## Efficacy of Neurofeedback for Children in the Autistic Spectrum: A Pilot Study

Betty Jarusiewicz, PhD

ABSTRACT. *Background*. The efficacy of neurofeedback training was evaluated in 12 children in the autist spectrum with matched controls, based on established training protocols for other conditions with similar symptoms.

*Method.* Twenty-four autistic children were divided into two groups, matched by sex, age, and disorder severit One group received neurofeedback training and the second acted as a control group. Responses to the Autis Treatment Evaluation Checklists (A TEC) and parental assessments of problem behaviors were analyzed to evaluate the effectiveness of neurofeedback training for this condition.

*Results*. Neurofeedback training resulted in a 26% average reduction in total ATEC rated autism symptom compared to 3% for the control group. Parental assessments reported improvement in all behavioral categorie socialization, vocalization, anxiety, schoolwork, tantrums, and sleep, compared with minimal changes in the control group.

Discussion. Autistic spectrum children who underwent neurofeedback training showed significant improvements autism symptoms and behaviors. The magnitude of improvement was independent of initial severity or age. (Artic copies are available from The Haworth Document) Service: 1-800-HAWORTH. E-mail address < getinfo@haworthpressinc. com> Website: < http://wwwHaworthPress.com> @ 2002 by The Haworth Press.

Inc. All rights reserved.]

Betty Jarusiewicz is Founder, Principal Investigator and Program Director, Atlantic Research Institute, Inc. She serves of the Board of Directors of EEG Spectrum International, Inc. (ESII). NeuroCybernetics, Inc., a subsidiary of ESII, developed the software used in this study.

Address correspondence to: Betty Jarusiewicz, 51 Memorial Parkway (Highway)

Address correspondence to: Betty Jarusiewicz, 51 Memorial Parkway (Highway 36), Atlantic Highlands, NJ 07716.

Journal of Neurotherapy, Vol. 6(4) 2002 http://www.haworthpressinc.com/store/product.asp?sku=J 184 @ 2002 by The Haworth Press, Inc. All rights reserved. 39