

Your ADD Life

Atentiv—not your father’s brain training.

THANKS TO THE DISCOVERY OF NEUROPLASTICITY, perhaps the single greatest advance in neuroscience in the past 25 years, we live in an era of “brain training.” This includes programs, software, games, interactive online activities, and much more. It’s exciting and confusing!

I am involved with a brain-training system called the Atentiv System (yes, it is missing one “t” and the final “e”). We’ve been researching this program for the past year-and-a-half in my office in Sudbury, and are beginning trials in my office in New York. Others have been studying it in locations in the U.S. and around the world.

Attention deficit affects millions of children each year, with one in three parents believing that these challenges will hold her child back from reaching her full potential. Increasing evidence suggests that brain training

The Atentiv System, developed by Waltham-based Atentiv, Inc., and available to the public in May 2014, takes brain training to a new level. Its special video game uses a child’s “cognitive signature” of EEG brain-wave activity to measure attention, second to second, as the child plays the game. Not yet FDA-approved as a treatment for ADHD, the system is going through clinical trials to gain such approval.

How Atentiv Works

Atentiv uses a headband containing an EEG-based brain-to-computer interface that precisely measures attention levels in real time. Children play the specialized video game on a computer or mobile device, using their attention levels to make their moves (no keyboard is used). When the child pays attention, an avatar, called Curtis, moves faster. When the child loses attention, Curtis slows down. Playing the game helps a child to identify her attention “muscle” and to strengthen it.

Three pilot studies have been completed with more than 50 children, ages six to 12, who have moderate problems with attention and impulsivity. They received eight to 10 hours of training per week for eight to 10 weeks. Symptoms improved by approximately 30 to 50 percent as rated by parents and clinicians. The latest U.S. study demonstrated more than 40 percent symptom improvement, with eight hours of training over eight weeks, in 80 percent of the sub-

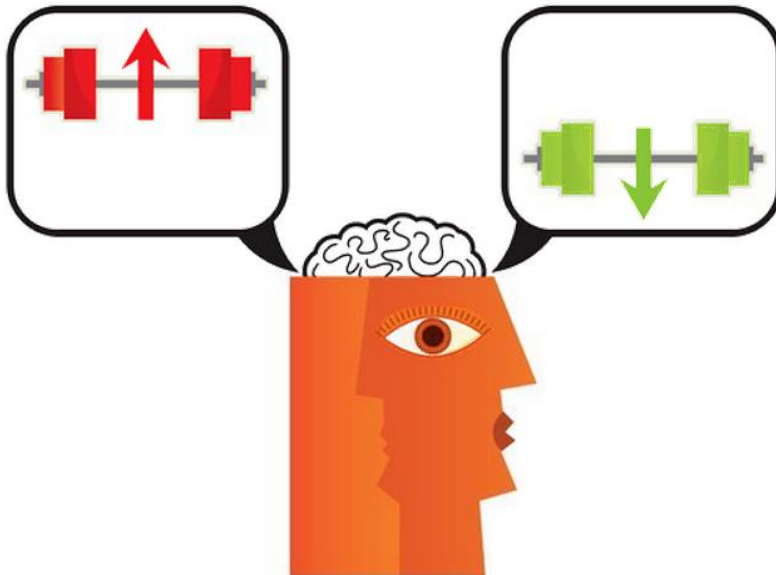
jects. Behavioral improvements were sustained for three to four months following training, which was as long as the researchers followed the children.

Equally important, kids like to play the game. Compliance is rarely a problem. I am so convinced that the Atentiv System will prove helpful to millions that I bought a small amount of stock in the company. I’m usually not a good stock picker. This time I think I am!

The progress I’ve seen with Atentiv is promising but not yet conclusive. But if what I’ve seen so far bears out in clinical trials, you may be happily telling your child one day to “go play your video games.”



Dr. Ned Hallowell has ADHD himself, and is a practicing psychiatrist and founder of the Hallowell Center for Cognitive and Emotional Health, outside Boston, and in New York City. He is the author of 19 books, including *Shine: Using Brain Science to Get the Best from Your People*.



is a key to helping these children, particularly for parents looking for alternatives to ADHD medication.

Welcome to Your New Brain

We know that the brain reorganizes itself in response to daily experiences. That’s what’s so exciting about neuroplasticity. Your brain can change, at any age, due to daily experience. The brain doesn’t just absorb things; it rewires itself. For those with attention deficit, this is good news. Life experiences—everything from a conversation and physical exercise to playing a game—can change the circuitry of the brain in formative and helpful ways.



Find 50-plus columns by Dr. Hallowell on a wide range of topics on ADDitudeMag.com (search “Hallowell”).