

Healing Young Brains

The neurofeedback solution is about rescuing children from pervasive and devastating disorders that affect millions of young people. Problems like autism, attention-deficit/hyperactivity disorder (ADHD), and even depression can have lifetime consequences. The simple truth is that when we rescue the child, we save the adult. Countless adults have bemoaned the fact that they did not get the needed help when they were younger; as a consequence, their adult lives have been in some way handicapped by what are now very treatable disorders.

Global dysregulation is the term for the theory that if brainwaves are dysregulated, there is a strong likelihood of a cluster of symptoms rather than just a single problem. For example, a child with ADHD is likely to have sleep problems, low self-esteem, depression, and perhaps angry outbursts. Another child with the same diagnosis may show generalized irritability, defiance toward authority, and perhaps a tic disorder, and so there is usually a cluster of symptoms, not just a single problem. Neurotherapists observed that when they started to regulate the ADHD brain, other symptoms began to disappear. Not only did the child become more focused, for example, but sleep also improved, tics disappeared, and the child became much easier to work with. In addition, therapists noticed that self-esteem improved, attitude brightened, and depression dissolved.

Allopathic medicine generally focuses on the primary complaints and tries to ameliorate the single problem with a treatment modality such as medication. Medications, however successful, generally carry unwanted side effects. Often a patient will have one drug to treat a single problem and two other drugs to treat the side effects of the first drug. Neurofeedback, on the other hand, seldom, if ever, has unwanted side effects. In fact, the effects of neurofeedback are generally the amelioration of additional symptoms in the cluster. If the training session does cause an unwanted side effect such as a headache or a sleepless night, it can be remedied in a single neurofeedback session. Neurotherapists expect multiple symptoms with every problem and so we target the primary problem while charting the other problems in the cluster, knowing that we are addressing more than a single symptom.

Autism is not only a problem of social engagement, just as ADHD is not only a problem of inattention in the classroom. Depression is not only a problem of feeling a little down, just as sleep disturbance is not only a nighttime problem. These are all problems that fall in clusters of problems that can only be described as serious, and they may be the first manifestation of lifelong problems. When these disorders are carried into adulthood, we see more failed marriages, less job success, more auto accidents, rockier personal relationships, and trouble with the legal system. We know scientifically that most of our medications do not “fix” these childhood disorders.

Inappropriate brainwave activity is at the core of most of these problems. In ADHD, for example, the dominant brainwave is a slow-frequency brainwave. Ritalin is a stimulant medication that speeds up the brain. It is, however, only a temporary treatment. Remove the stimulant and the brain slows to baseline again. Not only does Ritalin not fix the problem, it also has side effects, and we do not know the consequences of long-term use.

There is, however, a different kind of hope for children with these pervasive and destructive disorders. Neurofeedback is a sophisticated form of biofeedback that actually trains the brain to normalize the brainwaves and make them flexible and adaptable to situational needs. It can do on a more permanent basis what most medications can only do for a few hours, and there are no lasting negative side effects as there are with medications.

Neurofeedback is a quick, noninvasive, cost-effective treatment for a wide variety of disorders that affect not only children, but also adults. Without years of medical treatment, taking pills, or managing difficult diets, without months or even years of traditional therapy or behavior modification, we can successfully treat disorders like autism, ADHD, learning disabilities, and emotional/behavioral problems. Neurofeedback is a simple treatment that generally involves two sessions a week. The patient is connected to a specialized EEG (electroencephalogram) computer system. By watching a monitor, the patient can see what his or her brainwaves are doing and through training can learn to change dysregulated brainwaves to more functional and flexible brainwave frequencies.

If these children are not treated, we end up with adults who procrastinate, are disorganized, or who have problems that interfere with living normal, productive lives. Attentional and behavioral disruptions as well as emotional disorders are usually the outward signs of deeper problems. The problem is frequently brain dysregulation, which makes so many children and adults unable to access and utilize their inherent abilities and talents. In the case of ADHD, we are not just dealing with inattention and hyperactivity, we must deal with the frustration and anguish of academic underachievement, the lack of concern for the rights and welfare of others, and the disregard of and contempt for order and authority.

Disorders like autism, depression, anxiety, attachment disorder are generally the result of brainwave dysregulation, and are usually caused by some type of injury. Sometimes the injury is obvious and sometimes extremely subtle, ranging from trauma to a genetic injury. The brain is unable to self-regulate in a normal way. Neurofeedback treats the system, and when you regulate the brainwaves, symptoms in the entire cluster begin to disappear. Not only does attention improve, but patients sleep better, have less anxiety and depression, experience diminished learning difficulties, and are less aggressive. Interactions with others improve, patients generally act more appropriately in social situations, and self-esteem grows. If safety and efficacy are to be used to determine treatment, neurofeedback should be the treatment of choice for these disorders.

The best way to treat these disorders is to retrain the brain, restoring it to proper balance and flexibility. Brains are exquisitely designed to be able to interact socially, pay attention, and comprehend information; to achieve full human potential; to focus, think, reason, dream, and create. Brains should thrive on interaction, stimulation, and information and grow in ability and proficiency. When the brain can comprehend what is going on inside the skin, it can begin making changes in events in the body. The thinking brain can learn to give subtle instructions to change these internal activities. Neurofeedback is perhaps the biggest breakthrough in noninvasive medicine in the last fifty years. It is a self-regulating process that offers patients some control over their own recovery.