

Behavioral and Early Intervention Reviews/Research

INDEPENDENT REVIEWS OF EARLY INTENSIVE BEHAVIORAL INTERVENTION

Report of the Maine Administrators of Services for Children with Disabilities:

"Over 30 years of rigorous research and peer review of applied behavior analysis' effectiveness for individuals with autism demonstrate ABA has been objectively substantiated as effective based upon the scope and quality of science."

"Early interventionists should leverage early autism diagnosis with the proven efficacy of intensive ABA for optimal outcome and long-term cost benefit."

"The importance of early, intensive intervention for children with autism cannot be overstated."

"Furthermore, early, intensive, effective intervention offers the hope of significant cost/benefit."

Maine Administrators of Services for Children with Disabilities (1999). Report of the MADSEC Autism Task Force. MADSEC, Manchester, ME

Clinical Practice Guideline Report of the Recommendations for Autism and Pervasive Developmental Disorders by the New York State Department of Health:

"Based upon strong scientific evidence, it is recommended that principles of applied behavior analysis and behavior intervention strategies be included as an important element of any intervention program for young children with autism."

"Based upon the panel consensus opinion, it is recommended that all professional and paraprofessionals who function as therapists in an intensive behavioral intervention program receive regular supervision from a qualified professional with specific expertise in applied behavioral approaches."

"Based upon strong scientific evidence, it is important to include parents as active participants in the intervention team to the extent of their interests, resources, and abilities."

"Based upon strong scientific evidence, it is recommended that training of parents in behavioral methods for interacting with their child be extensive and ongoing and include regular consultation with a qualified professional."

New York State Department of Health Early Intervention Program. (1999). Clinical Practice Guideline Report of the Recommendations for Autism/Pervasive Developmental Disorders. New York State Department of Health, Albany, **NY**.

Practice Parameters Consensus Panel of the following Professional Organizations and Agencies:

American Academy of Neurology
American Academy of Family Physicians
American Academy of Pediatrics
American Occupational Therapy Association
American Psychological Association
American Speech-Language Hearing Association
Society for Developmental and Behavioral Pediatrics
Autism Society of America
National Alliance for Autism Research
National Institute of Child Health & Human Development
National Institute of Mental Health

"The press for early identification comes from evidence gathered over the past 10 years that intensive early intervention in optimal educational settings results in improved outcomes in most young children with autism, including speech in 75% or more and significant increases in rates of developmental progress and intellectual performance."

"However, these kinds of outcomes have been documented only for children who receive 2 years or more of intensive intervention services during the preschool years."

"Autism must be recognized as a medical disorder, and managed care policy must cease to deny appropriate medical or other therapeutic care under the rubric of "developmental delay" or "mental health condition."

"Existing governmental agencies that provide services to individuals with developmental disabilities must also change their eligibility criteria to include all individuals on the autistic spectrum, whether or not the relatively narrow criteria for Autistic Disorder are met, who nonetheless must also receive the same adequate assessments, appropriate diagnoses, and treatment options as do those with the formal diagnosis of Autistic Disorder."

Filipek, P.A. et al. (1999). *The screening and diagnosis of autistic spectrum disorders. Journal of Autism and Developmental Disorders. 29, 439-484.*

Practice Parameters for Autism by the American Academy of Child and Adolescent Psychiatry:

"At the present time the best available evidence suggests the importance of appropriate and intensive educational interventions to foster acquisition of

basic social, communicative, and cognitive skills related to ultimate outcome."

"Early and sustained intervention appears to be particularly important, regardless of the philosophy of the program, so long as a high degree of structure is provided. Such programs have typically incorporated behavior modification procedures and applied behavior analysis."

"These methods build upon a large body of research on the application of learning principles to the education of children with autism and related conditions."

"It is clear that behavioral interventions can significantly facilitate acquisition of language, social, and other skills and that behavioral improvement is helpful in reducing levels of parental stress."

"Considerable time (and money) is required for implementation of such programs, and older and more intellectually handicapped individuals are apparently less likely to respond."

Volkmar, F., Cook, E.H., Pomeroy, J., Realmuto, G. & Tanguay, P. (1999). *Practice parameters for the assessment and treatment of children, adolescents, and adults with autism and other pervasive developmental disorders. Journal of the American Academy of Child and Adolescent Psychiatry, 38 (Supplement), 32s-54s*

Mental Health: A Report of the U.S. Surgeon General:

"Thirty years of research demonstrated the efficacy of applied behavioral methods in reducing inappropriate behavior and in increasing communication, learning, and appropriate social behavior. "

"A well-designed study of a psychosocial intervention was carried out by Lovaas and colleagues (Lovaas, 1987; McEachin et al., 1993). Nineteen children with autism were treated intensively with behavior therapy for 2 years and compared with two control groups. Follow-up of the experimental group in first grade, in late childhood, and in adolescence found that nearly half the experimental group but almost none of the children in the matched control group were able to participate in regular schooling."

Satcher, D. (1999). *Mental health: A report of the surgeon general. U.S. Public Health Service. Bethesda, MD.*

Dawson G, Osterling J. Early intervention in autism. In: Guralnick MJ, ed. **The Effectiveness of Early Intervention**. Baltimore, MD: Paul H. Brookes Publishing Co; 1997:307-326

Greenspan SI, Wieder S **Developmental patterns and outcomes in infants and children with disorder of relating and communicating: a chart review of 200 cases of children with autistic spectrum diagnoses** . J Dev Learning Disord 1997; 1:87-141

Harris SI, Handleman JS, Gordon R, Kristoff B, Fuentes F **Changes in cognitive and language functioning of preschool children with autism**. J Autism Dev Disord 1991; 21:281-290 [Medline]

Hoyson M, Jamisson B, **Strain PS Individualized group instruction of normally developing and autistic-like children: the LEAP curriculum model**. J Div Early Child 1984; 8:157-172

Hurth J, Shaw E, Izeman SG, Whaley K, Rogers SJ **Areas of agreement about effective practices among programs serving young children with autism spectrum disorders**. Infants Young Child 1999; 12:17-26

Lovaas, O. I. (1987). **Behavioral treatment and normal educational and intellectual functioning in young autistic children**. [Journal of Consulting and Clinical Psychology](#), 55, 3-9.

Lovaas, O. I. & Smith, T. (1989). **A comprehensive behavioral theory of autistic children: Paradigm for research and treatment**. [Journal of Behavioral Therapy and Experimental Psychiatry](#), 20, 17-29.

McEachin, J. J., Smith, T., & Lovaas, O. I. (1993). **Long-term outcome for children with autism who received early intensive behavioral treatment**. [American Journal on Mental Retardation](#), 97 (4), 359-372. (See also the commentaries on this study)

Rogers SJ, Lewis H **An effective day treatment model for young children with pervasive developmental disorders**. J Am Acad Child Adolesc Psychiatry 1989; 28:207-214 [Medline]

Sallows, Glen O. & Graupner, Tamlynn D. (2005). **Intensive Behavioral Treatment for Children with Autism: Four-Year Outcome and Predictors**. [American Journal on Mental Retardation](#), 110 (6), 417-438

Smith, T., Donahoe, P. A., Davis, B. J. (2000). **The UCLA Young Autism Project**. In S. Harris and J. Handelman (Eds.), Preschool Education Programs for Children with Autism (2nd edition), pp. 29-48. Austin, TX: Pro-Ed, Inc.

The reader may be helped by reading a book by a mother: Maurice, Catherine, **Let Me Hear Your Voice**, Alfred A. Knopf, Publisher, New York (1993).

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(snippet) ELECTRONIC ARTICLE: Technical Report: The Pediatrician's Role in the Diagnosis and Management of Autistic Spectrum Disorder in Children

"There is a growing body of evidence that intensive early intervention services for children in whom autism is diagnosed before 5 years of age may lead to better overall outcomes.³²⁻⁴¹ The only controlled study of early intensive interventions with young children was done by Ivar Lovaas of UCLA.³⁶ It has received much attention for its remarkable results. Lovaas reported outcomes of treating young children with ASD (average age at initiation of treatment, 2.8 years) with 40 hours per week of 1-to-1 behavioral training (also called applied behavioral analysis or discrete trial learning) for 2 years. The training method focused on the acquisition of compliance behavior, imitation activities, language acquisition, and integration with peers using repeated discrete behavioral trials to accomplish the goals. After 2 years of therapy, almost 50% of the children in the treatment arm of the study were functioning typically in intellectual and academic areas. At 5-year follow-up, most had maintained their gains.³⁸ The major criticisms of the study are nonuniform participant selection, lack of clear standard diagnostic criteria at entry, the required intensity of the intervention for such young children, choice of outcome measures, and randomization issues. A recently published retrospective study of the Lovaas method⁴⁰ and preschoolers with autism and severe mental retardation showed that children receiving intensive early behavioral intervention obtained significantly higher IQ scores and better expressive speech in a small group of children. Two other studies found similar results.^{111,112} Intensive behavioral treatment is becoming increasingly popular and being implemented in some early intervention programs and school districts. Several model programs based on the applied behavioral analysis approach have been developed.¹¹³⁻¹¹⁵ In a recently published clinical practice guideline, the New York State Department of Health Early Intervention Program endorsed this method as its sole strategy for toddlers with ASD in a recently published clinical practice guideline.¹⁹ However, more replicative studies with improved methodology are needed before it can be unequivocally recommended for all young children."