

Anxiety and Panic Attacks

Imagine if you will, living in a state of constant worry. Sometimes it is just a sense of uneasiness; at other times, it is a chronic state of fear; and at still other times, it is a paralysis of will. There are people who spend their entire life bracing or what could happen. Some individuals are in constant dread of some event that may or may not happen. Others have episodic dread and even panic. Technically, this exaggerated fear response results from an overexcited limbic system. That is a part of the brain that responds to emotions.

Often, anxiety and panic attacks are referred to as disorders of “what if.” What if this happens, what if that happens, what if I get sick, what if they die, what if the sky falls? Most of us are not paralyzed by the future. Of course, things can happen and we could suffer the insults of life, but we will deal with it when it happens. For others, however, their entire lives are predicated on what could happen: the thoughts and images they conjure are not very pleasant. They are living almost exclusively in the future, which means that they have abdicated the now. The now is usually pretty safe, but patients with anxiety and panic don't live in the now because they are too busy fighting with the future. Neurofeedback calms the overexcited limbic system and helps them focus on living in the now.

The broad term “anxiety” represents a wide variety of disorders. It includes panic attack, obsessive-compulsive disorder, generalized anxiety, posttraumatic stress disorder, and numerous phobias. Children frequently have anxieties about the broad new world they are facing; fortunately for most children, these are just stages that they grow through. For some children, however, anxiety becomes a way of life and many of their anxieties are carried into adulthood. Anxieties also tend to generalize from one worry to another, to another. If we can work with the children before these worries become entrenched, we can save a lot of pain in later years.

The most common use of biofeedback over the past thirty or forty years has been for relaxation and stress management. We have long realized that both chronic and acute stress can lead to various anxiety states. Anxiety can manifest in a number of different ways, from a severe panic attack to phobias. It can also manifest in less severe cases such as performance anxiety or stage fright. The single most important function of brainwave training is its effect on the overexcited limbic system. When you calm the central system (the brain), you are calming the entire system, internally and externally.

When an individual feels threatened in some way, the brain reacts by being in an overly heightened condition. In other words, it speeds up; it is no longer relaxed and comfortable. The brain is making an excessive number of fast-frequency waves which are not the waves that are conducive to being calm and in control. The problem can compound and the person becomes increasingly out of control. It can finally reach the point where the person becomes frozen, unable to function. Anxiety can become a

self-fulfilling prophecy; I see myself becoming anxious and I fear becoming more anxious, so I do. Anxiety is just one of many manifestations of the dysregulated brain. Instead of being in homeostasis the brain is out of balance. In depression, the brain exhibits an excess number of slow-frequency waves. There can also be instability in the brainwaves; the brain is vacillating between fast and slow. When the brain is really racing or riled, it is visible on the EEG screen.

By teaching the brain to regulate itself better it subsequently functions better, not only in anxiety states, but also in life's normal challenges. Once patients have been trained to self-regulate brainwave states, they are no longer so vulnerable to the downward and upward spirals of anxiety and depression. Through multiple training sessions, the patient learns to bring certain aspects of his brainwaves under voluntary control; muscles begin to relax, the mind starts to calm, and a sense of control exists. Soon the patient learns to generalize this control in his everyday life. In the course of training, the patient receives repeated challenges to improve, and it is this training that promotes the regulatory process. Think of it as weight training for the brain; once the brain shows the slightest movement toward balance, it is challenged again to move even closer to homeostasis.

We learn many skills at an unconscious level and this is true of brainwave training. In general, we have little or no awareness of the mechanisms by which the brain regulates its own activities but we do know that through operant conditioning the brain can be trained. As the patient becomes more proficient at changing the brainwaves, the process enhances self confidence. Toward the end of training the patient has gained the ability to control and regulate the various brainwave states. We find that most patients who undertake the training gain significantly in their ability to control anxiety and panic states. They can generally do this to the point that these anxious states no longer interfere with the conduct of their normal lives. Finally, by the end of the training process, the brain is self-regulating and requires no effort on the part of the patient.

As patients become more skilled at focusing in the now, in the training room, this generalizes to the world outside. Neurofeedback providers train people to focus with a higher level of intensity, which precludes being somewhere else at the same time. Once we start the training, we help patients focus on the feedback they are receiving and to develop an ability to dismiss the fearful future. The process is repetitious and we do it until focusing on the now becomes an automatic process. After completing the training, which may take twenty to forty training sessions, no continuing willful effort is required to control anxiety or panic attacks. Once the brain is regulated, the normal brain flexibility is restored and the brain automatically adjusts to prevent these out-of-control states. Since brainwave training is a learning process, it is unlikely to require follow-up sessions after the completion of training.