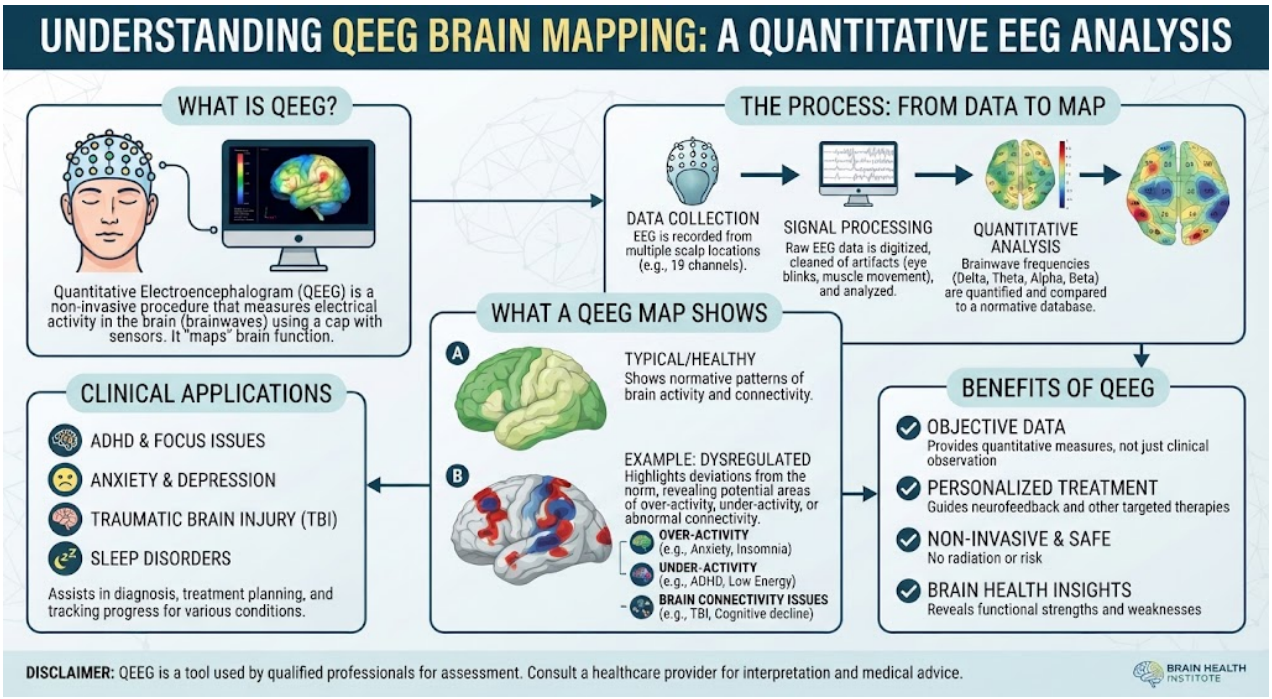
QEEG (Brain Mapping): An Adjunct in Understanding Brain Function

QEEG (quantitative electroencephalography), also known as brain mapping, is a tool that measures the brain's electrical activity and compares it, statistically, against normative databases. At BNC it is used as an **adjunct** – an additional source of information alongside clinical assessment – in understanding the neurophysiology behind conditions including ADHD, post-concussion syndrome, and anxiety and mood difficulties. It is not a stand-alone diagnostic test, and it is never used to replace clinical judgement.

What Is a QEEG?



A QEEG uses sensors placed on the scalp to record the brain's electrical activity, in the same way a standard EEG (electroencephalogram) does. The recording is then processed statistically and compared against normative databases, producing a "map" that can highlight areas where brainwave activity differs from what would typically be expected. This can sometimes reveal patterns of brain dysfunction that aren't visible on standard structural imaging such as CT or MRI scans.

How QEEG Findings Are Used at BNC



BNC psychologists do not record the EEG or interpret the raw results themselves. Instead, they refer the client to an experienced Clinical Neuroscientist – Dr Jacques Duff – who correlates the QEEG findings, T.O.V.A. (Test of Variables of Attention) results, and the client's reported symptoms against the research literature. These correlations are presented back to the referring clinician, **without a diagnosis or clinical recommendation being made** by the neuroscientist.

This distinction matters: it leaves the referring Clinician free to use these adjunct findings, alongside everything else they know about the client, to form their own clinical judgement and recommend a treatment approach. The QEEG and T.O.V.A. results are one input among several, not a substitute for the psychologist's or psychiatrist's own clinical assessment.

Is QEEG a Diagnostic Test?

No. QEEG is not a stand-alone diagnostic tool. Its findings are informative and can add to the overall clinical picture, but they are always interpreted alongside clinical history, symptom reports, and – where relevant – neuropsychological testing, rather than used on their own to make a diagnosis.

Safety and What to Expect

A QEEG is non-invasive and painless. Small sensors are placed on the scalp to record electrical activity, with the recording session typically lasting around 10 minutes. There is no radiation involved and no risk to the client.

Limitations of QEEG

QEEG findings are not specific to any one condition, and can be influenced by factors such as medication, fatigue, stress, or sleep. Interpreting the results reliably requires specialised training, which is why this is handled by an experienced Clinical Neuroscientist rather than reviewed in isolation. Results should always be considered alongside the broader clinical picture, not read on their own.

Frequently Asked Questions

What is a QEEG (brain map)?+

A QEEG, or quantitative electroencephalogram, measures the brain's electrical activity using sensors placed on the scalp, then statistically compares it against normative data to produce a set of "maps" of brainwave patterns. For a general explanation of **standard EEG**, see the Cleveland Clinic's EEG page (QEEG is a more advanced, statistically analysed version).

How can QEEG help with concussion and mental health symptoms?+

QEEG can reveal patterns of brain activity that aren't always visible on standard scans, which can add useful context in both concussion recovery and certain mental health presentations. It's one adjunct source of information among several, alongside your broader clinical assessment – see the Brain Injury Association of America's overview of brain injury and mental health for more on that link.

Is QEEG used to make a diagnosis?+

No. QEEG is not a stand-alone test for diagnosing concussion or mental health conditions. It's used alongside other clinical information to add to the overall picture – one piece of the puzzle, not the whole picture.

Who reads and interprets the QEEG at BNC?+

BNC psychologists do not record or interpret the QEEG. They are referred to an experienced Clinical Neuroscientist, Dr Jacques Duff, who correlates the findings with T.O.V.A. results and symptoms against the research literature, without making a diagnosis or clinical recommendation. This leaves your psychologist free to use these adjunct findings, alongside their own clinical judgement, to recommend treatment.

How can QEEG help guide treatment?+

By highlighting patterns that may be relevant to your symptoms, QEEG findings can help your psychologist consider which treatment options may be worth discussing with you, always as part of a broader, individualised treatment plan.

Is QEEG safe?+

Yes. QEEG is non-invasive and painless – there are no needles, no radiation, and nothing enters your body. Sensors simply sit on your scalp and record your

brain’s electrical activity, usually around 10 minutes.

Are there limitations to QEEG?+

Yes. QEEG findings aren’t specific to any one condition and can be influenced by factors like medication, fatigue, stress or sleep. Interpretation requires specialised training, and results are always considered alongside your broader clinical picture rather than in isolation.

Should everyone get a QEEG?+

Not necessarily. QEEG tends to be most useful for people with persistent or complex symptoms that aren’t fully explained by standard assessment, or where it may help inform treatment planning. It isn’t a routine test for everyone, but it can add real value in the right circumstances.

□□ (03) 9848 9100

Updated on: 23/08/2026 by: Dr Jacques Duff – PhD; BA Psych; Grad Dip Applied Psychology; FANSA, Clinical Neuroscientist.
Reviewed on: 23/08/2026 by: Bernard Ferriere – Clinical Psychologist; BA; Grad Dip Applied Psychology; Dip Clinical Hypnosis; MAPS