



New Research Demonstrates Improvements in Autistic Issues

"And Where the Improvement Stops, Nobody Knows!"

That's exactly the situation we are in with respect to the improvements we have observed in autistic issues in the recent study of training with the Peak BrainHappiness Trainer, just published in Frontiers in Human Neuroscience--see <http://peakachievement.com/articles/articles.htm>. Evidence summarized here demonstrates that there was a gain from session to session in the brainwave measures that **did not fade away** towards the end of the 18 session study. This pattern looks like the classic dose vs. response curve that we see with drugs and many types of training. ***We don't know how far improvement can continue if we keep on training.***

Help Us Find the Upper Limits to Improvements in Autistic Issues Using the Peak BrainHappiness Trainer

That's why we need the help of people who are willing to train autistic individuals either at home or in the office. We need to try this approach for a much longer number of sessions, evaluating behavior and EEG changes periodically along the way. We can also train them more frequently, which should improve the results, and there are particular parts of the brain we can also target, such as the right orbitofrontal cortex, which is very important for social functioning. We know that there will be a payoff to this effort. That study and two other similar studies show enough evidence to establish that the trainee will improve.

Rather than wait for the 5-7 years it may take to conduct a funded study, ***let's try the collaborative approach***, where a number of parents and clinicians cooperate over the Internet to pool their experiences and get this off the ground in a couple of months. I am looking for knowledgeable volunteers (including parents and clinicians) to participate and help coordinate this informal study. We will establish a list serve and a database, and use a common core group of measures for evaluation every nine sessions.

Training Two Key Abilities

The Peak BrainHappiness Trainer simultaneously trains two very important abilities for improving Social Brain Dysfunction (SBD), a far more descriptive term than Autistic Spectrum Disorder (ASD), which was used in the recently published study. It trains the ability to focus and sustain attention, and the ability to understand experiences by putting together various types of perceptions and other information into a unified event. Lacking well developed and integrated systems to do this, the SBD sufferer has great difficulty making sense of their experience, and has problems learning appropriate behaviors. **There were significant improvements in both Lethargy/Social Withdrawal and Hyperactivity measured for the participants in the study.**

Four Brainwave Measures Improved Consistently

The Peak BrainHappiness Trainer can separately or simultaneously train two brain rhythms that are known to enhance attention and understanding--measures called Focus and Neureka!. In the published study, the 18 children and adolescents with high functioning ASD were trained for 18 sessions to improve their Focus measure and raise the Neureka! measure above a minimum, while keeping it below a maximum, which was hard to reach. There were quite significant improvements in both the Focus and Neureka! measures, comparing the first and last session. Increasing Neureka! made the experience enjoyable for the children, who were happy to participate. As the graph shows, there was a very significant improvement in Neureka! across the sessions despite the fact that they weren't instructed to go all out to improve Neureka!, but just to keep it above a minimum. That kept a DVD movie going, and the better they did, the larger the picture.

The article also provided graphs for more traditional measures of improvement in Attention in ADHD, two theta to beta ratios, which were very significantly improved during the study. The graphs showed that they were still decreasing at the end of the study. Their decreases were very highly correlated to the increase in the Focus measure.

*It's clear that all four measures were continuing to improve at the end of the 18 sessions, pointing to the idea that they could get even better with more sessions. Furthermore, the researchers found evidence that both of these changes were related to the significant improvements in Lethargy/Social Withdrawal. **So as the brainwaves continue to improve, the behavior should follow.***

The principal author, Dr. Tato Sokhadze, has completed two other studies of neurofeedback and ASD with similar results. See the Articles page at www.autisticimprovement.com.

Interested in learning more or a demo? Please call us at 502-228-0605 or 800-886-4228 for more info on autistic improvement.

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The Peak BrainHappiness Trainer is an educational instrument. It is not intended to treat or diagnose any disease or disorder.

