the immune system.

Now it is common to use Alpha-Theta Neurofeedback Training as an efficient treatment not only for addiction disorders, anxiety, meditation enhancement and stress reduction, but also for peak performance.