The Benefits of Neurofeedback

Since brainwaves indicate the state a person is at, being able to alter and control your brain activities means being able to control and reproduce a particular state of mind and improve a desired performance at a given time.

Researches have shown that neurofeedback helps address various mental, emotional, and physical problems caused by brain dysregulation. It has been shown that neurofeedback:

- Improves sleep quality
- Improves attention span and focus
- Improves performance and well-being
- Increases motivation
- Improves patience
- Reduces anxiety
- Reduces anger and aggression
- Reduces temper tantrums
- · Reduces hyperactivity and impulsivity



Who benefits from Neurofeedback?

Since neurofeedback helps regulate and control one's brain activities, **ANYONE** hoping to improve self-regulation of brain activities will benefit from neurofeedback. In particularly, neurofeedback have been shown to improved symptoms of people with:

- Learning Difficulties (LD)
- Attention Deficit Hyperactive Disorder (ADHD)
- Attention Deficit Disorder (ADD)
- Oppositional Defiant Disorder (ODD)
- Obsessive Compulsive Disorder (OCD)
- Autism Spectrum Disorder (ASD)
- Sleep Disorder
- Anxiety Disorder
- Stress Disorder















NEUROFEEDBACK HAS BEEN RECOMMENDED BY **THE AMERICAN ACADEMY OF PEDIATRICS** AS BEST SUPPORT INTERVENTION FOR ADHD & GOOD SUPPORT INTERVENTION FOR TRAINING MEMORY'.

PROFESSIONAL SOCIETIES INVOLVED IN THE RESEARCH OF NEUROFEEDBACK SUCH AS

- ISNR (INTERNATIONAL SOCIETY FOR NEUROFEEDBACK & RESEARCH)
- AAPB (ASSOCIATION FOR APPLIED PSYCHOPHYSIOLOGY & BIOFEEDBACK)
- BCIA (BIOEEDBACK CERTIFICATION INTERNATIONAL ALLIANCE)
- CPA (THE CANADIAN PSYCHOLOGICAL ASSOCIATION & EEG BIOFEEDBACK)
- ANSA (APPLIED NEUROSCIENCE SOCIATY OF AUSTRALASIA)
- WABN (WESTERN ASSOCIATION FOR BIOFEEDBACK & NEUROSCIENCE)
- APA (AMERICAN PSYCHOLOGICAL ASSOCIATION)
- * HTTP://BIO-MEDICAL.COM/MEDIA/BLOG/EVIDENCE-BASED-CHILD -AND-ADOLESCENT-PSYCHOSOCIAL-INTERVENTIONS.PDF

Are there Side Effects from Neurofeedback?

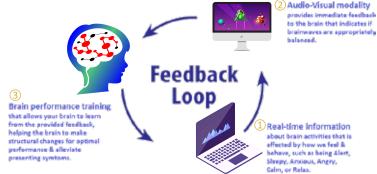
Much like measuring electrocardiogram (ECG) with a machine or listening to your heart beat with a stethoscope, the electrodes used in neurofeedback measures your brain activities in a NON INVASIVE, NO RADIOACTIVE, NO PAIN, and NON ELECTRICAL way.

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What is Neurofeedback?

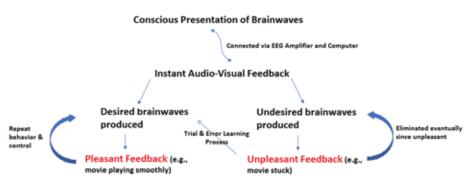
Neurofeedback or EEG (electroencephalogram) Biofeedback is a self-regulation method that allows an individual to pay conscious attention to his or her own brainwaves, and to make conscious changes to the brain activities. ① Similar to smartphone applications that tells us how many calories we have burned; smart watches that tells us our heartbeat rate; Neurofeedback tells us about our brain activities and allows us to consciously learn to control these activities. ②



By repeating this learning pattern, an individual will be able to control his or her brain activity for better well-being and performance. (3)

How does Neurofeedback work?

Automation Learning in Neurofeedback



The learning process involved presenting the individual with his or her own brainwaves that are detected via electrodes and an EEG amplifier. The brain activities are also connected with an instant auditory and/or visual feedback. During a typical session, when desired brainwaves are produced by the individual, pleasant feedback is provided and vice versa. Through brainwaves regulation practice, the person will be able to maintain a more balanced brain state that enhances performance or reduces unwanted behavior/ symptom.

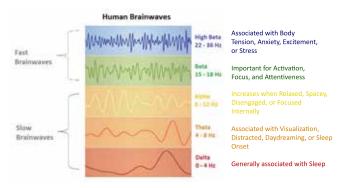
Similar to a child being more likely to repeat a behavior after being **reinforced** or **praised** for performing that behavior; neurofeedback training allows the repetition of desired brainwaves which results in positive well-being such as being **FOCUSED& MOTIVATED**; **CALM & RELAXED**; have **BETTER SLEEP QUALITY**; and **BETTER TEMPERAMENTS**.

What are brainwaves/ brain activities and how are they measured?



Our brain consists of billions of nerve cells, known as neurons. To get our brain working, these neurons have to communicate with each other, via electricity. When the millions of neurons communicate at the same time, they generate electrical activities, also known as brainwaves.

Our brainwaves come in fast and slow waves, and changes according to how we feel and what we do. When the brain is dominated by slow brainwaves such as Delta or Theta, we feel tired, lazy, or dreamy. When the brain is dominated by fast brainwaves such as Beta or High Beta, we feel alert, anxious, or excited.





Electrodes

Brainwaves can be detected via electrodes. Much like detecting heartbeat via a finger clip, these electrodes are placed on the scalp while connected to an EEG Amplifier that helps to detect and amplify the sensitive electrical signals of our brain.