Follow up of 14 ADD/ADHD children ages 6 to 17 using the SB program

Background

The purpose of this follow up study, done at the Advanced Cognitive Enhancement (ACE) clinics in Toronto, Canada, was to examine the efficacy of the SB program with children suffering from AD/HD. SB is a computer-based software program designed to improve focus, attention and concentration, in general. Through different cognitive tasks, the program trains users in developing different cognitive skills, which include:

Concept comprehension –	understanding tasks and concepts
Working memory –	retaining necessary information for short periods of time, yet long enough to complete specific tasks
Sequential processing –	working with pieces of information, one after another
Simultaneous processing or multitasking –	processing a few pieces of information at same time
Attention duration –	Sustaining attention for longer periods
Processing speed –	the speed with which information is processed
Selective attention –	focusing on one task at a time
Divided attention –	focusing on more than one task at a time
Sensory motor coordination –	coordinating sensory and motor skills
Visual processing –	working with visual images
Auditory processing –	working with sounds
Audio-visual coordination –	working with both sound and visuals, simultaneously
Peripheral vision -	noticing background details while focusing on a task.
Visual tracking -	the ability to focus on a moving object

Earlier testing using the program, provided evidence those skills can be improved. SB was also designed to improve brain wave ratios especially reducing slow brain waves (theta, alpha) and enhancing betas especially beta1 and beta2). Previous research (Lubar, Monastra and others) has shown improvement in cognitive performance after using Neurofeedback protocols designed to improve brain wave ratios.

The purpose of the study was to find out if improvement in cognitive performance using the SB program would also result in improvement in behavior, hyperactivity and academics.