

Am I Controlling the Way I Think or is it Controlling Me?



Have you ever wondered “what’s going on in her brain” about your 6 year old? Or “what in the world makes him act that way” about your husband? Or have you ever been around someone and struggled to figure out why they say the things that they say?

Psychological theorists such as Albert Ellis have taught us that how we think will directly affect how we feel which in turn affects how we behave. Yes, this is true, but what controls our thinking?

I’ve tried and tried but I feel as if there’s a force that keeps me from fixing this thinking even though I know it needs to change.

Neuroscience research has discovered the phenomenon of “Neuroplasticity” which is simply defined as the brain’s ability to change throughout a person’s life. Researchers believe that our experiences and thoughts can change neuron firing patterns. It is also believed that injuries to either the structure of the brain (lesions, tumors) or to the soft tissue (closed head injury, brain bruise) can also change neuron firing patterns as well as psychological trauma, viruses, and chemicals either from medication, substance abuse, or the environment. And of course, there are many more of us that have inherited a disrupted brain pattern and have to sit back and watch history repeat itself through generations.

We are extremely vulnerable to changes in the neuron firing patterns in our brain. But does that mean that we’re all doomed? Not exactly. Because not all conditions cause disruption, we really have no way of knowing if a traumatic event, hereditary condition or external force will or will not impact our brain. So we’re left wondering, *is my brain pattern controlling me? Or am I controlling my brain pattern?*

First, what does a disrupted pattern look like? Here’s an example; when the neural pattern in the frontal lobe of the brain is disrupted, it is suffice to say that emotions will be impacted. Depending on the precise area as well as details of the disruption, we are able to predict possible executive functioning difficulties, depression, anxiety, negative thinking, word finding problems, OCD behaviors, anger control issues, impulsivity, trauma responses, and problems with social interactions, just to name a few. So as the neuron firing pattern is out of balance or not working properly, our thought patterns can also be out of balance and not working properly.



How do we know **what, where, when** and **how** neural patterns have been disrupted or are “off balance”? Performing a Quantitative EEG (QEEG or Brain Map) is one way Neuroscience practitioners can determine the precise location, “**where**”, as well as details, “**what**”, of the neuron firing disruption. Determining the “**when**” and “**how**” is trickier and requires special conditions in order to provide an accurate hypothesis.

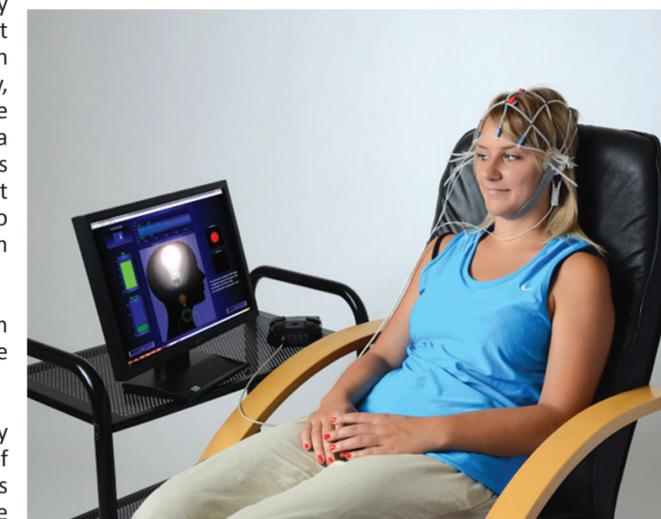
What is a Quantitative EEG (QEEG or Brain Map)? The QEEG is also called a brain map and does just that...it gives us a map of what is going on with the entire brain at one time. We attach electrodes to the whole head, 19 spots, and then record the brain waves with eyes open for 5 minutes and with eyes closed for 10 minutes. This recording is then sent to an independent specialist to be read and analyzed. They are able to not only give us a summary of significant findings but the report also shows the results of analyzing the data several different ways. The brain activity is not only compared spot by spot over the entire head, but we can also look at connections, symmetry, how different parts of the brain are communicating and all of this data is compared to a database of peers (same sex, handedness and age). It can help us see what areas need to be addressed more efficiently than just training spot by spot.

So, what do I do with the information I get from a Brain Map? Here’s where we talk about the good news.

As the concept of Neuroplasticity describes how patterns can veer of course and wreak havoc in our brains and lives, the same concept can be

used to correct disrupted patterns. The technique is called Neurofeedback. Neurofeedback, also known as EEG biofeedback, has been studied and practiced since the late 60’s. It is exercise for your brain by allowing you to see the frequencies produced by different parts of your brain in real-time and then through visual and auditory feedback, teaches the brain to better regulate itself. Neurofeedback can be used to help detect, stimulate, and/or inhibit activity in the brain safely and without medication. It can help restore a wider “range of motion” in brain states, much like physical therapy does for the body.

While the client sits comfortably watching a movie or pictures appear on the screen (a calm and focused state), the EEG equipment measures the frequency or speed at which electrical activity moves in the areas where electrodes have been placed. This information is sent to the therapist’s computer. The therapist



is then able to determine what frequencies are out of balance. For example, when the EEG shows that you are making too many “slow” or “sleepy” waves (delta/theta) or too many “fast” waves (high beta), the therapist adjusts a reward band to encourage more balanced activity. This encouragement or “reward” happens through visual recognition of the changes on the screen and the auditory reinforcement of “beeps”.

Now that we understand that neuron firing in the brain is affected by our thinking and that we can change our thinking by changing the neuron patterns in the brain through Neurofeedback, the next step is simple. Getting started is easy, just give us a call. The Brain and Wellness Center staff will answer all of your questions, and help you get scheduled. If you are wondering what services are best for you? We can help determine that at the time of the intake, in a telephone consultation, or you can schedule a face to face consultation and see our facility. Call, email or message us today! Brain and Wellness Center, 7301 W. Palmetto Park Rd., Suite 102A, Boca Raton, FL 33433. **(561) 206-2706**, e-mail us at info@bocabraincenter.com, or text us at **(561) 206-2706** or visit our website at www.BocaBrainCenter.com.

Renee Chillcott, LMHC

Renee Chillcott is a Licensed Mental Health Counselor that has been practicing Neurofeedback training since 2005. Renee holds a BA degree from The University of Central Florida and a Master’s Degree in Psychology from Nova



Southeastern University. She is a Licensed Mental Health Counselor and is the owner/operator of The Brain and Wellness Center, located in Boca Raton. At The Brain and Wellness Center, adults, teens, children and families enjoy a variety of services from multiple providers. Neurofeedback, Brain Mapping, Acupuncture, Nutritional Counseling, Learning Programs, and counseling are among a few of the services offered.



7301 W. Palmetto Park Rd.,
Suite 102A, Boca Raton, FL 33433.
(561) 206-2706
www.BocaBrainCenter.com.