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Brain Mapping: A New and Promising Tool for Mental Health

- Feeling lost?
- On the superhighway that is your brain, is the traffic flow going full speed in multiple directions... or is traffic at a standstill?
- Have you crashed, and don't yet know the extent of the damage?
- Not sure where to go next?

Then you may want to strongly consider getting a map of your brain to help point you in the right direction.

The human brain is an amazing, fabulous organ that is responsible for everything we do, think, feel, and remember. It is the 'headquarters' for all of our body systems. **It is the most important organ in our body,** yet most of us know very little about how well our brains are working.

The grey matter in our skull is incredibly complex, so when our brain is not working properly – or something has gone awry – it may take months or even years to figure out the source of the problem and how to treat it. And, like any health condition, understanding the root cause enables health providers to quickly and effectively pinpoint and treat the problem at its source.

How can we do a quick, non-invasive assessment of our brain and understand how it is functioning so we can start down the proper road to recovery? Easy – have your brain mapped!

What is brain mapping?

Our brains may be complex, but they are not without order, and this order can be captured, identified, and quantified through brain mapping. **Brain Mapping qEEG** (Quantitative electroencephalography) uses **EEG** (electroencephalogram) **technology** which places small sensors on the scalp to read and measure electrical activity in the brain and compares these measurements to a database of normative values.

The qEEG software interprets this range of data, and identifies performance patterns (sometimes positive, sometimes not) and areas of strength and weakness, then draws clinical considerations and conclusions based on those electrical patterns. The software then summarizes the data in a comprehensive technical report with a colour coded 'map' of how the brain is working.

Brain mapping provides important information about many important brain performance issues, including:

- the presence and extent of concussions and acquired brain injury
- Attention Deficit Disorder (ADHD)
- anxiety, depression, and mood issues
- migraines
- Obsessive Compulsive Disorder (OCD)
- schizophrenia
- autism (ASD)
- epilepsy
- substance addiction
- dyslexia, level of inflammation (pre-Alzheimer's)
- psychosis
- tinnitus
- sleep issues
- brain fog
- problems with concentration and memory
- overall brain performance and a variety of related brain chemistry issues

Brain mapping is a non-invasive procedure that *painlessly and safely measures your brain activity*.

To summarize, a brain map is a quick, impressive way to:

- 1) Identify the root cause of certain psychological or physiological symptoms by pinpointing brain frequencies.

- This helps to inform other professionals, including doctors, psychologists, counsellors, and behaviour analysts, with specific information about the underpinnings of brain and neurological functions.
- 2) Determine and develop a targeted data-driven therapy plan.
- Regardless of the symptoms you (or someone in your family) is experiencing, qEEG brain mapping will enable a deeper understanding of the brain's inner workings.
 - The brain map will provide you and your health team with a clear profile of current brain performance to help guide personal goal setting and potential treatments and therapies.
- 3) Measure your progress with treatment modalities such as [neurofeedback](#)
- Post-treatment brain maps can help evaluate treatment results to see if there has been a significant impact on how the brain is firing, and if you are heading in the right recovery direction.
 - The ability to see how behavioural changes are improving brain health can be extremely valuable and motivating. For example, if you have an initial brain map and then have another map done after a period of therapy and/or other treatments, and if you can visually and objectively see the impact of change, you are more likely to stay motivated and dedicated to the process.

Brain mapping is not just about identifying problem areas: CEOs and athletes use brain mapping and modalities such as neurofeedback to enhance brain functioning for performance.

Both my sons have had their brains mapped, and it has been incredibly helpful. Although brain mapping is a detailed, complex, scientific, 'over my head' kind of technology, the walk-through of the maps for my sons was easy to understand and readily identified – even confirmed – why we saw certain behaviours. I will also be taking advantage of this technology, to better understand my own performance patterns, strengths and weaknesses.

To learn more about Brain Mapping – check out this 3-minute video:

<https://www.youtube.com/watch?v=ggRV9C7z8z0>

Other Sources:

<https://www.braincodecenters.com/resources/blog/is-brain-mapping-legitimate#:~:text=Brain%20mapping%20is%20one%20of,points%20to%20one%20answer%3A%20yes.>

<https://pivotpoint.ca/brain-mapping-understanding-how-your-brain-works/>

<https://www.bitbrain.com/blog/qeeg-brain-mapping>

3 ½ minute video: <https://www.youtube.com/watch?v=2YrPF6ewr50>

A handwritten signature in black ink, appearing to read 'R. Morandini', with a stylized flourish at the end.

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If you would like to contribute or have ideas about what you would like to see in the ReFresh series, we would love to hear from you: contact rochelle@bcpvpa.bc.ca.