

FRIENDS OF NVT

OFFICIAL NEWSLETTER OF INNEURACTIVE



WHAT'S IN OUR LATEST ISSUE:

INTRODUCTION

Welcome to Issue 6, Volume 9 of our Friends of NeuroVisual Training Newsletter, where we explore the cutting-edge developments shaping the future of vision and cognition. This month, we focus on Dynamic Visual Acuity Tracking with Saccades and a Near/Far overlay.

This piece explores dynamic visual acuity training, using innovative exercises with Hart Charts to help athletes improve their ability to track moving objects. It's especially valuable for sports like baseball, where tracking the trajectory and spin of a ball demands a high level of dynamic visual acuity. The exercise involves holding "NEAR" and "FAR" sheets, with a trainer moving the "FAR" sheet randomly while the athlete reads characters on both sheets. This drill enhances saccadic eye movement, tracking, and dynamic visual acuity, providing a valuable edge for performance enhancement.

Also, don't miss our special 'How To' article for this issue: "Card Games for NVT"! This article outlines ways to play three popular card games and NVT training tools!

Thank you for your support! We look forward to creating more NVT centric content for you! We encourage you all to leave questions and/or comments below.

If you missed an issue, please visit <https://inneuractive.com> where all issues are available for free. Please tweet and share with your friends as we plan to release more great content.

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- Dynamic Visual Acuity Tracking with Saccades and Near/Far - Robert Hasselfeld
- "How To": Card Games for NVT - Dr. Joseph Clark, Ph.D.
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Dynamic Visual Acuity Tracking with Saccades and Near/Far

Visual acuity is the ability to see minute details on an object clearly and at a distance. Dynamic visual acuity, on the other hand, is the ability to perceive and resolve details of objects that are changing position or moving. Both versions of acuity are trainable, and we've discussed how Hart Charts play a role in visual acuity training (I2V8). Today, we're going to focus on how to conduct dynamic visual acuity tracking with saccades and near/far overlay. This style of drill is fantastic for baseball players or athletes who need to track moving objects clearly. To expand on that need, baseball players need to track the trajectory of the ball along with the spin of the ball. The spin determination requires a high level of dynamic visual acuity.

For set up you'll need a Near/Far Hart Chart set and a timer. First, you'll want to instruct the athlete to hold the small, "NEAR" sheet in either hand. The "FAR" sheet will be held by the NeuroVisual trainer or an assistant. Please note that this is contrary to a standard Near/Far drill where the far sheet is traditionally taped at eye-level. Have a timer set for one-minute prepared and once the athlete begins the exercise, start the timer.

Have the athlete read the alphanumeric starting at the top left character of the first column of the "NEAR" sheet, then have them read out loud the top left character of the first column of the "FAR" sheet (if the athlete is having trouble seeing in focus the far chart, it's okay to have them move closer). The athlete will continue reading the characters of the first column of the "NEAR" chart and the first column of the "FAR" chart until the participant has reached the bottom character of each chart. Once at the bottom, move to the next column and continue.

The trick to make this Near/Far activity a dynamic visual acuity drill is to have the trainer or assistant move the far sheet around in a randomized fashion while the drill is being executed. Moving the far sheet forces the athlete to work their dynamic visual acuity skills along with saccadic eye movement and tracking. The movement should be fast enough to require tracking but slow enough to be able to read the alphanumeric. Consider a movement speed of about 10 inches a second.

To take it further, you can use an assistant or trainer to move the near sheet as well. So, now the athlete is using dynamic visual acuity at both near and far distances, much like a baseball player would do when tracking the ball from pitcher's hand to the bat.

To track the progression of the athlete's dynamic visual acuity skills, record how many characters they identify within 1 minute. This drill is incredibly advanced and difficult, results may be below the standard for Near/Far drill. Further progression can be achieved by using the Hart charts and do a distance scanning saccade, with movement. Distance scanning saccades were discussed in I2V5. These dynamic visual acuity drills can be a great addition and progression of activities for your performance enhancement clients.

“How To” – Card Games for NVT

Solitaire:

10, 20, 30 card game.

This Solitaire card game uses a conventional deck of cards. The goal is to engage executive function and be fun and engaging.

Rules: Each card has a numerical value as follows.

Aces = 1 or 11, face cards = 10, numerical cards are face value.

Shuffle the cards and lay out one card at a time in a row. The game operates at the beginning of the row and the end of the row. Cards that are “in play” are the first three and last three at each end of the row. The goal is to use 3 cards available in the working ends of the row of cards (and in a row), with those 3 cards totaling 10, 20 or 30. You cannot use a buried card. For groups of 3 cards totaling 10, 20 or 30, pull them out of the line and put to the side. The more you put to the side the better.

If no group of 3 cards in a row total 10, 20 or 30, put down another card. The game is played until all the cards are put down. A win is only 1 card left. The fewer cards left the better the score.

Memory Game:

Using a regular deck of cards pull out pairs with matching colors.

Consider using 2 of hearts paired with 2 of diamonds, queen of spades and queen of clubs, et cetera. A typical starting point would be to pull out 8 pairs totaling 16 cards.

Shuffle the 16 cards thoroughly. Set the cards face down in a 4 by 4 grid. The instructions are for the client to turn over TWO cards at a time. If the cards are a matching pair, they put the cards to the side. If the cards do not match they turn them back to face down. They then turn over TWO more cards to find a match. The client is to continue this until all the cards are matched. The task requires the client to try to remember where the cards are.

You can time the person to see how long it takes to complete the game. You can also score the task by counting the number of two – card reveals.

This game can be progressed in difficulty by changing the number of cards used.

Blackjack:

Play blackjack. Note, there is no suggestion of playing for money or any stakes at all. This is a brain training activity.

The instructor is the dealer, and the client (s) is the player. The client is instructed to look once at the DOWN card. He she makes the hit or stay decision with only one look at the DOWN card. He/she plays the hand based on that one look.

Progress the complexity of the game with each hit being down. The client gets one look per card and the cards stay down.

Progress the complexity of the game with the client playing multiple hands.

He/she gets only one look at the DOWN card (s) and plays the hands from memory.

The rules above help train short term memory, strategy, and simple addition.

Rules for the client being the dealer.

The client takes on the role of dealer for Blackjack. He she deals as normal. The other players (assuming they are not clients doing training) get one up and one down in the deal. Once the dealer and other players see the UP card all card the dealer continues the game by asking hit or stay. For each hit the dealer will call the sum of the cards showing and state what number card or less must be DOWN to still be alive. No bluffing by the other players allowed fold when over.

When all players have been dealt their cards, the dealer turns his/her DOWN card up and calls the sum. He/she then decides to hit or stay. The dealer calls the sum of their cards for each hit. When the dealer decides that they are staying the total cards is announced and the total required to win. NOTE, the players do not give totals. All cards are turned UP and the dealer must add the cards to determine who wins or loses.

This game is practice for the client / dealer to do simple math and to keep track of multiple activities at the same time.

This Blackjack game and the two variations can be fun and engaging to help practice some cognitive activities, memory, and simple math. Having the client be a dealer or a player mixes up the activity and the skills needed.

Announcements

Check out this article regarding how the brain and NVT can be beneficial as part of a rehab program following injury:

<https://tinyurl.com/2f43rpza>

Check out our store, <http://www.inneuractive.com/shop> ! We regularly add new products and are excited for the upcoming launch of our NVT warmup panels.

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.

Disclaimer: Nothing in this communication should be construed as a practice of medicine, an endorsement, or political action. The opinions are the opinions of the authors.