







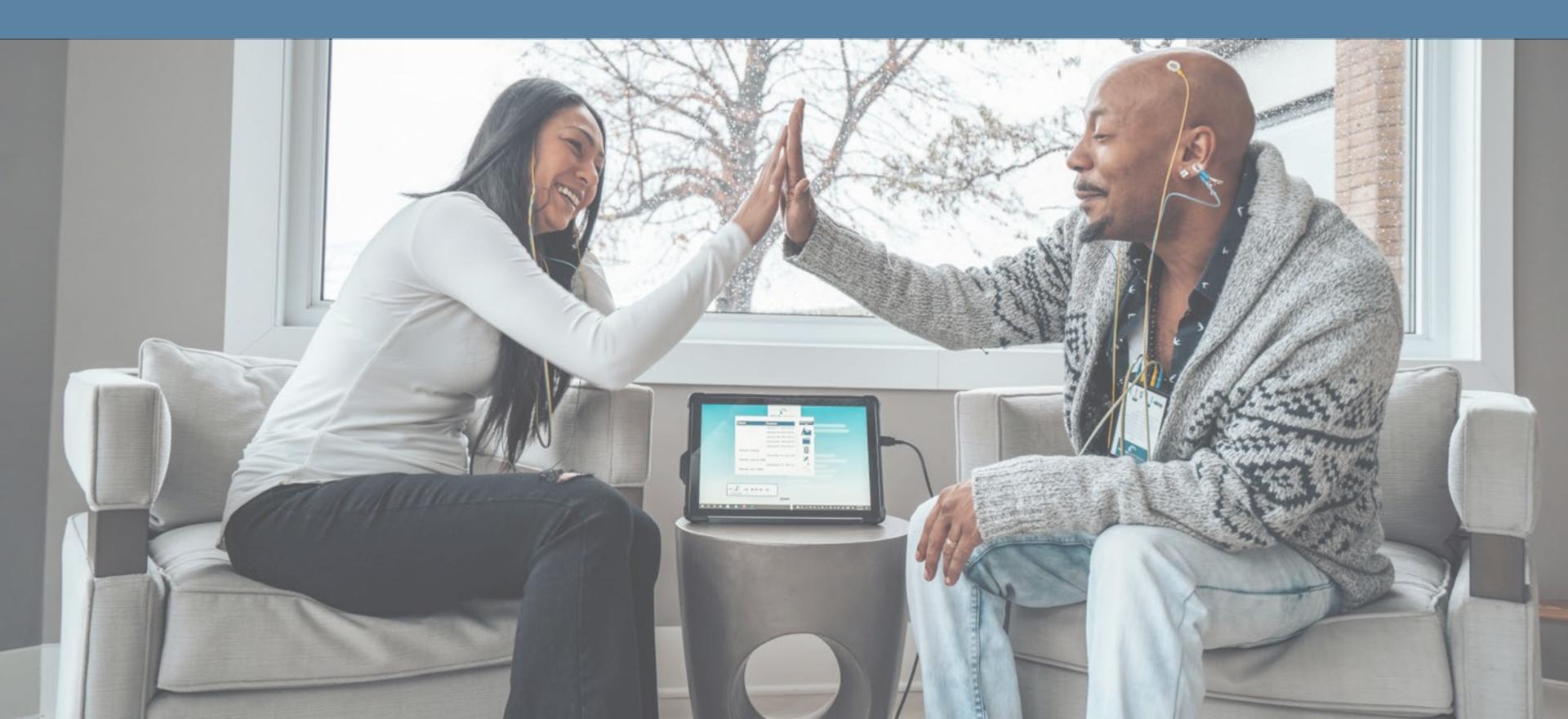


HOW TO USE THIS FLIP BOOK

- This flip book is intended for Trainers who see Clients
- This PDF is printable and its pages can be inserted in a binder
- Use this flip book as a tool during your first Client consultation
- Have it displayed to help new Clients understand the process



NEUROPTIMAL® DYNAMICAL NEUROFEEDBACK®







- Welcome- Thank you, for coming in for your NeurOptimal® introduction meeting
- Let's talk a few minutes together
- I would love to hear what brought you in today-
- Then I want to share with you what this process is about
- (Do you mind if I videotape you telling your story?) *Give them the "Permission to videotape form"



BRAIN TRAINING





BRAIN OPTIMIZATION THROUGH TRAINING







- NeurOptimal® is a neurofeedback system created by Dr.'s Valdeane & Susan Brown
- Zengar Institute Inc. has been in operation since 1996
- A rendition of the NeurOptimal® software has been in use for 20 years and is currently in over 76 countries worldwide
- NeurOptimal® is time-tested, safe and effective



THE ZENGAR® MISSION STATEMENT

Zengar Institute Inc.'s mission is to create, deliver and support the most effective and safe brain training system available in the world today. The purpose of this endeavor reflects the mission of its founders— to relieve suffering.

Dr. Valdeane & Dr. Susan Brown

GAINING RESILIENCE AND FLEXIBILITY





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TRAINER DIALOGUE

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NEUROPTIMAL® DYNAMICAL NEUROFEEDBACK®



The brain is in constant movement and never repeats the same electrical pattern





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The brain is in constant movement and never repeats the same electrical pattern

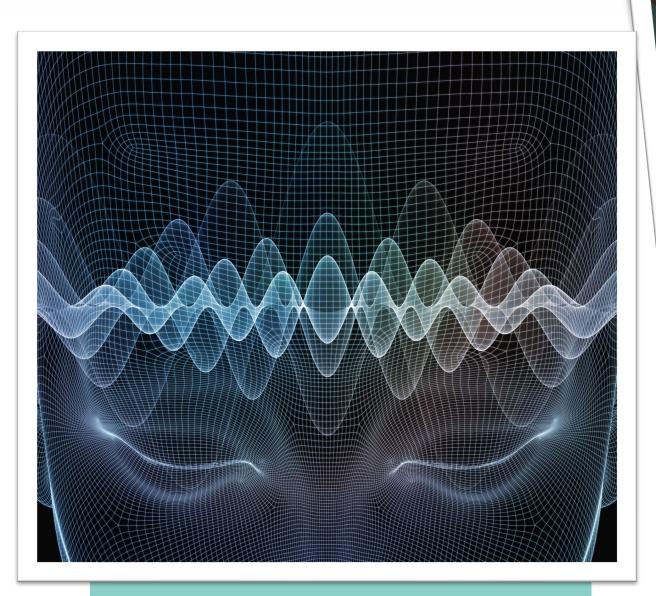
- NeurOptimal® is a brain training method.
- The software notices small subtle changes in the electrical signal of the brain and creates an interruption in the media stream. This alerts the unconscious brain that change has occurred (we call this 'information').
- The brain responds by adjusting according to that "Information" or interruption by adjusting or becoming more present.
- This is the way the central nervous system (CNS) normally reacts to change in its environment.
- NeurOptimal® is communicating mathematically in the same way the CNS intrinsically talks to the body.
- Every time someone is doing a session it is a totally different brain, just like a kaleidoscope.

Every Session is the first and the last





WHAT IS BEING MEASURED?







Every brain is different and is forever changing, learning, and adapting moment to moment



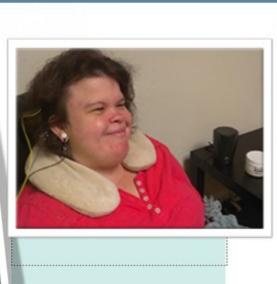




WHAT IS BEING MEASURED?







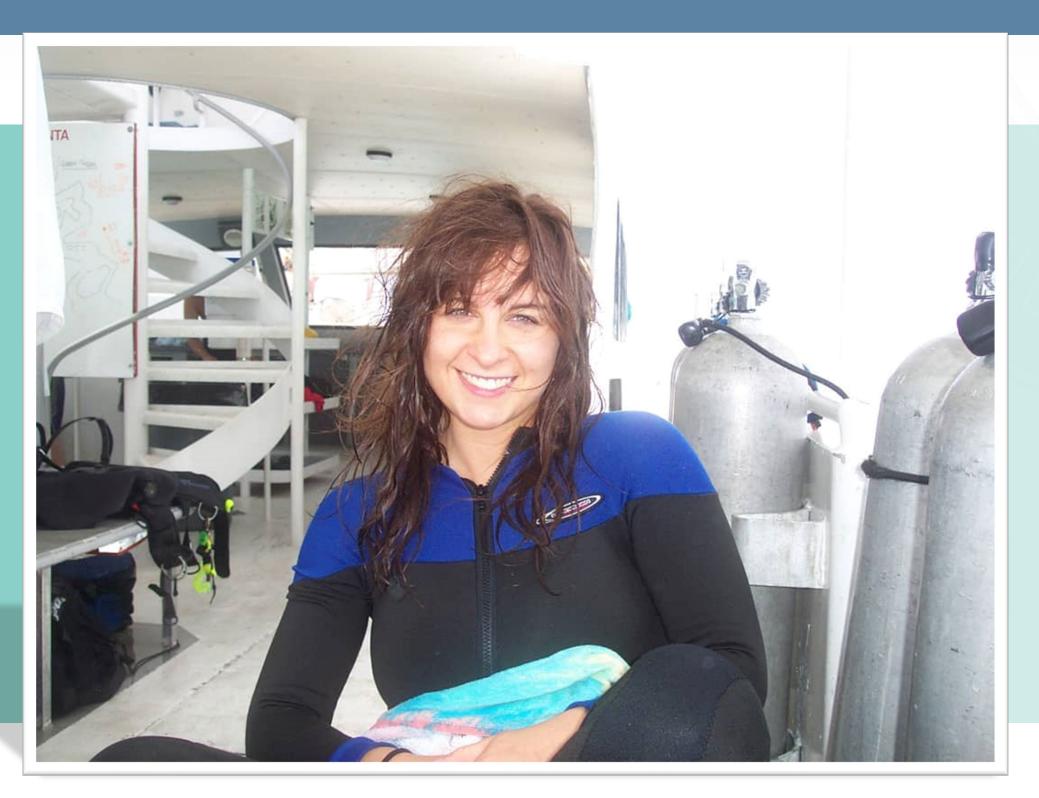
Every brain is different and is forever changing, learning, and adapting moment to moment

- The movement we see is called an electrical signal, electro-magnetic or sometimes called brain activity
- How do we measure that signal?

- Through sensors on the scalp with conductive paste
- zAmp amplifies the electrical signal and turns it from an analogue signal into a digital signal
- All you do is sit there and relax, listen to the music, watch the screen (if you want) close you eyes if you would rather, read, or fall asleep!



WHO NEEDS NEUROPTIMAL®?

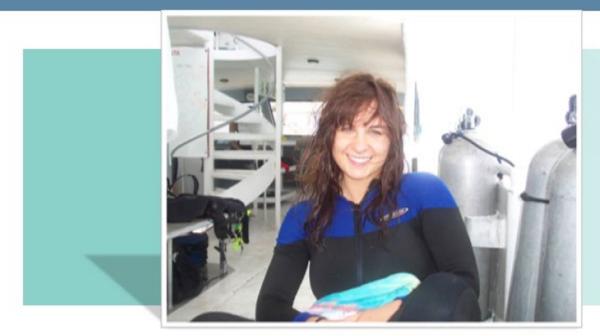


Anyone that feels they need that step up





WHO NEEDS NEUROPTIMAL?



Anyone that feels they need that step up

- As life can hit hard, our brain isn't always able to respond quickly. Instead, it
- will repeat the same pattern and the same story.
 Telling the same stories will usually create a persistent consistent electrical pattern in our electrical signal of the brain
- Worrying about the same things- over & over
- Not able to flexibly move through our thoughts, or daily tasks
- Sleep can be affected
- Moods can be affected

- Relationships can be threatened
- Performance can suffer



WHAT DOES NEUROPTIMAL® DO?



NeurOptimal® provides the central nervous system with information about what it is doing





WHAT DOES NEUROPTIMAL® DO?

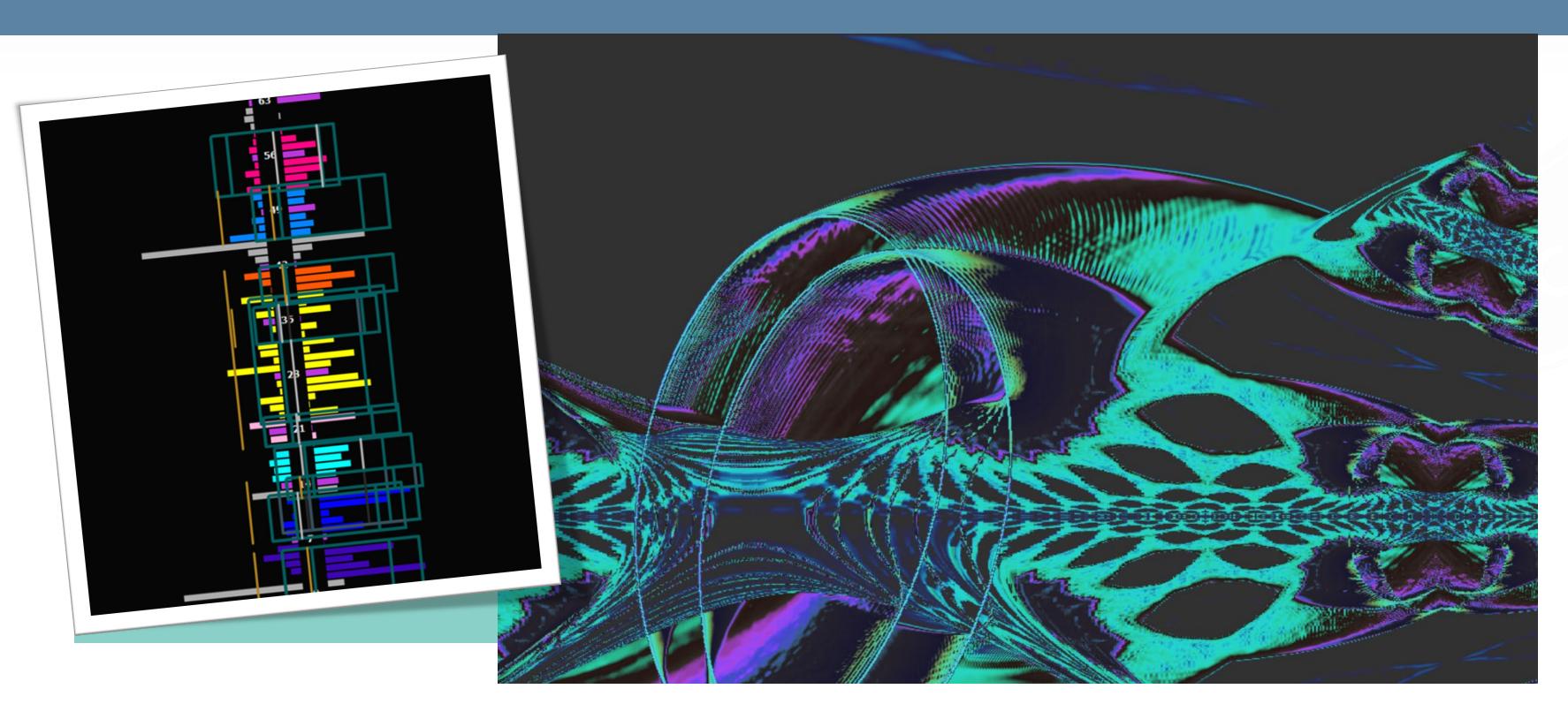


NeurOptimal® provides the central nervous system with information about what it is doing

- To create flexibility using NeurOptimal®, the feedback systemcommunicates with the CNS (Central Nervous System)
- NeurOptimal® is a computer software program
- Using sensors and paste the electrical information is being read from the scalp
- We use a zAmp (amplifier) to turn the electrical activity coming in through the sensors from an analog signal to digital, so the computer can understand it. It also amplifies (makes the electrical signal louder).
- NeurOptimal® creates an interruption anytime there is a 'difference' in the electrical signal, in terms of Duration, Intensity, Frequency or Shift- the DIFS



HOW DOES IT WORK?



CLIENT SCREEN





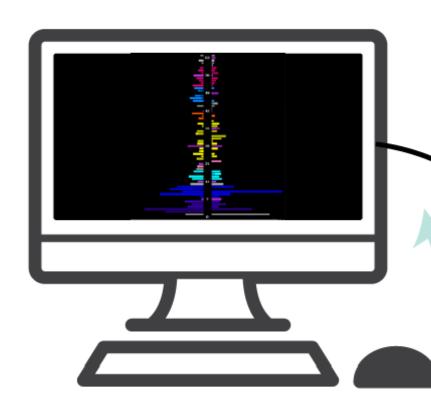


CLIENT SCREEN

- Reading this electrical signal from the brain, the NeurOptimal® system mathematically measures the Duration, Intensity and any Shifts/Changes that occur.
- This means that both the strength of the signal and the timing of the signal is being measured (where most other neurofeedback systems measure in amplitude/strength only)
- The speed of NeurOptimal®'s software and the idea of measuring 'timing' is unique to only NeurOptimal®



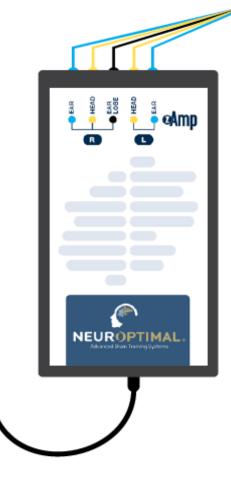
FEEDBACK LOOP



Voltage Fluctuations are measured in the EEG signal. The NeurOptimal® software analyzes the data 256 times per second detecting changes in 4 ways we call the DIFS:

- Duration
- Intensity
- Frequency
- Shift

'External noise' is ignored by NeurOptimal®'s robust de-noising process, which will discard all signals that are not made by the brain



The zAmp starts the process of feedback by:

- Amplifying EEG signal
- Changing the output from analog to digital



Sensors - Active at C3 & C4, Reference at ear tops & Ground on ear lobe

Specialized **Conductive Paste** called 10/20 (for use with our read-only sensors)

The 'information' is fedback to the individual by slight interruptions in the media stream. The central nervous system (CNS) responds and adjusts as a natural indication that changes in the internal or external environment have been made

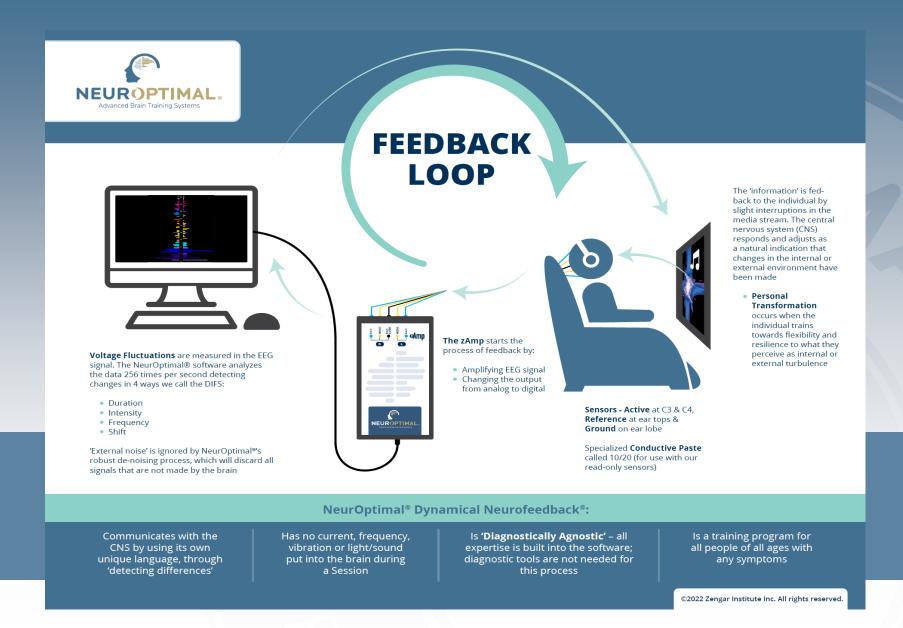
> Personal Transformation occurs when the individual trains towards flexibility and resilience to what they perceive as internal or external turbulence

NeurOptimal® Dynamical Neurofeedback®:

Communicates with the CNS by using its own unique language, through 'detecting differences' Has no current, frequency, vibration or light/sound put into the brain during a Session

Is 'Diagnostically Agnostic' – all expertise is built into the software; diagnostic tools are not needed for this process Is a training program for all people of all ages with any symptoms

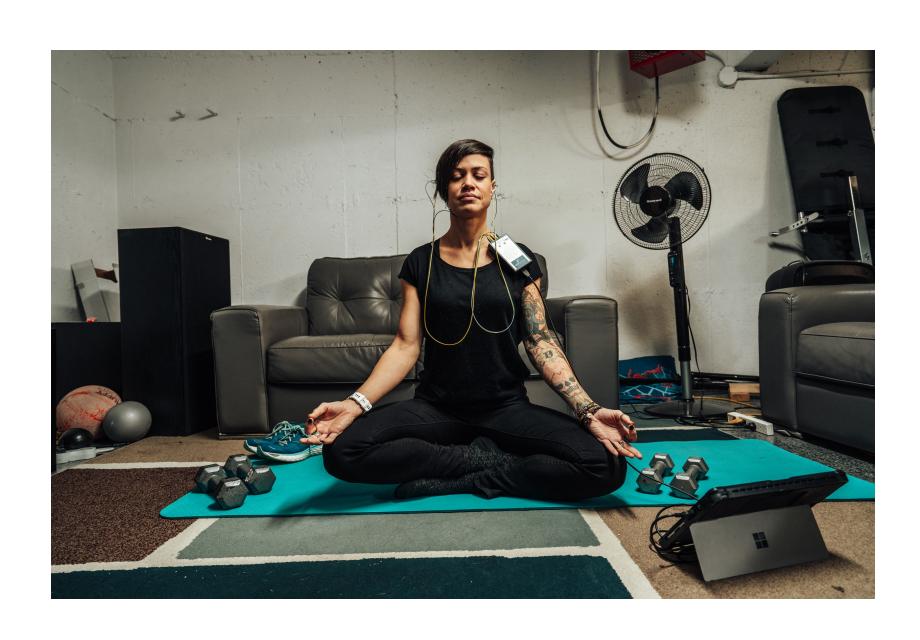


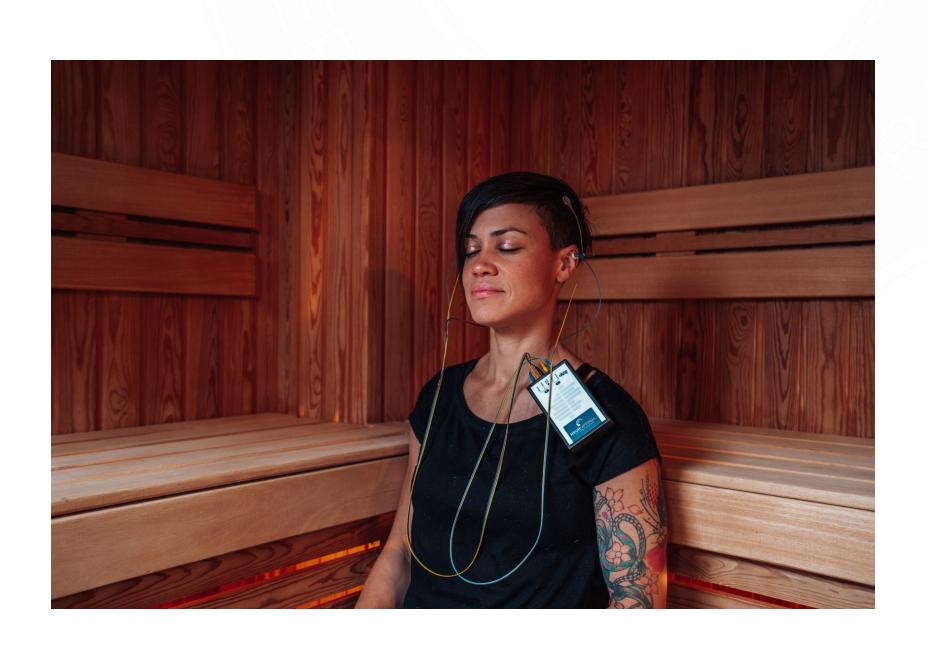


- The sensors go on the head of the Client
- Special conductive paste that holds the sensors in place
- Individuals typically sit in a nice comfortable chair
- The zAmp "amplifies" the data and changes the electrical signal from analog to digital
- That signal is sent into the software program for analysis
- This information is analyzed 256 times per second and is detecting changes in the activity (DIFS)
- Your brain perceives these slight interruptions as a notification that something changed and then the CNS "adjusts" to that information.
- The brain's job is to keep us alive. Therefore, it always is moving towards a
 place of comfort.



WHAT ARE THE BENEFITS?





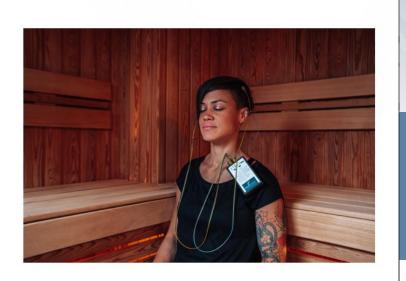
Maneuvering through the turbulence of life





WHAT ARE THE BENEFITS?



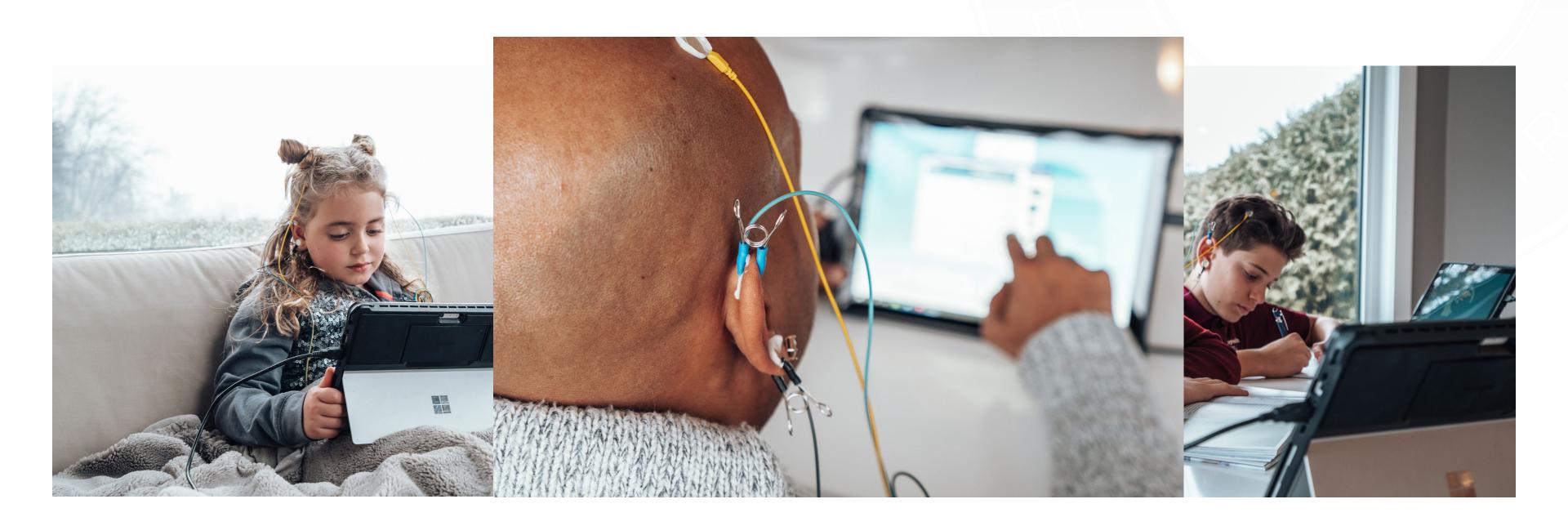


Maneuvering through the turbulence of life

- One of the biggest benefits is the ability to gain flexibility & resilience to easily and effortlessly make decisions without concern
- Everything we do in life has the potential to add stress and as the body can self-heal, this process presents the information so the individual can regain that ability
- It is diagnostically agnostic (it doesn't matter what the diagnostic is)
- NeurOptimal® reminds the brain to self-regulate or "re-adjust" to the external environmental turbulence
- Nothing is put into the brain (no electricity, no strong frequency or vibration, or light/sound)



BENEFITS OF BRAIN TRAINING

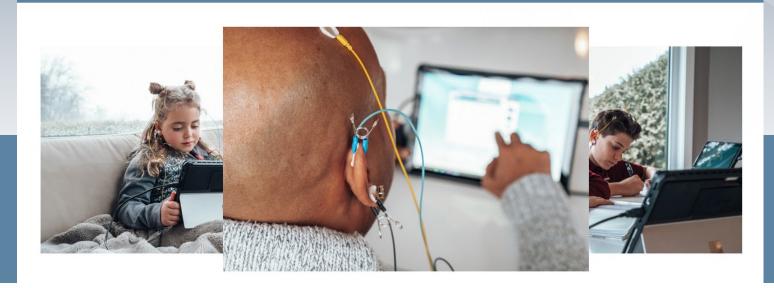


How will it affect me?





BENEFITS OF BRAIN TRAINING



How will it affect me?

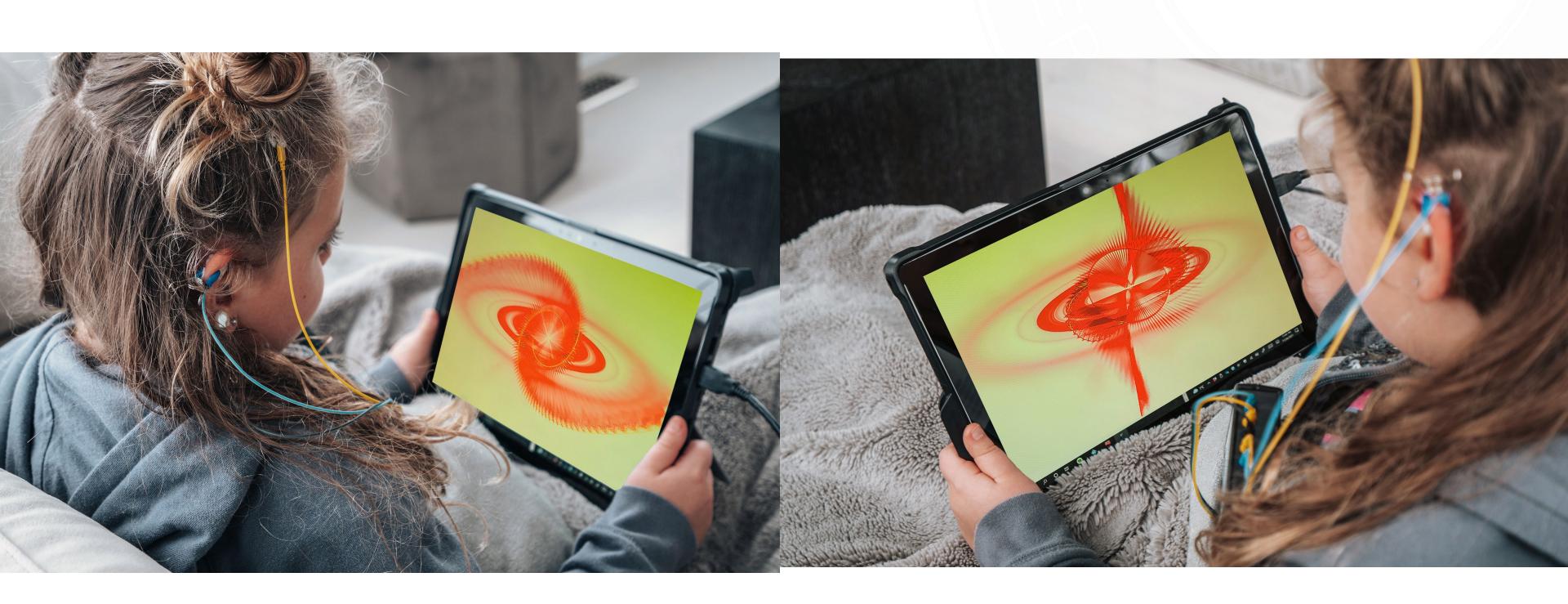
- Sleep patterns change; feeling more rested, most of the time sleeping through the night
- Waking feeling refreshed, the restless & internal frustration may dissipate
- People become more involved in family & discussions: more communicative, sharing personal ideas
- Overall content & happier mood, feeling more internally balanced

- Staying focused longer, noticing visual & auditory details
- More energy than before training
- Listening better and with intent
- More compassion and empathy
- Less obsessive and compulsive
- Less distracted
- Better memory
- More patient, less reactive and impulsive
- Can roll with life's "punches" more easily

Common changes that are witnessed while training



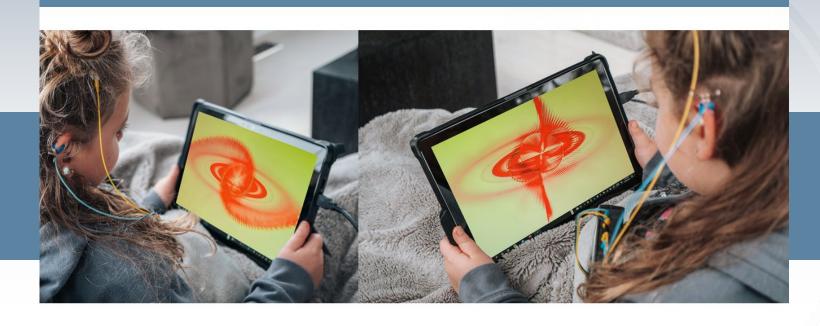
HOW DO I KNOW IF IT'S WORKING?







HOW DO I KNOW IF IT'S WORKING?

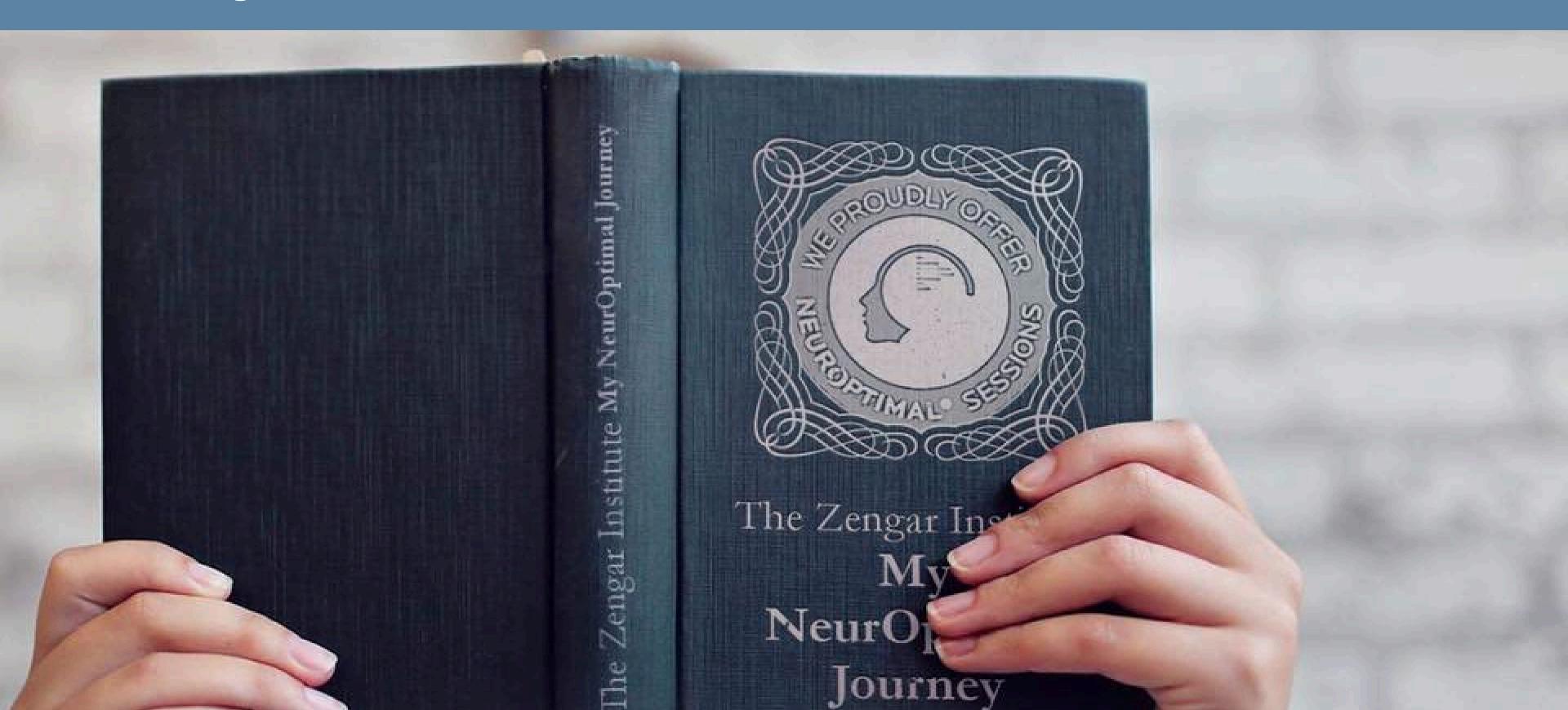


"How do I know it's working"? Let's explore that:

- How does the brain know how to walk?
- How does the body know when to send oxygenated blood to an organ?
- How does a body "self-heal" a broken leg or a skinned knee?
- What happens when the CNS detects change in the body's temperature or any bodily function?
- The CNS knows this as an internal communication system and NeurOptimal® can speak that same language so the brain responds



OUR JOB AS A DETECTIVE: TRAINER PERSPECTIVE







As a Trainer we assume a role of detective rather than a role of therapist. As Trainers, we cannot accept the responsibility to 'cure' you or 'heal' any specific disorders/issues. However, we do understand because your body organically knows how to do this, we just need to use NeurOptimal® as a reminder. The Trainer can then take a proactive part in documenting changes or shifts.

We want to empower you to be in charge of **your** own process.

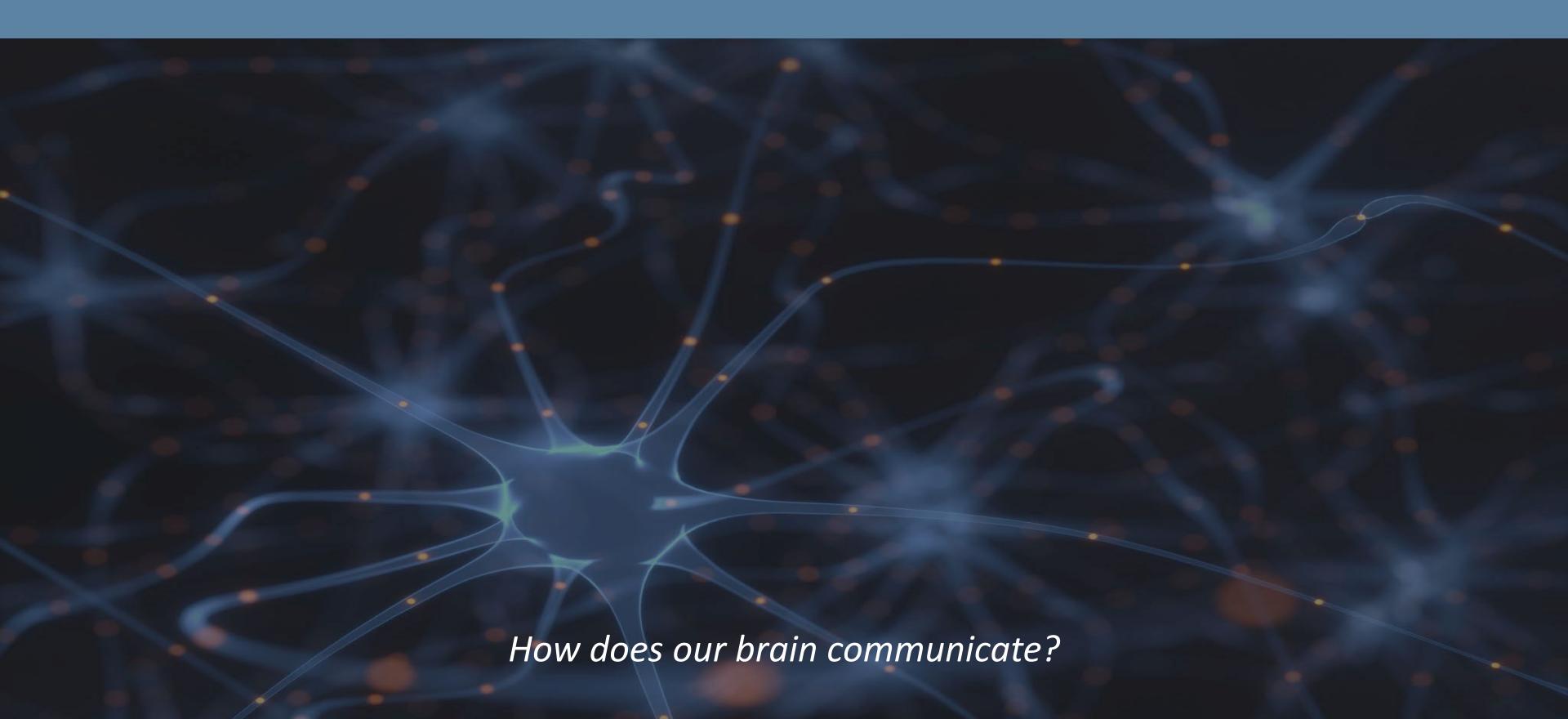
We share information about the program and process

We may video tape your responses for you to look at later or keep a journal

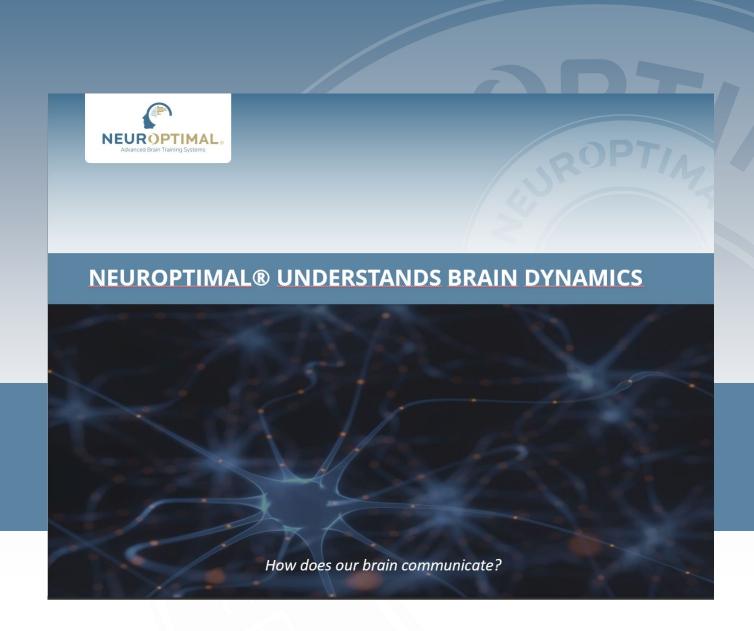
We want to keep you actively looking at and noticing the differences



NEUROPTIMAL® UNDERSTANDS BRAIN DYNAMICS



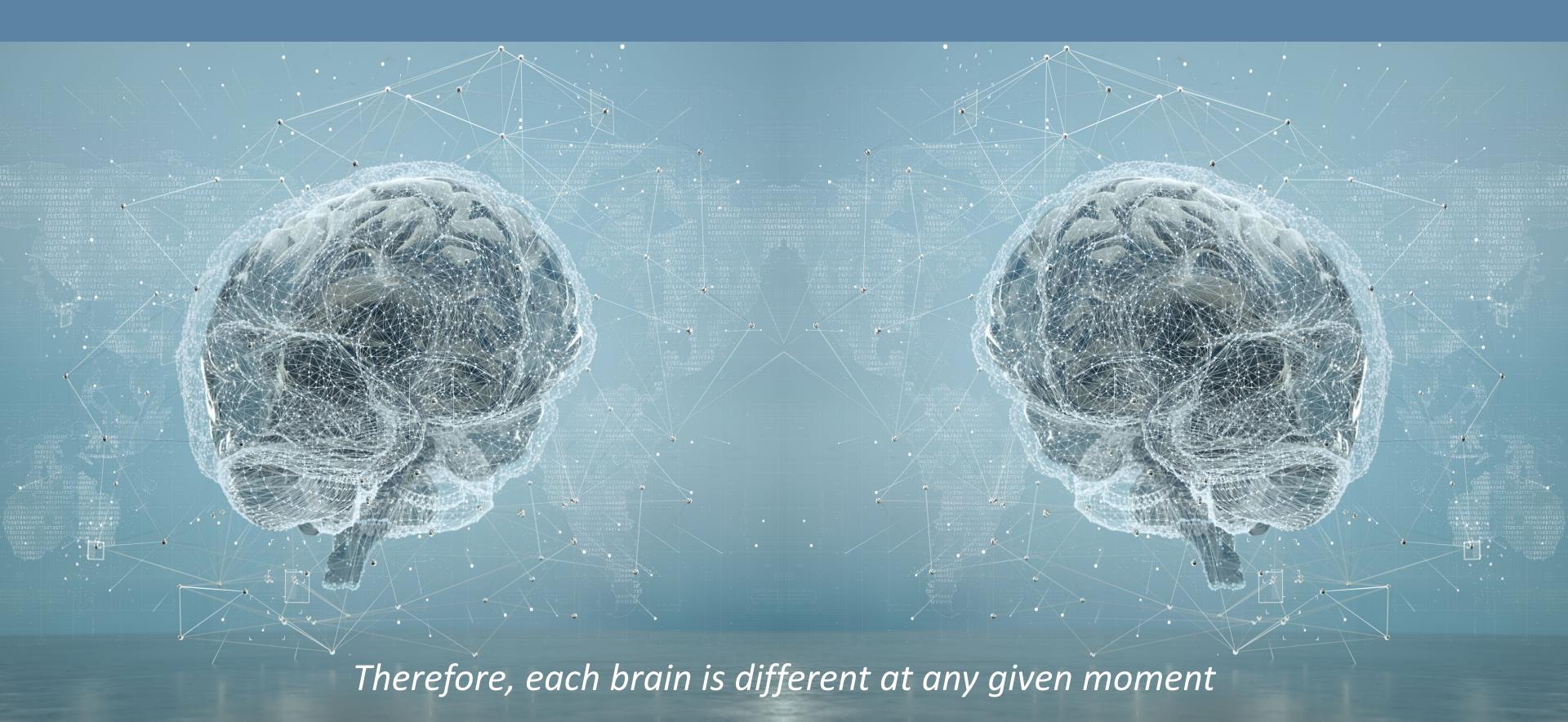




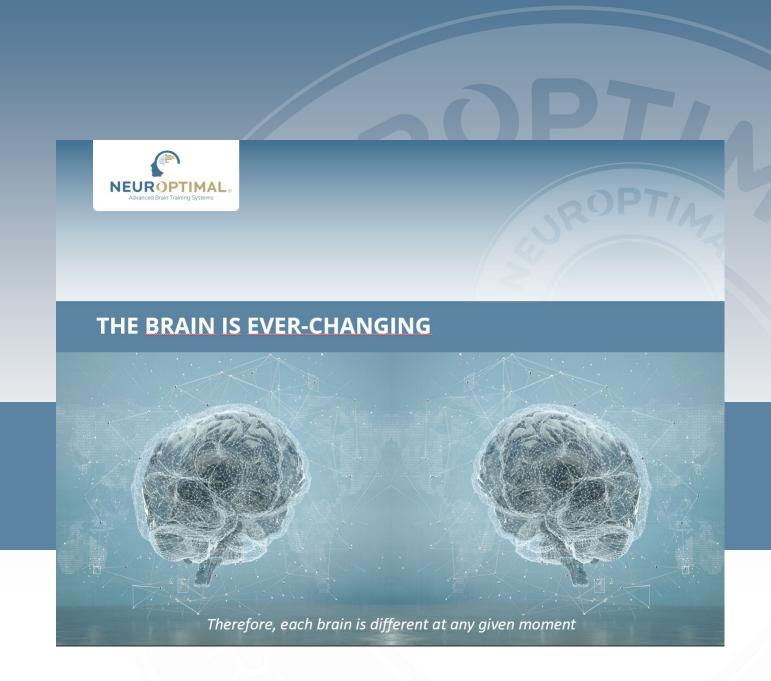
- The brain is the most complex **dynamical** structure known to the universe
- It can process massive amounts of information, develop responses and apply these responses for increased efficiency and mastery
- To understand chaos: it is helpful to know how the brain perceives incoming information
- Consciousness is self regulated meaning that processes not requiring our immediate attention take place outside of our awareness



THE BRAIN IS EVER-CHANGING





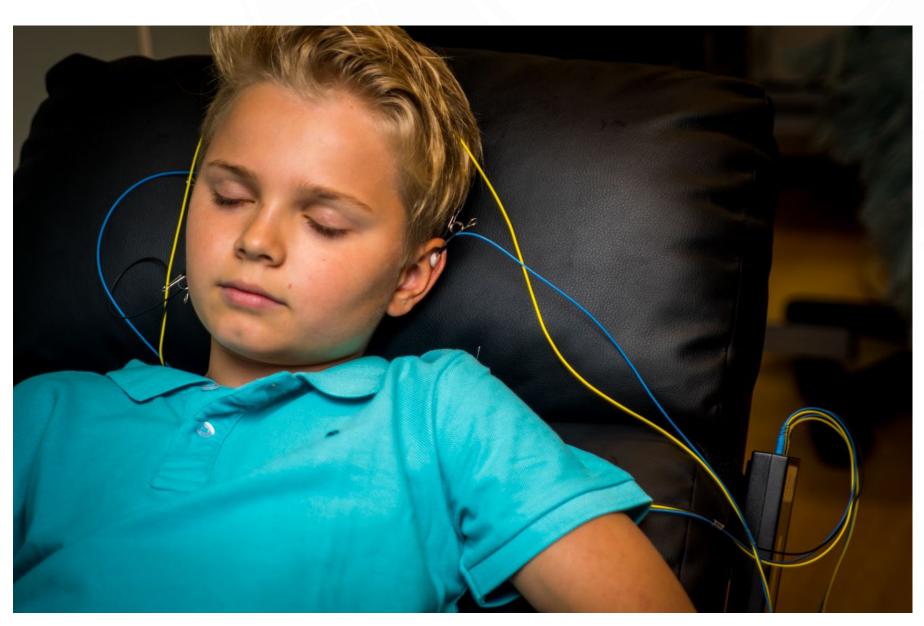


- Supportive in its innate ability to change
- The Central Nervous System (CNS) is ever changing and constantly detecting changes this is how NeurOptimal® works
- We have the most dynamical process available
- It trains the brain by using the CNS' own unique ability to monitor change within the body and respond to that change
- Therefore, NeurOptimal® communicates in the same way as the CNS communicates to itself



PROCESS VARIABILITY





Information is...





PROCESS VARIABILITY





Information is...

Our brain is infinitely cycling and self regulating

- We understand there are no **absolute** values that are inherently "best", or the "amount" of activity required for specific functions
- It always varies from brain to brain, and it always varies with time for that same brain
- In comparison, our system generally regulates to around a blood pressure of 120/80 or to a temp of about 98.6 but this does not stay constant, nor is it fixed



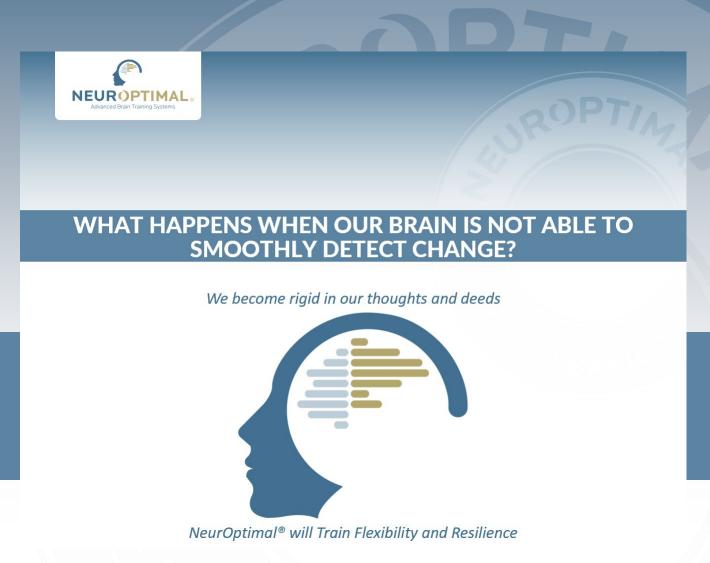
WHAT HAPPENS WHEN OUR BRAIN IS NOT ABLE TO SMOOTHLY DETECT CHANGE?

We become rigid in our thoughts and deeds



NeurOptimal® will train flexibility and resilience





What happens when our brain is not able to smoothly detect change?

We tend to become:

- Rigid
- Disorganized
- Persistent Complaints

The electrical signal stays in a "fixed pattern". By interrupting that pattern with a milli-second of silence or static (the interruption in the music), the brain will adjust and find a new place of internal comfort

What happens when our brain is not able to smoothly detect change?

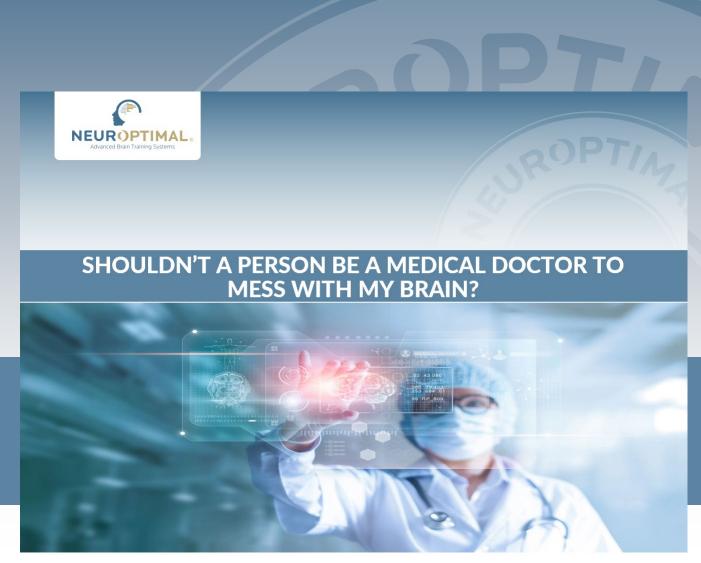


SHOULDN'T A PERSON BE A MEDICAL DOCTOR TO MESS WITH MY BRAIN?



Training not treatment





Training not treatment

- This is training (not therapy)
- It is diagnostically agnostic
- NeurOptimal® reminds the brain to self-regulate
- Nothing is put into the brain (no electricity, no strong frequency or vibration, or light/sound)
- Because nothing goes into the brain and nothing comes out of the brain, we are simply "teaching" the brain to respond differently
- All we are doing is providing information to the brain about what it is doing. It sorts itself out on its own from there.
- There are no decisions being made by me on behalf of your brain.



YOUR ROLE AS THE CLIENT



A learning process works best with consistent Sessions





YOUR ROLE AS THE CLIENT



A learning process works best with consistent Sessions

- The Client has the responsibility to decide on the consistency of their brain training Sessions (1-2 times weekly, 3-4 times a week, daily)
- The Client has the responsibility to document shifts with the Trainer
- The Client understands that the 'progress' is learned internally to adjust and learn to self-heal
- The Client understands that the use of the Tracking Tools will keep the process focused on internal shifts



NEUROPTIMAL® 3.0







NEUROPTIMAL® 3.0



- The NeurOptimal® process is a private relationship between the software system and the Client
- The internal responses by the Client are always diverse and dependent upon the Client's ability to observe and process this information





The NeurOptimal® Session Experience



Before the first NeurOptimal®
Session, you will ask your Client
to fill out the Tracking Tools
describing how they are feeling
and what they wish to achieve in
coming to your training Sessions.





The Client can be seated in a comfortable reclining chair facing a computer monitor if they wish.



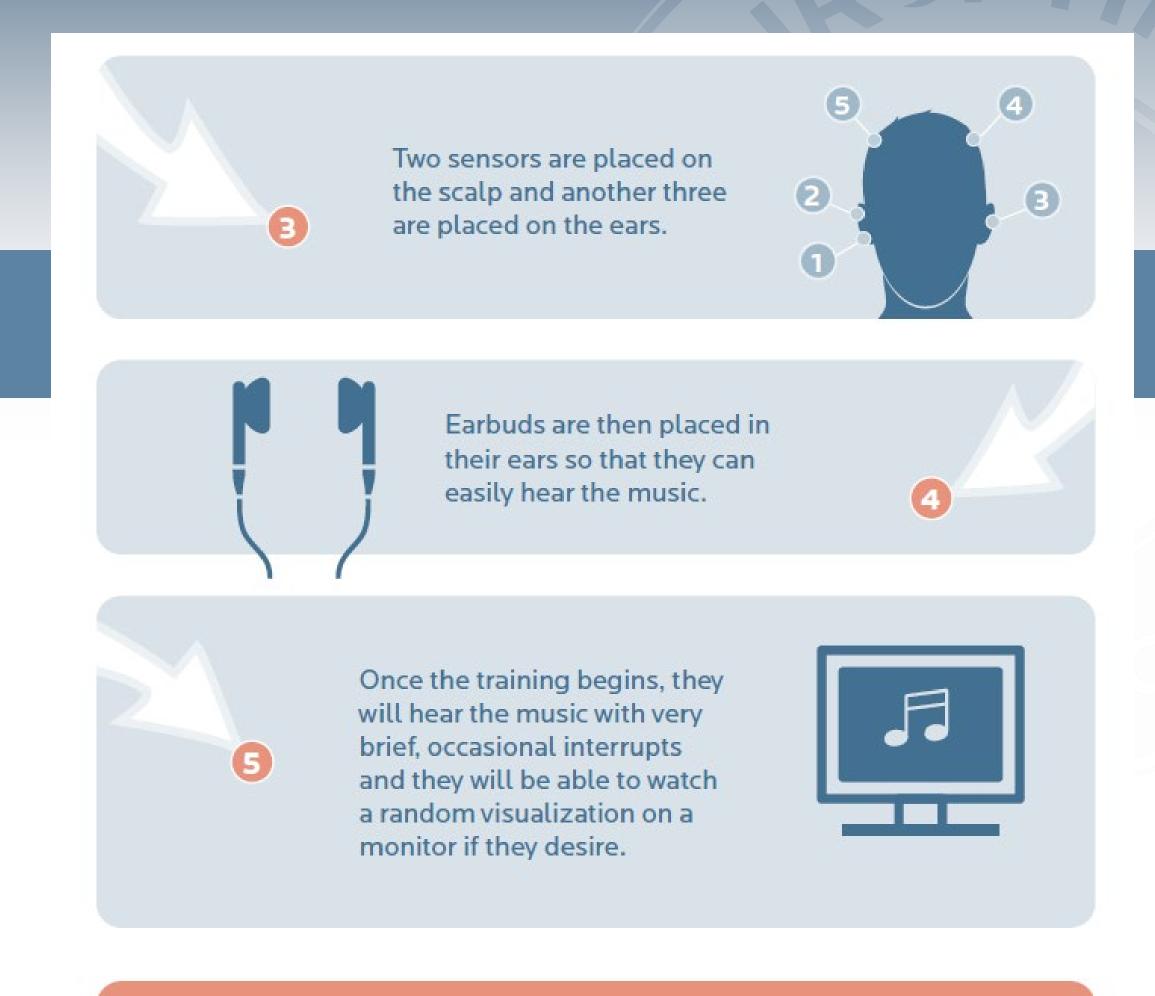






- We ask that you fill out some paperwork possibly a questionnaire and Intake Form
- Usually, you'll be seated in a comfy chair or at a table with a monitor or large TV available for you to watch

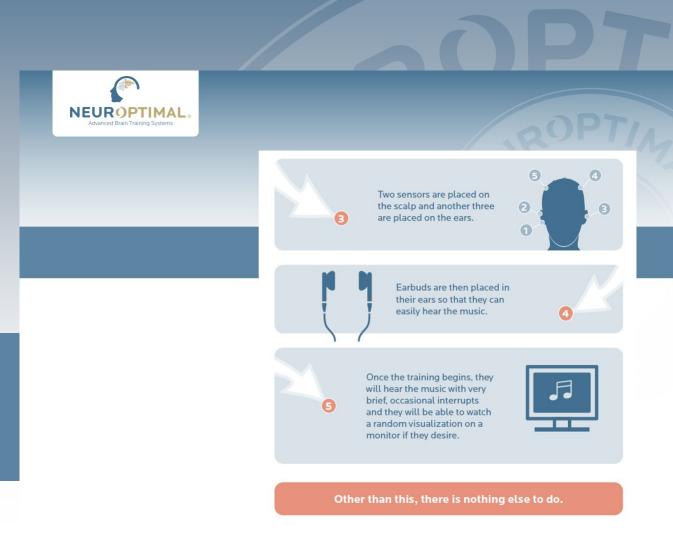




Other than this, there is nothing else to do.







- Five sensors are placed on the scalp and ears with conductive paste
- We offer ear buds (or speakers) in our office, or you can bring in your own ear buds
- Throughout the 33-minute session, slight interruptions (or what sounds like static) in the music will be heard
- These interruptions are NeurOptimal®'s way of drawing your non-conscious attention to the process



- How often do we do Sessions?- We empower Clients to make that decision
- **How many Sessions for X,Y or Z?** The diagnostic doesn't matter, Sessions are always individual to the person
- How many Sessions is enough?- Whatever the Client wants and feels they need.
- **Do people have side effects?-**We do not put anything in nor take anything out, therefore the effects are their journey, possibly reminding them of another past event. Possibly could need a doctor to look at being over-medicated.
- What to expect after first Session?- Reduce expectations! We are not expecting anything in particular to happen and neither should they.
- Sensor falls off during a Session? Feel free to put them back on unless asleep then don't wake them-
- Do results last? It is a learned process, like learning to read, we can't take that learning away from you once you know it

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- **Medications** *Medications may need to be adjusted as your CNS learns to function as it used to, help doctor understand the process*
- When to stop Neurofeedback- NeurOptimal® does not have a specific time to start or stop. It is always up to the Client to be aware of the very subtle shifts and determine when it makes sense to be finished with the support of the Trainer.
- Booster Sessions- Many times if someone has finished Sessions, they may feel they want to come back and do more Sessions, this can usually help someone feel their best in just a few Sessions
- Session series vs. lifetime commitment-Some people feel great after a group of initial sessions, others want to keep that feeling and continue on to for life (like a gym membership).

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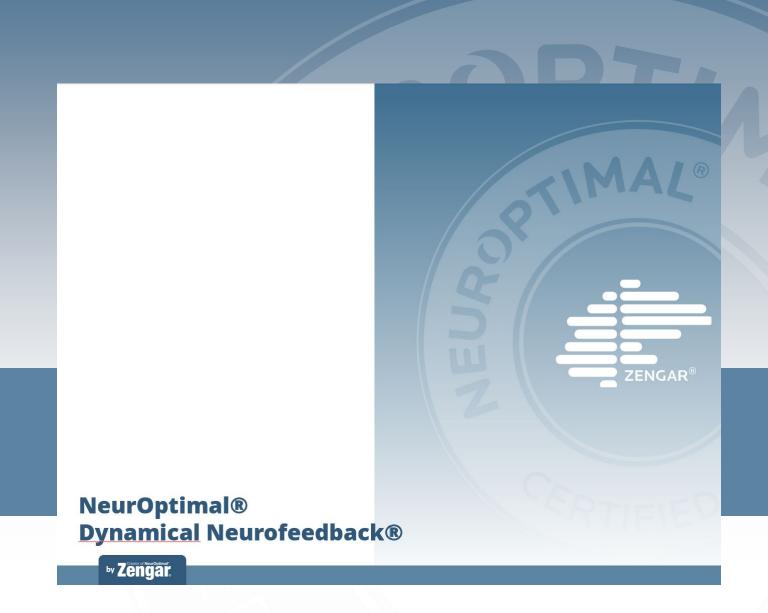
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NeurOptimal® Dynamical Neurofeedback®





- If you are interested in starting this process, would you like to schedule a time to come in for your first Session?
- Here is the paperwork if you would like to proceed... and information that will remind you at home of everything we have talked about here today.
- Our cost per Session is
- We also have information on how we will track your shifts and changes as you go.