

How Do Brain Maps and Neurofeedback Work?

7 Degrees Unlimited

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Introduction:

Quantitative Electroencephalogram (QEEG) is a non-invasive tool that measures and analyzes brain wave activity by recording the electrical activity of the brain. The results obtained from a QEEG are used to create a map of the brain and identify opportunities for optimization in the brainwaves. Neurofeedback, on the other hand, is a form of biofeedback that utilizes the data obtained from a QEEG to train the brain to regulate its own activity. This whitepaper will explore the workings of QEEG and Neurofeedback, their benefits, and the types of opportunities that exist for the business world.

What is QEEG?

QEEG is a specialized form of electroencephalogram (EEG) that uses advanced signal processing techniques to analyze and map the brainwaves. QEEG uses sensors placed on the scalp to measure the electrical activity of the brain. The electrical activity is then analyzed using advanced software to produce a map of the brainwaves. The map can be used to identify opportunities in the brainwaves that could help improve an individual's performance at work as well as their overall well-being.

QEEG is a non-invasive and painless process that takes approximately 30 minutes to complete. The results obtained from a QEEG can be used to analyze and identify opportunities for brainwave retraining to optimize work performance and overall wellness.

What is Neurofeedback?

Neurofeedback is a form of biofeedback that utilizes the data obtained from a QEEG to train the brain to regulate its own activity. Neurofeedback involves the use of sensors placed on the scalp to measure the electrical activity of the brain.

The data obtained from the QEEG is used to create a customized training program (protocols) for the patient. The patient is then hooked up to a computer that provides feedback on their brainwaves. The feedback is in the form of sounds and images that are controlled by the patient's brainwaves. The patient's brain learns to regulate their brainwaves by controlling the feedback provided by the computer.

Neurofeedback is a non-invasive and painless procedure that takes approximately 30 minutes to complete. The number of sessions required to see results varies depending on the opportunities being treated. In the business world, neurofeedback has been shown to be effective in improving focus, strategic thinking, productivity, collaboration, as well as many other benefits.

How does Neurofeedback work?

Neurofeedback works by training the brain to regulate its own activity. The patient is hooked up to a computer that provides feedback on their brainwaves. The feedback is in the form of sounds and images games that are controlled by the patient's brainwaves. The patient's brainwaves are retrained to the specific opportunity being focused upon.

Neurofeedback is a form of operant conditioning. Operant conditioning is a type of learning in which behavior is strengthened by the consequences that follow it. In the case of neurofeedback, the patient's brainwaves are reinforced when they are in the desired state. The feedback provided by the computer reinforces the desired brainwave state, which trains the brain to regulate its own activity.

Benefits of QEEG and Neurofeedback:

QEEG and Neurofeedback have numerous benefits. They are data driven, non-invasive, and painless procedures that can be used to diagnose opportunities to improve an individual's performance and overall well-being.

QEEG and Neurofeedback are drug-free treatments that have no side effects. They are also personalized, data driven treatments that are customized to the needs of each patient. QEEG and Neurofeedback have been shown to be effective in driving peak performance, optimizing behavioral opportunities, and improving individual's overall well-being.