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FRIENDS OF NVT

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INTRODUCTION

Welcome to the newest edition of the NeuroVisual Training (NVT) Newsletter! In this issue, we delve into two crucial aspects of improving cognitive and visual functions: NVT's role in addressing learning disabilities and the effective use of flashcards for reading disabilities.

In "NVT and Learning Disabilities," we explore how NeuroVisual Training (NVT) can offer significant benefits in mitigating learning disabilities. By focusing on eye discipline, ocular motor movement, and brain training, NVT helps individuals improve study endurance, attention, and processing of information, ultimately enhancing academic performance and self-esteem.

Additionally, our "How To" guide in Issue 6 of Volume 10 introduces a practical approach to using flashcards to treat reading disabilities. By incorporating fill-in-the-blank flashcards into interactive drills, individuals can enhance their sight reading and phonetics skills while engaging in enjoyable physical activities.

These articles shed light on innovative methods to support individuals facing learning and reading disabilities, showcasing the potential of NVT techniques to make a meaningful difference in their lives. We invite you to explore these insights and integrate them into your training regimen, fostering not only cognitive growth but also a balanced and fulfilling lifestyle.

Unlock the power of NVT and flashcards to empower learning and enhance cognitive abilities. Happy reading, and here's to continued growth and success!

WHAT'S IN OUR LATEST ISSUE:

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NVT and Learning Disabilities

Vision training as practiced by a lot of Optometrists and eye care professionals has been around for about 75 years. Common reasons for engaging in traditional vision training are for weak eye, strabismus, amblyopia, dyslexia, learning disabilities and others. In this article we will shed a little light and some opinions concerning how NeuroVisual Training (NVT) can be beneficial for assisting with learning disabilities. This is based, in part, on the traditional benefits of vision training and the added benefits of the Neuro part of NVT.

There are many causes for what is labeled as Learning-Disabled. The result is often poor academic performance, lowered self-esteem, peer pressures, social pressures and family pressures. Diminishing the impact from a disability can help in many aspects of a person's life. NVT can be one of those strategies to mitigate learning disabilities.

In Volume 1, Issue 1 we talked about the three pillars of NVT; Eye discipline, ocular motor movement and brain training. Please also note in numerous other issues we talk about how to test and train those pillars. When engaging in NVT and including the three pillars we are addressing some deficiencies in the learning-disabled individual. Poor eye discipline can be tested and trained with various methods (V1I8, V2I5, and others – Gaze stabilization, eye discipline, t-scope). These methods tend to help train a person to keep their eyes on a task and keep the brain engaged in that task. These methods can help improve the ability of a learning-disabled individual to have better study endurance, better able to take in information in class (like from slides during a lecture), be better able to pay attention and others.

In V2I5 we talked about the tachistoscope (T-scope) and NVT training. The T-scope is where a person stares at a computer screen and an image is flashed on screen. The client is to recall as many details about the flashed image as possible before the next image flashes. The task trains Pillar 1 because if they have poor eye discipline and look away, they can miss a flash. The T-scope has an added training benefit of training Pillar 3 as well. The constellation of NVT training with the three pillars often covers brain training that can benefit the learning disabled.

Ocular motor performance concerning the learning-disabled individual can often be associated with difficulty reading, difficulty with reading retention, fatigue when trying to read, difficulty working on media, difficulty working on hard copy, learning in class say from a teacher or desktop and other related activities. All the afore mentioned activities, and a host of others, need good ocular motor performance to be able to provide the brain with the information that a learning-disabled person will need to perform. Poor ocular motor performance can contribute to difficulty learning and diminish academic performance and / or study endurance. There are numerous methods that we have presented that can help test and train ocular motor performance in ways that can mitigate some learning disabilities. We presented methods concerning saccadic eye movement (Hart Charts, V1I7, V2I2, and others) on accommodation or near far movements (near far, speed of accommodation and brock string V4I7, V7I66, and others), and on visual processing (Stroop, Word finding HC, V2I8, V3I3 and others).

In V1I7 we talk about using the Hart charts to train scanning eye movements, or saccadic eye movement. The Hart charts are often a grid of alphanumeric where a client is tasked with calling out the alphanumeric from the left sheet and right sheet, while scanning left and right. The task is timed so that the client's eyes must saccade quickly. This drill tests and trains Pillar 2. It can be progressed to differing eye muscles, multiple targets as well as adding word finding (V8I3) to train memory and processing. Saccadic eye movement is critical to learning tasks involving reading.

Concerning Pillar three of NVT if a person is learning disabled the brain may be getting poor information or it may be having difficulty processing information. Memory and processing is a critical part of the brain training pillar of NVT. Many of our NVT methods in Pillars one and two have components of brain training and there are brain training methods in isolation that can address pillar three.

We've had several issues where we discussed methods to support Pillar three. We've talked about Stroop, Word finding Hart charts, Flashcards, Marsden balls, Dynavision, T-scope and others). These Pillar three activities can train the brain in many ways including but not limited to: impulse control, memory, decision making, speed of decision making, speed of processing and multitasking. Also, many of the Pillar three activities can be done while doing other Pillar 1 or 2 activities, making them defacto multitasking drills. Thus, with NVT, one can maximize the training by overlaying the complexity with multitasking and multi-pillar-based activities.

In V2I8 we wrote about the Stroop testing and training methods. Stroop testing and training can be performed with three different Hart Chart – like sheets where the client calls the color of the word and does not read the word. Most words are color words, but some are non-color words. Their task is to recall the non-color words and to call out the colors of the words as fast as possible while saccading their eyes left and right across the 8x8 grid of colored words. This activity can test or train the brain and thereby covers Pillar 3 of NVT.

In conclusion, please understand that learning disabilities can be the result of numerous causes, and we cannot address all of them here or with NVT. But NVT is grounded in solid brain training and educational activities. Vision training, similar to what is contained in Pillars one and two, have had decades of success and NVT is simply an extension of some of those methods with the Pillar three overlay. Thus, the evidence that NVT based vision training can be a means to help mitigate some types of learning difficulties. If you know someone who is struggling some types of NVT and / or vision training may be able to help.

How To: Using Flashcards to Treat Reading Disabilities

In this issue's "How To," we'll show you how to use flashcards to treat and uptrain reading disabilities. We will use proprietary and novel flashcards built by Inneuractive to train sight reading and phonetics skills. Before we get into the methodology and drill creation, it's essential to understand the areas of reading we're focusing on: **sight reading** and **phonetics**.

For a quick refresher, sight reading is the ability to read and comprehend text at a glance. In the context of language, it primarily refers to the skill of reading written words effortlessly. This skill is crucial in various aspects of language learning and communication, and it helps facilitate a quicker grasp of vocabulary and grammar structures.

Phonetics is the use of the sounds of the letters in the words to be converted into human speech, focusing on the physical properties and articulation of sounds. Understanding phonetics is essential for accurate pronunciation and effective communication, involving categorizing and analyzing speech sounds and breaking them down into distinct phonemes, the smallest units of sound that can change the meaning of a word. It is also important for recognizing new words and converting new words to word patterns for sight reading.

The synergy between sight reading and phonetics is evident in the holistic approach to language learning. Most humans need and use both methods for reading and written language communication. The question remains: how can we use flashcards to treat reading disabilities and uptrain these two critical areas of reading comprehension? That's where Inneuractive's Fill in the Blank flashcards come into play.

These flashcards have words written on them but are missing one to two letters within the word. The client must fill in the missing letters and create the word on the card.

These cards can be powerful tools for training and improving sight reading and phonetics. For sight reading, these cards work on word recognition and rapid processing. For phonetics, these cards work on sound association and auditory discrimination. (mentally supplying the correct sounds for the missing letters). Most of the words with the blanks could be sounded phonetically into other words. The blanks when filled in produce other words. For example, C_AT might look like the word CAT. But if you fill in the blank with an O, the new word is COAT which sounds completely different. The combined focus on completing the words visually and considering their phonetic components creates an integration of sight reading and phonetics skills.

Creating a Drill to Train Sight Reading and Phonetics

It is important to note that we don't sit in a quiet room and go through flashcard decks with our clients. We often do physical activities like pitch and catch or have the client walk through pendulums with a flashcard overlay. This requires multitasking and added focus on the cognitive tasks while doing the physical activities simultaneously. It also adds a fun and active exercise to the flash card activity and keeps the subject engaged. So, as an example, we'll create a drill that integrates flashcards.

What you'll need:
- Fill in the Blank Flashcard Deck
- Vector Ball
- An assistant

First, have the client and assistant stand around 6-10 feet away, with the assistant holding the Vector Ball. Position yourself off to the side but still in the client's vision field, and ensure you have the flashcards deck. To begin, set the rules of the Vector Ball (i.e., red flash = right-handed catch, blue flash = two-handed catch, green flash = left-handed catch) and make sure both participants understand the rules. Have the assistant and the client start passing back and forth.

After a minute of getting used to the drill, pause and build to the next level. Explain to the client that when they pass the Vector Ball, they need to glance at the flashcard between pitches and catches, take in the information, try to fill in the blanks while the ball is away from them, and complete the word before the ball is returned. The client can sound out the word and potentially fill in letters as they go about the pitch and catch. If they don't complete the flashcard, they'll have to continue passing and try to complete the word while doing other things. We want the client to think through the problem and use phonetic and / or sight reading methods to solve the flashcard problem. For clients who aren't ready for that level, have them pass the ball, complete the word, and then receive the following catch. Moving one card at a time, one pass at a time.

The fill in the blank flash cards have different levels of complexity too. There are flash cards with hints, so kind of a phonetic word construction. There are flash cards with no hints where the person needs to reason out what words could be created by filling in the blank. Also, Inneuractive has other flash cards that work in different ways, which we'll discuss in future issues, please stay tuned.

Integrating flashcards featuring missing letters is a pragmatic approach to enhancing sight reading and phonetic skills. Through creative and structured exercises using fill-in-the-blank flashcards, clients engage in rapid visual recognition and processing. The missing letter component fosters a deeper connection between visual representations and auditory forms of language. As the brain adeptly navigates the completion of words with absent letters, it simultaneously refines its auditory discrimination skills. We encourage sounding out the new words that might be possible. This dual focus contributes to a comprehensive understanding of words, bridging the gap between visual comprehension and accurate pronunciation. Finally, and we think very importantly, combining fun physical activities with the flashcard tasks makes the drills enjoyable, increases participation and attendance, with concomitant improvements in outcomes.

Announcements

Congratulations to our team member Kevin Kohmescher on his acceptance into medical school!

Happy Birthday to Inneuractive's President Jon Vincent!

Neurobiks Class is now offered at a new time! We are now offering classes from 11AM-12PM, Monday - Friday @ CrossFit Cincinnati in Blue Ash!

Sign up for your free trial today: neurobiks@inneuractive.com!

We encourage our Friends of NeuroVisual Training community to engage with these enriching resources. Your commitment to staying updated fuels the advancement of our field, and for that, we are sincerely appreciative.