Brief Report: The Effects of Exercise on the Self- Stimulatory Behaviors and Positive Responding of Adolescents with Autism (Abstract)

Rosenthal-Malek, A. & Mitchell, S. (1997). Brief report: the effects of exercise on the self-stimulatory behaviors and positive responding of adolescents with autism. *Journal of Autism and Developmental Disorders*, 27(2), 193-201.

Previous research had demonstrated the effectiveness of exercise on reducing negative behaviors in special populations. This study was completed to expand on that research, by examining the effect of exercise on a sample of children with autism. The participants included 5 adolescent males, with a mean age of 15 years. All were diagnosed with autism. Each child then completed either an exercise session or an academic session on a given school day, for a total of 20 sessions, 10 of each type. The exercise consisted of stretching, then jogging for 20 minutes. The academic session consisted of a variety of typical subjects used during the regular school day. The child then went to either a regular classroom period, where he was given a specific number of questions to answer, or he went to a community workshop. Data were collected on the amount of self-stimulatory behavior in either setting, the number of correct answers during the classroom period and the amount of work completed at the workshop.

The authors found that for both classroom and workshop locations, self-stimulatory behaviors decreased significantly after exercise as opposed to academics. They also found exercise increased correct responses in the classroom, and increased the amount of work produced at the workshop. They therefore recommend the inclusion of exercise programs for adolescent students with autism. They stress however, that further research is needed to determine the most beneficial schedule and duration for the exercise program.