

Using EEG in hypnotherapy

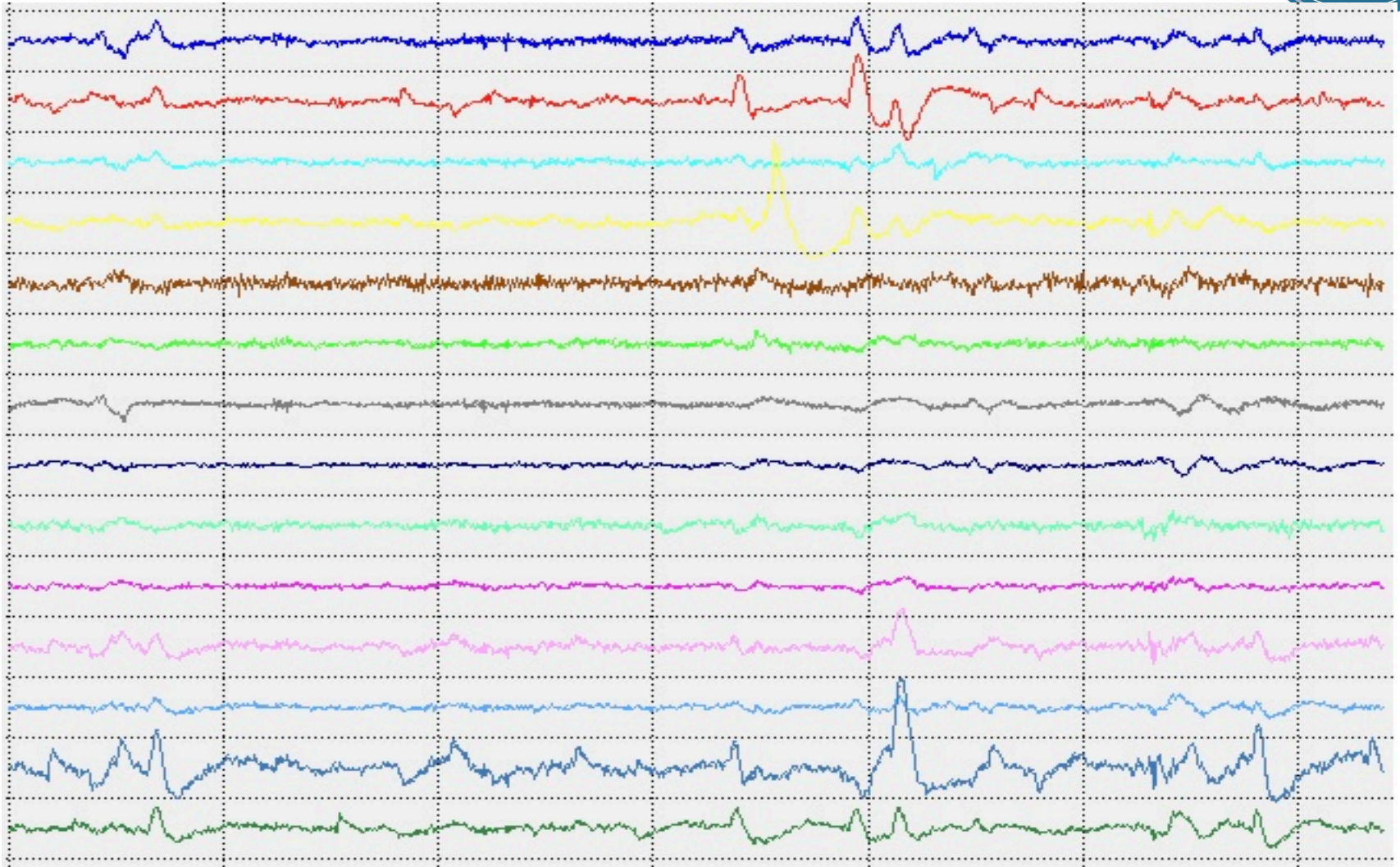
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What is EEG?

- a method of recording electrical energy in the brain
- Electrodes are placed on the scalp and fluctuations in electrical energy are recorded usually on a graph
- EEG can be used in a clinical setting to diagnose abnormal patterns of electrical activity in the brain (e.g. epilepsy)
- or in a research setting to understand which parts of the brain are responsible for what sorts of activity – language, movement, memory, visual processing and so on.



Pure EEG trace



Alpha

- Alpha Brain Waves are a sign of relaxed activity in your brain.
- High levels of alpha brainwaves are common among highly creative individuals who have a clear mind or are experiencing relaxation.
- Children have significantly greater amounts of alpha brain wave activity than adults.
- Environmental stressors, fear, anxiety, tension, and overworking tend to deplete your alpha wave activity.

Beta

- Beta brainwaves are the fastest brainwaves
- They are usually produced in the left hemisphere of the brain whilst you are working on your mid-morning crossword, Sudoku, taking exams or reading a book.
- People who think logically tend to have high levels of beta.
- Adults produce more beta than children and adolescents and this may be reflected in their ability to focus on tasks better.

Theta

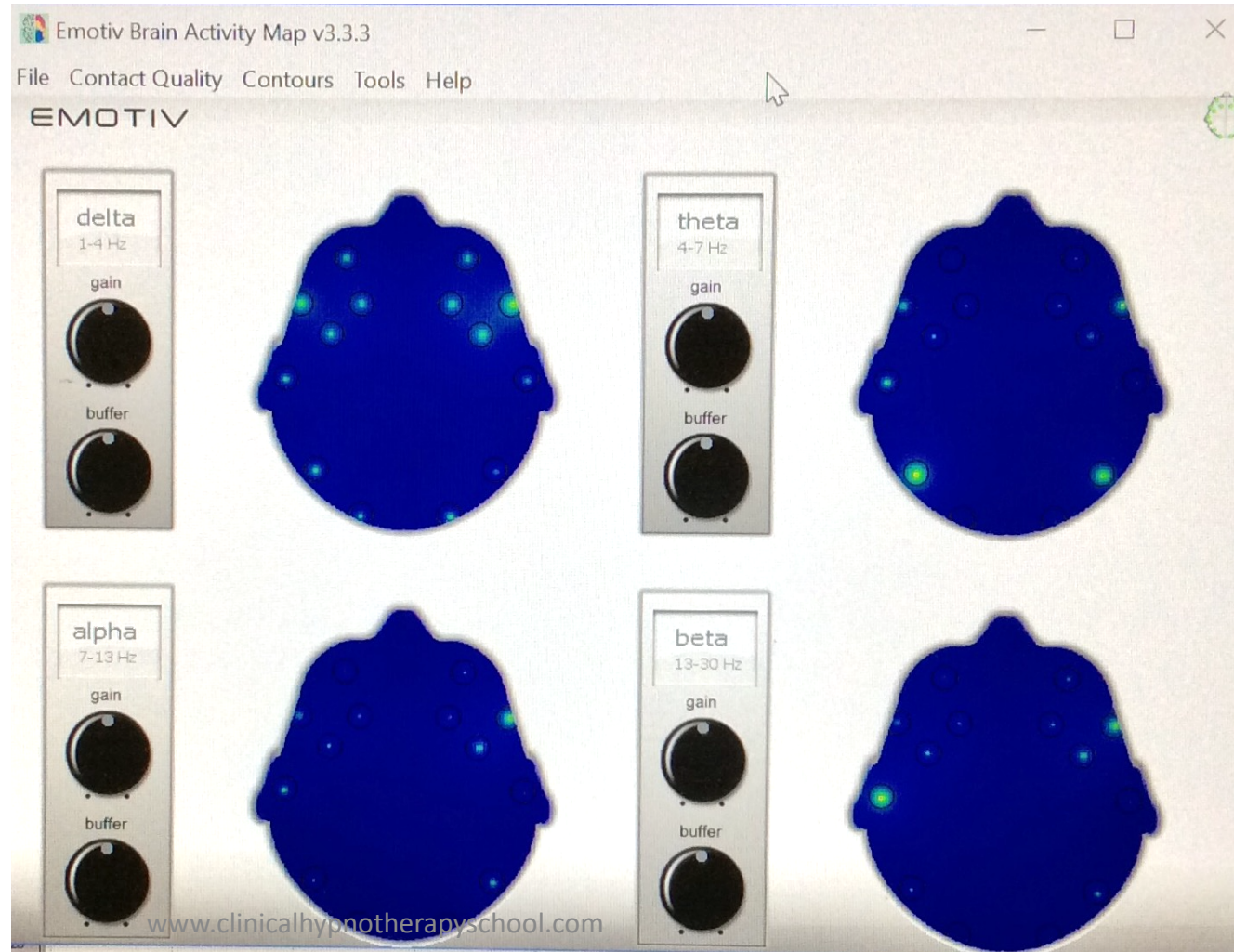
- Theta brainwaves are fairly slow
 - associated with the early stages of sleep and with Rapid Eye Movement sleep or dreaming or TRANCE
- Produced when you experience surges of emotion and have been associated with enhanced creativity.
- Artists show high levels of theta.
- People with attention-deficit problems (ADD/ADHD) have difficulty shifting out of the theta state when they are required to focus
 - which makes school work and holding down a job much harder.

Delta

- Delta brainwaves are the slowest brainwaves
- Produced when you are in the deepest stages of sleep or when you are unconscious.
- Delta waves do not show the same pattern of synchronicity that other brainwaves show
 - they can appear anywhere in the brain and not necessarily in both hemispheres at the same time.
- People with high levels of delta waves tend to show the most empathy for others.

Brain waves during trance

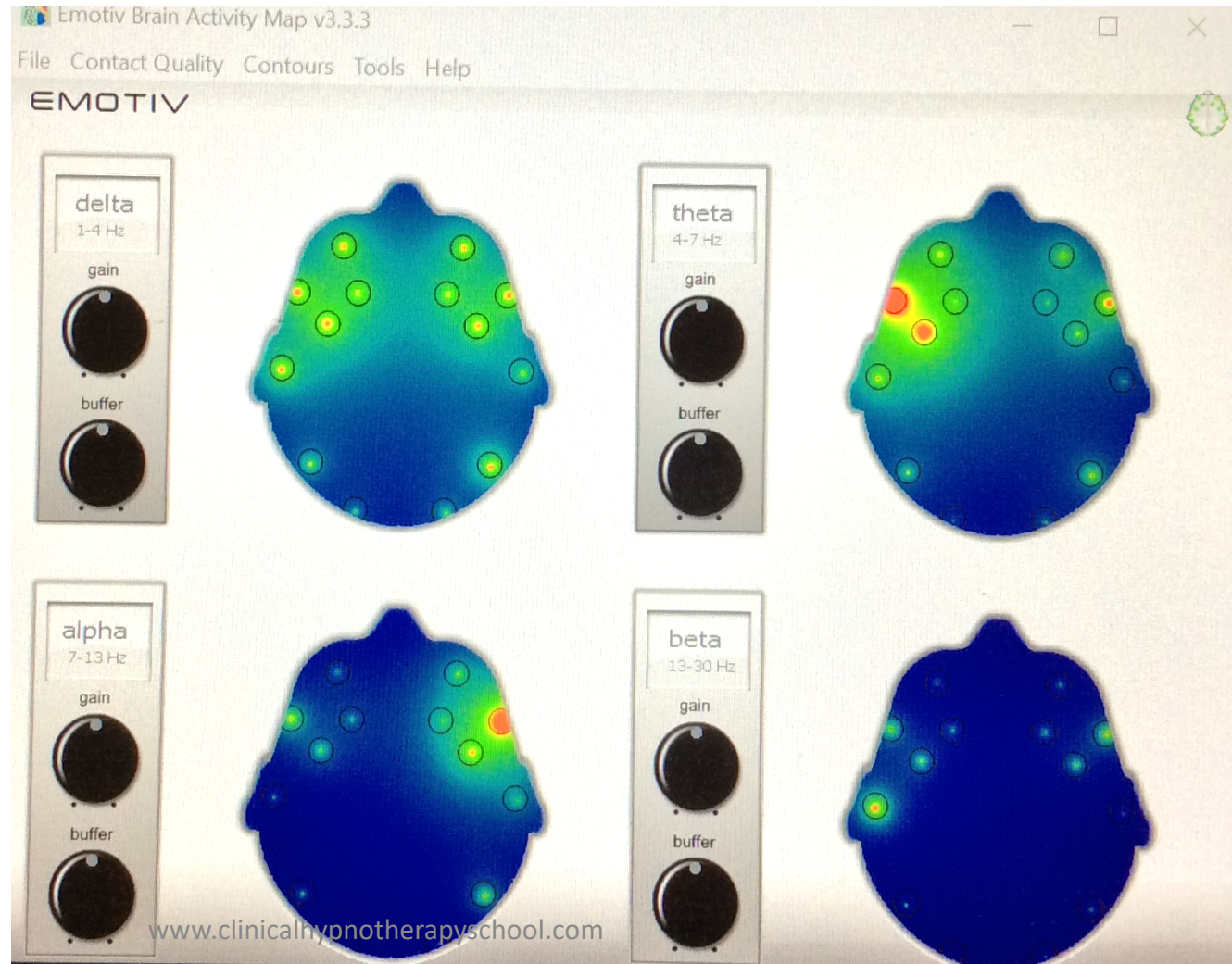
- Hop on the couch!



Brain waves during trance

Relaxation phase

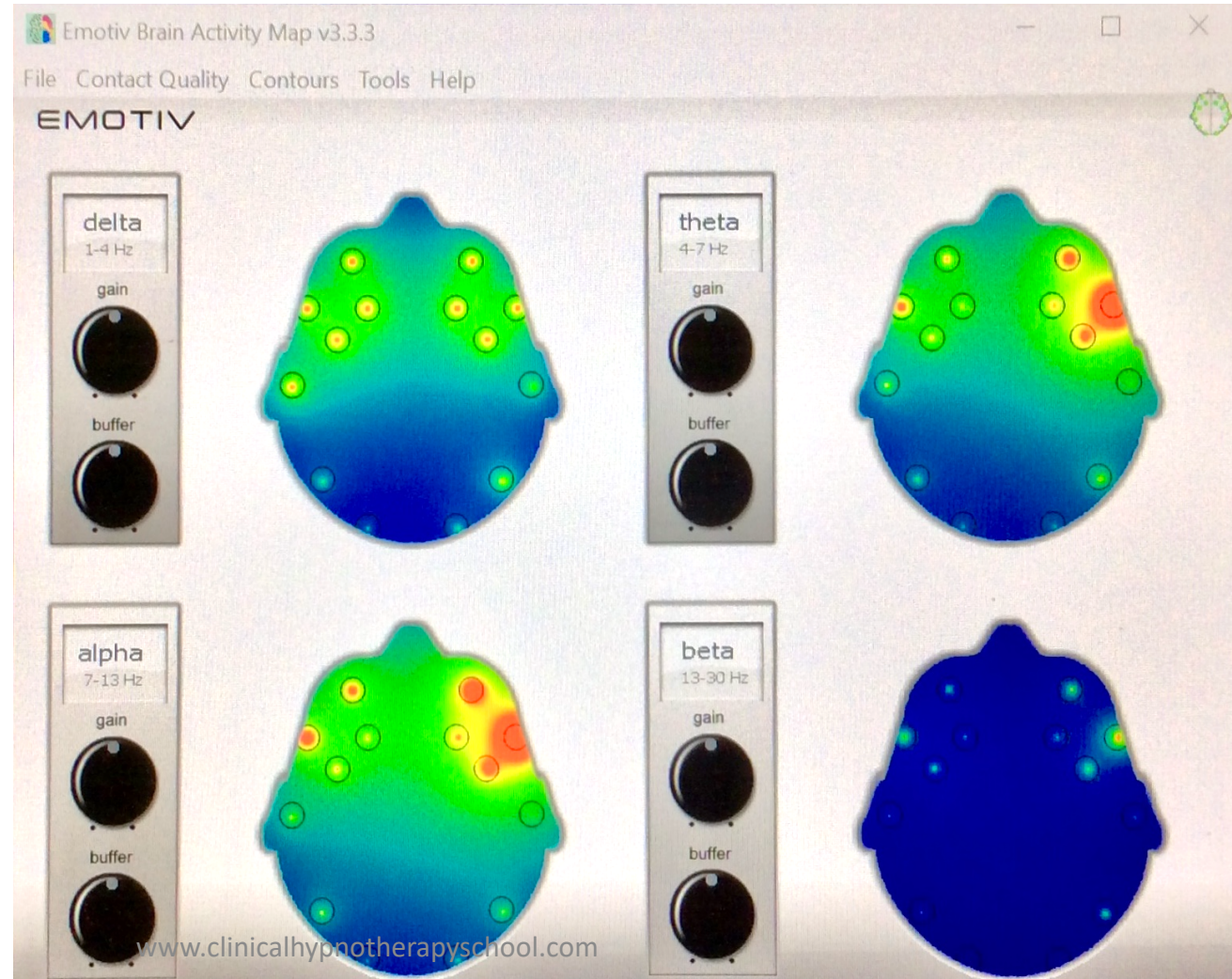
- Theta and Delta are active
- Note LHS processing
- Alpha is busy visualizing the material
- Brain trying to make sense of it



Brain waves during trance

Metaphor

- Note RHS activity
- High levels of visualization
- Creativity
- Finding solutions
- Reassembling information



Hypnosis is good for you!

Increased Alpha:

- Relaxation; enhanced problem solving; reduced fear, tension and stress; natural antidepressant

Increased Theta:

- Stronger, more natural emotions; intuition; advanced problem solving; “re-programming”

Increased Delta:

- Empathy; reduces cortisol, adrenalin; increases natural repair cycle; increases melatonin = sleep

Decreased Beta:

- Reduced anxiety and nervousness; fewer knee-jerk reactions; controlled social interactions