

# STYLE

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## THE REAL BRAIN WAVE

ANXIOUS? STRESSED? BEATING YOURSELF UP? NEUROFEEDBACK CAN HELP TO REPROGRAMME YOUR BRAIN, REPORTS *JINI REDDY*

**B**ored with sun salutations? Meditation proving a slog? Then you might want to cast your self-improvement sonar in the direction of neurofeedback, a cutting-edge therapy that is making waves — brainwaves, that is — on these shores. Those who have tried it swear it offers inner transformation: a profound lessening of anxieties, awakened states, feelings of elation and the focused, clear, calm mind more readily accessed through years of effortful practices. “With neurofeedback, you can break out of unwanted habitual thoughts or reach states of mind that you normally can’t attain,” says Christina Lavelle, a partner in Brainworks, in London. “In doing so, you free yourself to choose your reactions, rather than being at the mercy of them. The process of learning is largely automatic, relaxing and can be a lot of fun. It’s holistic, noninvasive, safe and drug-free. And it works. The effects are permanent.”

Brainworks is one of the few outfits in Britain where you can try the therapy and the only one in the country to use the cutting-edge “Loreta” system, which stands for low-resolution brain electromagnetic tomography, a mouthful for a device that records electrical activity from the scalp. “In the past year, neurofeedback has evolved hugely,” Lavelle says. “With the Loreta system, we can work deep areas of the brain that traditional surface neurofeedback cannot reach. The results are much quicker, and you need fewer sessions.”

As a therapy, neurofeedback isn’t new. It was pioneered by Nasa in the 1960s, as a way to help astronauts who were having fits when exposed to rocket fuel. Then it was adopted by wannabe mystics — the LSD crowd looking for a new high — which didn’t help its credibility. “Fortunately, in the 1990s technology caught up with the concept and there was scientific evidence that it works,” Lavelle says.

Psychiatrists, neurologists and military medics have given neurofeedback the thumbs-up. In America it has been used as a form of rehabilitation for former military personnel suffering from post-traumatic stress, and apparently AC Milan’s footballers use it, as do City CEOs, poker champions and Olympic athletes to achieve peak performance. Sarah Roy, one of the Brainworks cofounders, claims that the physicist Stephen Hawking is a fan.

A session involves wearing a hat with 19 electrical sensors. These monitor your brainwaves and convert them into audiovisual form. “This allows you to see what your brain is doing. You then learn to recognise negative patterns and train the brain to produce healthier ones,” says Lavelle.

Mark Reardon, 25, who works in commercial banking, had a course of sessions last year and found it so useful, he still has top-ups. “My initial motivation was to become more productive at work and improve the quality of my sleep, as I never felt rested,” he says. “Prior to neurofeedback, I was close to being dismissed on numerous occasions. Since my initial sessions, I’m now looked upon more kindly, feel more assertive and have been successful in applying for two promotions. I find it easier to get things done and it has greatly improved my accuracy at work.” He also feels that his sleep is more rejuvenating. And there was an added bonus: “I used to have problems with binge eating, which I’ve since overcome. Neurofeedback hasn’t changed my personality but it has equipped me to deal better with life’s challenges.”

While the therapy has lots of orthodox therapeutic uses, and has been used successfully to tackle panic attacks, depression, epileptic fits and trauma, it has also, intriguingly, been an aid to reaching the higher levels of consciousness beloved of yogis, monks and advanced meditators.

For Kate Hewett, 41, a yoga teacher based in Devon, the therapy was unexpectedly transformative. “The week after the sessions finished was probably the most extraordinary of my life. I saw the world and my place in it completely shift. It was unlike any other spiritual experience I’ve had before, mainly because its effects have been so long-lasting and utterly convincing. Though the experience did fade over time, it feels as if there’s no going back to where I was before. Many things that used to get to me just don’t any more.”

A marriage between science and spirituality it may be, but as Lavelle stresses, neurofeedback is not a magic pill: “It can facilitate change, but you have to want to change.” And there are contraindications: she won’t treat anyone with schizophrenia or bipolar disorder.

By now, I’m desperate to have a go myself. What might neurofeedback do for a freelance writer who is generally optimistic, but sensitive and prone to sugar addiction and man fixations? Secretly, I wonder if a few sessions can induce those blissful feelings you get when you’re in love. Maybe I’m looking for a fix. But what’s the harm if it works? The sessions (I’ve signed up for seven) take place in a smart office in Fitzroy Square, central London. The first thing I notice is a giant leather armchair — more corporate than Captain Kirk’s command chair — and a screen with a swirly saver of a multicoloured brain.

I had filled out a lengthy medical questionnaire before coming and we had chatted on the phone, so, without too much preamble, Lavelle places what looks like a swim cap with octopus tentacles dangling from it on my head. She uses saline goo to attach the sensors — so far, so Hellraiser, I think. Initially, my brain is mapped and analysed. She tells me that it is working reasonably well (phew), but that my anxiety levels are sky-high and that it would be a good idea to work on that first.

The session is painless: I play a computer game, moving a Ferrari around a track with my mind (when I was a kid I fantasised about having telekinetic abilities, so this feels pretty cool). The car only moves when my brainwaves find their way into the optimal state that Lavelle has set as a parameter. When this happens, I get positive feedback — the Ferrari whizzing round, music and beats. My brain likes this; it’s happy, and wants to find that optimal state again. The idea is that, after a few sessions, it will without any prompting.

The results are astonishing. A day later, the mind chatter that rolls like a loop in my head — the what ifs, the worries — simply disappears. It’s as if someone has turned down a radio blaring in the background. A few more sessions and I have voluntarily stopped mainlining chocolate. Seriously, I think, this stuff ought to be on the NHS.

A week on and I begin to feel a surge of bliss. The feeling of wanting to plug up the hole in my soul lessens. By now, I am begging Lavelle to move on to my pleasure centres. “Will you be walking around having orgasms every five minutes?” asks a friend. The answer is no, but I can’t fail to notice I’m in a state of low-level arousal (sadly, there’s no man to enjoy the fruits) and feel a calm energy in me. It’s not that there are no more irritations — it’s just far easier to put them into perspective, to detach myself from them.

Lavelle assures me the changes will be permanent: “The euphoric feelings might wear off, but your brain can’t ‘unknow’ what it’s experienced, and you’ll have reached a new state of normal,” she says. Two months on and I can vouch for that: I still feel far, far calmer and more worry-free than I did before the sessions. And I’ve noticed I’m making more sound decisions.

So, is neurofeedback set to be the yoga of the Aquarian age? The downside is the cost — £1,320 for the standard 12 sessions. Even so, in London, business is brisk. “People are starting to understand the brain more, and working with it isn’t as scary as it was once perceived to be,” Lavelle says. “So, yes, I think neurofeedback will eventually become commonplace.” NHS, take note. ●

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