

FRIENDS OF NEUROVISUAL TRAINING NEWSLETTER. ISSUE 5, VOLUME 2.

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Introduction.

In this week's issue of the Friends of NVT Newsletter we discuss the importance of the role of the NVT Trainer. Dr. Joseph Clark provides an overview of the 5 key attributes of an NVT trainer that lead to successful performance enhancement and rehabilitation programs.

This week's "How To" focuses on the use of tachistoscope programs to train visual recognition, short term memory, and visual processing. The tachistoscope serves as a great tool for both performance enhancement and rehabilitation NVT programs.

Thank you for your continued support in NeuroVisual Training and please be sure to follow our twitter account @FriendsOfNVT for more great content!

The Role of the NVT Trainer: Watching, Listening, Educating, Creating and Entertaining.

One of the main success predictors for physical therapy and related rehabilitation disciplines (personal trainer, athletic trainer, occupational therapist et cetera) is having a positive therapist – client relationship. If your patient likes you (the therapist) the patient is more likely to have a positive outcome.

The NVT trainer has the same type of relationship and obligations. While you need not become best buddies with you patient or client you do need to have a positive and nurturing professional relationship. This includes positive and, when needed, negative reinforcement.

A list of skills or attributes that many of us feel aid in successful NVT for performance enhancement as well as rehab are; Watching, Listening, Educating,

Creating and Entertaining. Each are important, however, their importance can change based on the client and where he/she is in the NVT program.

Watching. I have a very simple rule when I am teaching or mentoring students; the patient you are working with is the most important organism on the planet while you are with them. Don't have small talk with friends, don't be on your media device, pay attention to them. If they feel you're not into the program, they won't be either. You need to make corrections if they make a mistake, you need to reinforce good performance or aid recovery from poor performance. Watching also helps you, the NVT trainer, because you learn what to watch for, to spot changes in strategies, spot hints of fatigue or disenfranchisement. Every patient or client is a chance to learn.

Listening. I personally love to do NVT in groups because I embrace the cacophony of sounds that can occur. Picture a group of 12 people doing dynavision, vector balls, calling saccades, calling brock string colors, giving answers to T-scope questions? That is quite a lot of auditory stimulation. For the NVT trainer, if you hear high energy sounds it is a sign of a good session. However, if you hear flat disinterested voices or activity you are at risk of losing the session. Equally, if you are doing one-on-one drills with someone, listening to their energy and intonation tells you their level of engagement. Knowing your patient or client will guide you on how to listen and how to respond to what you are hearing. Some small recommendations to consider are giving them the option to choose the next drill or using a reward strategy such as setting a challenge. For challenges, I'll often offer to do a competition with the individual head to head. Trying to beat the therapist at his/her own game may add even more motivation. I will not intentionally lose either, so a win in a head to head competition is an important milestone. Having a daily or weekly leader board is also a way to challenge people to get on the leader board and to reward a good performance. Athletes tend to be very competitive, especially within their own locker room.

Education. I personally believe that it is a big mistake to try to do NVT and not give the client or patient the rationale behind what they are doing. Each exercise does not require a long lecture on the science behind the exercise, but rather if you can explain the relationship of the exercise to something that is relevant to that person it will help keep them engaged in the exercises. Say for example a person is a soccer player and we have them doing dynavision by hitting buttons on the board. As a soccer player they do not need to have great eye – hand coordination as they use their feet with their craft. However, we explain to them that the goal of the dynavision drill is ALSO to improve peripheral vision and trusting peripheral vision. Soccer is a sport where there is a lot going on, often in 360° and good peripheral vision is often critical to that activity. Many coaches teach discipline using terms like, "Stay home" and "don't get sucked in" so I have also explained the red right, green left drill to people, including the frontal lobe discussion, to emphasize how we train discipline. The athletes will begin to appreciate and invest more into NVT as you educate them on what they should be getting out of it.

Creating. NVT for performance and rehabilitation requires the therapist to create an environment and pathway to success. While there are many established ways to

conduct the NVT, the therapist will always need to keep it fresh and appropriate for the client or patient. This may require changing drills on the fly, or even creating an entirely new drill, to adapt to the needs of the patient and program. A great resource for this is the dynavision as it can be programmed on the fly to meet the client needs (Issue 4, Volume2). Moreover, there are always new products and programs coming out that you can add to your toolbox for NVT. If it is new for you and the patient it will be fresh and hopefully exciting. There are a lot of NVT modalities that can be done simultaneously with other activities. Multi-tasking and mixing of drills are great ways to keep the patient or client engaged with new and novel activities.

Entertaining. Hopefully every experienced therapist will nod their collective heads in agreement that entertaining the patient or client is part of the job. You or I can be part of that entertainment by being funny or charming, but the real entertainment comes in the exercises and drills that provide a mixture of work, fun, and entertainment. How to entertain the patient and client is as unique as each individual and changes as the sessions progress. For example, if I am doing NVT with a team I may drop some “Easter eggs” in the session. Imagine having a player doing word finding saccades and the saccades spell out fun phrases. After the saccades they are asked to recall the words or phrases. A similar call and recall drill is possible on the dynavision t-scope. A regular t-scope activity could have fun pictures included with sports specific pictures. All in all, keeping a patient entertained results in more buy-in and therefore better results.

As you can see the trainer has many roles in a performance enhancement or rehabilitation program. The NVT specialist needs to be a therapist, coach, cheerleader, psychologist and clinician. As a result, every day is a new adventure with new rewards.

“How To” – Tachistoscope.

We have referred to the tachistoscope in the dynavision (Issue 3, Volume 2), however, here we will be discussing a tachistoscope paradigm that can be run using a power point program or any flashed image. The concept is very simple; flash an image and have the patient or client recall information off of that image. This trains visual recognition, short term memory and visual processing. It can be used as part of an NVT training program for performance enhancement or rehabilitation. This type of brain training is a great adjunct to NVT training and can be progressed to include doing the tachistoscope training while multi-tasking. Consider doing the tachistoscope training while on an exercise bike.

At the start of the tachistoscope program we give the subject these instructions; “For this exercise, watch the screen to see the picture flashed on the screen. Find and write down the number seen in the picture. You will have a few seconds to write this. Then the picture will show again for a few seconds – mark down and keep track of your score. Next the screen will say ready, watch carefully for the flashed picture and repeat until told

to stop or finished. Press space once to start. Hit space at any time to advance to the next slide.”

When we do the tachistoscope training we recommend that the individuals are required to get and recall a minimum of two bits of information from the flashed image. We also default the flash duration to 0.4 seconds. Then they have several seconds to recall the information. The information theme we look for are 1. An alpha numeric and 2. A description of the scene.



Once people have tried to recall information describing the scene, we may ask them specific questions;

What was the alpha numeric; 92Gtx85Q.

Where is the ball?

Name two player numbers.

In brain parlance for some people these tasks require left brain and right brain recall. Doing the tachistoscope training can also be used to train people to get better at recognizing patterns and formations related to their sport if you can get the right images. However, you need not have directly sport related images to do the tachistoscope training. We also will mix in sports specific images with fun things like vacation photos. Having a variability and unpredictability keeps their visual processing system ready to take in and process information. We'll also occasionally omit the alpha numeric because people get so focused on trying to spot it to the detriment of the scene.

Tachistoscope programs are available online or you can make your own with PowerPoint. Simply set up the power point with a slide show and have the slide of interest flash at a predetermined duration. Consider starting the tachistoscope flash at about 0.5 to 0.4 seconds. Gradually progress the difficulty of the tachistoscope training by shortening the flash duration to about 0.2 to 0.25 seconds.

The duration of the tachistoscope session can vary depending upon the needs of the athlete or client. Typically, we want a person to do greater than 5 minutes of the training or a certain number of slides for the session. The PowerPoint program can run on a timed basis or by clicking through the slides.

We also move around when and where the alphanumeric shows up and change the contrast of the field in which the alphanumeric appears. The alphanumeric typically starts at about 4 characters and goes up to 10 characters. This drill can also be done in the presence of a small group where the group tries to outdo who recalls what and how fast they can call out the description of the image.

We have also had feedback from students that the tachistoscope training has been an aid for classroom activity. Many students feel that college lectures flash images too quickly to be able to get all of the information from it. Students who completed tachistoscope training reported feeling more comfortable and adapt to receive information from classroom activities.

In conclusion the tachistoscope will train the brain in sports specific or general training. The NVT trainer can customize the tachistoscope to the needs of the client or patient and progress it by changing the timing and complexity of the images.

Announcements.

If interested in Tachistoscope downloadable software, please visit the following website: <https://inneuractive.square.site/shop/tachistoscopes/4> for more information.

If interested in any NVT products, Inneuractive's store can be accessed via the following link <https://inneuractive.square.site/s/shop> . If specifically interested in any customized NVT products, please feel free to reach out to us at jvincent@inneuractive.com and/or click the following link for more details: <https://inneuractive.square.site>.

Please provide any and all feedback to Jon Vincent, at jvincent@inneuractive.com. Constructive criticism is an integral part to helping Inneuractive grow, so it is much appreciated.

In other news, the #9 nationally ranked UC Bearcats had their second consecutive bye week last week. However, this Saturday they will be traveling to Dallas, Texas to take on the #16 ranked SMU Mustangs. This game will be aired on ESPN2 at 9 PM.

As always, if there are any questions, comments, or concerns please feel free to reach out to Dr. Joe Clark at clarkjf@gmail.com and please visit <https://inneuractive.square.site/> for more information on NVT, available NVT products, and NVT services.

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