

New guided therapy speeds brain training

BY JANICE YOUNGWITH

There's good news on the neurofeedback front as specially trained practitioners now use four-channel connectivity guided therapy to speed brain training.

"Four-channels allow us to speed treatment and in many cases, shorten the path to results," says Ann L. Rigby, founder and director, The Neuroconnection, Naperville. "We still are looking at the brain in three dimensions in order to improve the communication in neuronal networks, targeting the same connectivity data, and developing the maps as with two-channel training."

However, instead of averaging two channels of data, Rigby says practitioners now are able to average four in a particular region. "That's great news for clients and their families who now are seeing changes much quicker."

She reports that the four-channels create lasting change within half of the number of sessions of the two-channel training previously was done in office — effectively reducing by 50 percent the number of sessions needed to create lasting change.

In practice for just over 12 months at her facility, Rigby says four-channel Connectivity Guided Neurofeedback is a more powerful form of Connectivity Guided Neurofeedback, which focuses on brain waves produced by electrical signals as the brain's neurons fire. Comparative maps from pre- and post-training demonstrate faster change, with results documented within the brain remaps, with various other empirical testing tools such as the Autism Treatment Evaluation Checklist, and other self-report measures.

"Because these changes occur very quickly and are lasting, it is very important four-channel Connectivity Guided Neurofeedback only be used by an experienced practitioner," she cautions. "Training is particularly effective for clients with autism as it trains regions of the brain — where neuropathways were supposed to have formed during early development and did not — for better communication and timing."

What the experts say

According to Rigby, Connectivity Guided Neurofeedback makes changes in the brain that allow other therapies to be absorbed faster.

"When you have the neuro-



Doctors believe Connectivity Guided Neurofeedback makes changes in the brain that allow other therapies to be absorbed faster.

connections that allow you to now perform the tasks, improvements are seen more quickly," says Rigby, who says speech therapy can be enhanced, children are able to pay more attention and get more out of tutoring, become socially aware and engaged, and often need to join a social skills group to catch up due to their new awareness and interest in peers.

Among other results is the ability to transition without disruption, increased focus, improvement in social skills and social pragmatics, increased calmness and decreased anxiety, improved verbal communication or expressive language, improved receptive language, fewer repetitive behaviors and improved processing speed.

"The new interest in others, improvement in eye contact and empathy can be an amazing thing to watch," she says. "A child at the beginning of training, who had no interest in others, will suddenly come into the office engaging with others in the waiting room or carrying on reciprocal

conversations with staff when they were not able to do this before."

Because of the brain's lifelong neuroplasticity, the brain can change and form new connections at any age, says Rigby, who currently sees clients ranging in age from three to 77.

Rolling Meadows family shares personal success

For 6-year-old Brenner Zeek, of Rolling Meadows, a combination of both right and left hemisphere training has brought changes that are nothing short of amazing.

"Diagnosed with an autism spectrum disorder at age 3, Brenner wasn't speaking or making eye contact, was socially withdrawn," recalls his mother, Nicole. "We had just moved to Rolling Meadows from Naperville when my husband, Christopher, recalled seeing an article on Connectivity Guided Neurofeedback training."

Brenner's first sessions focused on his brain's right hemisphere, targeting an area responsible for anxiety, poor

social skills, disinterest in other kids, poor eye contact and inattention.

"Following just 10 sessions, we started to notice a considerable decrease in hyperactivity and impulsivity," reports his mom, who says her son seemed to have fewer emotional outbursts, wasn't jumping off furniture, could occasionally sit for a time, and became more flexible and socially appropriate.

The biggest plus, she says, is her son was finally able to start sleeping through the night, something his twin sister, Caitlin, had mastered months previously.

"I was skeptical at first, but by the time he returned to school in the fall, even his teachers were amazed by his newfound ability to sit still, concentrate and focus on lessons," she recalls. "They didn't think he could be the same child they had seen just a few months previously!"

Brenner's first-grade teachers at Marion Jordan School in Palatine reported improvements and he started having some great days, according to his mom, who says, "Even though we worked on the right side, his speech also started to improve and he began using more novel sentences and more words."

"Neurofeedback training can be very effective with autistic spectrum disorders, particularly Connectivity Guided Neurofeedback, which trains the way the brain communicates with itself," explains Rigby, who notes Brenner's remapping did show improvements on both sides of his brain.

"We did additional sessions on both hemispheres as Brenner continued to make significant and steady progress," she reports. "His hyperactivity decreased, focus increased, he was able to demonstrate more knowledge of and use of words, had less scripting and was better able to follow novel commands."

Overall, Rigby says, Brenner's parents reported a 52 percent drop in autism symptoms with just 30 sessions of the four-channel Connectivity Guided Neurofeedback.

"Our last brain mapping results were amazing," reports Brenner's mom, who says money spent on the program was an investment in her child and she is already seeing a giant return on that investment.

Eight-year-old Will Luka of Elmhurst, and his mom, Pam, couldn't agree more.

As a high school speech pathologist

NEW ON THE MEDICAL FRONT

Continued from Page 12

and the busy mother of three boys — two who are on the autism spectrum — Pam Luka says her son's experience with four-channel connectivity guided neurofeedback have been life-changing.

"It's like watching Pinocchio become a real boy right in front of your eyes," she states. "Will, who was diagnosed with autism at 3, is developing a personality, talking more, is engaged and engaging. His Jefferson Elementary teachers are telling me they see big changes. Despite being a year behind academically, he's now spelling at a second-grade level, reading sight words, playing at recess and no longer off on his own."

A combination of central, right-sided and left-sided training with shifting focus on different regions of the brain to address areas of hyper and hypo connection proved successful for Will.

According to Rigby, her client's first brain mapping showed a frontal hyperconnection which affected his ability to focus and concentrate and slowed his processing speed. After just 10 sessions of the four-channel Connectivity Guided Neurofeedback, he was less hyper, more attentive to his school work, more motivated to go to school and began interacting with other kids at school.

As brain maps showed improvement, social pragmatics, visual/spatial understanding and the ability to understand larger picture concepts became the focus of right-sided training.

"His parents soon reported he was beginning to play more with other children, had more awareness of his body and had dramatically improved social interactions," Rigby notes.

With a third brain mapping done due to ongoing speech delays, Rigby says receptive and expressive language delays were seen as hyperconnection in the left hemisphere. "We saw this on the map and by the third map, following seeing changes in the frontal and right side, we were ready to address speech. Parents began reporting language improvements in just



Will Luka, 8, of Elmhurst has responded positively to his therapy.

10 additional sessions, noting their son was having more spontaneous, relevant conversations with less scripting.

"Overall, Will showed scored dropping 42 percent on his Autism Treatment and Evaluation Checklist, a tool used by researchers to evaluate treatment of individuals with autism."

How it works

The noninvasive, non-medication and painless intervention is believed to enhance neuro regulation and improve the ability of the brain to function optimally.

Measured using an electroencephalogram amplifier and computer to show when optimum functioning is present, neurofeedback training sessions induce change by rewarding the brain with sounds and visual images from a movie or game which is played when the correct brain waves are produced.

The Connectivity Guided Neurofeedback process involves the use of specific brain mapping tools that

More resources

For information on Neurofeedback, Connectivity Guided Neurofeedback, and the new four-channel Connectivity Guided Neurofeedback, call The Neuroconnection at (630) 858-5105 or visit www.theneuroconnection.com.

provide three-dimensional statistical computations which show how the brain is communicating with itself.

For information

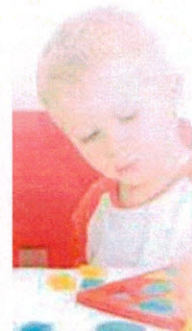
Neurofeedback has been used for more than 20 years in the treatment of attention deficit, anxiety, chronic fatigue, substance abuse and mood disorders. It meets the American Academy of Child and Adolescent Psychiatry's clinical guidelines for recommending evidenced based treatment.

Experts at The Neuroconnection have been providing Neurofeedback for 14 years and Connectivity Guided Neurofeedback for seven years.

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