

Massachusetts Psychologist (1998)

Biofeedback Treatment potential EXPANDING

By Lauren John

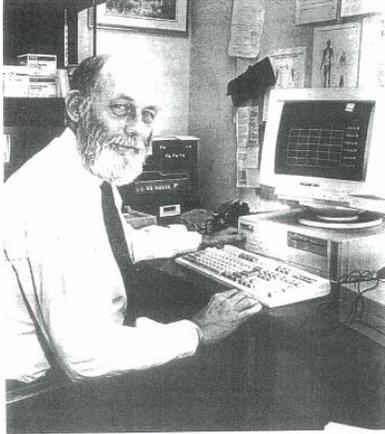


PHOTO BY RUTH PETERS
Technological advances have improved the measurement and graphic display of brain wave frequencies according to Paul Swingle, Ph.D., the coordinator of the Clinical Psychophysiology Clinic at McLean Hospital in Belmont.

The woman's voice on psychologist Paul Swingle Ph.D.'s answering machine was slurred and slow, like a record played at the wrong speed. The patient, 35, whose speech had been affected following the removal of a brain tumor, struggled to make herself understood as she scheduled her next appointment. Three months and 12 sessions later, the voice on the machine was clear and vibrant, a result of integrating biofeedback into her treatment, says Swingle, who is a Coordinator of the Clinical Psychophysiology Clinic at McLean Hospital. He has saved a series of messages the woman left to illustrate her progress.

In treating this patient, Swingle used newer "neuronal" or brainwave biofeedback techniques. These techniques are now being practiced more widely, he says, thanks to technological advances that have improved the measurement and graphic display of brainwave frequencies.

Few people walk directly into a psychologist's office and say that they need biofeedback, according to Philip Brotman, Ph.D., a Program Director of Biofeedback Training Associates, based in Manhattan. The vast majority are physician-referred, which underscores the importance of physician education and even marketing, he explains. Further complicating matters is the fact that there is no formal licencing board, which makes it harder to evaluate practitioners.

However, physicians or psychologists seeking well-trained local biofeedback practitioners can turn to two certifying organizations, The Biofeedback Certification Institute in Wheat Ridge, CO or the National Registry of Neurofeedback Providers in Culver City, CA.

Regarding reimbursement for these services, psychologists and physicians sometimes assume that it is difficult for clients to get insurance coverage, Brotman says. The difficulties, however, are those that psychologists and their patients face in general as managed care moves in. This is because insurance companies are generally billed for psychotherapy services and not biofeedback as a stand-alone treatment.

One application that Swingle would especially like physicians and patients to know about is the effectiveness of biofeedback as a tool for treating alcoholism.

"We have known for many years that genetically at-risk alcoholics are deficient in slow wave activity at the back part of the brain," he says. "Through biofeedback, we can teach them to increase slow wave activity."

Kids with attention deficit disorder, on the other hand, often produce too much slow wave brain activity of the kind associated with day-dreaming or sleeping, rather than the faster waves needed for an activity such as reading.

The brainwaves of these children can be monitored as they play video games, which are programmed to display visual rewards such as a sudden release of balloons or a rocket shooting off, when they increase the type of brainwave activity associated with sustained attention. "In essence the child is playing a video game with his head," Swingle says.

"Biofeedback is a very effective way to teach kids...they love the interaction with the computer," says Gregg Jacobs, Ph.D., a psychologist with the Division of Behavioral Medicine at Deaconess Hospital in Boston. Jacobs has treated children with headaches, hypertension, and gastrointestinal problems.

Deaconess is well known for its Mind/Body Institute in which patients are treated for a variety of conditions, ranging from heart disease and cancer to panic disorder in which psychological stress is believed to play a role. Through guided imagery and meditation patients learn a "relaxation response," pioneered by Herbert Benson, M.D., which can be brought about without the use of biofeedback equipment.

"Most people can eventually learn the relaxation techniques without the *equipment*," Jacobs admits. But what formal biofeedback does is accelerate the learning curve, he says. After all, patients are constantly receiving visual and auditory feedback.

Some patients see the electrodes as intrusive: in fact it can even raise the level of discomfort, according to Brian Ott, Ph.D., a psychologist who uses biofeedback for pain management at Bunker Hill Community Health Center and in his private practice, Behavior Management Services. But many see it as "fascinating...an educational experience," he says.

In the course of his work day Ott will confer with neurologists, physical therapists, primary care physicians, and even dentists who refer patients with jaw pain, to develop a comprehensive treatment program. And he stresses what psychologists say they most want others to know about biofeedback – that it is a therapeutic tool or modality, rather than a stand-alone treatment.