

Client Acknowledgment Form

What is a QEEG, Quantitative Electroencephalography:

QEEG is an assessment measuring EEG brain wave activity which is detectable at the surface of the scalp. This procedure involves placing a cap embedded with sensors on the head. Electrode gel is filled into each sensor in order to create a connection between the scalp and each sensor. Once a quality signal is established, EEG data is then collected over a period of a few minutes. Preparation and assessment procedure takes approximately 1 hour.

What Types of Neurofeedback are Offered at EVND?

Neurofeedback is a form of Biofeedback. There are many applications of neurofeedback training, many of which we employ at EVND. They include: MCN (Microcurrent Neurofeedback), Traditional Neurofeedback employing visual and/or auditory feedback utilizing 1 - 4 channels and Alpha/Theta Training. Sessions last approximately 1 hour.

What are Adjuncts to Neurofeedback Training?

Adjuncts are training procedures that may be used before, during and/or at home between sessions. These include:

tDCS, tACS, tRNS: **t** = transcranial, **DCS** = Direct Current Stimulation,

ACS = Alternating Current Stimulation, **RNS** = Random Noise Stimulation

tDCS, tACS, tRNS employ tiny “doses” of very specific frequencies applied to the brain in sequence. Specific frequencies are determined by QEEG results and symptom presentation.

pEMF = Pulsed Electromagnetic Field. pEMF is a microcurrent which has been converted to a pulsed electromagnetic field. With **pEMF**, you can expect reduced inflammation and muscle tension, improve cellular function, nutrient absorption and circulation. Balancing of the endocrine system, assisting in detoxification, and stimulating tissue regeneration.

AVE = Audio Visual Entrainment. Integrates principles of audio and visual stimulation to safely and effectively guide the user into desired states of consciousness and maximum brain functioning.

HRV = Heart Rate Variability training. HRV is the variance in time between the beats of your heart. HRV is linked to your ANS and is the balance between the parasympathetic and sympathetic nervous systems. Learning to modulate these systems through breathwork and visualizations increases your ability to handle stress, lower blood pressure and clear your mind.

Photobiomodulation = Form of light therapy that utilizes non-ionizing light sources, including lasers, light emitting diodes, and/or broadband light, in the visible (400 – 700 nm) and near-infrared (700 – 1100 nm) electromagnetic spectrum.

Benefits of Neurofeedback and the Adjuncts listed above

Neurofeedback = Benefits are usually experienced as improved focus, enhanced concentration, increased energy, improved quality of sleep, decreased moodiness, diminished agitation, and reduction in anxiety as well as reduction in other physical symptoms typically related to stress such as headache.

tDCS, tACS, tRNS = Improves sleep quality, enhances learning and attentiveness, relieves symptoms of depression, chronic pain, and cravings.

pEMF = pEMF, you can expect reduced inflammation and muscle tension, improve cellular function, nutrient absorption and circulation. Balancing of the endocrine system, assisting in detoxification, and stimulating tissue regeneration.

AVE = Boosts your mood, improves sleep patterns, sharpens your mind and increases your level of relaxation.

HRV = promotes awareness of how your mindset and behavior affects your nervous system and bodily functions. HRV Training can reduce anxiety, improve stress management and sleep quality.

Photobiomodulation = Inflammation reduction, wound healing, tissue growth and repair, ATP production, pain relief, reduced anxiety and depression,

Risks/Side Effects

Risks/Side Effects of Neurofeedback

Training with neurofeedback can occasionally result in adverse responses that temporarily increase symptoms. They are typically associated with relaxation and calming of the nervous system and can present as fatigue, headaches, lightheadedness, dizziness, irritability, moodiness, weeping, insomnia, agitation, and difficulties with focus and anxiety. Such responses are temporary and resolve themselves anywhere from 30 min to 12-24 hours.

Risks/Side Effects with tDCS,tACS and tRNS

Slight irritation can occur at the site of lead application. Irritation such as tingling, slight stinging sensation, itchiness, and on rare occasions redness and/or blistering. During application of stimulus, some may experience dizziness, nausea, overwhelming emotional reactions which may include euphoria and or weeping. Phosphene effect can also present during application of stimulus. Phosphene effect is a ring or spot of light in the peripheral visual fields which is produced by direct stimulation of the visual system other than by light and usually only lasts while the stimulation is being applied. Side effects can last a few minutes to 12-24 hours after a session.

Risks/Side Effects with AVE:

Audio Visual Entrainment can cause the release of repressed memories. If traumatic memories surface during or after a session, immediately report this to your clinician for guidance in seeking appropriate support.

In rare instances, disorientation, nausea, vertigo, euphoria, “deja-vu” or a sense of mental instability can occur. Slowly lowering the intensity of light and sound and/or stopping the session is recommended as these symptoms will fade after a few minutes. Mild headache can occur if dehydrated when starting a session and/or abruptly stopping the session before it can go through the preprogrammed fading out process. Drinking a glass of water before starting a session can prevent this.

Lowered blood pressure can occur due to extreme relaxation. Rise very slowly after a session.

Risks/Side Effects Associated with Frequency Specific Microcurrent (FSM)or pEMF

There have been no permanent adverse effects attributable to the use of the microcurrent units or to the use of the frequencies. Sometimes when muscles are successfully treated, range of motion increases so much that joints and nerves can become temporarily painful until range of

motion goes back down. After muscles are treated there is sometimes a detoxification reaction that occurs 90 minutes after treatment similar to that seen with massage therapy. This can be lessened by having a drink of water and taking an antioxidant combination. At most, a slight buzzing sensation can be felt by some, but most don't feel anything at all. The side effects of FSM/pEMF treatment are usually very rare and mild, and may include nausea (feeling sick to the stomach) and drowsiness.

Risks/Side Effects Associated with HRV

None. Slight dizziness or tingling in the lips. This may occur only if the participant is breathing too fast and shallow. Instruction will be given to avoid this.

Risks/Side Effects Associated with Photobiomodulation

After more than three decades of research there are no known risks or major side effects attached to photobiomodulation therapy.

On rare occasions, first time users have reported:

- Fatigue (temporary) – probably due to the release of metabolites but the majority report a resurgence of energy
- Headaches (temporary) – from the reactivation of neural connections and increased microcirculation
- Dry throat (temporary) – from the stimulation of renal functions

EVND designs each Neurofeedback Training Program around each client's specific needs as determined by symptom presentation, QEEG results and/or lab results. Each program may contain any combination of the above described Neurofeedback applications and adjuncts to training, including the addition of supplementation or medication when necessary. On occasion, additional cost may apply to the base Neurofeedback Package rate when additional adjuncts are added to any Neurofeedback Program. Any potential additional cost will be discussed before implementation of additional adjuncts to therapy.

By signing below, I agree to participate in the EVND Neurofeedback Training Program including QEEG acquisition and have had explained to me and understand the benefits, risks and possible side effects to neurofeedback training including adjuncts to training that may be implemented as needed at any time to my neurofeedback program. I also understand that results from my QEEG are for guidance in protocol selection and a measurement of progress while participating in EVND Neurofeedback training program and NOT to be interpreted as a diagnosis or claim to prevent or cure any disease.

Signature _____

Printed Name _____

Date _____

Parent or Legal Guardian _____

Printed Name _____