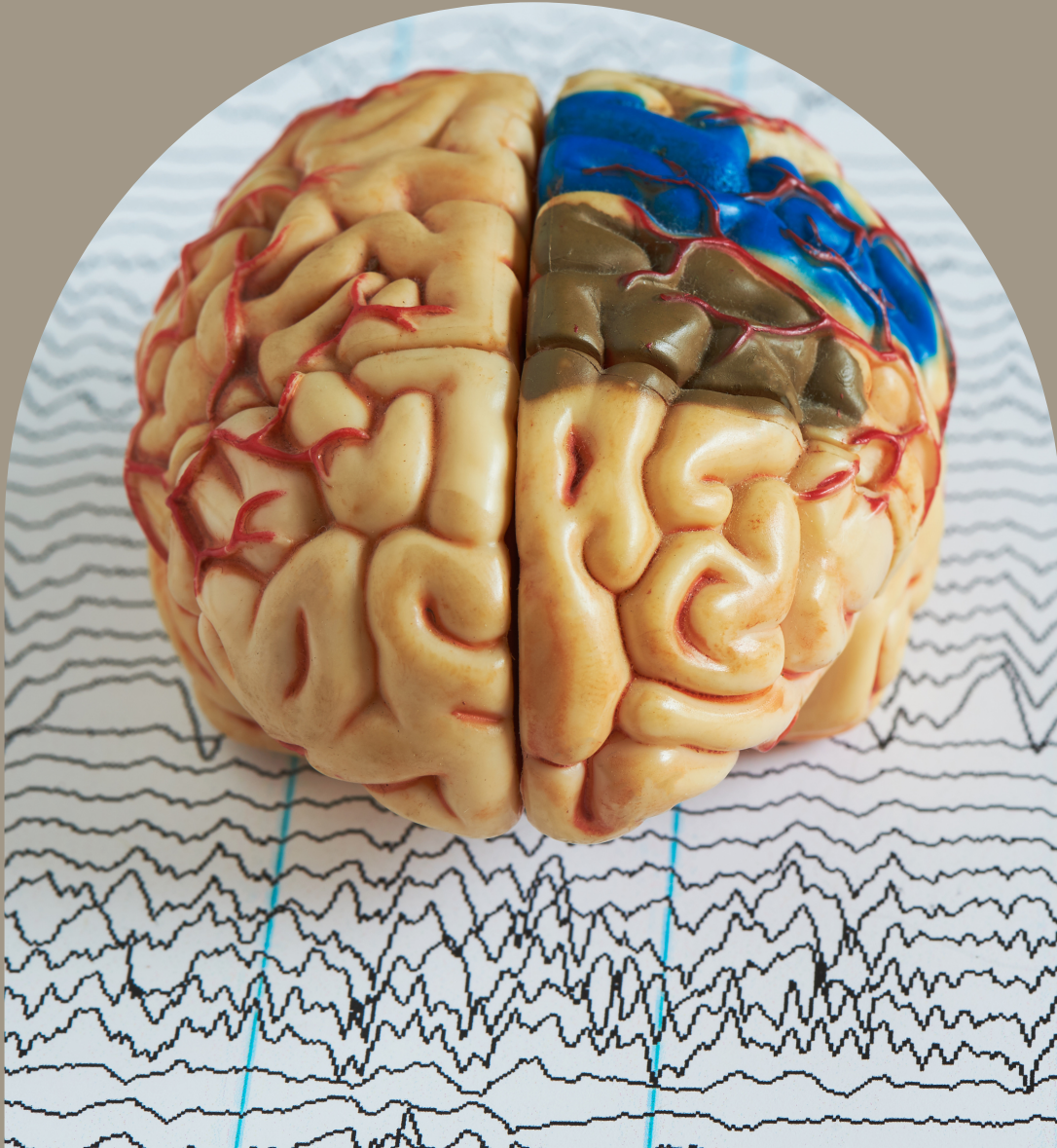


Aristotle's Psychological and Biofeedback Services

Neurofeedback



What is Neurofeedback

How does it work?

How can it help?

Brain Wave Frequencies

WHAT IS NEUROFEEDBACK?

1

Neurofeedback is a non-invasive method of direct brain functioning training. It is also a type of biofeedback and is therefore, also called **EEG Biofeedback**

2

It uses the **electrodes** (which act like tiny microphones) placed on the client's scalp to record and amplify the EEG, or brainwaves and control auditory, visual, and/or tactile feedback which allows learning to take place

3

This operant learning **initiates self-regulation** and enhances relaxation, both necessary components of **good brain function**

How does Neurofeedback work?



In another way, neurofeedback targets the underlying dysregulation in brain activity that can exacerbate and sometimes cause clinical symptoms. This influence may also encourage neurophysiological resilience with the induction of brain flexibility, relaxation, and a steadier central nervous system. For example, if one's state of neuroanatomy and physiological health is over-stimulated or under aroused, mental illnesses, with various symptoms may manifest behaviorally, psychologically, emotionally, and/or physically. Such disorders as anxiety and depression have a base in neurophysiology which consequently can be targeted for training. A. brain with greater flexibility has the capacity to more healthily adapt to challenging life situations.

WHAT CAN NEUROFEEDBACK HELP?

Neurofeedback is training in self-regulation. Good self-regulation is necessary for optimal brain function. Self-regulation training enhances the function of the central nervous system and thereby improves mental performance emotional control and physiological stability.

With Neurofeedback we target the bioelectrical functioning of the brain, which is actually a more important issue of the "chemical imbalance" that is often talked about. We are concerned with the brain's internal regulatory networks, and we training the brain's function dysregulation. Simply by detecting the brain towards enhanced stability and improved function.

In other respects, Neurofeedback is somewhat like putting the brain on a stair stepper to exercise certain regulatory functions continuously. This is applicable to a wide variety of functional deficits

BRAIN WAVE FREQUENCIES

Alpha

between 7.5 and 13Hz. Usually observed in the **posterior** regions of the head on each side brought out by closing the eyes by relaxation, and estimated by eye-opening or by concentration

Beta

14Hz. and greater usually most evident frontally may be absent or reduced in areas of damage. Increases beta response when trying to focus in necessary

Theta

3.5 to 7.5Hz. Classes as "slow" activity. It is abnormal in awake adults and predominant in children with attention-deficit and LD.

Delta

3Hz . or below. Tends to be the highest amplitude. Increased delta response when attending to a task is a severe abnormality. This brainwave diminishes when high focus and increased attention is required

ABOUT

At Aristotle's Psychological and Biofeedback Services our mission is to always provide the highest quality, professional mental health services. Our professional staff is compassionate, well trained, and experienced, and maintains the highest standards of ethical practice and client confidentiality. Aristotle's Psychological & Biofeedback Services is committed to providing service without regard to race, age, religion, sex, physical conditions, national origin, handicap, developmental disability, or sexual orientation. We strongly believe in the importance of a good working relationship with our clients and do our best to meet their needs, using up to date skills, research knowledge, and professional techniques of behavioral assessment and intervention for productive change. Aristotle's Psychological & Biofeedback Services will make every effort to improve the quality of life of every client we encounter. We take pleasure in dedicating our services especially to the children and caring for their psychological health.

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