NEUROFEEDBACK INSTITUTE

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ADHD Children: When 50% is Really 100%!

One of the greatest challenges parents of an ADHD child will face is how to determine the level of their child's success? In other words, part of the problem determining school success is the existence of so many alternatives or strategies that parents must decipher to ensure the ADHD child's success? For example, the many different types of support can become frustrating and a confusing experience for school, parent and child alike, which can actually undermine a perception of the child's achievement. For instance, there can be the different school programs or support to facilitate greater academic and behavioral success. That is, a percentage of ADHD children often have average to above average academic skills, which entitles them to a 504 or regular education accommodations with testing, homework preparation, etc. Conversely, if ADHD children have a defined learning handicaps (reading, written language, math etc.), they are entitled to special education services or an IEP (individual educational program), which allows for smaller specialized classes in English, math, study skills, etc. The special education identification can eliminate lack of choice and provide a more flexible academic program as well as behavior accommodations for greater focusing and school achievement.

However, the dilemma for some parents: if we allow for a 504, are we placing the ADHD child with a known *neurological disability* into a classroom that requires study skills based on regular education curriculums and schedules, which is often antithetical to the child's focusing, organization and behavior skills? Also, if the child is given a 504, will regular education teachers support accommodations, such as extra time allotted for tests, homework and even permit the child to have periodic breaks (high school block schedules consist of 80 minute class periods). Finally, if the ADHD child has a learning disability, do we allow him to be placed in a *special education* class, which may attach a stigma and a challenge to his self-esteem and academic success?

Support and strategies from the many specialists can also become a challenge for all those involved, especially when ADHD children and parents are putting forth 100 percent. Even after all the needed adjustments,

a parent may still perceive struggles with school and home issues. In addition, when a parent struggles with countless setbacks, he may then resort to additional support in the form of private therapists, nutritionists, MD's etc., all of which can often overwhelm the child and parent.

Out of desperation, some parents will turn to medication, which often comes in the form of stimulants, such as Ritalin, which can be a short-term fix that can lead to a future addiction for hard-core drugs.

Finally, one strategy for ADHD children and recommended as a Level 1 Support (Level 5 is the lowest) by The American Academy of Pediatrics (April, 2012) is Neurofeedback, commonly known as EEG Biofeedback.

Whatever path the parent chooses: a 504 regular school program with testing and homework accommodations; a special education class that offers flexibility and specialization in core subjects; the private therapist who prescribes a behavior contract and works with the parent on how to set boundaries; the nutritionist who will advise the parent about sugar and/or food intake; the MD who could prescribe medication, and/or the success of Neurofeedback; the great challenge for school personnel, parent and child is to recognize that at times you are giving 100% but you are not getting 100% improvement. The key is to look for those small beads of success because for ADHD/ADD children, 50% success can often be 100%. Just ask the ADHD/ADD child: **To contact Dr. Sortino, e-mail davidsortino@comcast or on his blog:Dr. David Sortino – Santa Rosa Press Democrat.**

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Children With Attachment Disorders - Healing the Paper Cut!

Abandoned children often compare their abandonment or attachment issues to a *paper cut* in their heart, an injury that simply never heals. For parents of such children the pain of trying to heal the paper cut can be a life-long journey. Although there will be brief moments of recovery and/or a belief that the child will someday move beyond the painful memory of abandonment, the paper cut is always hanging over the child and family like some dark cloud. The problem is that there will mostly be lows and very few highs, which causes the parent and/or caregivers to constantly search for a cure to heal the paper cut.

For most parents, the search for the magic cure is ongoing, often beginning with family therapy, which comes in the form of a trained therapist who has a specialty in dealing with attachment disorders. The parents feel a sense of relief that *maybe* they will learn how to deal with the child's inability to trust, the child's unpredictable moods and the child's intense cycles of rage. The psychotherapy, which is mostly verbal, relies on the child's verbal ability to trust the therapist in order to communicate his/her unpredictable emotions arising from mistrust. An experienced therapist will attempt to tap into the child's brain or limbic (emotional) system via the hippocampus, seat of trusting relationships. The purpose of trying to stimulate the hippocampus is that the child will hopefully begin to experience a sense of trust that was lost during the critical period of infancy, the early months when the child bonds with his caregivers. Further, unless the child can learn a semblance of trust, the paper cut can only get worse as the child's social world moves into play groups and school situations in which rudimentary social skills are developed and required.

The opposite brain area of the child's hippocampus is the brain's amygdala, which represents the human's survival mechanism, or a *fight or flight* response so prevalent with attachment disordered children. In other words, when placed in a constant state of survival, the child can never bond or establish secure emotional relationships, hence the term attachment disorder. Moreover, the more the amygdala comes into play, the more the brain's higher centers are short-circuited (empathy) and learning potential and intelligence are compromised. In addition, the chemical cortisol is secreted into the brain to further accentuate the child's fight or flight mechanism. Therefore, like a metronome echoing the words: *they don't like me; they will never accept me; they will abandon me if I fail* -- the child's never ending cycle for emotional survival is the paper cut or black cloud that is always lurking. (This is precisely why so many children suffering from attachment disorder have so much difficulty in school, particularly during adolescence when identity and social relationships dominate).

Moreover, when one's interpretation of social relationships is associated with fight or flight, another problem can develop and associated with the right or non-verbal side of their brain. This problem can be a serious detriment to such children's learning potential and intelligence, especially when placed in traditional school environments where learning is predominantly a left-brain, logical, linear and mathematical endeavor. Not surprising, many children of this ilk often have weak focusing skills (the right side of the brain is associated with spatial intelligence), which is why they are often misdiagnosed as bi-polar, ADD or ADHD?

As a result, some parents will intelligently choose to turn to art therapy to heal the paper cut. The art therapist will address the child's mistrust and let the child draw his/her emotions out on paper as a strategy to talk about their drawings. For the child, the drawings serve as spokesperson to mistrust and their non-verbal personality. For younger children the therapist can use *sand tray* as another strategy toward stimulating trust and communication. With sand tray the therapist provides the child with miniature figures to use in a sandbox-like environment as a strategy to connect the child's feelings with play. Finally, sand tray as art therapy is an excellent avenue to stimulate the child's visual and kinesthetic intelligences (see Montessori and Steiner school curriculums)..

Another group of parents turn to *neurofeedback*, a successful method that helps the child learn how to *self regulate* his brain by viewing videos of nature etc. (Neurofeedback has been supported by the American Association of Pediatrics as having *Level 1 efficacy* (top ranking) in application to ADHD). The success of neurofeedack is that it rewards the child's brain when it is focused and inhibits or reminds the child when they are distracted or unfocused. After a series of 30 to 45 minute sessions the child's brain begins to change (plasticity) from being unfocused, overly aroused and fearful, to one associated with less arousal and control. The ability to experience control, especially with attachment-disordered children, is a powerful experience for such children. Now it is the hippocamus rather than the amygdala that is stimulated, allowing the child to form positive attachments (bonding) and a connection to the higher centers of the brain associated with empathy and executive thinking.

The above therapies represent the journey most parents of children with attachment disorders often follow for a cure to the paper cut and a persistent sentence of mistrust.

The bottom line is for parents to look for long-term solutions, rather than temporary solutions in order to heal the child's paper cut. **Dr. David Sortino, is the current Director of Educational Consulting and Testing, a private consulting company catering to teachers, parents, students. To contact Dr. Sortino, e-mail davidsortino@comcast** or on his blog: Dr. David Sortino – Santa Rosa Press Democrat.

Neurofeedback Can Make the Difference

What Is Neurofeedback?

Neurofeedback is direct training of brain function, by which the brain learns to function more efficiently. Dr. Sortino observes the brain in action from moment to moment, and shows that information back to the person. And also rewards the brain for changing its own activity to more appropriate patterns. This is a gradual learning process. It applies to any aspect of brain function that we can measure.

How Can Neurofeedback Help Your Child?

Neurofeedback is training in self-regulation. Good self-regulation is necessary for optimal brain function. Self-regulation training enhances the function of the central nervous system and thereby improves mental performance, emotional control and physiological stability.

With Neurofeedback we target bioelectrical functioning of the brain, which is actually a more important issue than the "chemical imbalance" that is often talked about. We are concerned with the brain's internal regulatory networks and we train the brain's internal regulatory networks and functional deregulation. Simply by detecting the brain going off track through the EEG, we can train the brain toward enhanced stability and improved functioning.

In other respects, Neurofeedback is somewhat like putting the brain on a stair stepper to exercise certain regulatory functions continuously. This is applicable to a wide variety of functional deficits.

Who Can Benefit?

Individuals of any age can benefit from EEG training. Neurofeedback can help a variety of learning issues such as an inability to focus, test anxiety and general weak school performance. For adults, neurofeedback can help maintain good brain function as they age. Peak performers (athletes) also use EEG training to enhance their abilities in sports, business and the arts.

How Does Neurofeedback Work?

Sensors are attached to the scalp with EEG paste, which then picks up brain waves. It is painless and does not involve the application of any voltage or current to the brain, so it is entirely non-invasive.

A computer processes the brain waves and extracts certain information from them. Neurofeedback will show you the ebb and flow of your brain waves and the specific information we obtain from them, in the form of a video game. Dr. Sortino will instruct you how to play the video game using only your brain waves. (Everyone can do it.) The specific brain wave frequencies that we reward and the sensor locations on the scalp are unique to each individual.

Medications are not the only way to manage your child's inappropriate or maladaptive behaviors.

Neurofeedback therapy is a safe, non-invasive, alternative option for the treatment of attention-deficit hyperactivity disorder (ADHD) in children and adolescents. In November 2012, the American Academy of Pediatrics approved Neurofeedback and Biofeedback as a Level 1 or "best support" treatment option for children suffering from ADHD. Research suggests that Neurofeedback is an equally effective treatment to medication.

Children are typically given three doses of 10 mg Ritalin per day on school days. Neurofeedback training is shown to be a favorable option that provides the same results. For parents who prefer other options aside from medication, Neurofeedback is a non-invasive, safe, effective, and long-lasting treatment option. Typically, the child will participate in 10 to 20 sessions or more depending on severity of symptoms, and each session lasts 45 to 60 minutes.

Neurofeedback and Success!

Over the past twenty years, Nuerofeedback has reached the point of having very high expectations for success in training. When such success is not forthcoming, or if the gains cannot hold, then there is usually a deeper reason for that which needs to be pursued. Nearly everyone should make gains by using neurofeedback that they themselves would judge to be worthwhile. Our brains are made for learning and skill-acquisition.

> "As neurofeedack establishes modulated arousal, people tend to become more goal-oriented and less tangential. Impulsive reactions to urgencies and crises give way to concentrated awareness of the truly relevant and important aspects of tasks, events, and people. There is a reduction in compulsive preoccupation and an enhanced integration of verbal and nonverbal messages."
>
> —R. Mark Steinberg & Dr.Siegfried Othmer
> *ADD – The 20 Hour Solution*

The Fast ForWord Program For Struggling Readers!

Dr. Sortino can also help your child through the Fast ForWord Reading Intervention Program, created by Scientific Learning Corporation, which addresses reading struggles by preparing student brains for reading and learning success. The software develops the processing assistance that is required of any student to read, listen, think, and participate successfully in the classroom.

The Fast ForWord LANGUAGE Series products build foundational elementary school reading and language skills to help students learn successfully in the general classroom. Fast ForWord can help children meet the challenging state academic standards and improve state test scores. Fast ForWord also provides extra academic support and learning opportunities in reading and language for struggling students, including at-risk students, ELL students, and special education students.

Helps Middle and High School Readers Close the Achievement Gap!

The Fast ForWord LITERACY Series helps struggling preteen and teenage readers build their

Fast ForWord continued...

confidence – and improve state assessment scores. The series features age-appropriate exercises, characters and artwork designed to appeal to secondary school students and adults. It builds foundational middle and high school reading and language skills to help districts move struggling students – including at-risk students, ELL students, and special education students – to become successful learners in the general classroom.

Reading Assistant

Using speech recognition technology, Scientific Learning's Reading Assistant software provides one-on-one guided oral reading support, acting as a patient, non-judgmental listener to struggling readers. Monitoring for signs of difficulty, the program intervenes with assistance when the child is challenged by a word. Extensive reporting features enable educators to monitor their students' progress with Scientific Learning products. Educators whose students are using Reading Assistant software may also play back recordings of student's individual readings at a later time.

Meet Matthew...
dismissed from Special Ed

His parents were worried. Their young son was diagnosed with ADHD, struggled to read, and hated school But after one year on Fast ForWord, he made four years' worth of growth. His whole life changed. "It's so cool. My teachers stopped talking so fast and I can hear them."

Fast ForWord is a radically different intervention software. Developed in a university lab specifically for children with learning issues, Fast ForWord addresses the core cause of your students' learning difficulties by targeting foundational phonics, language, memory, attention, processing and sequencing skills. It is one of the most powerful and unique reading interventions ever created.

David Sortino, Ed.M., Ph.D.

Dr. David Sortino holds a master's degree in human development from Harvard University, and a doctorate in clinical psychology. He has spent the last 40 years as a teacher, director (residential and day treatment to SED/LH children and adolescents), resource specialist (K-12 public and private school), as well as graduate child development instructor at several universities. In addition, he has served as a consultant to state and county correctional programs and works directly with individuals and families.

In his private practice, he consults and collaborates with students, parents, teachers, and psychologists to provide support for students Pre-K through college in establishing school success and greater achievement motivation. He is a trained specialist in Neurofeedback as well as in the Fast ForWord Reading Intervention Program.

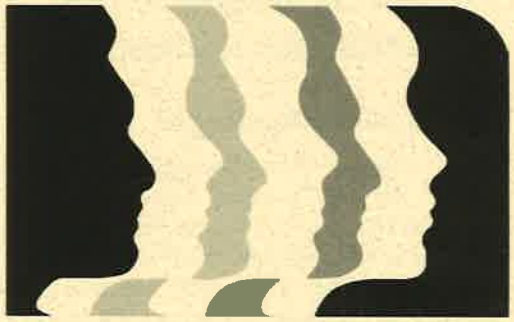
Dr. Sortino's recently published book *The Promised Cookie* about his teaching experiences with ADHD children is available is available on Amazon.com.

His column "Awakening Every Child's Genius" is available through several North Bay newspapers, and he writes a blog for the *Santa Rosa Press Democrat* entitled "Your Child's Learning Brain."

The following are recently posted articles on Dr. Sortino's blog:

- Children with Attachment Disorders: Healing the Paper Cut
- A Viable Alternative to Medication For ADHD Children?
- Learning Potential, Student Fatigue and/or Lack of Sleep
- The Underachieving Child
- Kids and Competitive Sports: Too Much Pressure?
- ADHD Children: When 50% Is Really 100%!
- BPA and Childhood Developmental Disorders

You can reach his blog by going to: http://davidsortino.blogs.pressdemocrat.com/ or by searching: Dr. David Sortino Press Democrat.



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Help for ADHD, Learning & Reading Difficulties through Neurofeedback and Fast ForWord

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CLOSE TO HOME

Kids and sports: Too much pressure

By DAVID SORTINO

A child playing any sport that includes uniforms, umpires, coaches, players and parents will often sense an intense need from the adults that they succeed. That intense pressure contains all the elements that can cause eventual failure.

This is particularly true with baseball. A rounded bat used to hit a round ball often traveling at a great speed is a sport built for a child's failure.

A professional player who gets a hit one out of every three trips to the plate over the course of a career could end up in the Baseball Hall of Fame!

David Sortino

Organized sports places such a high level of stress on the child that many children simply give up most competitive sports by age 12. However, a large number of children will still place themselves in competitive situations, regardless of the degree of failure causing much consternation for parents and child alike.

As a child, I had the best of both worlds when it came to sports and competition.

First, my parents were mainly concerned with my having fun with my chosen sport, baseball.

Second, where I grew up, our initial exposure to sports was sandlot baseball, which consisted of a grassy field where all the neighborhood kids would go to play a baseball game, often lasting for hours on end. There were no parents, umpires, uniforms or coaches. Moreover, any disagreement was quickly solved by the rock, paper and scissor method.

Finally, our trophy was simply the fun of playing the game. Interestingly, myself and two other sandlot players went on to play college ball, and one even signed to play minor league ball.

Recently, I observed an 11-year-old child on TV who was at bat in a very intense Little League World Series game. Before 10,000 screaming fans, he struck out, ending the game and causing his team's elimination; the child broke down in tears.

There is no moral to the story. However, like most children at this age, I would have given my right arm to play in a Little League World Series game, regardless of the level of success or failure. But who knows what stress that situation caused on that child and his future willingness to play in competitive sports?

Therefore, my suggestion to parents of children dealing with competition is that they read John Wooden's book, "Game Plan For Life." John Wooden was the highly successful UCLA basketball coach (he won 10 NCAA basketball championships in 12 years) who believed that winning and losing, although important, should be secondary to skill and character development.

For example, instead of first asking the child did you win or lose the game, we might ask the child did you improve with your passing or dribbling skills? Or, what did you learn from the game and, above all, did you have fun?

The bottom line is that we should always remember the old adage that children would never learn rules to games if they didn't have fun playing the game.

I think the late John Wooden might agree.

ediatrics
ediatrics.aappublications.org

ublished online February 17, 2014

oi: 10.1542/peds.2013-2059)

ediatrics
ediatrics.aappublications.org

ublished online February 17, 2014

loi: 10.1542/peds.2013-2059)

Article

In-School Neurofeedback Training for ADHD: Sustained Improvements From a Randomized Control Trial

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- Author Affiliations

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ABSTRACT

OBJECTIVE: To evaluate sustained improvements 6 months after a 40-session, in-school computer attention training intervention using neurofeedback or cognitive training (CT) administered to 7- to 11-year-olds with attention-deficit/hyperactivity disorder (ADHD).

METHODS: One hundred four children were randomly assigned to receive neurofeedback, CT, or a control condition and were evaluated 6 months postintervention. A 3-point growth model assessed change over time across the conditions on the Conners 3-Parent Assessment Report (Conners 3-P), the Behavior Rating Inventory of Executive Function Parent Form (BRIEF), and a systematic double-blinded classroom observation (Behavioral Observation of Students in Schools). Analysis of variance assessed community-initiated changes in stimulant medication.

RESULTS: Parent response rates were 90% at the 6-month follow-up. Six months postintervention, neurofeedback participants maintained significant gains on Conners 3-P (Inattention effect size [ES] = 0.34, Executive Functioning ES = 0.25, Hyperactivity/Impulsivity ES = 0.23) and BRIEF subscales including the Global Executive Composite (ES = 0.31), which remained significantly greater than gains found among children in CT and control conditions. Children in the CT condition showed delayed improvement over immediate postintervention ratings only on Conners 3-P Executive Functioning (ES = 0.18) and 2 BRIEF subscales. At the 6-month follow-up, neurofeedback participants maintained the same stimulant medication dosage, whereas participants in both CT and control conditions showed statistically and clinically significant increases (9 mg [$P = .002$] and 13 mg [$P < .001$], respectively).

CONCLUSIONS: Neurofeedback participants made more prompt and greater improvements in ADHD symptoms, which were sustained at the 6-month follow-up, than did CT participants or those in the control group. This finding suggests that neurofeedback is a promising attention training treatment for