The effectiveness of parents as co-therapists in behavioral and educational interventions for young children with autism and pervasive developmental disorders: A review

Brian Rotsztein, M.A.

Lynch School of Education
Boston College

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Abstract

Autism is characterized by significant deficits in areas necessary for normal development that is found in typically developing children. Parenting a child with autism places a tremendous burden on the families who take care of them, which frequently leads to high levels of stress among family members. Studies suggest that the use of intensive early behavioral intervention and special education are the most promising treatments for this population. Increasing numbers of parents are being trained as co-therapists to treat their young children in the home environment, which has distinct advantages as part of these intervention programs. This paper reviews studies which include a parent-training treatment component for their young children with autism and pervasive developmental delays. Sixteen (14 behavioral and 2 special education) comprehensive treatment studies are reviewed. Taken together, the results suggest that these intervention programs successfully improve the cognitive, adaptive, behavioral, and social abilities in this population, while showing less severe symptomatology. Moreover, children who undergo these therapies tend to have more advanced school placement and decreased need of a classroom aide. Additionally, there is a simultaneous decrease in stress among parents, who appear to become more effective at eliciting and recognizing appropriate behavior, and tend to rate the treatment positively. Parent-child interactions tended to be rated as more significant post-treatment. However, many studies were found lacking in their experimental methodology which prevents accurate evaluations of the research.

***For more information, please contact: brian.rotsztein@bc.edu**

Table 1. **Behavioral and Educational Programs**

			Parents Outcomes			Parent-child	Child Outcomes				
Type of Program	Sample size (n)	Number of hours of intervention	Stress & well-being	Satisfaction with treatment	Quality of skills	Quality of interactions	Cognitive ability/ IQ	Adaptive behavior/ Social skills	Language (Nonverbal or verbal)	School placement	Symptom severity
Lovaas-based programs											
Lovaas (1987)	Experimental group =19 Control group (exp)=19 Control group (norm)=21	Grp 1 = 40 Grp 2 = 10 Grp 3 = 0	No	No	No	No	Yes	Yes	Yes	Yes	No
Anderson et al. (1987)	Experimental group =14 No Control group	Grp 1=15-25 +Parents: at least 10hrs; Grp 2=0	No	Yes	Yes	No	Yes	Yes	Yes	Yes	No
McEachin, Smith, & Lovaas (1993)	Long-term follow up of Lovaas (1987)	--	No	No	No	No	Yes	Yes	No	Yes	Yes
Sheinkopf & Siegel (1998)	Experimental group =11 Control group=11	Grp 1 = 12-43 Grp 2 = 0	No	No	No	No	Yes	No	No	No	Yes
Sallows & Graupner (1999)	Experimental group =12 Control group (exp)=12 Control group (norm)=19	Grp 1 = 39 Grp 2 = 29 Grp 3 = 0	No	No	No	No	Yes	Yes	Yes	No	No
Smith, Buch, & Gamby (2000)	Experimental group =6 No Control group	Grp 1 = 26 Grp 2 = 0	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	No
Smith, Groen, &Wynn (2000)	Intensive treatment=15 Parent training=13	Grp 1=30 (parents=5) Grp 2=10-15(parents=5)	No	Yes	No	No	Yes	Yes	Yes	Yes	No
Eikeseth et al. (2002)	Behavioral group=13 Eclectic group=12	Grp 1 = 28 (parents=4) Grp 2 = 29 (parents=4)	No	No	No	No	Yes	Yes	Yes	No	No
Behavioral Programs											
Hemsley, et al. (1978)	Experimental group =16 Control group 1=14 Control group 2=16	Not provided	No	No	No	Yes	Yes	Yes	Yes	No	No
Sherman, et al. (1988)	Home-based group=5 Outpatient group=5 Residential group=5	Grp 1 = 30-40 Grp 2 = 5-7 days/week Grp 3 = 5-8	No	No	No	No	No	Yes	No	Yes	Yes
Robbins, Dunlap, & Plienis (1991)	Experimental group =12 No Control group	Grp 1 = 5 Grp 2 = 0	Yes	No	Yes	No	Yes *	Yes *	Yes *	No	Yes
Lalinec (1995); Lalinec et al. (1995)	Experimental group =21 No Control group	12 min/day intensive lesson + generalization	Yes	No	No	No	Yes *	Yes	Yes	No	No
Koegel, Bimbela, & Schreibman (1996)***	Experimental group=10 Experimental group=7	Not provided	Yes	No	Yes	Yes	No	No	No	No	No
Weiss (1999)	Experimental group =20 No Control group	Grp 1 = 40 Grp 2 = 0	No	No	No	No	No	Yes	No	Yes	Yes
Educational Programs											
Short (1984)	Experimental group =15 No Control group	Not provided	Yes	Yes	Yes	Yes	No	Yes	No	No	No
Ozonoff & Cathcart (1998)	Experimental group=11 Control Group=11 (no parent treatment)	Grp 1 = 30 min/day intensive lesson Grp 2 = 0	No	No	No	No	Yes* *	No	No	No	Yes
Totals ('yes' /16 studies)			5	4	5	3	12	13	9	7	6

*Developmental measure **Psycho-educational measure ***This study focuses on parents and does not discuss comprehensiveness with respect to the children

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