

EXCERPT: "Feeding Your Head"

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...Originally developed by UCLA researchers studying ways to prevent or treat epilepsy, EEG Biofeedback has since been used to treat thousands of children suffering from Attention Deficit Hyperactivity Disorder. In the vast majority of cases it has restored--sometimes in as few as three or four sessions, usually in about 20--normal behavior to wall-climbing children who were beyond even Ritalin. Of those on amphetamines such as Ritalin, almost all are able to stop using drugs entirely or cut back substantially.

As with Ritalin, so with Prozac, Welbutrin, Paxil, Serzone, Valium, Melaril, Ativan, Depakote, lithium, and the rest of that motley-but-unmusical crew. EEG Biofeedback has made people suffering from anxiety, depression, sleep disorders, chronic pain and a host of other illnesses whole again, either off drugs altogether or on greatly reduced dosages.

More importantly, unlike drug therapy, the beneficial effects of EEG Biofeedback don't end when you cease treatment. In many cases, they last indefinitely (or at least 20 years; the length of time there have been cases to study). In other cases, a few "refresher" sessions are needed every year or so.

"One of the most promising findings...is how amenable the brain is to effecting change in its own function if only it is given the appropriate clues," says Dr. Siegfried Othmer, Phd., one of the pioneers in the field. "Why shouldn't the brain be able to adapt to new information about itself! It's called learning. That's what our brain does well."

And, once the brain "learns" how to regulate itself to function normally, it tends to retain that ability just as it does any other new skill. (The ability to balance on a bicycle, for example.)

Dr. Othmer states that any condition adversely affecting cognitive function is a sign of "disorder" in the brain. There can be "observable differences in serotonin, norepinephrine and dopamine function," he notes, "but these may be effects rather than causes...we must look at the brain as a control-and-feedback mechanism. A functioning serotonin system is a necessary but insufficient condition for maintaining order (in the brain)."

Which may be why members of the "Prozac Nation," as well as users of other serotonin-uptake-inhibiting anti-depressants, frequently get better but never get well.

What EEG Biofeedback training does is stimulate your brain to stop functioning at specific levels (measured in cycles per second) associated with your particular condition. Without getting into a dissertation on alpha, beta, SMR, theta and delta brain waves--putting it instead in almost embarrassingly simplistic terms--if you are hyper, agitated, and "wired" much of the time, your

brain is probably producing beta brain waves of too high a frequency. Whereas, if you're sluggish, depressed, uncaring about the world or yourself, it's likely your brain may be producing too many SMR or theta waves. The game (biofeedback) trains your brain to operate at optimum frequency levels, and the EEG measures your brain waves in real time so that you get "rewards" (the points and the beeps) only at those levels.

"I've never had an anxiety case or a case of chronic pain that didn't respond," says Dr. Neal King, an Austin, Texas therapist who began using EEG Biofeedback eight years ago as an alternative to the more traditional forms of therapy he also offers. "Cases of long-term, generalized anxiety usually respond within the first couple of weeks (at two or three sessions a week), but normally take 20 to 30 sessions to be resolved.

What EEG can do, in CFS, post-stroke, chronic pain, and other cases where there is actual physiological damage, is retrain the patient's brain-wave activity to operate at levels that maximize its ability to overcome or moderate the effects of the condition.

Even more significant for many people, Dr. King points out that EEG Biofeedback can be used to simultaneously treat a variety of problems. Maybe you have trouble falling asleep because you dread the coming day and its problems, are in a deep depression because you're always too groggy to deal with tomorrow when it gets here, and frequently suffer pounding, stress-induced headaches. A traditional shrink would probably prescribe three different drugs for you- with, potentially, three different kinds of disquieting, or even calamitous side-effects.

However, by simply relocating a sensor to "read" a different part of your brain, an EEG "game" can both stimulate the beta waves needed to bring you out of the depression and increase the SMR waves that will calm your anxiety. Meanwhile, throughout the session you're also improving your brain's ability to self-regulate, which should make you much less vulnerable to headache "triggers."...

Performance training

"It changed my life," says Southern California pro golfer and businessman--or, maybe I should say "ex-businessman", Ed Galvin.

For almost 10 years Ed was a pro golfer who needed an executive day job to keep a roof over his head, the wolf from his door, and his feet in golf shoes. Then he discovered EEG Biofeedback.

"After the very first session I was able to focus better than at any time in my life," Ed says. "Whatever physical ability I had didn't change. What changed was my ability to focus, to devote 100 percent of my attention to the task at hand, to sustain my emotions at an even keel for 18 holes.

"All of a sudden things like a lawn mower revving up, or a guy walking by on the course, or someone in the gallery having a coughing fit didn't distract me anymore. Last year I made 21 out of 25 cuts, I made money on the Nike tour, I was first alternate at the L.A. Open. This year I'll be able to do the whole tour as a full-time, money-earning pro.

As Dr. Othmer puts it, "This tool is revolutionary in its implications for the future of mental health and for the intellectual journey that we are all on. At its best, biofeedback aids function, not merely dysfunction...it gives flight to the soul."

EEG Biofeedback training is being offered by a growing number of psychologists and psychiatrists throughout the United States and abroad.