Auditory Integration Training: A Double-Blind Study of Behavioral, Electro-physiological, and Audiometric Effects in Autistic Subjects

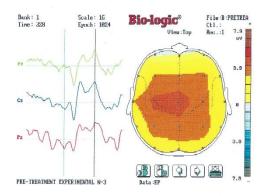
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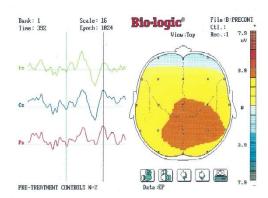
Nineteen autistic subjects were assigned at random to either the experimental group (n=9), which listened to AIT-processed music, or a placebo group (n=10), which listened to the same, but unprocessed, music. All evaluations were 'blind' to group assignment. Behavioral, electrophysiological, and audiometric measures were assessed prior to and following AIT. Behavioral: A significant improvement was observed in behavioral problems (using the ABC-1) in the experimental group at the 3-month follow-up assessment. Electrophysiological: Of the 19 subjects, three experimental group and two placebo group subjects were able to cooperate with the auditory P300 Event Related Potential (ERP) task. All five subjects showed abnormal P300 ERPs prior to the AIT listening sessions. Three months following AIT, all three subjects showed a dramatic improvement in their auditory P300 ERP. No improvement was seen in the placebo group. Audiometric: The subjects' poor communication and attention skills precluded formal statistical evaluation of the data from a battery of audiometric tests; however, an audiologist was able to assign correctly 10 of the 15 subjects for whom partial data were available to the treated and non-treated groups, on a 'blind' basis.

Comment. AIT was reported to produce both behavioral improvement and normalization of brain wave activity. The behavioral changes on the ABC-1 are consistent with those obtained in a previous study (Rimland&Edelson, 1995, Section A, #10). Although the electrophysiological findings are encouraging, they are based on a total of only five subjects.

Pre-Treatment Experimental



Pre-Treatment Control



Post-Treatment Experimental

Post-Treatment Control

