

DOCUMENT RESUME

ED 370 340

EC 303 073

AUTHOR Chambliss, Catherine; Doughty, Renee J.  
 TITLE Parental Response to Lovaas Treatment of Childhood Autism.  
 PUB DATE 26 Feb 94  
 NOTE 11p.; Paper presented at the Annual University of Scranton Psychology Conference (9th, Scranton, PA, February 26, 1994).  
 PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)  
 EDRS PRICE MF01/PC01 Plus Postage.  
 DESCRIPTORS \*Autism; \*Behavior Modification; \*Behavior Problems; Family Environment; Father Attitudes; Intervention; Mother Attitudes; Outcomes of Treatment; \*Parent Attitudes; Performance Factors; Sex Differences; Therapists; \*Therapy; Time  
 IDENTIFIERS Behavior Management; \*Lovaas (O Ivar)

ABSTRACT

This study examined the importance of several parental factors in shaping the outcome of a behavioral treatment program for children with autism based on the work of O. Ivar Lovaas. The Lovaas approach remediates behavior problems through the redesign of the household environment. Respondents to a questionnaire sent to 18 families were 3 mothers and 2 fathers from a total of 5 families of children (ages 4-7) with autism. Specifically, the study looked at the following factors: (1) amount of time each family spent delivering the therapeutic interventions; (2) the number of different therapists per family; (3) optimistic or pessimistic attitudes about therapy; and (4) the structure of the family. Results suggested that the female parent generally experiences greater stress and responsibility in caring for an autistic child. Male parents spent significantly less time with the autistic child but tended to be more generally optimistic about their child's future than did mothers. Both male and female parents were somewhat optimistic about the Lovaas method. The average family used five therapists and devoted a mean number of 5.5 hours daily to therapy. (DB)

\*\*\*\*\*  
 \* Reproductions supplied by EDRS are the best that can be made \*  
 \* from the original document. \*  
 \*\*\*\*\*



ED 370 340

U.S. DEPARTMENT OF EDUCATION  
Office of Educational Research and Improvement  
EDUCATIONAL RESOURCES INFORMATION  
CENTER (ERIC)

This document has been reproduced as  
received from the person or organization  
originating it  
 Minor changes have been made to improve  
reproduction quality

• Points of view or opinions stated in this docu-  
ment do not necessarily represent official  
OERI position or policy

Parental Response to Lovaas Treatment  
of Childhood Autism

Catherine Chambliss, Ph. D.

Renee J. Doughty

Ursinus College

1994

Presented at The Ninth Annual University of Scranton Psychology  
Conference, February 26, 1994.

"PERMISSION TO REPRODUCE THIS  
MATERIAL HAS BEEN GRANTED BY

Catherine  
Chambliss

2

BEST COPY AVAILABLE

TO THE EDUCATIONAL RESOURCES  
INFORMATION CENTER (ERIC)."

## Abstract

Many studies have been done in the area of autism, a serious psychological disorder that affects the intellectual, social and emotional functioning of children. Although children with autism usually are given a poor prognosis, outcome evaluations of different types of therapy have shown that many of its symptoms can be significantly reduced. One type of therapy that involves behavior modification has been studied intensively by Dr. O. Ivar Lovaas. This study has been designed to determine the importance of several parental factors in shaping the outcome of a treatment program based on Lovaas' behavioral modification techniques. This study will describe the amount of time each family spends delivering the therapeutic interventions, the number of different therapists, optimistic or pessimistic attitudes about therapy, and the structure of the family, and discuss the impact of these on outcome.

Parental Influence on Lovaas Treatment  
Success in Autistic Children

I would like to begin by briefly describing what autism is, for those of you who may not be familiar with the disorder. Autism is a serious psychological disorder that affects the intellectual, social and emotional functioning of children. The disorder has been found to be quite rare. Many of the children that have the disorder do not speak and they develop activities that may seem monotonous to others. Some of these activities include banging their head on a wall, biting their hands and arms, rocking back and forth, and continual arm movement. In many cases one will see these activities in excess when the child is experiencing frustration or anger. The disorder is usually diagnosed around the age of 12-18 months. The diagnosis often comes with a poor prognosis, however, with early intervention autism has been overcome in some cases. Many outcome evaluations of different types of therapy have shown successful reduction of several symptoms and in some cases complete return to normal functioning.

One type of therapy that involves intensive behavior modification has been studied extensively by Dr. O. Ivar Lovaas. Lovaas' logic is based on a traditional operant paradigm, according to which the child's behavior is modifiable through the adult's careful, consistent control of reinforcement contingencies.

Autistic children are believed to be especially vulnerable to inconsistencies in the delivery of reinforcement and punishment because their handicaps already compromise the efficiency of their learning. As a result, there exists less of a "margin for error" in raising such a child.

Circumstances that inadvertently reinforce maladaptive responses can rapidly promote unwanted behavioral strategies in these children. For example, eventually giving in to a child's wishes following an extended temper tantrum culminating in an extreme form of behavior (e.g., self-mutilation or hand-biting) reinforces acting-out for the child. Autistic children can be extremely rigid and persistent, and seem extraordinarily willing to resort to drastic measures to control their environment. Their coping strategies create situations that often frustrate the parents and exceed the parents' patience threshold. As a result, even after trying to avoid rewarding inappropriate behavior, caregivers frequently tend to give in to these behaviors. As a result of the partial reinforcement effect, once acquired, maladaptive responses become exceedingly difficult to extinguish and can eventually come to tyrannize the household.

Without special interventions, the natural environment of most autistic children inadvertently creates an expanding repertoire of daily maladaptive behaviors. Each experience with frustration sets the stage for the potential acquisition of a new disruptive behavior. This view is consistent with the literature showing

poorer prognosis for children who are older before the behavior modification methods are initiated.

When autistic children are introduced to behavior modification therapy at an older age, the difficulty of the therapeutic task becomes compounded by the fact that they have a learning history that had produced an extensive arsenal of maladaptive manipulative behaviors. These actively compete with appropriate responses and inhibit learning, and create an extremely frustrating household environment.

Lovaas' methods address these behavior problems through the redesign of the household environment. This behavioral modification system had been developed to alter maladaptive behaviors systematically and offers the child alternative ways of responding. Tasks that are presented to the child are intense in their requirements and only appropriate responses or good behaviors are rewarded in the program.

This treatment program places an especially great amount of pressure on the female parent. The demand on them, as trainers, to frustrate their child (to avoid inadvertent counterproductive reinforcement), strongly collides with the usual expectation that mothers nurture, gratify, and comfort their children. Accordingly, this type of treatment might be expected to place an especially difficult burden on the female parent. Although it is difficult for the fathers to withhold reinforcement from their children, such disciplining is more consistent with the male parental sex role

stereotype and common expectations of fathers.

In order to assess this hypothesis that participating in the Lovaas behavior modification treatment program imposes greater burdens on the female parent than it does on the male parent, this study compared the responses of the mothers and fathers providing their children with the treatment based on Lovaas strategy. The level of participation, perceptions of treatment, and financial commitment of these parents will be described.

#### Method

A questionnaire assessing the level of parental involvement and attitudes toward treatment was distributed to eighteen parents of autistic children beginning treatment based on Lovaas' methods. This study examined the responses from five families. Respondents were three females and two males, drawn from the Montgomery County, Pa. area. Each of the subjects had one child that was diagnosed as autistic, who had started receiving Lovaas-based training within two months of the data collection.

#### Results

One third of the mothers were employed full-time; the remaining two-thirds worked part-time. All fathers that responded were employed full-time. For mothers, the average number of hours spent with their autistic child on weekdays was 12 hours, and on weekends was 16. For the fathers the average number of hours on weekdays was 9 hours, and on weekends was 12 hours. The average

number of hours that the mothers and fathers spent on the Lovaas therapy was 11.67 hours/day and 1.0 hours/day, respectively. On the item measuring the child's potential for eventually living independently, females showed a greater amount of pessimism. On the 4-point Likert Scale, with the items ranging from extremely pessimistic (1) to extremely optimistic (4), the mothers mean response was 1.60, while that of fathers was 2.00. On the item measuring Lovaas treatment expectations, using an identical Likert Scale, the mothers mean response was 2.00 and the fathers mean response was 2.50. The mean number of therapists for families was 5 and the mean amount of money spent per hour on each therapist was found to be \$7.80. The time devoted to therapy averaged 5.5 hours/day for each autistic child.

#### Discussion

The number of subjects in this study was limited in part because of the rarity of autism. Although eighteen questionnaires were sent out to local parents of autistic children, only five were returned, even after families were re-contacted. The limited response may be due to the busy schedules of parents with autistic children. Autism is a very demanding disorder for both parents involved, as well as for the rest of the family.

The results from the small sample available supported the hypothesis that the female parent generally does experience greater stress and greater responsibility in caring for an autistic child. Male parents spent significantly less time with their autistic



child during the week and on weekends, than did the female parents. The mothers were also found to be more extremely pessimistic about their autistic child's future in general than were the male parents. With regard to expectations of the Lovaas' method, parents were more optimistic. However, the females were found to still be rather pessimistic, whereas half of the males expressed some degree of optimism. This pessimism for the females may be due to the fact that the mothers spend more time doing the therapy with the child. This may be true especially early on in the treatment because the progress can be extremely slow. Their greater involvement may foster a more realistic appraisal in the area of the treatment; fathers who view the treatment more from a distance may maintain a more idealized picture of the therapy. The mothers may also feel greater responsibility for the outcome than the father because of their traditional role as primary caregiver. This may contribute to a more negative outlook because mothers may self protectively be trying to prepare themselves for the worst.

The employment results indicated that all fathers were employed full-time, whereas two of the mothers worked part-time and only one worked full-time. This may also contribute to the difference between the fathers' and mothers' perceptions of the therapy. The fathers are more likely to concentrate on their job in order to support the family and provide the financial means for therapy, thus leaving the mothers to be more concerned with the

procedure and results.

Many other types of therapy were listed as having been tried for the children. The success ratings of the other types of therapy were found to be in about the same range as the Lovaas method. This may be due to the fact that each child had only been doing the therapy for two months or less at the time the questionnaire was received, and as stated before, the beginning of the therapy is the hardest. Many successful cases using the Lovaas methods have been with younger children that were diagnosed and placed in the behavior modification early on, rather than later in their lives. The children in this study were aged 4-7 years (this may also be a contributing factor to the outlook ratings for the therapy). Despite the lack of outcome data on such older clients, it is probably desirable that the parents have generalized from the findings based on the treatment of younger children. Some degree of optimism is vital for an enduring commitment to this treatment approach. Future research might explore whether initial parental optimism is predictable of later treatment outcome.

One of the reasons the study was done involved the fact that several of the types of therapy that are being conducted in the school systems are not proving to be successful. Many parents are actively exploring new methods of teaching for their autistic children for this reason. The major obstacle these parents confront is financial; the cost of the Lovaas treatment can be

prohibitive. In this study, the average family is using five therapists paid an average rate of \$7.80 an hour. The mean number of hours devoted to therapy was found to be 5.5 hours daily. This illustrates the great expense of this treatment. Parents are not being reimbursed by the state for this therapy, even though many of them are pulling their children out of public school in order to provide the therapy. This study was done in an attempt to support state funding for such home-based treatment.

Further research assessing the efficacy of this treatment with these older children may help to justify revisions of school policies regarding the education of autistic children.