familyservices WINDSOR-ESSEX COUNSELLING & ADVOCACY CENTRE

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Neurofeedback at Family Services Windor-Essex
Frequently Asked Questions (FAQs)

The Science

1. What is Neurofeedback (NFB)?

Neurofeedback is a tool that can use your brain's natural electrical activity to help it function more effectively. Your brainwaves are observed in action and your brain is rewarded for changing its own activity to more desirable patterns. Like many of your organs, your brain is "self-regulating" and neurofeedback can help train your brain to better self-regulate to improve your brain function. Your improved brain function can result in a reduction in your symptoms which in turn leads to improved health and well-being.

2. How does Neurofeedback work?

Trained therapists use sensors to monitor your brainwaves and a specialized computer program to send feedback to you through a series of 'tones' when your brainwaves are functioning within an optimal range. The stimuli (tones) only occur when your brainwaves are functioning within that optimal range. This acts as a reward for your brain. When your brainwaves fire at a rate that is not optimal, you will not hear a tone. This tells your brain that something is out of balance and encourages it to "figure out" how to return to an optimal range to be rewarded again by the stimuli.

Over the course of a neurofeedback training program, your brain learns from this feedback through practice and repetition. Due to your brain's "neuroplasticity" (ability to create new pathways), this can promote lasting functional changes within your brain activity. Your brain can learn to consistently operate within an optimal range, even outside of your training sessions, which in turns helps to alleviate your accompanying symptoms.

3. Why does Neurofeedback work?

Your brain is amazingly adaptable, also known as "neuroplasticity". It is capable of making adjustments to improve its own performance if given cues about what to change. When the brain is regulating itself well and is alert and attentive, brainwaves show particular patterns.
Through neurofeedback, we challenge your brain to maintain this new optimal state of functioning. Gradually, after 20 or so training sessions, your brain learns to retain this skill and remain at optimal state for longer periods of time.

Outcomes and Results

4. What results should I expect?

Everyone's brain (and the brainwaves they produce) are unique, therefore the results will vary from person to person. That said, someone whose brain is consistently operating in an optimal state usually means they are:

- more present and focused
- calmer and more patient
- less reactive or irritable
- better able to handle arising issues
- less symptomatic

For PTSD, individuals notice a decrease in their anxiety symptoms, an improvement in their sense of relaxation and positive outcomes in their relationships, both at work and at home.

5. How long do the effects last?

The effects of neurofeedback are cumulative. After the first few sessions, the improvements you experience may wear off in a day or two. After more training, the changes will last longer. Once the training is complete and your brain has integrated enhanced self-regulation, the benefits should be robust. Setbacks may occur following severe stressors, such as major illness, accidents, surgery or major hormonal shifts. If this happens, you may find it helpful to return for booster sessions.

6. Are there any side effects of Neurofeedback training?

Neurofeedback is a safe and non-invasive method of treatment/therapy. There are no electric currents being applied to the brain whatsoever. EEG sensors simply record and display a picture of your brain activity (waves) as it happens, and this information is utilized to begin gradually strengthening your brain to its optimal state.

7. Does Neurofeedback work for everyone?

While most people will respond positively to NFB, there are certain individuals who may not be benefit from it (i.e. their brainwaves do not respond effectively to the training).
Candidates for NFB will be required to have a formal diagnosis of PTSD (DSM V) from their referring physician or psychiatrist. It will be determined at the initial assessment whether an individual is a good candidate for Neurofeedback.

NFB at FSWE

8. What is the Neurofeedback process?

Individuals receiving neurofeedback at Family Services Windsor-Essex generally go through the following process:

Step 1: Initial Assessment including Clinical Interview(s) and a Brain-Mapping Session
Step 2: Brain Training Sessions (1-2 sessions/week for approx. 20-25 sessions)
Step 3: Re-mapping Session, review and personalized plan for post-treatment success

Candidates must have a diagnosis of Post-Traumatic Stress Disorder (PTSD) from their Primary Care Physician, Psychiatrist or Psychologist.

9. What is a Brain Map?

A brain map is a type of scan that measures your brainwaves to help us identify which brainwaves could be changed to achieve better brain function (as they may be causing you trouble). The scan is painless, stress-free and takes about a half hour to complete. We scan your brain using a snug-fitting cap that fits over your head that has built-in sensors that will listen to, monitor and measure the electric activity of your brain activity (brainwaves). In NFB, we use this brain map to develop your personalized training program.

10. Am I a good candidate for Neurofeedback?

Brain training is a matter of intention, attitude and commitment. Good candidates for NFB have the following in common:

- Are ready and interested in trying neurofeedback
- Can commit to regular sessions for a given period of time
- Are willing to provide feedback to their NFB therapist via progress tracking system
- Continue to follow their doctor's instructions, including taking prescribed medicines

Good candidates also:

- Are committed to general health and well-being, such as good sleeping habits, balanced diet, exercise, etc.
- Are not taking non-prescription drugs, illicit drugs, or abusing alcohol, etc.
- Are able to abstain from caffeine, alcohol, non-prescribed drugs 24 hours prior to their brain training session
- Do not have untreated thyroid problems

11. How long do the Neurofeedback Brain Training Sessions take?

Each session can range from 45 to 60 minutes. This will include time to place and adjust a few sensors on your brain (as determined by your brain map); then a maximum of 30 minutes for "brain training" where you relax and gently respond to the feedback (beeps). This will be followed by a discussion with the therapist to monitor how things are progressing.

12. What are the fees for treatment and coverage options?

Similar to the regular psychotherapy session, there is a sliding scale available for neurofeedback treatment (depending on the type of neurofeedback required or chosen).
The full fee for a neurofeedback session is $75. You may be covered for neurofeedback sessions through your workplace benefit plan, an EAP/EFAP plan and/or other insurance plans.

13. What are Family Services Windsor-Essex Neurofeedback Therapist qualifications?

Family Services Windsor-Essex NFB therapists are certified by the *Biofeedback Certification International Alliance* (https://certify.bcia.org/4dcgi/resctr/search.html). BCIA Board-certified practitioners must:

- hold an appropriate degree in a BCIA-approved clinical health care field
- meet strict didactic education and clinical training requirements
- pass a written certification exam
- adhere to the BCIA Professional Standards and Ethical Conduct which states that when working with a medical or psychological disorder, unlicensed providers must work under the supervision of an appropriately-credentialed provider.

To get the most out of neurofeedback, it is important to ensure you are being guided by a competent, accredited professional through a reputable agency.

Neurofeedback and Post-Traumatic Stress Disorder (PTSD)

14. What is the history of Neurofeedback and Biofeedback

Neurofeedback (or EEG biofeedback) is simply biofeedback developed for the brain that has been in practice for more than 40 years. Neurofeedback is a very safe, painless and non-invasive process where positive changes are encouraged and developed through a personalized training program.

All types of biofeedback enable an individual to learn how to change their own physiological activity to improve their health and well-being. Biofeedback programs measure physiological activities such as brainwaves, heart function, breathing, muscle activity and skin temperature. These programs rapidly and accurately “feedback” information to the user. The presentation of this "feedback" information — often in conjunction with changes in thinking, emotions, and behavior — encourages the desired physiological changes. With practice, these changes can be sustained without the continued use of the programs.