

Translation from the article written in the Magazine “Akkoord”.

Note about the article: the article was written for an audience that has probably no knowledge of neurofeedbacktraing at all (Musicians). The author, Margreet Holleman also had to reduce the interview to +/- 800 words. In the first lay-out of the article I also mentioned the name of Val and Sue/Zengar and Henk and Ineke/Aine. The editor did not want to mention their names because the article is not commercial. Therefore they chose a picture of the matrix-mirror. This is recognizable for people who know about ZIN. I tried the best I can to translate the article. I am honored that the article is shown on the Zengar home-page.

## Neurofeedback-method --Playground--

The person behind “neuro-insight, practice for coaching and neurofeedback training” is Hannie Ruinen. She achieved a degree in music (Bachelor of Arts) and last year she graduated as a natural therapist. She is also an enthusiastic neurofeedback trainer and, people who have worked with her on their mental and physical problems have had wonderful positive results.

There is not a lot of scientific research in the field of neurofeedback training in The Netherlands. Nevertheless nfb-trainers are convinced that, when the brain is not flexible many diseases can continue to stay in the CNS. So, the brain will not adapt to new situations, or, is doing this far too slowly. In this perspective it is possible that physically the pain should have been gone but remains in the brain, simply because the brain is still headed towards the pain that once was.

### *How does neurofeedbacktraining work?*

The brain has a tendency to stay headed to negative events. Because of that mechanism it is sometimes hard to change and improve recovery. So, part of the problem remains situated between the ears (in the brain), literally. During nfb-training the self-healing capacity of the human body/CNS is invited to do its work, and, during this process the brain/CNS is being invited to relax after this stress-response. The CNS then will learn to focus/look at positive events while it also learns to avoid/neglect negative responses. Because of that the so called relaxation-response/letting go of tension, is being touched. So, we do not tell the brain what it has to do. There is no pushing whatsoever. The changes that appear are often very gentle and obvious, and they lead to more quietness, better focusing and more self-confidence.

### *How does training evolve in a session?*

First we adjust 6 sensors on the head of the client. Those sensors will only measure. The signal will go into an encoder and after that the signal will be transferred to the computer/software. The basic idea is that the client doesn't have to do anything at all, but of course he or she is allowed to tell what is going on in their lives. You don't want to talk? That's fine, but usually people want to tell their story. In the meantime the client is watching movements on a flatscreen, these movements come with music. When there are turbulences detected in the CNS by the software, sound and image will freeze for a split second. The CNS reacts to these frozen moments, and will unconsciously adapt their

behavior: the feedback moment. Doing nfb-training regularly, the brain eventually will learn to adapt in a natural way. So, when during training, instability is being detected, this instability will be followed by stops in movement and music instantly. The cns will adapt to this proces quickly. The whole proces is unconscious and continuous. The ungoing stream of information and adjustment is a basic idea behind nfb-training.

*Will musicians benefit with this kind of training?*

“Yes, nfb works great for people who experience fear of performing on stage. Neuro-insight works together with musicians but also with juvenile workers, nurses, students, actors, singers, athletes who want to perform the best they can in their own field of expertise. Musicians often build up fences around difficult parts in the music the have to play. Because of that there is a real chance that at that particular part in their music, things will go wrong. When the brain has learned, through training, to relax, the musician will experience new energy, new chances and there will be optimal flow and function. Through so called peak performance the musician will learn to concentrate better and therefore learn to perform better. Self confidence will grow/increase and the result is permanent. Another option to deal with fear of performing is the use of beta-blocker meds but medication in this perspective is denying the self-healing capacity of the cns. Each session is a session with a unique person, a unique brain and unique goals. Enjoying/experiencing how a client finds the best in him/herself is one of the best aspects to watch from the side-line as a neurofeedback trainer.