# FRIENDS OF NVT

#### OFFICIAL NEWSLETTER OF INNEURACTIVE



## INTRODUCTION

Greetings and welcome to Volume 8, Issue 3 of the Friends of NeuroVisual Training Newsletter. We are thrilled to continue to serve as your primary source of information and insights on NeuroVisual Training (NVT) for injury prevention, rehabilitation, and performance enhancement. Our unwavering mission is to increase awareness about the significance of the eye-brain-body connection and equip individuals, athletes, and patients with the necessary resources to optimize their visual and cognitive abilities.

In this Issue, we are going to delve into the exciting realm of sports vision and explore how specialized NVT can help elevate athletes' performance to new heights. Our main feature will be a review of an article by Dr. Jennifer Stewart, OD, entitled "Could a Sports Vision Specialty Be Your Ticket to the Big Leagues". This article discusses specific practitioners' journeys to what they term "Sports Vision Training", as well as evaluating Dr. Stewarts' stated equipment useful when starting a Sports Vision Training practice. What sets us apart from traditional practitioners is our specialized focus and expertise on the "neuro" component of vision training, which is one of our core pillars of our NVT program. In this issue, we will also provide practical tips and techniques for improving visual scanning and tracking skills, including a helpful "How To" section on Hart Charts - Scanning to Make or Find Words. Be sure to stay tuned for more valuable insights and updates on the latest developments in NeuroVisual training!

#### WHAT'S IN OUR LATEST ISSUE:

- Introduction
- Article Summary: Could a Sports Vision Specialty Be Your Ticket to the Big Leagues
  Esha Reddy
- How to: Hart Charts –
   Scanning to Make or Find
   Words Dr. Joseph Clark,
   Ph.D.
- Announcements
- Disclaimer



## Article Summary: "Could a Sports Vision Specialty Be Your Ticket to the Big Leagues"

Sports are a massive part of life for Americans. In fact, 75% of American households have at least one school-aged child participating in youth sports, with \$30-40 billion annually spent on youth sports activities (Stewart 1).

As a result, there is the opportunity for vision practitioners, like optometrists, and athletes to partake in sports vision training. For optometrists, sports vision training provides the unique opportunity to connect professions with their personal interests in athletics. For athletes, receiving sports vision training can help them improve their speed and accuracy of eye-tracking abilities, reaction time, information processing, and more. Additionally, sports vision training is a collaborative field, requiring practitioners to effectively communicate with coaches, athletes, and other involved professionals.

There are multiple reasons why one may choose to specialize in sports vision training. Some choose to pursue sports vision training as a way of continuing their love and passion for sports in a manner besides competing. For others, sports vision training enables them to become involved in the competitive world of sports while setting themselves apart from other optometric practices.

In her article, Dr. Stewart details how and why some of her colleagues joined the world of sports vision training. For Adam Clarin, OD, optometry and vision training was a way for him to bridge his love for sports psychology, neuroscience, and competition. Similarly, for Dr. Klosterman, sports vision training was a way to create a subspeciality within his practice while combining his passion for athletics.

On our team, for Friends of NVT author Dr. Clark, Ph.D., vision training was a way to take the same methods that helped TBI patients get better and apply them to helping athletes improve performance while preventing injury. He started learning neuro training and sensory training in the 90s. In the 2000s he was asked to take over the concussion program for the University of Cincinnati sports. As he worked with athletes, stroke patients, and TBI patients, he gravitated towards doing Neuro Visual Training for athletes to help them better know their brains. In realizing that he was the custodian of their brains and that NVT helped with performance and injury prevention, the concept of NVT for performance enhancement and injury prevention at UC was implemented.

Furthermore, sports vision training is very accessible and does not necessarily require expensive materials, equipment, or technology to be effective. Some low-tech materials include Brock strings, hart charts, tennis balls, Bosu balls, colored flashcards, Marsden balls, prisms, loose lenses, heco stix, balance board, and playing cards. Dynavisions, Senaptec sensory stations, FitLights, strobes, RightEye, Reflexion, and Cognivue are higher-tech options that are also available. While the higher-tech options can be effective for vision training, simpler exercises using the Brock string or saccades using hart charts are easy and equipment-light activities can contribute to an accessible, impactful vision training regimen. Dr. Clarin re-enforces this message, stating "practitioners can start working with athletes in their private practices without a large outlay in cost, time, or resources".

While Strong's article focuses primarily on optometrists joining the field of sports vision training, vision training is certainly not limited to these clinicians. Athletic trainers, coaches, physical therapists, chiropractors, and others can all utilize sports vision training and Neuro Visual Training in their practice.

If you are looking to get started with a sports vision specialty, joining the International Sports Vision Association will allow you to attend organization conferences and network with colleagues. Inneuractive also offers multiple training courses in Neuro Visual Training methods, detailed in I3V7. Additionally, Inneuractive offers software and product to help build a strong, effective neuro-visual training routine (<a href="https://www.inneuractive.com/shop">www.inneuractive.com/shop</a>).

#### References:

Jennifer Stewart, O. D. (2023, January 9). *Could A sports vision specialty be your ticket to the big leagues?* Independent Strong. Retrieved February 20, 2023, from https://independentstrong.reviewob.com/index.php/2023/01/10/could-a-sports-vision-specialty-be-your-ticket-to-the-big-leagues/

### "How To" - Hart Charts: Scanning to Make or Find Words

Hart charts are a valuable tool for NeuroVisual Training (NVT) practitioners. In fact, we have discussed Hart charts in several issues of the FoNVT newsletter (V1I7, V2I2, V4I2, V4I4, V6I8) due to their versatility and usefulness in NVT training. One way in which Hart charts can be used is to train accommodation with near far charts. By using Hart charts that incorporate varying distances between the alphanumeric characters, practitioners can train the eyes to adjust and focus on different distances, thereby enhancing visual acuity and depth perception. Another valuable feature of Hart charts is the ability to embed word finding exercises within them to work on short term memory while the eyes are scanning the alphanumeric characters. This can be achieved by having the Hart charts spell out words as the person saccades through the sheets, thus combining visual and cognitive training to improve overall cognitive performance. Overall, the use of Hart charts in NVT training can be a powerful tool for enhancing cognitive performance by improving visual acuity, depth perception, and short term memory. With continued research and development in this area, NVT practitioners can unlock even greater potential for cognitive enhancement and improved overall brain function.

In this How To, we are going to brief you on how you can do a version of word finding using Hart Charts that are not word finding Hart Charts. Here are the step-by-step instructions for using the non-word finding Hart charts in a 2x2 grid:

#### Materials needed:

4 non-word finding Hart charts in a 2x2 grid on a wall with large font and a 10x10 grid.

A list of coordinates to call out.

#### Instructions:

Set up the 4 non-word finding Hart charts in a 2x2 grid on a wall. Assign a number (1-4) to each Hart chart.

Explain to the subject the coordinate system used in the Hart charts. Each alphanumeric on the chart has a specific location identified by a unique set of coordinates consisting of three numbers: the first number corresponds to the Hart chart, the second number corresponds to the row, and the third number corresponds to the column.

Instruct the subject to scan the Hart charts and find the alphanumeric as quickly as possible.

Call out three numbers (e.g. 2, 4, 6) and instruct the subject to locate the alphanumeric at that specific coordinate as quickly as possible.

As soon as the subject finds and calls out the alphanumeric, you call out the next set of coordinates.

For the "call and recall" exercise, instruct the subject to call out the alphanumeric and remember what they said until they find a word. Once they find a word, they should call out the word and continue scanning for alphanumerics.

At the end of the exercise, instruct the subject to recall as many words as possible and determine if there was a theme to the words.

In this drill, the client will perform saccadic eye movements, ocular motor scanning, and short-term memory exercises through word finding, while also multi-tasking. Unlike previously described Word-Finding Saccade exercises,

this task does not require pre-made Word-Finding Hart charts and can be used in addition to or as a replacement for word finding exercises. It is a valuable task to use in conjunction with word finding Hart charts to mix up the client's routine. Additionally, this task is an important skill to develop for field-oriented sports where individuals must be able to scan and find key players or recall how an adversary set up a play. By regularly practicing this task, the client will improve their cognitive abilities such as visual scanning, visual processing speed, and shortterm memory recall. This skill is important in various contexts, not just in sports, but also in everyday life activities such as driving and reading.

As an NVT practitioner, you will need to plan ahead to set up a series of coordinates to spell out words for this task. However, this task is flexible and can be tailored to meet the client's needs. One advantage of this task is that it prevents the client from memorizing words, as they might do in other exercises like word finding Hart Charts. To make it easier for you to plan the task, we have several folders of 4 Hart Charts with pages of coordinates for the word finding, as well as sets of coordinates with themes to help the client recall the words after completing the task.

This task is best done with a NVT trainer calling out the alphanumerics, this can be advantageous for the client. If the client is struggling to find the correct alphanumeric, the trainer can accelerate the rate at which they call out the coordinates to help the client improve their speed and accuracy. This feature of the task allows for an adaptable and challenging exercise that can improve the client's visual scanning, processing speed, and short-term memory skills.

## **Announcements**

On June 22 2023, meet Dr. Clark at the Food court in the NATA convention in Indianapolis. More information can be found here; https://convention.nata.org/."

The American Society for Neurochemistry is meeting in Lexington in March! If you are interested, you may register here: https://www.asneurochem.org/2023-registration

The National Neurotrauma Society opened abstract submissions this week for their national meeting in Austin, TX June 25-28; <a href="https://www.neurotrauma.org/">https://www.neurotrauma.org/</a>

As always, if you're interested in learning more about Inneuractive our mission, our products and service offerings, or just Neuro-Visual Training in general, please click the following link: www.inneuractive.com.

Have suggestions for a future issue? Please reach out to clarkjf@gmail.com or info@inneuractive.com and we will do our best to include your request in the future.