

DEFENSE HEALTH BOARD FIVE SKYLINE PLACE, SUITE 810 5111 LEESBURG PIKE FALLS CHURCH, VA 22041-3206

SEP 18 2009

DHB

MEMORANDUM FOR: ELLEN P. EMBREY, DEPUTY ASSISTANT SECRETARY OF DEFENSE (FHP&R), PERFORMING THE DUTIES OF THE ASSISTANT SECRETARY OF DEFENSE FOR HEALTH AFFAIRS

SUBJECT: Defense Health Board Findings Pertaining to Autism Treatment

1. References:

- a. Report of the ECRI Institute Health Technology Assessment Service Comprehensive Educational and Behavioral Interventions for the Treatment of Autism Spectrum Disorders: Prepared for the Department of Defense TRICARE Management Activity, 25 November 2008.
- b. Presentation: Applied Behavioral Analysis, to the Defense Health Board, CAPT Robert DeMartino, Director, Behavioral Medicine Division, Office of the Chief Medical Officer, TRICARE Management Activity, 5 September 2008.
- c. Memorandum, DASD (C&PP), Request to the Defense Health Board Pertaining to Autism Treatment, 26 August 2008.
- d. TRICARE Management Activity, TRICARE Operations Manual 6010.51M, 1 August 2002.
- At the request of Dr. Joseph E. Kelley, Deputy Assistant Secretary of Defense for Health Affairs, Clinical and Program Policy, the Defense Health Board was asked to examine the following:
 - a. The scientific evidence surrounding applied behavioral analysis (ABA) therapy, including the benefits, treatment intensity and duration, as well as short-tem and long-term effects associated with this treatment.
 - b. Areas for further research.
 - The existence of emerging treatments for autism that provide comparable benefit to ABA therapy.
- 3. The Board received a presentation from a Department of Defense (DoD) subject matter expert and public comments during the open session of the DHB Full Board meeting on 5 September 2008 and discussed methods of assessing the issue. The DHB President

- subsequently tasked the Psychological Health External Advisory Subcommittee to thoroughly review the literature on autism and its treatments including ABA, and report its findings and recommendations to the Core Board. A list of additional references identified by a review of the literature is attached.
- 4. The Psychological Health External Advisory Subcommittee held a meeting on 26 to 27 January 2009, during which the Subcommittee members discussed the findings and implications of an evidence-based review of broad behavioral and educational interventions for the treatment of autism spectrum disorders (ASDs), prepared by the ECRI Institute. In addition, the Subcommittee held a telephonic meeting on 19 May 2009 during which the members received a briefing on the TRICARE autism benefit.

FINDINGS

- ASDs are disorders of brain development associated with problems in the regulation of
 emotion, cognition, and behavior that may result in profound developmental impairments,
 and social, academic, and vocational disability.
- 6. ABA is a type of Early Intensive Behavioral Intervention (EIBI).
- A paucity of data resulting from few studies, small sample sizes, problems in experimental
 design within existing studies, as well as lack of long-term follow-up, exists that could
 inform questions and provide answers related to the absolute and relative effectiveness of
 ABA for ASD.
- The Subcommittee recognizes that military families face limitations and widespread geographic disparities in gaining access to pharmacologic and psychosocial habilitative treatments for ASD. It also recognizes that many families feel they are benefitting from current services, even if limited.

CONCLUSIONS

9. The Board appreciates the opportunity to provide input on the important issue of ABA treatment for autism spectrum disorders (ASD). However, the principal factor limiting the ability of the Board to draw firm conclusions regarding the relative efficacy of ABA is the lack of sufficient sound and thorough peer-reviewed evidence on this issue.

RECOMMENDATIONS

- 10. ASDs require the integration of habilitative treatments as a minimum acceptable standard for management of the illness and its consequences.
- 11. Regarding short-term effects of treatment associated with ABA: evidence exists to conclude that EIBI of which ABA is one example may produce short-term gains in intelligence quotient (IQ) and adaptive behavior, but not improvements in other symptoms or dimensions of functional impairment in individuals with ASD.

- 12. Regarding long-term effects of treatment associated with ABA: insufficient evidence exists to draw conclusions regarding the long-term efficacy of any current intervention strategies.
- 13. Regarding the comparative effectiveness of treatments other than ABA: insufficient evidence exists to draw conclusions regarding the relative efficacy of ABA and other forms of EIBI.
- 14. Rigorously-designed clinical trials addressing the shortcomings of the literature are recommended to support future evidence-based recommendations. These include especially comparisons of various treatments and interventions in the short and in the long term. Establishing partnerships with relevant organizations to accomplish this, such as with the National Institutes of Health, is desirable.
- 15. The Board endorses the notion that families receiving ASD-related services from the DoD or supported by the DoD should be encouraged to participate in longitudinal and other research designed to address the shortcomings in the literature.
- 16. The Board endorses the implementation of individualized child, adolescent and familyfocused case management strategies that take into account regional variability in treatment resources.
- 17. These recommendations should be reviewed two to three years from the date of this memorandum.

FOR THE DEFENSE HEALTH BOARD:

Wayne M. Lednar, M.D., Ph.D.

DHB Co-Vice-President

Gregory A. Poland, M.D.

DHB Co-Vice-President

Charles Fogelman, PhD

Chair, Psychological Health External Advisory Subcommittee

Charley / Fogeline (4

Attachment(s):

As stated

Distribution List

DASD (FHP&R)
DASD (C&PP)
DHB Members and Consultants
Surgeon General of the Army
Surgeon General of the Navy
Surgeon General of the Air Force
Joint Staff Surgeon
Library of Congress

Additional References

West L, Waldrop J, and Brunssen S. Pharmacologic Treatment for the Core Deficits and Associated Symptoms of Autism in Children. *Journal of Pediatric Health Care* 2009 Mar-Apr; 23(2):75-89.

Rossignol DA, Rossingnol LW, Smith S, et al. Hyperbaric Treatment for Children with Autism: A Multicenter, Randomized, Double-Blind Controlled Trial. *BMC Pediatrics* 2009 Mar 13; 9(1):21.

Seida JK, Durec T, and Kuhle S. Systematic Reviews of Psychosocial Interventions for Autism: An Umbrella Review. *Developmental Medicine and Child Neurology* 2009 Feb; 51(2):95-104.

Eikeseth S. Outcome of comprehensive psycho-educational interventions for young children with autism. *Research in Developmental Disabilities* 2009 Jan-Feb; 30(1):158-78.

Howlin P, Magiati I, and Charman T. Systematic Review of Early Intensive Behavioral Interventions for Children with Autism. *American Journal on Intellectual and Developmental Disabilities* 2009 Jan 1; 114(1):23-41.

Reichow B and M Wolery. Comprehensive Synthesis of Early Intensive Behavioral Interventions for Young Children with Autism Based on the UCLA Young Autism Project Model. *Journal of Autism and Developmental Disorders* 2009 Jan; 39(1):23-56.

Grindle CF, Kovshoff H, Hastings PR, et al. Parents' Experiences of Home-Based Applied Behavior Analysis Programs for Young Children with Autism. *Journal of Autism and Developmental Disorders* 2009; 39:42-56.

Spreckley M and R Boyd. Efficacy of Applied Behavioral Analysis Intervention in Preschool Children with Autism for Improving Cognitive, Language, and Adaptive Behavior: A Systematic Review and Meta-Analysis. *Journal of Pediatrics* 2009; 154:338-44.

Ospina MB, Krebs SJ, Clark B, et al. Behavioural and Developmental Interventions for Autism Spectrum Disorder: a Clinical Systematic Review. *PLoS ONE* 2008 Nov; 3(11):1-32.

Paul R. Interventions to Improve Communication in Autism. Child and Adolescent Psychiatric Clinics of North America 2008 Oct; 17(4):835-56, ix-x.

Posey DJ and CJ McDougle. Treating Autism Spectrum Disorders. Child and Adolescent Psychiatric Clinics of North America 2008 Oct; 17(4): xv-xviii.

Akhondzadeh S, Tajdar H, Mohammadi MR, et al. A Double-Blind Placebo Controlled Trial of Piracetam Added to Risperidone in Patients with Autistic Disorder. *Child Psychiatry and Human Development* 2008 Sept; 39(3):237-45.

Nickels K, Katusic SK, Colligan RC, et al. Stimulant Medication Treatment of Target Behaviors in Children with Autism: A Population-Based Study. *Journal of Developmental and Behavioral Pediatrics* 2008 Apr; 29(2):75-81.

Posey DJ, Stigler KA, Erickson CA, et al. Antipsychotics in the Treatment of Autism. *The Journal of Clinical Investigation* 2008 Jan; 118(1): 6-14.

Rogers SJ and LA Vismara. Evidence-Based Comprehensive Treatments for Early Autism. Journal of Clinical Child and Adolescent Psychology 2008 Jan; 37(1):8-38.

Bartz JA and E Hollander. Oxytocin and Experimental Therapeutics in Autism Spectrum Disorders. *Progressive Brain Research* 2008; 170:451-62.

Case-Smith J and M Arbesman. Evidence-Based Review of Interventions for Autism Used In or Of Relevance to Occupational Therapy. *American Journal of Occupational Therapy* 2008; 62:416-429.

Charles JM, Carpenter LA, Jenner W, et al. Recent Advances in Autism Spectrum Disorders. *International Journal of Psychiatry in Medicine* 2008; 38(2):133-140.

Foxx R M. Applied Behavior Analysis Treatment of Autism: The State of the Art. Child and Adolescent Psychiatric Clinics of North America 2008; 17:821-34.

Leskovec TJ, Rowles BM, Findling RL. Pharmacological Treatment Options for Autism Spectrum Disorders in Children and Adolescents. *Harvard Review of Psychiatry* 2008; 16(2):97-112.

Remington B, Hastings RP, Kovshoff H, et al. Early Intensive Behavioral Intervention: Outcomes for Children with Autism and Their Parents after Two years. *American Journal on Mental Retardation* 2007 Nov; 112(6):418-38.

Rossignol DA, Rossignol LW, James SJ, et al. The Effects of Hyperbaric Oxygen Therapy on Oxidative Stress, Inflammation and Symptoms in Children with Autism: An Open-Label Pilot Study. *BMC Pediatrics* 2007 Nov; 7(36):1-13.

Erickson CA, Posey DJ, Stigler KA, et al. Pharmacologic Treatment of Autism and Related Disorders. *Pediatric Annals* 2007 Sept; 36(9):575-585.

Matson JL, Matson MM, Rivet TT. Social-Skills Treatments for Children with Autism Spectrum Disorders: An Overview. *Behavior Modification* 2007 Sept; 31(5):682-707.

McClure I and A Le Couteur. Evidence-Based Approaches to Autism Spectrum Disorders. *Child Care, Health, and Development* 2007 Sept; 33(5):509-512.

Magiati I, Charman T, Howlin P. A Two-Year Prospective Follow-Up Study of Community-Based Early Intensive Behavioral Intervention and Specialist Nursery Provision for Children

with Autism Spectrum Disorders. *Journal of Child Psychology and Psychiatry* 2007 Aug; 48(8):803-12.

Rickards AL, Walstab JE, Wright-Rossi RA, et al. A Randomized, Controlled Trial of a Home-Based Intervention Program for Children with Autism and Developmental Delay. *Journal of Developmental and Behavioral Pediatrics* 2007 Aug; 28(4):308-16.

Schechtman, MA. Scientifically Unsupported Therapies in the Treatment of Young Children with Autism Spectrum Disorders. *Pediatric Annals* 2007 Aug: 36(8): 497-505.

Schwichtenberg A and J Poehlmann. Applied Behavioral Analysis: Does Intervention Intensity Relate to Family Stressors and Maternal Well-Being? *Journal of Intellectual Disability Research* 2007 Aug; 51(PT8):598-605.

Ben-Itzchak E and DA Zachor. The Effects of Intellectual Functioning and Autism Severity on Outcome of Early Behavioral Intervention for Children with Autism. *Research in Developmental Disabilities* 2007 May-June; 28(3):287-303.

Eikeseth S, Smith T, Jahr E et al. Outcome for Children with Autism Who Began Intensive Behavioral Treatment Between Ages 4 and 7: A Comparison Controlled Study. *Behavior Modification* 2007 May; 31(3):264-78.

Thomas KC, Morrissey JP, and McLaurin C. Use of Autism-Related Services by Families and Children. *Journal of Autism Developmental Disorders* 2007 May; 37(5):818-829.

Stachnik JM and C Nunn-Thompson. Use of Atypical Antipsychotics in the Treatment of Autistic Disorder. *The Annals of Pharmacotherapy* 2007 Apr; 41(4):626-34.

McConachie H and T Diggle. Parent Implemented Early Intervention for Young Children with Autism Spectrum Disorder: A Systematic Review. *Journal of Evaluation in Clinical Practice* 2007 Feb; 13(1):120-9.

Stahmer AC and DS Mandell. State Infant/Toddler Program Policies for Eligibility and Services Provision for Young Children with Autism. *Administration and Policy in Mental Health and Mental Health Services Research* 2007 Jan; 34(1):29-37.

Woodard C, Groden J, Goodwin M et al. A Placebo Double-Blind Pilot Study of Dextromethorphan for Problematic Behaviors in Children with Autism. *Autism* 2007 Jan; 11(1):29-41.

Hilton JC and BC Seal. Brief Report: Comparative ABA and DIR Trials in Twin Brothers with Autism. *Journal of Autism and Developmental Disorders* 2007; 37:1197-1201.

Marr D, Mika H, Miraglia J, et al. The Effect of Sensory Stories on Targeted Behaviors in Preschool Children with Autism. *Physical and Occupational Therapy in Pediatrics* 2007; 27(1):63-79.

Reed P, Osborne LA, and Corness M. Brief Report: Relative Effectiveness of Different Home-Based Behavioral Approaches to Early Teaching Intervention. *Journal of Autism and Developmental Disorders* 2007; 37:1815-1821.

Steege MW, Mace FC, Perry L, et al. Applied Behavior Analysis: Beyond Discrete Trial Teaching. *Psychology in the Schools* 2007; 44(1):91-99.

White SW, Keonig K, and Scahill L. Social Skills Development in Children with Autism Spectrum Disorders: A Review of the Intervention Research. *Journal of Autism and Developmental Disorders* 2007; 37:1858-1868.

Zachor DA, Ben-Itzchak E, Rabinovich AL et al. Change in Autism Core Symptoms with Intervention. *Research in Autism Spectrum Disorders* 2007; 1:304-317.

West L and J Waldrop. Risperidone Use in the Treatment of Behavioral Symptoms in Children with Autism. *Pediatric Nursing* 2006 Nov-Dec; 32(6):545-549.

Nagaraj R Singhi P, Malhi P. Risperidone in Children with Autism: Randomized, Placebo-Controlled, Double-Blind Study. *Journal of Child Neurology* 2006 Jun; 21(6): 450-5.

Chavez B, Chavez-Brown M, Rey JA. Role of Risperidone in Children with Autism Spectrum Disorder. *The Annals of Pharmacotherapy* 2006 May; 40(5):909-16.

Cohen H, Amerine-Dickens M, Smith T. Early Intensive Behavioral Treatment: Replication of the UCLA Model in a Community Setting. *Journal of Developmental and Behavioral Pediatrics* 2006 Apr; 27(2 Supplemental):S145-55.

Eldevik S, Eikeseth S, Jahr E et al. Effects of Low-Intensity Behavioral Treatment for Children with Autism and Mental Retardation. *Journal of Autism and Developmental Disorders* 2006 Feb; 36(2):211-224.

Oneal BJ, Burns GL, Kahn TJ, et al. Assessment of Home-Based Behavior Modification Programs for Autistic Children: Reliability and Validity of the Behavioral Summarized Evaluation. *Journal of Prevention and Intervention in the Community* 2006; 32(1-2):25-39.

Scattone D and KR Knight. Current Trends in Behavioral Interventions for Children with Autism. *International Review of Neurobiology* 2006; 72:181-93.

Symes MD, Remington B, Brown T, et al. Early Intensive Behavioral Intervention for Children with Autism: Therapists' Perspectives on Achieving Procedural Fidelity. *Research in Developmental Disabilities* 2006; 27:30-42.

Turner LM, Stone WL, Pozdol SL, et al. Follow-Up of Children with Autism Spectrum Disorders From Age 2 to Age 9. Autism 2006; 10(3):243-265.

Wachtel LE and LP Hagopian. Psychopharmacology and Applied Behavioral Analysis: Tandem Treatment of Severe Problem Behaviors in Intellectual Disability and a Case Series. *Israel Journal of Psychiatry and Related Sciences* 2006; 43(4):265-274.

Yoder P and WL Stone. Randomized Comparison of Two Communication Interventions for Preschoolers with Autism Spectrum Disorders. *Journal of Consulting and Clinical Psychology* 2006; 74(3): 425-435.

Lord C, Wagner A, Rogers S, et al. Challenges in Evaluating Psychosocial Interventions for Autistic Spectrum Disorders. *Journal of Autism and Developmental Disorders* 2005 Dec; 35(6):695-708.

Schopler E. Commentary: Comments on "Challenges in Evaluating Psychosocial Intervention for Autistic Spectrum Disorders" by Lord et al. *Journal of Autism and Developmental Disorders* 2005 Dec; 35(6):709-711.

Sallows GO and TD Graupner. Intensive Behavioral Treatment for Children with Autism: Four-Year Outcome and Predictors. *American Journal on Mental Retardation* 2005 Nov; 110(6):417-38.

Eikeseth S. Intensive Behavioral Intervention for Children with Autism. A Reply to Prior. Journal of Paediatrics and Child Health 2005 Jul; 41(7):391-2.

Francis K. Autism Interventions: A Critical Update. *Developmental Medicine and Child Neurology* 2005 Jul; 47(7):493-499.

Corsello CM. Early Intervention in Autism. Infants and Young Children 2005; 18(2):74-85.

Howard JS, Sparkman CR, Cohen HG, et al. A Comparison of Intensive Behavior Analytic and Eclectic Treatments for Young Children with Autism. *Research in Developmental Disabilities* 2005; 26:359-383.

Howlin P. The Effectiveness of Interventions for Children with Autism. *Journal of Neural Transmission* 2005; (69):101-19.

Levy SE and SL Hyman. Novel Treatments for Autistic Spectrum Disorders. *Mental Retardation and Developmental Disabilities Research Reviews* 2005; 11(2):131-42.

Stahmer AC, Collings NM, Palinkas LA. Early Intervention Practices for Children with Autism: Descriptions from Community Providers. *Focus on Autism and Other Developmental Disabilities* 2005; 20(2):66-79.

Shea V. A Perspective on the Research Literature Related to Early Intensive Behavioral Intervention (Lovaas) for Young Children with Autism. *Autism* 2004 Dec; 8(4):349-67.

Schwartz IS, Sandall SR, McBride BJ, et al. Project DATA (Developmentally Appropriate Treatment for Autism): An Inclusive School-Based Approach to Educating Young Children with Autism. *Topics in Early Childhood Special Education* 2004 Fall; 24(3):156-168.

Vastag B. Autism Interventions Come of Age. *Journal of the American Medical Association* 2004 Jun; 291(23): 2807-2808.

Doughty C. What is the Evidence for the Effectiveness of Behavioral and Skill-Based Early Intervention in Young Children with Autism Spectrum Disorder (ASD)? NZHTA Tech Brief Series 2004 Apr; 3(1).

Bodfish JW. Treating the Core Features of Autism: Are We There Yet? *Mental Retardation and Developmental Disabilities Research Reviews* 2004; 10(4):318-26.

Sinha Y, Silove N, Wheeler D, et al. Auditory Integration Training and Other Sound Therapies for Autism Spectrum Disorders. *Cochrane Database Systematic Review* 2004;1:CD003681.

Hastings RP. Behavioral Adjustment of Siblings of Children with Autism Engaged in Applied Behavior Analysis Early Intervention Programs: The Moderating Role of Social Support. Journal of Autism and Developmental Disorders 2003 Apr; 33(2):41-150.

Connor M. Monitoring and Reviewing Early Behavioural Intervention in Autism (Lovaas). *Educational Psychology in Practice* 2003; 19(1):21-33.

Diggle TJJ and HHR McConachie. Parent-Mediated Early Intervention for Young Children with Autism Spectrum Disorder (Review). *Cochrane Database Systematic Review* 2003; CD003496.

Finche L and C Raffaele. Intensive Behavioural Intervention for Children with Autism: A Review of the Evidence. *Occupational Therapy Now* 2003; 5(4):20-23.

Kabot S, Masi W, Segal M. Advances in the Diagnosis and Treatment of Autism Spectrum Disorders. *Professional Psychology: Research and Practice* 2003; 34(1):26-33.

Turgay A, Binder C, Snyder R et al. Long-Term Safety and Efficacy of Risperidone for the Treatment of Disruptive Behavior Disorders in Children with Subaverage IQs. *Pediatrics* 2002 Sept; 110(3):e34.

Lonsdale D, Shamberger RJ, Audhya T. Treatment of Autism Spectrum Children with Thiamine Tetrahydrofurfuryl Disulfide: A Pilot Study. *Neuroendocrinology Letters* 2002 Aug; 23(4):303-8.

Jensen VK and LV Sinclair. Treatment of Autism in Young Children: Behavioral Intervention and Applied Behavior Analysis. *Infants and Young Children* 2002 Apr; 14(4):42-52.

Eikeseth S, Smith T, Jahr E, et al. Intensive Behavioral Treatment at School for 4-to 7- Year-Old Children with Autism: A One-Year Comparison Controlled Study. *Behavior Modification* 2002 Jan; 26(1):49-68.

Bibby P, Eikeseth S, Martin NT, et al. Progress and Outcomes for Children with Autism Receiving Parent-Managed Intensive Interventions. *Research in Developmental Disabilities* 2002; 23:81-104.

Bibby P, Eikeseth S, Martin NT, et al. Erratum to "Progress and Outcomes for Children with Autism Receiving Parent-Managed Intensive Interventions". *Research in Developmental Disabilities* 2002; 23:79-104.

American Academy of Pediatrics: Committee on Children with Disabilities. The Pediatrician's Role in the Diagnosis and Management of Autism Spectrum Disorders in Children. *Pediatrics* 2001; 107:1221-6.

Boyd RD and MJ Corley. Outcome Survey of Early Intensive Behavioral Intervention for Young Children with Autism in a Community Setting. *Autism* 2001 Dec; 5(4):430-441.

Mikhail AG. Autism Spectrum Disorders: Update of Evaluation and Treatment. *Current Psychiatry Reports* 2001 Oct; 3(5):361-5.

[No authors listed] Autism and Lovaas Treatment: A Systematic Review of Effectiveness Evidence. *International Journal of Technology Assessment in Health Care* 2001 Spring; 17(2):252.

Ingersoll B, Schreibman L, Stahmer A. Brief Report: Differential Treatment Outcomes for Children with Autistic Spectrum Disorder Based on Level of Peer Social Avoidance. *Journal of Autism and Developmental Disorders* 2001; 31(3): 343-349.

McGahan L. Behavioural Interventions for Preschool Children with Autism. Ottawa: Canadian Coordinating Office for Health Technology Assessment, 2001.

National Academy of Sciences: Committee on Educational Interventions for Children with Autism, National Research Council. *Educating Children with Autism*. National Academies Press, 2001.

Salt J, Sellars V, Shemilt J, et al. The Scottish Centre for Autism Preschool Treatment Programme: A Developmental Approach to Early Intervention. *Autism* 2001; 5(4)362-373.

Smith T, Buch GA, Gamby TE. Parent-Directed, Intensive Early Intervention for Children with Pervasive Developmental Disorder. *Research in Developmental Disabilities* 2000 Jul-Aug; 21(4):297-309.

Bassett K, Green CJ, Kazanjian A. Autism and Lovaas Treatment: A Systematic Review of Effectiveness Evidence. Vancouver: University of British Columbia, British Columbia Office of Health Technology Assessment, 2000.

Smith T, Groen AD, Wynn JW. Randomized Trial of Intensive Early Intervention for Children with Pervasive Developmental Disorder. *American Journal on Mental Retardation* 2000 Jul; 105(4):269-85.

Aman MG and KS Langworthy. Pharmacotherapy for Hyperactivity in Children with Autism and Other Pervasive Developmental Disorders. *Journal of Autism and Developmental Disorders* 2000; 30(5):451-459.

Dawson G and R Watling. Interventions to Facilitate Auditory, Visual, and Motor Integration in Autism: A Review of the Evidence. *Journal of Autism and Developmental Disorders* 2000; 30(5):415-421.

Gupta S. Immunological Treatments for Autism. *Journal of Autism and Developmental Disorders* 2000; 30(5):475-479.

King BH. Pharmacological Treatment of Mood Disturbances, Aggression, and Self-Injury in Persons with Pervasive Developmental Disorders. *Journal of Autism and Developmental Disorders* 2000; 30(5):439-445.

Koegel LK. Interventions to Facilitate Communication in Autism. *Journal of Autism and Developmental Disorders* 2000; 30(5):383-391.

Page T. Metabolic Approaches to the Treatment of Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders* 2000; 30(5):463-469.

Rogers SJ. Interventions that Facilitate Socialization in Children with Autism. *Journal of Autism and Developmental Disorders* 2000; 30(5):399-409.

Schreibman L. Intensive Behavioral/Psychoeducational Treatments for Autism: Research Needs and Future Directions. *Journal of Autism and Developmental Disorders* 2000; 30(5):373-378.

Zimmerman AW. Commentary: Immunological Treatments for Autism: In Search of Reasons for Promising Approaches. *Journal of Autism and Developmental Disorders* 2000; 30(5):481-484.

Pomeranz K. Letters to the Editor: Home-Based Behavioral Treatment. *Journal of Autism and Developmental Disorders* 1999; 29(5): 425.

Siegel B. Letters to the Editor: Response to Pomeranz. *Journal of Autism and Developmental Disorders* 1999; 29(5): 425-426.

Simon N. Letters to the Editor: Auditory Dysfunction in Autism: A Submicroscopic Form of Wernicke's Encephalopathy? *Journal of Autism and Developmental Disorders* 1999; 29(5): 426-427.

Jocelyn LJ and OG Casiro. Treatment of Children with Autism: A Randomized Controlled Trial to Evaluate a Caregiver-Based Intervention Program in Community Day-Care Centers. Developmental and Behavioral Pediatrics 1998 Oct; 19(5):326-334.

Rogers SJ. Empirically Supported Comprehensive Treatments for Young Children with Autism. *Journal of Clinical Child and Adolescent Psychology* 1998 Jun; 27(2):168-179.

Gresham FM and DL MacMillan. Early Intervention Project: Can Its Claims be Substantiated and its Effects Replicated? *Journal of Autism and Developmental Disorders* 1998; 28(1):5-13.

Ozonoff S and K Cathcart. Effectiveness of a home program intervention for young children with autism. *Journal of Autism and Developmental Disorders* 1998; 28(1):25-32.

Rogers SJ, Osaki D, Hall T, and Reaven J. <u>The Denver Model: An Integrated Approach to Intervention for Young Children with Autism: A Guideline for Parents</u>. Denver: JFK Center for Developmental Disabilities, 1998.

Sheinkopf SJ and B Siegel. Home-Based Behavioral Treatment of Young Children with Autism. *Journal of Autism and Developmental Disorders* 1998; 28(1):15-23.

Gresham FM and DL MacMillan. Autistic Recovery? An Analysis and Critique of the Empirical Evidence on the Early Intervention Project. *Behavioral Disorders* 1997; 22: 185-201.

Gresham FM and DL MacMillan. Denial and Defensiveness in the Place of Fact and Reason: Rejoinder to Smith and Lovaas. *Behavioral Disorders* 1997; 22: 219-230.

Smith T, Eikeseth S, Klevstrand M et al. Intensive Behavioral Treatment for Preschoolers with Severe Mental Retardation and Pervasive Developmental Disorder. *American Journal on Mental Retardation* 1997 Nov; 102(3):238-49.

Matson JL, Benavidez DA, Compton LS, et al. Behavioral Treatment of Autistic Persons: A Review of Research from 1980 to the Present. *Research in Developmental Disabilities* 1996 Nov-Dec; 17(6):433-65.

Lovass OI and G Buch. Intensive Behavioral Intervention with Young Children with Autism. Behavioral Intervention for Young Children with Autism: A Manual for Parents and Professionals. Texas: Pro-Ed, 1996 May:61-86.

Rimland B and SM Baker. Brief Report: Alternative Approaches to the Development of Effective Treatments for Autism. *Journal of Autism and Developmental Disorders* 1996 April; 26(2):237-241.

Schreibman L. Brief Report: The Case for Social and Behavioral Intervention Research. Journal of Autism and Developmental Disorders 1996 Apr; 26(2):247-50.

Campbell M, Schopler E, Cueva J, et al. Treatment of Autistic Disorder. *Journal of the American Academy of Child and Adolescent Psychiatry*. 1996 Feb; 35(2):134-143.

Stromer R and HA Mackay. Naming, the Formation of Stimulus Classes, and Applied Behavior Analysis. *Journal of Applied Behavior Analysis* 1996; 29(3):409-431.

Shapiro T and M Hertzig. Letters to the Editor: Applied Behavioral Analysis: Astonishing Results? *Journal of the American Academy of Child and Adolescent Psychiatry* 1995 Oct; 34(10):1255-6.

Friman PC and CP Lucas. Behavioral Treatment for Autism. *Journal of the American Academy of Child and Adolescent Psychiatry* 1994 Nov-Dec; 33(9):1349-51.

McEachin JJ, Smith T, Lovaas OI. Long-Term Outcome for Children with Autism Who Received Early Intensive Behavioral Treatment. *American Journal on Mental Retardation* 1993 Jan; 97(4):359-91.

Birnbrauer SJ and DJ Leach. The Murdoch Early Intervention Program after 2 Years. *Behaviour Change* 1993; 10(2):63-74.

Schopler E, Short A, and Mesibov G. Relation of Behavioral Treatment to "Normal Functioning": Comment on Lovass. *Journal of Consulting and Clinical Psychology* 1989; 57:162-4.

Lovaas OI. Behavioral Treatment and Normal Educational and Intellectual Functioning in Young Autistic Children. *Journal of Consulting and Clinical Psychology* 1987 Feb; 55(1):3-9.

Schopler E, Mesibov G, Shigley RH et al. Helping Autistic Children Through Their Parents: The TEACCH Model. The Effects of Autism on the Family. New York: Springer, 1984.

Baer DM, Wolf MM, Risley TR. Some Current Dimensions of Applied Behavior Analysis. *Journal of Applied Behavior Analysis* 1968; 1:91-97.