

A Parent Management Training Program for Parents of Very Young Children with a Developmental Disability

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Description of Project

The purpose of this project was to determine whether a parent management treatment program that has been found to be efficacious for children ages 4-8 would be effective for families with a child (age 2-3) who has a developmental disability.

Introduction and Overview

Behavioral interventions have been found to be effective in decreasing behavioral problems of children with oppositional defiant disorder, attention-deficit hyperactivity disorder, (Danforth et al., 2005; Webster-Stratton, 2005; Barkley, 1997) and pervasive developmental disorders (Harris et al., 2000; Lovaas and Smith, 2003; RUPP Autism Network, 2007). Thus, parent training programs have emerged to treat these populations of children. These programs generally focus on teaching parents behavioral techniques that will increase their child's compliance and decrease aggressive/oppositional behavior. Such programs have been developed for use in individual or group therapy for children with ODD or ADHD (Webster-Stratton, 2005; Barkley 1997), but primarily for individual therapy with children diagnosed with PDD. When the Children's Developmental Center, which serves children with developmental delays ages 0-3, discovered that they had a population of children with developmental delays who also had clinically significant behavioral problems they realized that there was an unmet need. After consultation with psychologists in the community they decided to adopt the *Incredible Years* program. The problem was that this program was not developed for children under three with a developmental delay. Due to this it became important to assess the efficacy of the program for the families in the center. Of further interest was whether implementing the behavioral intervention in a group format rather than the traditional individual family treatment modality would be beneficial for these families. I was invited to assist in the process of this evaluation.

My interest in joining the CDC was based on a personal interest in working with families of children with developmental delays and the opportunity to work in an interdisciplinary setting. Involved in this program are a speech therapist, two physical therapists, an autism specialist, and a teacher all of whom gathered together to learn the program and have taken turns in being group leaders. They were interested in having a person in the discipline of psychology to round out the program as it is based on psychological principles. While there are only two leaders for each class that is conducted, there are monthly research meetings in which members from all of the disciplines cited above are involved. Other than these research meetings all members are accessible for consultation if an issue comes up in the class that is in the area of one of these disciplines. For example, at times parents with children who have a language delay ask how they

can implement verbal praise when their child has difficulty with receptive language. When this situation occurs the group leaders can consult with the speech therapist for advice or strategies.

Methodology

Participants

Families with a child diagnosed with a communication or motor delay were asked to complete a Child Behavioral Checklist (CBC). Those who scored in the clinical range on the aggressive behavior, emotional reactive, and/or attention problems scales of the CBC were invited to participate in the parent management program. Elevations on this scale are consistent with children who have behavioral problems in the home. All the children are under the age of three. The families were asked to complete a consent form to participate in the group.

While there have been a total of five groups completed since the fall of 2006, this project focused on the latest group in which I was more personally involved. In this fifth group, six families participated with a child age range of 18-30 months ($M = 24.2$) with 4 females and 2 males. Two children were diagnosed with a communication delay only, one child was diagnosed with a motor delay only, and three children have both a diagnosed motor and communication delay. Five of the families self-identified as Caucasian and one family self-identified as Hispanic. All families were English-speaking as the CDC does not currently have the resources to serve monolingual Spanish-speaking families. Although both parents of each family were invited to participate, group members consisted predominately of mothers. Out of the six families, only two fathers consistently participated in the group. Out of eight sessions, one family attended four, two families attended five, two families attended six, and one family attended all eight. Due to missing data only 4 families were included in the analysis one male and one female leaving an average age of ($M = 24.5$).

Measures

Child Behavior Checklist (CBCL): The CBCL is a behavioral checklist completed by a parent or a primary caregiver. It provides information as to a child's competencies and behavior. Parents are asked to rate the frequency of 112 items from 0 (not true of the child), 1 (somewhat or sometimes true), or 2 (very true or often true). The T-scores can be interpreted by as follows: 65-70 Borderline clinical range, >70 Clinical range. Scores below 65 are considered within the average range. The CBCL contains a variety of scales related to internalizing and externalizing behavior. Due to the focus of this study, only three scales were used to identify children with behavioral problems in the home, specifically the Emotionally Reactive, Aggressive Behavior, and Attention Problems scales. Families of children who were rated to be in the borderline to clinical range in any of these syndrome scales qualified to participate in the group. Reliability of this measure has been demonstrated with a Cronbach alpha range of .80 to .85 for syndrome scales (Costin and Chambers, 2007).

Parent Stress Index-Short Form (PSI): Parental stress was measure with the PSI, which parents completed during the first session of the parent management training. Parents of children with disabilities have been found to experience higher overall stress (Hadadian, 1994). Parental stress

appears to be related to behavioral problems (Webster-Stratton, 2005). It has also been noted that when parents are better able to manage their own stress, they are better able to cope with their child's behavior in a productive manner. Also, when an oppositional child demonstrates a reduction in behavioral problems, parent stress decreases as well (Webster-Stratton, 2005; Danforth et al., 2006). The PSI yields three different indices related to the source of stress: Parent Distress, Parent/Child Dysfunctional Interaction, and Difficult Child.

The Incredible Years: The Incredible Years is a 13 week program developed by Webster-Stratton (2005) that uses videos showing parents doing it right and doing it wrong which lends to group discussions. She recently published a toddler and baby-infant version of the program which was not available at the time of the project. The program implemented was developed for children ages 3-8 with behavioral problems. Thus, the program was adapted to fit the population we serve at the CDC. Emphasis was placed in the early portions of the program that were based on building more positive parent/child interactions. Furthermore, the program was reduced to eight sessions rather than 13. Objectives include increasing child-directed play, promoting language with child-directed coaching, social emotional coaching, praise and encouragement, providing incentives, handling separation and reunions, positive discipline. All of these topics are included over the 8 weeks of the program which has been found to be helpful in applied settings for children 3-8 (Taylor et al., 1998).

Procedures

Parents in the Richland, Washington area who seek developmental services at CDC are asked to complete a CBCL as part of the initial assessment process. Parents are also asked to sign a consent form as the CDC collects ongoing data for research. Families who qualify are then invited via letter and phone calls to participate in the parent management group. Those who choose to participate are asked to complete the PSI during the first session. Furthermore, parents are asked to complete a short five item survey about each session, which group leaders use to ensure that the needs of the families are being met. During the last session, parents are asked to complete the Time 2 CBCL and PSI. Parents who are unable to attend the last session are contacted to complete these forms as soon as possible. Parents also complete a more detailed overall satisfaction survey. At the end they are presented with a certificate of completion that indicates the number of sessions that they attended.

We are regularly attempting to obtain data that will help assess the efficacy of the program, thus, we are also trying to collect follow-up forms for parents who drop-out of the program or refuse to participate. Currently, it appears that dropout has been a direct result of lack of childcare rather than a dissatisfaction of the program. Unfortunately, collecting data from this sample is difficult and we are working to develop a more efficient method of obtaining this information.

Although the overall goal of this project is to assess the efficacy of this program, we have not at this time completed all the necessary data collection for a definitive answer to our question. However, we are in the process of collecting the necessary data. We are working towards having a waitlist control group which is one of the best methods to assess the effectiveness of a clinical intervention and rule-out confounds such as spontaneous recovery, maturation, and other possible environmental influences. Ideally, assignment to the treatment group would be random

which also assists in reducing the influence of confounds. As this process has yet to materialize below are preliminary results based on the data that is presently available.

Results and Discussion

Paired T-tests of Group five's Time 1 and 2 data indicated that there was a reduction of symptoms on all three CBCL scales and all three PSI indices. Specifically, one component was found to have a statistically significant change: the CBCL Aggressive Behavior scale ($t(3) = 7.24, p = .005$). Although all scales yielded a reduction in symptoms they did not reach statistical significance. These results are promising in that parents noticed a reduction in all areas assessed. Furthermore, the aggressive behavior targeted through this intervention was reduced significantly. It is possible that a larger sample size would yield significant results in the other scales. Reviewing the scores of the CBCL qualitatively, it is apparent that all the scores on Time 2 were below were in the average range, except for one family who rated their child's emotional reactive score in the borderline range. Thus, there are clinical significant changes in the scores.

Qualitative data was informally reviewed for this group. At the end of each session parents were asked to evaluate the session content, the videotape examples, group leaders, and the group discussion. The ratings were on a 4-point scale: "not helpful," "neutral," "helpful," and "very helpful." All of the ratings were "helpful" and "very helpful" for every session except for two ratings of "neutral" about session content and three ratings of "neutral" about the videotapes (by the same participant). The positive aspect is that leaders and group discussion were always rated as "helpful" or "very helpful." Indeed, during the last session parents verbally reported that they enjoyed to group modality of the class because they realized that they are not the only parents experiencing problems raising their child. One mother said that she realized over the course of the group sessions that she was not a bad mother.

Limitations of this project include a lack of a control group and a small sample size. We hope to fix these limitations in the future. Again the results are promising: Aggression behavior was significantly reduced and parent satisfaction of the program is perhaps suggestive of clinically significant reduction in behavioral problems and stress.

Overall, this project is showing some promise. We hope to be able to conduct a randomized control trial in the future which would be the best method of assessing efficacy. This project has allowed me to work more closely with other disciplines, which I have enjoyed thus far. Currently, I am actively working on getting permission from the director to allow for a control group study. I have also been recruiting undergraduate students to participate in the research, providing services at the CDC at no cost. I am also planning on developing a program for undergraduate students in which they learn the techniques that we teach in the parent management group and practice them by providing childcare to the families who attend the sessions. Once these students have mastered the program, they would be invited to participate in co-facilitating a group, which would be considered good clinical experience for those seeking a graduate degree in the future.

References

- Barkley, R. A. (1997). *Defiant children: A clinician's manual for assessment and parent training (2nd ed.)*. New York, NY, US: Guilford Press.
- Costin, J., & Chambers, S. M. (2007). Parent management training as a treatment for children with oppositional defiant disorder referred to a mental health clinic. *Clinical Child Psychology and Psychiatry, 12*(4), 511-524.
- Danforth, J. S., Harvey, E., Ulaszek, W. R., & McKee, T. E. (2006). The outcome of group parent training for families of children with attention-deficit hyperactivity disorder and defiant/aggressive behavior. *Journal of Behavior Therapy and Experimental Psychiatry, 37*(3), 188-205.
- Harris, S. L., & Handleman, J. S. (2000). Age and IQ at intake as predictors of placement for young children with autism: A four- to six-year follow-up. *Journal of Autism and Developmental Disorders, 30*(2), 137-142..
- Hadadian, A. (1994). Stress and social support in fathers and mothers of young children with and without disabilities. *Early Education and Development, 5*(3), 226-235.
- Lovaas, O. I., & Smith, T. (2003). *Early and intensive behavioral intervention in autism*. New York, NY, US: Guilford Press
- Research Units of Pediatric Psychopharmacology [RUPP] Autism Network (2007). Parent training for children with pervasive developmental disorders: a multi-site feasibility trial. *Behavioral Interventions, 22*, 179-199.
- Taylor, T. K., Schmidt, F., Pepler, D., & Hodgins, H. (1998). A comparison of eclectic treatment with Webster-Stratton's parents and children series in a children's mental health center: a randomized clinical control trial *Behavior Therapy, 29*, 221-240.
- Webster-Stratton, C. (2005). *The Incredible Years: A Trouble-Shooting Guide for Parents of Children Aged 2-8*. Seattle, WA, US: Incredible Years.