2017 Report of TAI∞

Pilot Training Results
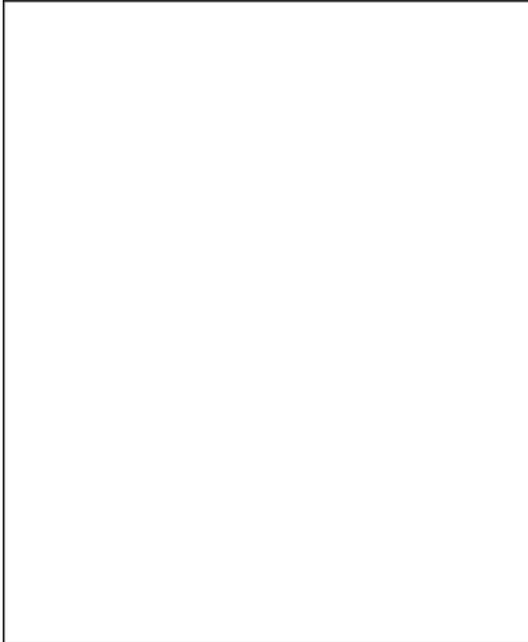
Based on 2016 Pilot Data

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Whereas other programs will not guarantee gains for individuals participating in their programs, TAI∞ will. Individual results, however, can vary from the averages presented in this report and from student to student.

INTRODUCTION FROM TRINA DAS

Nearly 2,000 children and adults received training in 2016 between the months of January and March at 40 TAI brain training centers throughout Eastern India. Some were school students seeking greater academic success. Others were career or senior adults wanting to stay mentally sharp, or accident victims wanting to regain skills they had lost due to an injury. The majority, however, were students struggling to do better in school.

Why did their families choose our system over math tutoring?

Perhaps it's because, dollar for dollar, TAI∞ is 7 times more effective than tutoring or any other development program. (The figures are shown in page 11).

Here's why TAI∞ is so effective:

TAI∞ doesn't re-teach information, like tutoring does.

Instead, TAI∞ strengthens the underlying brain skills that make learning possible at the very first time. Since weak cognitive skills account for about 80% of all learning difficulties, you can't imagine how life-changing this can be for a struggling student!

Tutoring asks students to simply work harder with the weak cognitive skills that were unable to fully grasp the information the first time it was taught. But TAI∞ math program takes a different approach. We eliminate the cause of the learning struggle by targeting weak cognitive skills and making them stronger. (How much stronger? See page 7).

Furthermore, TAI∞ learning technology is research-based and is developed after 9 years of algorithm iterations. We are constantly evaluating our results, and applying the latest research to modify and improve our learning algorithms.

Not only that, but at TAI∞ we measure the gains of every student using very high standards of testing.

In the following report, you'll see some of the impressive results of our initial programs. (Like 2.9 years of reading gains in as little as six months. See page 12).

What you can't see in these pages are the life-long benefits our students enjoy as a result of understanding math concepts and improving cognitive skiils. TAI∞ students don't just get better grades and greater IQ; they get faster, sharper brains that help them succeed in every area of life, over the course of their entire life. And what seemed impossible, our students are able to comprehend and memorize anything and everything after one time reading and they can now retain and retrieve the same information for months with almost perfect accuracy.
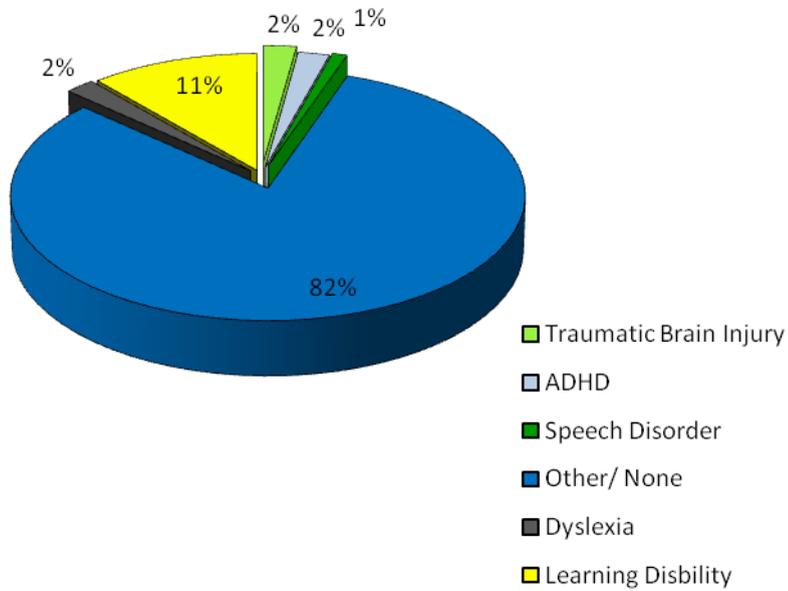
The results are in. TAI changes lives. Will it change yours?

Trina Das

Founder & CEO, TAI∞
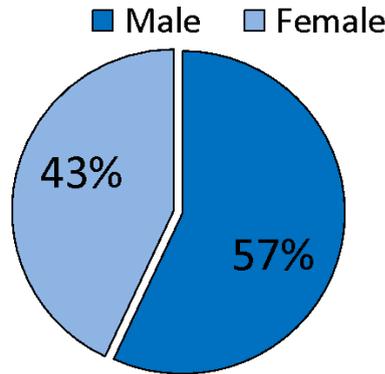
WHO BENEFITED FROM TAI∞ IN 2016?

Percentage of students with the following

2% 2% 1%

2%

11%

82%

- ☐ Traumatic Brain Injury
- ☐ ADHD
- ☐ Speech Disorder
- ☐ Other/ None
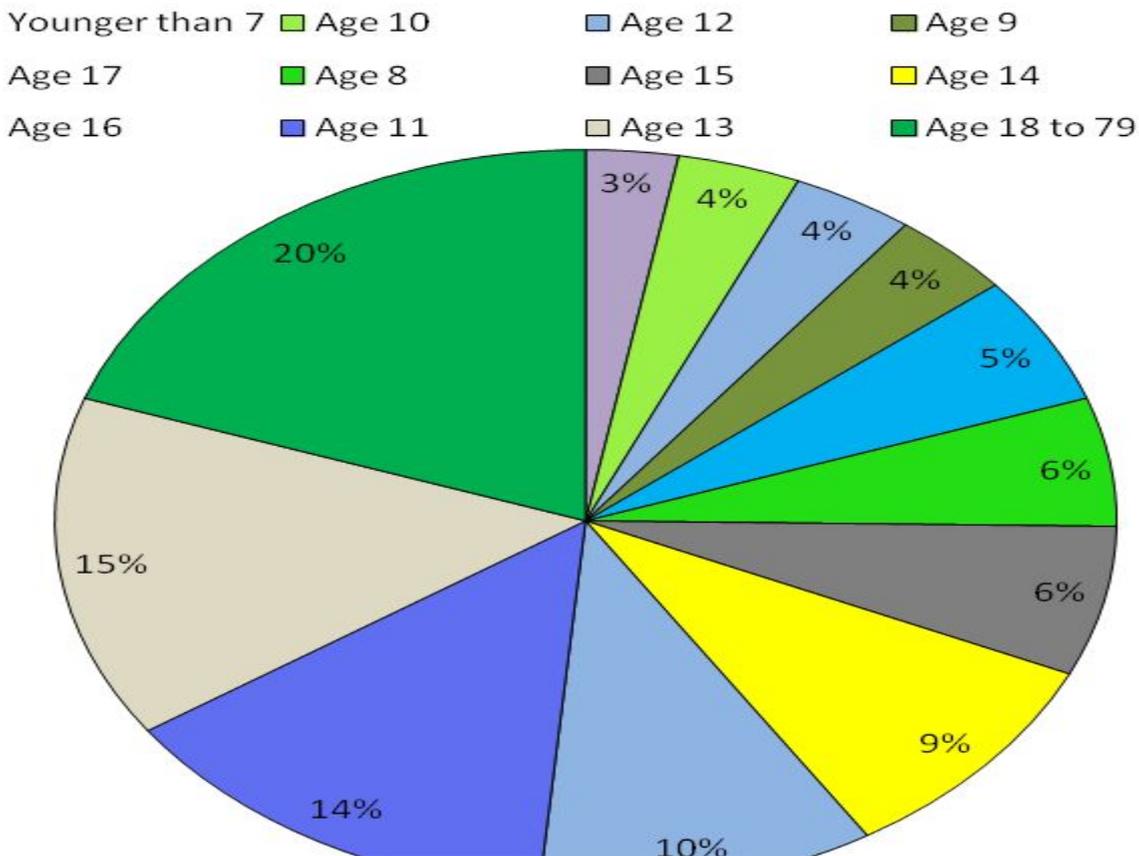- ☐ Dyslexia
- ☐ Learning Disbility

Finally, the following charts show the distribution of students who received training at our centers in 2016 according to age and gender :

Gender Wise Admission

■ Male   □ Female

43%

57%

Age Wise Admission

Younger than 7   □ Age 10   □ Age 12   ■ Age 9
Age 17   ■ Age 8   ■ Age 15   □ Age 14
Age 16   ■ Age 11   □ Age 13   ■ Age 18 to 79

3%   4%
4%
4%
5%
20%
6%
6%
15%
9%
14%
10%

In summary, the average age of our students was 15.6 years, with the majority of our students between the ages of eleven and sixteen. Male students outnumbered female students 57 to 43 percent.

STEP ONE: FINDING THE CAUSE

When people come to us to develop a faster and smarter brain, we want them to enjoy the best of brain training technology from us with customized training and focused improvements. We want each and every client coming to us to get rid of all the cognitive disabilities or concerns, which were previously affecting their performances. To free them from every cognitive weakness, along with giving them a stronger and faster brain for a lifetime, we need to know where these problems lie. To know about the underlying problems we have some of our in house developed standardized tests through which we identify these weak areas and where do the client's interest lies. These tests help our clients to understand what the problem areas which are holding them back are.

ABOUT OUR TESTS:

TAI∞ has developed its own series of assessment tools, including the TAI Tests of Cognitive Abilities and the TAI Tests of Achievement. These standardized tests are used across the country by educators and psychologists to measure cognitive skills and academic abilities comprehensively in 350+ skill gap areas with 40 simple questions.

These tests, combined with learning skills rating scales, measure the strengths of these key cognitive skills:

Long-term memory: The ability to recall information that was stored in the past.

Processing speed: The ability to perform simple or complex cognitive tasks.

Logic & reasoning: The ability to reason, form concepts, and solve problems using unfamiliar information or new procedures.

Short-term memory: The ability to apprehend and hold information in immediate awareness while simultaneously performing a mental operation.

Visual processing: The ability to perceive, analyze, and think in visual images.

Attention (three types): Sustained attention is the ability to stay on task; selective attention is the ability to not be distracted; divided attention is the ability to handle more than one task at a time. Our tests also measure word attack, which is the ability to apply phonic and structural analysis skills to pronounce unfamiliar printed words.

ABOUT OUR SCORES:

As you look at the information in this report, you'll see that test scores are commonly presented in two forms:

Age Equivalent Scores indicate how one student's scores compare with the average scores of other age groups.

Standard Scores indicate how far above or below average an individual score falls, using a common scale (ex: "average" of 100). IQ is normally presented as a standard score with "100" being average.

STEP TWO: ADDRESSING THE PROBLEM

Once we identify which cognitive skills are weak, our intelligent program provide intense content designed to develop a super strong and super accurate memory and at the same time target and strengthen weak math skills. Here are our six core programs:

Memory is a fully integrated system of cognitive training exercises delivered in an intense, one-on-one environment. Memory module quickly identifies and corrects weak skills including: attention, short-term and long-term memory, processing speed, logic & reasoning, and visual and auditory processing. The course is developed class wise and it teaches class wise application of memory.

Attention Span is a revolutionary 'break and alert' accelerated program modelled after the process by which attention span is developed in students. This module develops alertness, increased focus, concentration and patience. It also develops confidence and logical thinking.

Mathematics is a unique program that tests, trains, and strengthens the core mental skills necessary for overall math success, critical thinking and problem solving. Mathematics module is designed class wise with student specific needs.

Handwriting module helps children develop their handwriting and neat writing. It also teaches creative writing and use of various fonts.

Visualization module develops the life skills required to understand complex problems deeply. It teaches the core fundamental things required to have a strong honest and sincere will to solve problems by visualizing the problem statement from various perspective.

Motivation module is designed for students having certain fears or to take them out from symptoms of breakdown, inferiority complex, jealousy, frustration. This module in general develops the leadership skills required for lifelong success.

In 2016, more than 85% of students participated in either all or math program, with the average length of training running about 10 weeks.

Parent Participation

Parents of school-aged children can choose how involved they want to be in their child's training. Parental involvement can range from very little to providing about 80% of the training.

About a half of parents (54%) selected our "Premium Program," where the full 2 minutes of daily activities were completed by students along with their parents. Roughly 2 out of 5 families (43%) opted for our "Partner Program" which allowed parents to provide about half the training at home. 3% of parents went with the "Directed Program," in which they provided the majority of weekly training at home, with specific targets set for their children every week.

Percentage of students by program (for school students at elementary, middle school and high school levels).

Program	Percentage	Program Length
Memory	85%	10 weeks*
Mathematics	68%	12 weeks*
Attention Span	27%	10 weeks*
Visualization	35%	10 weeks**
Motivation	12%	8 weeks*
Handwriting	21%	3 weeks**
TAI∞ Level Advanced	26%	7 weeks*

*Classes are never fixed and students can attend any or no sessions according to their needs.
**Weekly printed worksheets were sent to these students regularly during the training period.

Using Mental Imagery & Suggestion

Your mindset and subconscious beliefs also have strong ties to your ability to perform cognitive tasks. TAI was uniquely designed so that all of the benefits from brainwave stimulation, as described above, could be combined with the benefits of affirmations and suggestion to help you take control of your mind.

It is just as important to provide a psychological basis for increased intelligence as it is to provide the necessary neural activity. For example, a common limiting belief is "I am not good at math." And if you truly believe that, it will hold you back from making any real progress.

In 2007, a study by psychologist Carol Dweck at Stanford University found that beliefs about intelligence had more of an impact on intelligence than was previously assumed.12 Dweck separated one hundred 7th grade students into 2 equal groups. All students had suffering math scores. One group was taught good studying habits, the other was taught about the plasticity of the brain, and how the brain can change; that new neural connections can be formed and intelligence can actually be increased. At the end of the semester, the children who were taught about the nature of intelligence ended up performing better than those who were taught improved study skills!

Using a set of practical psychological techniques, beliefs about your own mental abilities can be shifted. This enables you to function at the highest levels your brain can support.

Using multiple methods, both psychological and neurological in nature, it is possible to change the brain and have a positive impact on cognitive abilities. That's what TAI strives to do, with dozens of inquiry based math games and videos rooted in successful research.

STEP THREE: MEASURING THE RESULTS OF TAI∞ BRAIN TRAINING

RESULT: STRONGER COGNITIVE SKILLS

The following graphs show before- and after-training results for more than 2,000 students who underwent an average of 10 weeks (90 hours) of training.

The graphs show changes in IQ scores, with 50 being considered as an average score. The following chart shows improvements in students who initially tested in the lowest score (24 or lower). After brain training, students with lowest scores "moved up in line" an average of 40 scores:

**Percentile Improvements among Students with Severe Cognitive Weakness**

This chart shows improvements in students with moderate scores who initially tested between the 25 and 50. After brain training, these students "moved up in line" an average of 28 scores:
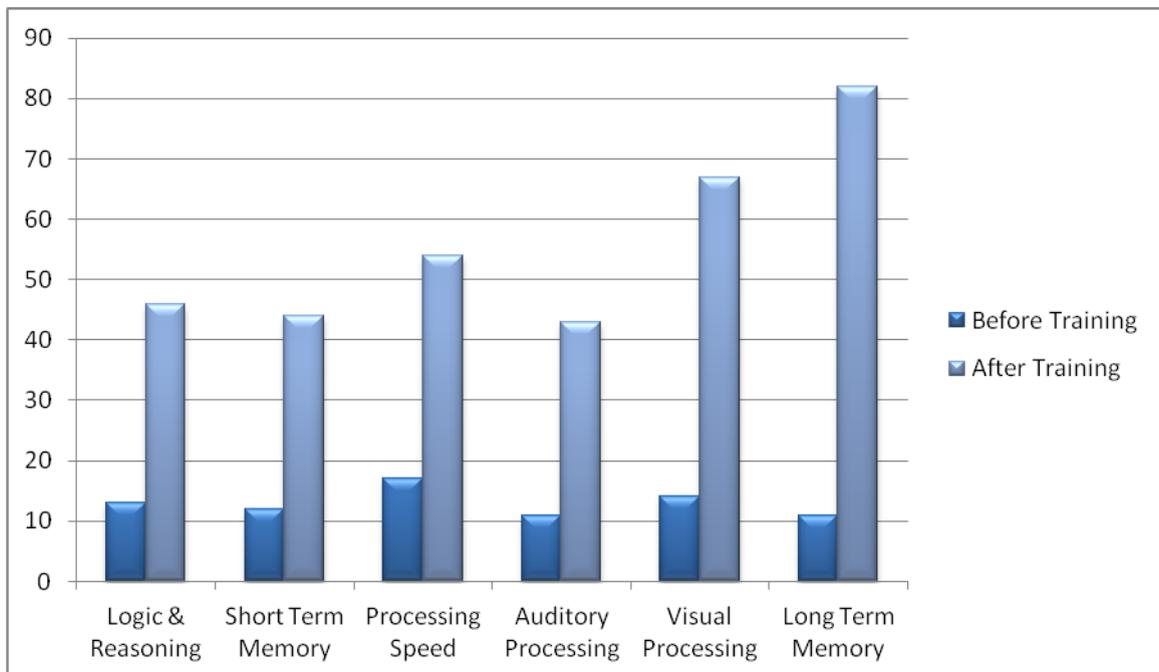
Finally, this chart shows improvements in students with average cognitive skills who initially tested in the 51st to 75th percentile. These students "moved up in line" an average of about 20 percentile points:
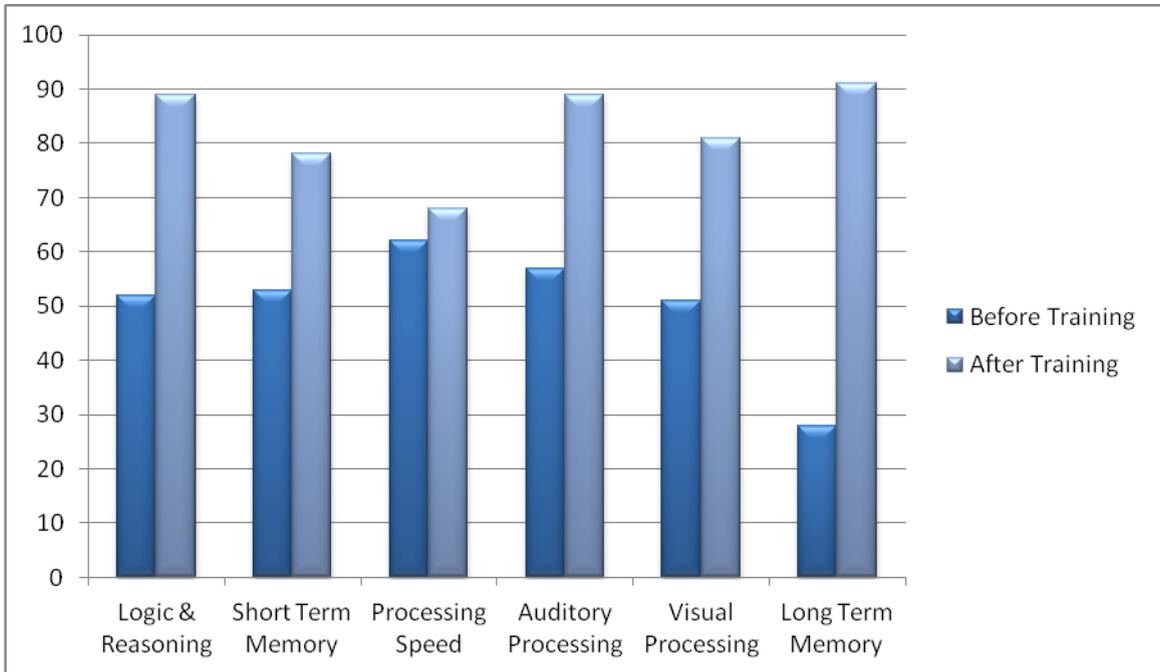
Percentile Improvements among Students with Above Average Cognitive Skills
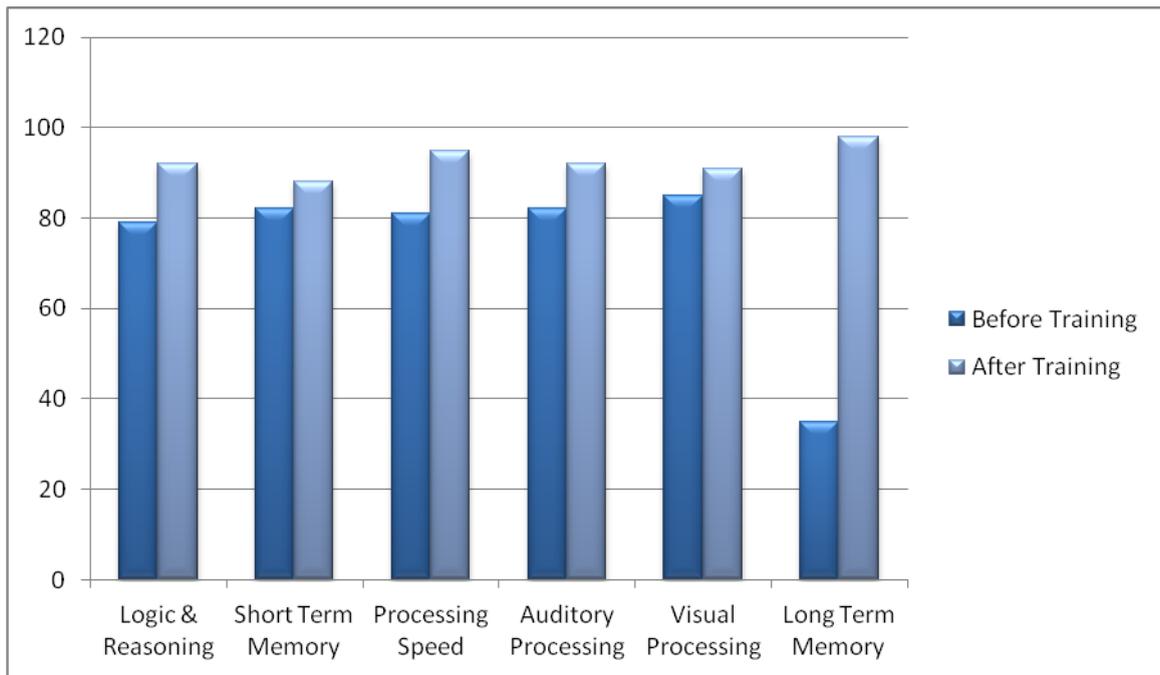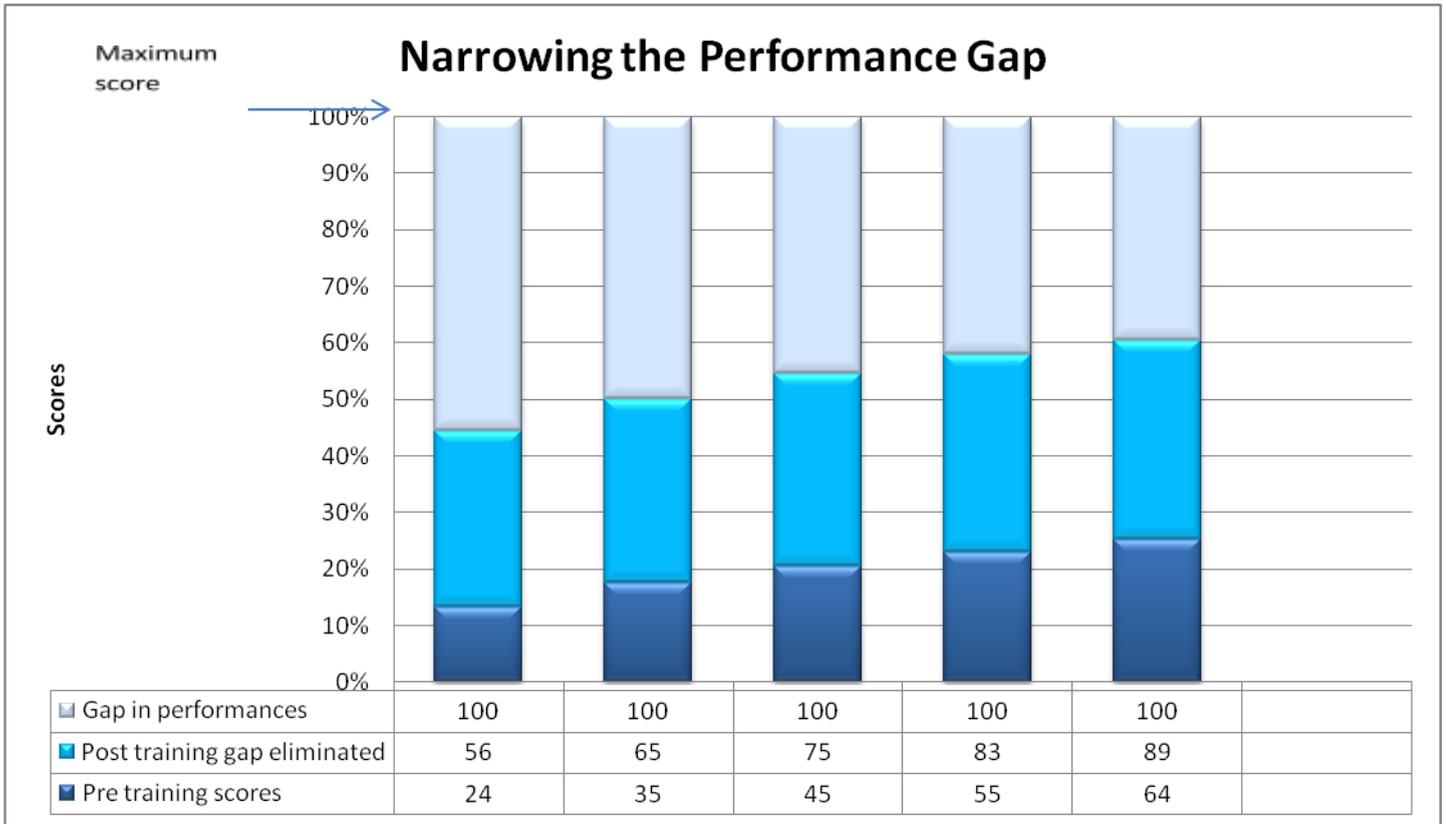

RESULT: NARROWING THE PERFORMANCE GAP

Another way to measure the overall results of TAI∞ skills training is to consider the gap between how well a student performed in cognitive function prior to brain training and the highest possible performance.

Our goal is to eliminate 25% or more of that gap by the time that student completes the prescribed TAI∞ training program (an average of 10 weeks of training). And if the same student participates in follow-up training a year later, our goal would be to eliminate 35% or more of the remaining gap, and so on.

The following chart shows, on average, how much of the gap was eliminated in March 2016 based on how big the gap was to begin with:

Narrowing the Performance Gap

Maximum score

Scores

Gap in performances	100	100	100	100	100	
Post training gap eliminated	56	65	75	83	89	
Pre training scores	24	35	45	55	64	

RESULT: HIGHER IQ

Yet another way to measure the improvements made by our students is by tracking gains in overall IQ (measured as General Intellectual Ability [GIA]).

Gains in IQ differ depending on the length of time a student participates in our brain training programs. As you can see, the longer the training, the greater gains in IQ:

Average Gain in IQ Points Based on Length of Brain Training

IQ Gains

IQ Scores

	7 weeks	12 - 24 weeks	32 weeks
IQ Gains	15	20	25
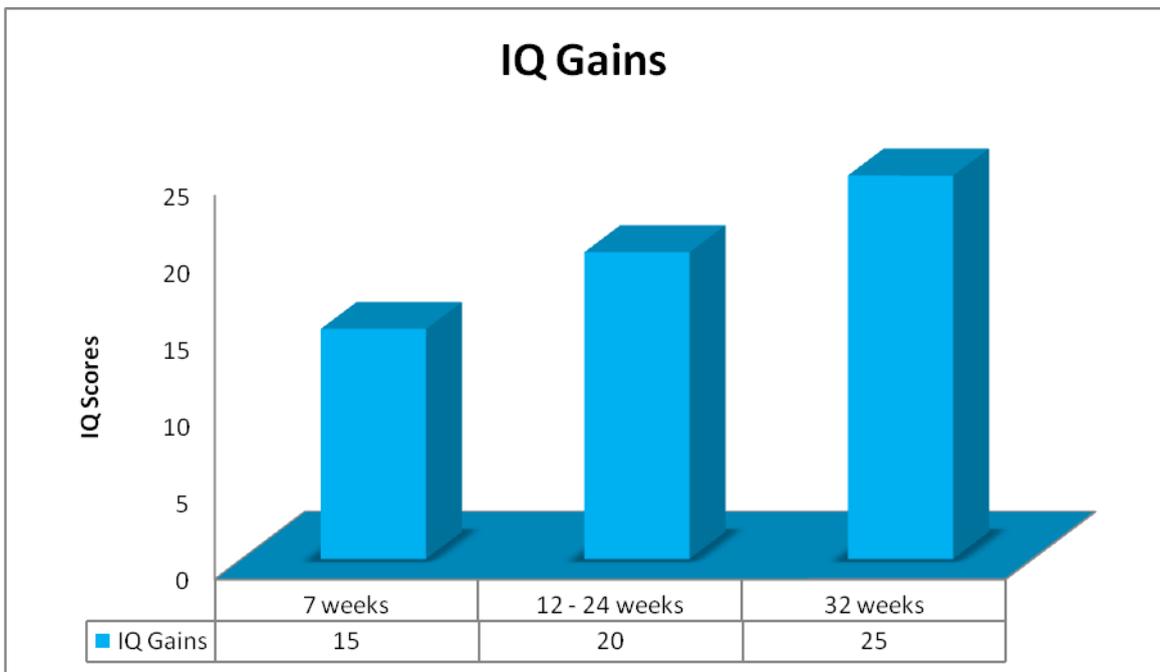
Marks Improvements Recorded: Improvements in school

According to the survey taken on students after 3 months from TAI∞ middle school program completion, this chart shows how it has increased their marks and school performance:
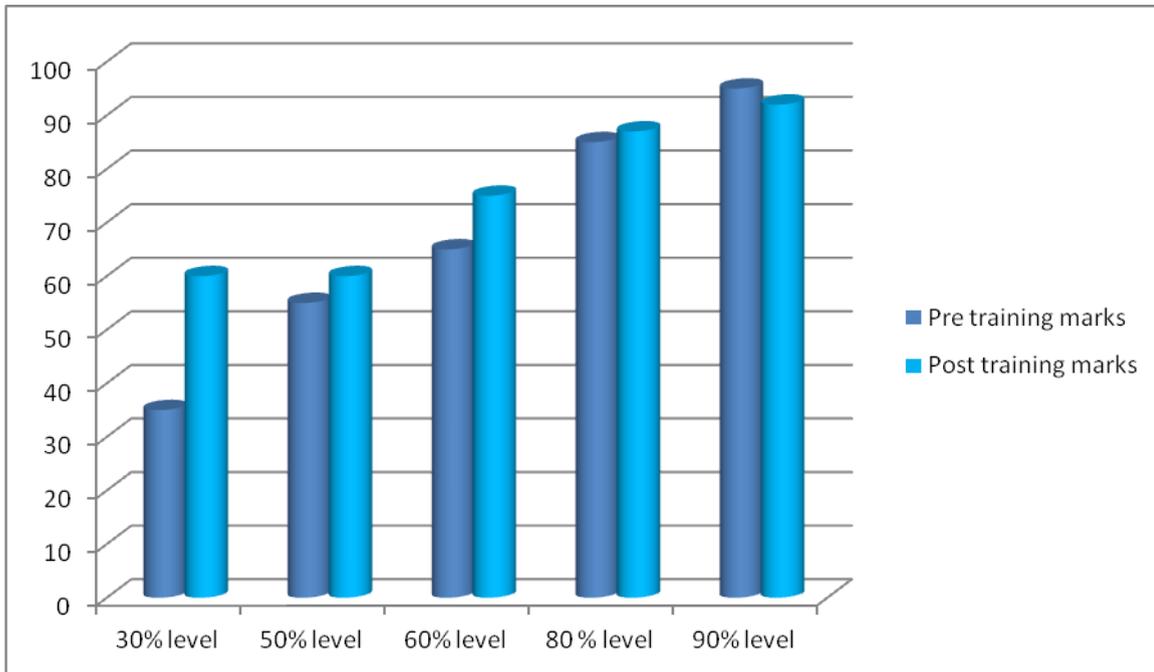
According to the survey taken on students after 6 months from TAI∞ high school program completion, this chart shows how it has increased their marks and school performance:
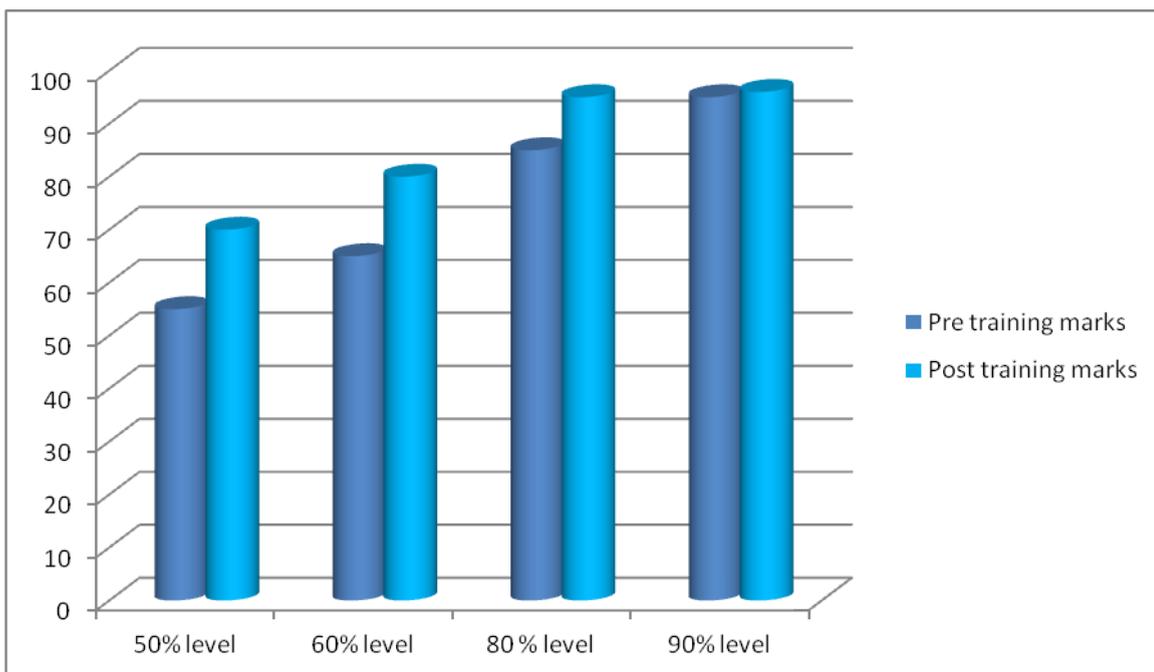

To summarize, our studies show that TAI∞ program has increased 10.7% marks in students in the age group of 10 to 17 years on an average.

Learning Time and Speed Improvement Recorded

According to the survey taken on students after TAI∞ school program completion, this chart shows how it has increased their learning speed and time:

We had given our children (in the age group of 11 and 18 years) unknown sets of difficult words, paragraphs, formulas and math problems to solve and memorize within 3 hours and here are our pre training and post training results in percentages.
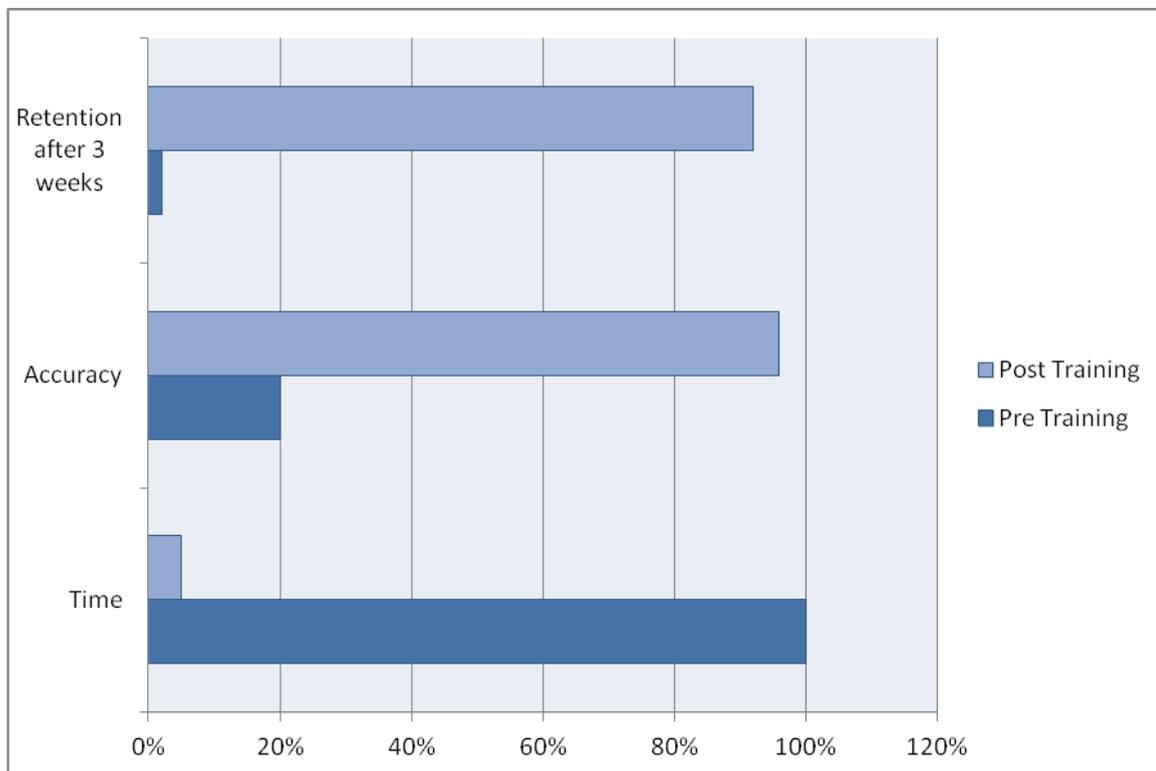
Study time has decreased by 95% (or even more as study time pre training couldn't be determined so we have calculated it with 100%) on an average and accuracy in retention has increased by 380% and the memory developed through the program is 4600% longer on an average as per our results after the TAI∞ brain training program.

STEP FOUR: MEASURING THE VALUE OF TAI∞ BRAIN TRAINING
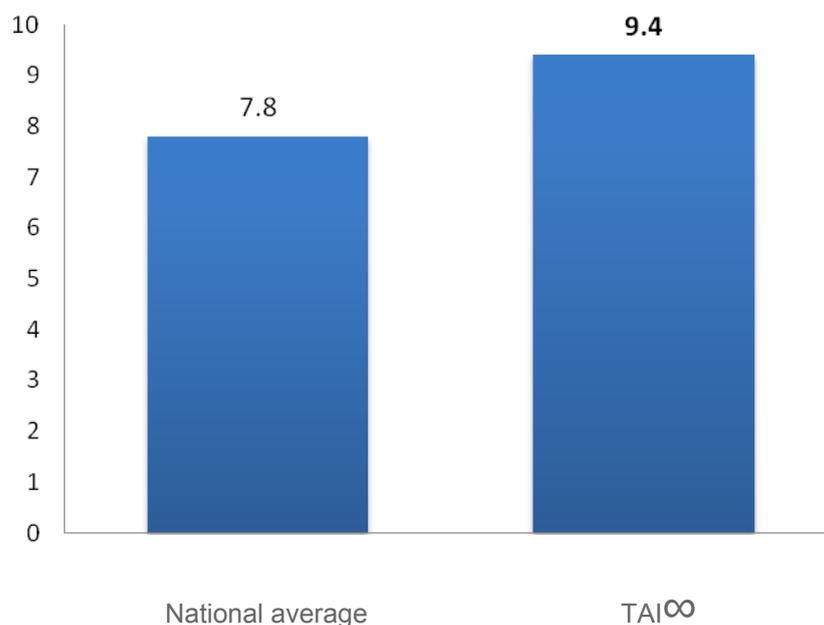
MEASURING VALUE BASED ON SATISFACTION

One of our very intentional goals as a company is to "WOW" our customers.

Every month, we receive testimonials from clients who are thrilled with the life-changing results they've experienced because of skill training at TAI∞ (you can see some of our testimonials at:). The stories shared by our students and their families are a powerful indicator of the value of the programs we offer.

We also take the time to measure the satisfaction of each and every TAI∞ client using a well-known rating scale.

The Satisfaction Rating asks clients, "On a scale of 0 to 10 (10 being highest), how likely are you to recommend TAI∞ to a friend or colleague?" Our 2016 satisfaction rating, based on over 3,000 students and their parents, was 9.2 out of 10. This is nearly 20% higher than the national average and one of the highest ratings in the country.

"On a Scale of 0 to 10, How Likely are You to Recommend this Company to a Friend or Colleague?"
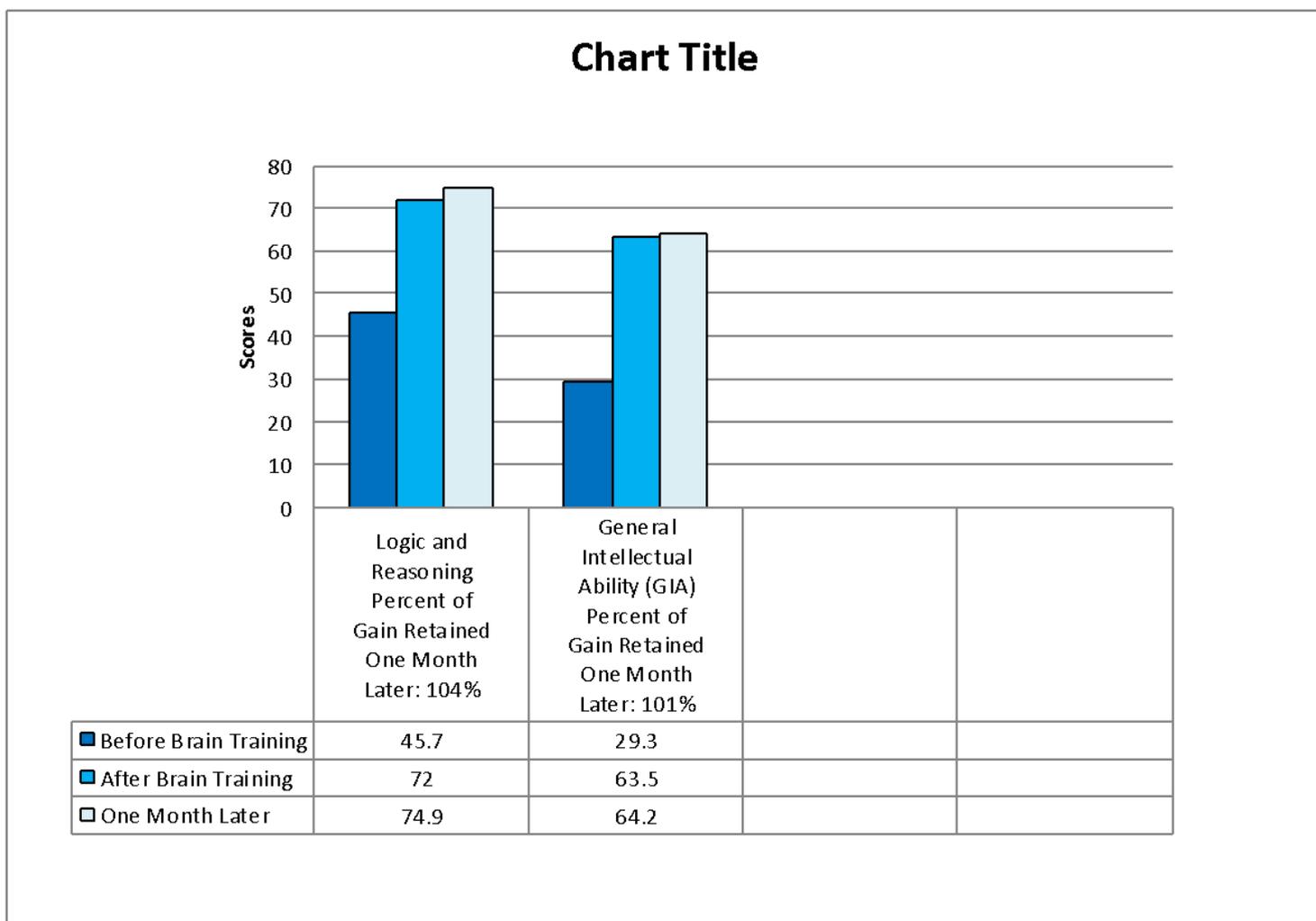
MEASURING VALUE BASED ON RETENTION OF GAINS

TAI∞ students and their families are clearly happy with our training programs. But do the results last? Are the gains made in cognitive skills permanent?

Our method of brain training is designed to move new skills to a subconscious level for permanent results, and one-month follow-up studies confirm that this is indeed what occurs.

The following chart shows the retention of gains in two categories. The first category is General Intellectual Ability (or IQ), which is a composite score based on the core cognitive skills areas. The second category is Logic & Reasoning. In both categories, students tested higher, on average, a year later than they had immediately following brain training.

Chart Title

	Logic and Reasoning Percent of Gain Retained One Month Later: 104%	General Intellectual Ability (GIA) Percent of Gain Retained One Month Later: 101%		
■ Before Brain Training	45.7	29.3		
■ After Brain Training	72	63.5		
□ One Month Later	74.9	64.2		

CONCLUSION

The numbers tell the story. After brain training at TAI∞, our students of all ages really do experience the life-changing results of a faster, smarter brain.

Appendix

Research we used:

1. Lubar, J.F. (1991). Discourse on development of diagnostics and biofeedback for attention-deficit/hyperactivity disorders. Biofeedback and Self Regulation, 16(3), 201-224.
2. Patrick, G.J. (1994). Improved Neuronal Regulation in ADHD: An application of fifteen sessions of photic-driven EEG neurotherapy. UMI Dissertation Abstracts Database. (University Microform Edition No. 9523739). Ann Arbor, MI: UMI Dissertation Services.
3. Russell, H.L. (1997). Intellectual, auditory and photic stimulation and changes in functioning in children and adults. Biofeedback, 25(1), 16-17, 23, 24.
4. Boyde, W.D. (1998, Spring). EEG biofeedback in the schools: The use of EEG biofeedback to treat ADHD in a school setting. Journal of Neurotherapy, 123-127.
5. Carter, J.L., & Russell, H.L. (1993). A pilot investigation of auditory and visual entrainment of brain wave activity in learning disabled boys. Texas Researcher, 4, 65-73.
6. Carter, J.L., & Russell, H.L. (1994). An audio-visual stimulation unit with EEG biofeedback for treatment of learning disabilities. Final Report: Department of Education SBIR Phase I Contract RN 93082027.
7. Micheletti, L. (1998). The use of auditory and visual stimulation for the treatment of attention deficit hyperactivity disorder in children. (Doctoral dissertation, University of Houston, 1999). University Microfilms International: The Sciences & Engineering, Vol 60(6-B).
8. Olmstead, R. (2000). Therapeutic use of auditory and visual stimulation in the treatment of attention deficit hyperactivity disorder. Auditory and Visual Stimulation, 1, 11-15.
9. Olmstead, R. (2005). Use of auditory and visual stimulation to improve cognitive abilities in learning-disabled children. Journal of Neurotherapy, 9(2), 49-61.
10. Siever, D. Applying Audio-Visual Entrainment Technology for Attention and Learning. Biofeedback Magazine. 2003; 31(4)
11. Budzynski T, Jordy J, Budzynski HK, Tang H, Claypoole K. Academic performance enhancement with photic stimulation and EDR feedback. J Neurother. 1999;3(3-4):11-21
12. Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. Child development, 78(1), 246-263.

Further Reading

Academic Performance Enhancement with Photic Stimulation and EDR Feedback. Thomas Budzynski, Ph.D., John Jordy, M.Ed., Helen Kogan Budzynski, Ph.D., Hsin-Yi Tang, M.S., and Keith Claypoole, Ph.D., Journal of Neurotherapy, 3(3), 11-21.

Audio-Visual Entrainment (AVE) Program as a Treatment for Behavior Disorders in a School Setting, Michael Joyce & Dave Siever, 1997, Journal of Neurotherapy, vol 4 (2), 9-32.

EEG differences in ADHD-combined type during baseline and cognitive tasks., Swartwood JN, Swartwood MO, Lubar JF, Timmermann DL.

New Visions School NeuroTechnology Replication Project 2000 - 2001, Michael Joyce

Righting the Rhythms of Reason: EEG Biofeedback Training as a Therapeutic Modality in a Clinical Office Setting. Tansey, M.A., Medical Psychotherapy 3 (1990): 57-68

Attention deficit disorder. Othmer, S. (1998). EEG Spectrum Training Syllabus. Volume 3. Encino, CA: EEC Spectrum.

Intellectual, auditory and photic stimulation and changes in functioning in children and adults. Russell, H. L. (1997). Biofeedback, 25(1), 16-17, 23, 24.