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Effects of a Parenting Group on Family Relationships and Child Behavior Problems

Patricia E. Fernandez

LOMA LINDA UNIVERSITY
School of Science and Technology
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Effects of a Parenting Group on Family Relationships and Child Behavior Problems

by

Patricia E. Fernandez

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the requirements for the degree of
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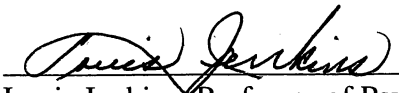
Each person whose signature appears below certifies that this project in his/her opinion is adequate, in scope and quality, as a doctoral project for the degree of Doctor of Psychology.

, Chairperson

David Vermeersch, Assistant Professor of Psychology

Kendal Boyd, Assistant Professor of Psychology



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DEDICATION

I would like to dedicate this study to my son Evan who has been my inspiration. I wish to thank my mother and father for their encouragement, love, and model of work ethic. I am also thankful for my sister and the laughter and gracious support that make her wonderful. I am eternally thankful for my Uncle Mike and Aunt Charlese and their spiritual guidance that has persisted through my life and studies. I am grateful for my loving grandmother and Aunt Mary who helped me achieve my goals. I would also like to thank my tias who have been there every step of the way. Finally, I would like to say thank you to Jamie and my best friends Daphne, Erin, Jen, Jose, and Shell; your support made completing this program possible.

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Family Relationships and Child Behavior Problems

by

Patricia E. Fernandez

Doctor of Psychology, Graduate Program in Psychology
Loma Linda University, September 2006
Dr. David Vermeersch, Chairperson

The current study is aimed at assessing the effectiveness of the Parent Project, a structured parenting group used with the parents of adolescents, 12 to 15 years old, who have been identified as experiencing behavior problems. The Parent Project focuses on improving the parent child relationship and family environment. Participants included 12 caretakers who have completed the 10-week program. Intervention effects were evaluated at baseline and upon completion of the program. It was hypothesized that parents would report significantly greater improvements in the parent-child relationship, family environment, and child behavior problems at completion of the program. Statistical and clinical significant finding were present across all three domains. Specifically, parents reported being more involved, supportive, communicative, and likely to set limits. Family changes were also found through increased organization and decreased conflict. Moreover, there was an overall reduction in child behavior problems.

Introduction

Child behavior problems have become a source of serious concern in the school setting. Despite classes designed to provide added structure and support, the problems often persist and affect the students' peer relations and academic achievement. There is ample evidence to indicate a relationship between parent variables and child behavior problems. As a result, parenting programs have been implemented in an effort to help the child. Researchers have evaluated the effectiveness of parenting programs by measuring behavioral changes in the parent and child. Research has shown that training programs for parents have significantly reduced behavioral problems of the child.

The purpose of this study is to extend the research on parent training and evaluate the impact of a program aimed to help parents address destructive adolescent behavior problems. The Parent Project is designed to teach and reinforce better parenting skills. Specifically, the program educates and trains parents on how to be a more effective parent; how to promote emotional well being in their child; how to establish and maintain limits; and how to establish social resources within the school and community. Since adolescent behavior problems can interfere with the student's success at school, and/or be an indication of future problems, determining the effectiveness of this intervention has clinical value. In particular, the study will address the following questions: 1) Does the program enhance the quality parent-child relationship variables? 2) Do factors within the family environment change? 3) Do child behavior problems decrease as a result of parents completing the program?

Educational settings are often the stage for displaying many problems that children experience. The number of students per class makes it challenging for teachers to give the one-on-one attention that students with behavioral problems often need. Studies have indicated that anywhere from 7% to 20% of children meet the criteria for oppositional defiant disorder (ODD) or conduct disorder (CD). The amount jumps to 35% for low-income welfare families (Webster-Stratton & Hammond, 1998). These are disturbing figures given that the behaviors associated with these disorders have repeatedly been found to predict future problems, including drug abuse, juvenile delinquency, depression, violent behavior, and school dropout (Kazdin, 1985).

Numerous studies have found a relationship between parent variables and child behavior problems. Todd (2000) noted that parents who have challenging teens often have a history of legal involvement, school problems, drug and alcohol issues, or assault (verbal or physical) in the home. Linfoot, Martin, and Stephenson (1999) explored how 265 parents of children enrolled in preschools or child care centers perceived their child's behavior and their own needs. Researchers found a "family coercive process" in children demonstrating severe behavior disorders. It was observed that during this 'cycle' parents who were not prepared or able to cope with their role would respond inconsistently and adversely to their children's behavior. They also found that parents who saw their children as having more aggressive behaviors were more inconsistent in their use of management strategies, utilized punishment more, demonstrated a lack of confidence, and a need for help with personal coping strategies. However, the authors indicated that these parental behaviors might be a result rather than a cause of their children's aggressive behavior. Another parent variable co-occurring with children experiencing

behavioral problems is maternal depression. Researchers found a high prevalence of depression in their sample of 41 parents of 2 to 10 year-old children with severely disruptive behaviors (Hutchings, Appleton, Smith, Lane, & Nash, 2002).

While the precise relationship between parent and child behaviors has yet to be identified, research has supported the notion that parent characteristics and behaviors may be contributing to and helping maintain child behavior problems, and are therefore a meaningful target for intervention. As a result, parenting groups designed to facilitate a change in the child's behaviors often do so by teaching parents the strategies and coping techniques that also lead to a change in their own behavior.

School-based programs have been indicated as an intervention for student behavior problems. Given that kids are at school for such long periods, a child with behavior problems will most likely act them out as some point in this setting. Teachers and counselors are instrumental in being able to identify those children in need of help. Parenting groups are often recommended as an effort to help the child. Studies have validated the effectiveness of parent training in helping to reduce child behavior problems while also attempting to delineate specific variables that enhance parent and child behavior change. A 12-week parenting program developed for at-risk middle school students was designed to teach parents skills including: parental monitoring, positive reinforcement, parent-child communication, limit setting, and problem solving. The program implemented a class-discussion, practice-trials in the class, home-trials with the child, and then follow up discussions and practice each week with group input and support. The program led to reductions in parents' reports of harsh behavior in problem situations, reduction of over reactivity and improvement in reinforcing appropriate

behavior, setting expectations, remaining calm in distressing situations, setting limits and problem solving. Parents' reports of adolescent antisocial behavior also showed significant change and the changes were maintained through follow-up (Irvine, Biglan, Smolkowski, Metzler, & Ary, 1999).

In another study, 25 middle-income married mothers with at least one child younger than five went through a parent education program based on Reevaluation Counseling. Results indicated that the program reduced parenting-related stress, improved parental attitudes, and encouraged authoritative parenting practices (Wolfe & Hirsch, 2003). The program was focused on improving the lives of individuals and their social context. The group supplied the parents an outlet for past distressful experiences, encouraged and facilitated a means of social support and provided specific parenting skills that they could implement in the home. A different program assigned parents of 141 3-8 year-old children with anti-social behaviors to a parenting program which emphasized engaging in parental emotions, behavioral strategies and parental understanding of scientific rationale. Results indicated that children in the intervention group demonstrated a large reduction in antisocial behaviors and the parents increased the proportion of praise relative to ineffective commands (Scott, Spender, Doolan, Jacobs & Aspland, 2001).

Webster-Stratton, Reid, and Hammond (2001) evaluated the effectiveness of parent and teacher training as a prevention program for 272 Head Start mothers and their 4-year-old children. The authors found that children who had conduct problems were more likely to have parents who displayed high levels of harsh critical parenting. They also found that children who were at high risk for conduct problems also had high rates of

noncompliant and aggressive behaviors (Hutchings, Appleton, Smith, Lane, & Nash, 2002). The parents were assigned to either a standard treatment of an individual meeting with a team of therapists or an intensive treatment of three 5-hour sessions of treatment, during which videotaped parent-child interactions were used to give feedback. Results indicated a significant reduction in the depression rates of mothers in the intensive treatment group and improvements in child behavior and maternal discipline for both treatment groups.

Knapp and Deluty (1989) looked at low SES and middle-SES mothers of 3 to 8-year olds presenting problems in behavior management and compared results of being taught parenting skills via modeling and role playing versus through readings, brief review tests, and discussions. Results indicated that modeling and role-playing are more effective than verbal methods in training lower SES mothers to employ behavioral techniques. For mothers in the middle-SES group, no significant differences were found for reported behavioral change between the methods implemented. It is interesting to note that middle-SES mothers reported significantly greater improvements in their child's behavior than lower-SES mothers, irrespective of treatment.

Rotto and Kratochwill (1994) studied 6 parents and their 4 elementary school children who exhibited noncompliant behavior problems in the home. They conducted 10-12 week sessions from 1-2 hours involving the delivery of behavioral consultation to parents, in which the content of treatment focused on promoting parent acquisition of competency skills. The researchers concluded that the improvements in the children's behavior suggests that parents can be taught to assist in changing problematic child

behaviors through a behavioral consultation that integrates case consultation with parent training.

Serketich and Dumas (1996) conducted a meta-analysis of 26 studies and found support for short-term effectiveness of behavioral parent training (BPT) to modify antisocial behavior in children. The effects of BPT were also found to generalize fairly well to both children's classroom behaviors and parents' personal adjustment. Researchers did indicate that no conclusions could be drawn about BPT's effectiveness in modifying children's antisocial behavior relative to other treatments.

In yet another study, researchers compared the results of therapist-led group discussion and videotape modeling (GDVM), and individually self-administered videotape modeling treatment (IVM), a group discussion treatment (GD), and a waiting-list control group (CON) for 114 mothers and 80 fathers with conduct-problem children, aged 3 to 8 years. Results indicated that more than two thirds of the entire sample showed clinically significant improvements, however the GDVM group was superior to treatments without both components. Children in all three treatment groups had significant reductions in noncompliant and deviant behaviors when interacting with fathers, and with GDVM and IVM mothers. Another interesting finding was that all the significant improvements reported right after treatment was maintained one year later. In fact, GDVM mothers and fathers and IVM fathers reported a further reduction in child behavior problems at the one-year follow-up (Webster-Stratton, Hollinsworth, & Kolpacoff, 1989).

McMahon, Forehand, and Griest (1981) incorporated training in social learning principles in their program for twenty mothers of children who were referred for

noncompliance and other oppositional behavior problems. Mothers were divided into a technique-alone (TA) treatment in which attends, rewards, ignoring, commands, and time-outs were taught, or a social learning (SL) principles treatment, which added didactic instruction and brief reading assignments in various SL principles. At post-treatment and a 2-month follow-up, mothers in the SL group perceived their children as significantly better adjusted, and tended to emit more attends plus rewards and a higher percentage of contingent attention. Also, their children were significantly more compliant than children in the TA group. Their results suggest that parent training is enhanced with the inclusion of social learning principles.

Limitations to some of the results in the previous research relate to maintenance of gains. Although most results remained significant on follow-up assessments this was not always the case. The social support emphasis provided in most groups seems to ameliorate the possibility of recidivism. It seems that if the parent develops an alliance with at least one other member before leaving the group, the principles will more likely continue to be talked about and reinforced. A limitation in the Stratton et al. (2001) study was differential dropout, such that the more stressed mothers seemed to stay in the experimental groups but drop out of the control group. In Linfoot et al. (1999), researchers found that if instead of having a therapist-led discussion of the videotape you had the parents "self-manage" videotaped sessions, without therapist support, gains were not as great.

In reviewing the literature, the various methods of training parents' new skills all resulted in positive behavioral changes, regardless of the methods implemented within these studies. However, training groups void of any social interaction, such as videotaped

sessions alone, appeared to yield the least amount and shortest term of change. The opportunities for caretakers to not only share their personal experiences with other caretakers but also to feel supported, appeared invaluable. Also, developing rapport with at least one other member of the group seems important, such that even after the group ends the parent will still have somewhat of an alliance to the principles learned. Another emergent theme was the parent's own confidence level in his/her ability to parent the child. For some parents, becoming extremely frustrated with their child was associated with a sense of hopelessness in their ability to handle the situation, suggesting that engendering confidence is a critical component in parent training groups. Also in considering different levels of SES Knapp and Deluty's (1989) research implied the importance of considering factors that might inherently make it more challenging for lower-SES parents to implement and maintain change. One factor that is important when considering parenting groups which target lower-SES parents may be the method of teaching used in the group. Lower-SES parents might grasp new concepts better when visual methods are incorporated instead of only utilizing verbal instruction. Despite the variations, the consistency across the literature suggests that parenting groups have been found effective in enhancing positive parenting skills and promoting the child's overall well being.

The current study is aimed at assessing the effectiveness of the Parent Project, a structured parenting group used with the parents of students who have been identified as experiencing behavior problems. Created in 1988, this collaborative program was specifically designed to help caretakers intervene in destructive adolescent behavior. Parent Project was developed by a Child Psychologist, Mental Health therapist and in

collaboration with University of California, Los Angeles and law enforcement.. The project is organized under the Pomona Unified School District's Adult Education Program and operates in cooperation with local law enforcement, mental health care professionals, juvenile courts, probation, and community based organizations. The Parent Project curriculum focuses on improving school attendance and performance, drug use intervention, gang intervention strategies, and reducing family conflict. The program is based on the theory that a change in the parent-child relationship is core at implementing change in the family environment and child behaviors.

The groups are run by facilitators that attend a 40 hour training course to become certified to lead the Parent Project curriculum. These courses are taught by the psychologist, mental health professional, and law enforcement representative who designed the program. The groups take place in various locations and different groups can be occurring at the same time. However, since the program operates on a ten week curriculum the project is run in a closed group format.

Project objectives include 1) describing the importance of demonstrating love and affection, 2) improving the parent/child relationship, 3) demonstrating effective methods of reducing family conflict, 4) demonstrating and utilizing effective discipline methods with their out-of-control or strong-willed children, 5) recognizing, confronting and intervening with adolescent alcohol and other drug use, 6) recognizing, confronting and intervening with their children's gang involvement or negative peer associations, and 7) developing effective action plans to stop any unwanted behavior.

The Parent Project topics are as follows: Session I "Understanding Our Children" introduces parents to a parenting model for strong-willed children. Session I discusses

and practices key techniques for demonstrating love and affection and the three most effective methods of influencing and motivating children. Session II "Addressing Problematic Behavior" aims to have parents learn and practice strategies to effectively confront problematic behavior and reduce family conflict. Session III "Active Supervision, Structure and Improving School Performance" introduces parents to active supervision and structure in the home. Parents learn and practice how these parenting techniques are applied to improve school attendance and performance. In Session IV "Drug Use: Identification, intervention and Prevention Techniques" parents learn and practice how to identify, confront and intervene with adolescent drug and alcohol use. In Session V "The Out-Of-Control Child" parents learn and practice how to identify and intervene with all negative peer associations including youth gangs and the occult. Interventions for violence, runaways and other out-of-control behaviors are also presented here. In Session VI "Developing Personal Action Plans" parents learn and practice how to develop and initiate effective action plans to stop any unwanted behavior. Session VII "Finding Help and Support" is a lesson designed to help direct parents to the community resources available to their families. In Session VIII "The Dynamics of Change" parents explore the process of change and decide which phase of change their families are currently experiencing. In Session IX "Managing Conflict in the Home" parents learn to recognize potential causes of parent/child conflict and practice strategies for reducing conflict in the home. Finally, Session X "Effective Communication Skills: Active Listening" introduces parents to the components of active and reflective listening. Parents discuss potential barriers to their children and methods of overcoming these barriers.

The project meets once a week for ten (10) consecutive weeks. Each week has a curriculum with objectives and activities for every meeting. At the conclusion of the ten (10) sessions, parents are encouraged to participate in an on-going, facilitated group for a minimum of six weeks. The sessions will continue to be topic-focused, designed to refine parenting skills, and provide a support group for the emotional support families need as they begin making changes at home.

Parents have been mandated to attend a parenting group and will be invited to participate in the study. Specifically, the study aims to assess the impact of the Parent Project on parent's perceptions of the parent-child relationship, the family environment, and child behavior problems. Given the aforementioned goals of the study, the following are hypothesized:

1. Parents in the program will report significant improvements, from pre- to post-treatment, in the parent-child relationship, as measured by the following subscales of the Parent-Child Relationship Inventory: increase in Parental Support, increase in Involvement, increase in Communication, and increase in Limit Setting.
2. Parents in the program will report significant improvements, from pre- to post-treatment, in the family environment, as measured by the following subscales of the Family Environment Scale: increase in Cohesion, increase in Organization and decrease in Conflict.
3. Parents in the program will report significant improvements, from pre- to post-treatment, in child behavior problems, as measured by a decrease in the total problem score of the Child Behavior Checklist.

Materials and Method

Participants

Participants were twelve parents, including one male and eleven females. Of the participants, eight were the biological mother, one biological father, two grandmothers, and one cousin. Six participants were single, two were married, two divorced, one separated, and one widowed. Although couples are encouraged to attend the group together this did not take place among these participants. Five caretakers had an education level less than twelfth grade, and seven graduated from high school, including one who continued on to receive a college degree. At baseline, 67% of the caretakers were working outside of the home and 33% were homemakers. Of the participants 75% (nine caretakers) reported an average annual household income ranging from $0 - $20,000, 17% (two caretakers) ranging from $20,001 – $40,000, and 8% (one caretaker) over $40,001. Participants were recruited from the San Bernardino School District review board as a result of their child's behavior problems, such as truancy, aggressive behaviors and continued academic failure due to associated behavior problems. Caretakers were mandated to attend the parent training course as part of a plan of intervention decided by the district review board. San Bernardino School District explained that the parents would need to attend all ten sessions, or make up a session if unable to come, in order to receive a certificate of completion. The ages of the students ranged from 12 to 15 and included three males and nine females. Overall, eight families self-identified as Hispanic, and one as African-American, Caucasian, Pacific Islander, and Other.

Measures

Parent-Child Relationship Inventory (PCRI). The Parent-Child Relationship Inventory (Gerard, 2000) consists of seven content scales and two validity indicators. Each of the content scales explores a specific aspect of the parent-child relationship. These scales were developed using a combination of empirical and rational approaches. One of the two validity indicators gauges the client's tendency to give socially desirable responses. The other validity indicator, which is based on agreement between answers on select pairs of items, measures the tendency to give inconsistent responses. Of the 73 items included in the content scales, 26 are keyed positively and 47 are keyed negatively. If an item is positively keyed, a response of agrees or strongly agree increases the score for the scale on which that item appears; conversely, if an item is negatively keyed, a response of disagree or strongly disagree increases the scale score. High scores indicate positive parenting characteristics.

The dimensions of the 7 content scales include: 1) Parental Support scale (SUP), which assesses the level of emotional and social support a parent receives; 2) Satisfaction with Parenting scale (SAT) consists of items measuring the amount of pleasure and fulfillment an individual derives from being a parent; 3) Involvement scale (INV) examines the level of a parent's interaction with and knowledge of his or her child; 4) Communication scale (COM) consists of positively keyed items that assess a parent's perception of how effectively he or she communicates with a child; 5) Limit Setting scale (LIM) contains items that focus on parent's experience disciplining a child; 6) Autonomy scale (AUT) assesses the ability of a parent to promote a child's independence; and 7) Role Orientation scale (ROL) examines parent's attitudes about gender roles in parenting.

The overall internal consistency (alpha) coefficients are good and ranges from .70 to .88. The instrument is scored using a four-point Likert-type scale where 1 = "strongly agree"; 2 = "agree"; 3 = "disagree"; 4 = "strongly disagree". Scores range from 84 to 504. The test-retest stability of the PCRI suggests that the inventory has good temporal stability ranging from .68 to .93.

Family Environment Scale (FES). The FES (Moos & Moos, 1986) was developed in order to gain a naturalistic understanding of family social environments. It is composed of seven subscales that measure the actual, preferred and expected social environment of families. These subscales assess three underlying sets of dimensions: relationship dimensions, personal growth (or goal orientation) dimensions, and system maintenance dimensions. The relationship and system maintenance dimensions primarily reflect internal family functioning, whereas the personal growth dimensions primarily reflect the linkages between the family and the larger social context. The FES helps people describe their current family as they perceive it and it is widely used to better understand individual's perceptions of their conjugal and nuclear families; to formulate clinical case descriptions and understand the impact of the family of adaptation; to monitor change and promote improvement in families; to describe and compare family climates and contrast partner's perceptions or parents; and children's' perceptions; as well as to focus on how families adapt to life transitions and crises, and understand the impact of the family on children and adolescents.

The FES was normed on a sample of over 1,000 people belonging to 285 families. A wide variety of ethnic minority families were included in the sample to ensure generalizability to the population at large. Internal consistencies ranged from moderate

for Independence and achievement Orientation to substantial for Cohesion, Organization, Intellectual-Cultural Orientation, and Moral-Religious Emphasis. Test-retest reliability coefficients are all within an acceptable range, varying from a low .68 for Independence to a high of .86 for Cohesion. Construct validity for the FES has been reported as significant when correlated with or compared to similar measures (Swindle, 1983; Waring, McElrath, Lefcoe, & Weisz, 1981; Spiegal & Weisler, 1983). The FES has been found to reliably tap family members' perceptions of family functioning. It taps seven dimensions: 1) Cohesion, which taps the degree of commitment, help and support that family members provide for each other; 2) Conflict, which taps the amount of openly expressed anger, aggressiveness and conflict among family members; 3) Organization, which indicates the degree of importance that the family places on organization and structure in planning family activities and responsibilities; 4) Achievement which taps how much activities such as school and work are cast into an achievement oriented or competitive framework; 5) Expression, which indicates the extent to which family members are supported and encouraged in expressing their feelings directly to one another; 6) Activity, which taps the amount of participation in social and recreational activities, and 7) Morality, which indicates the emphasis on ethic and religious issues and values.

Child Behavior Checklist (CBCL). The CBCL (Achenbach, 1991) was designed to record children's competencies and problems as reported by parents or caretakers. The 20 competence items attain parents' reports of the amount and quality of their child's participation in sports, hobbies, games, activities, jobs and chores, and friendships; how well the child gets along with others and plays and works alone' and school functioning.

Each of the 118 problem items and two open-ended problem items are scored on a 3-step response scale. A primary reason the CBCL was designed is to identify syndromes of problems that tend to occur together. The following eight syndromes are displayed on the profile: 1)Withdrawn; 2) Somatic Complaints; 3) Anxious/Depressed; 4) Social Problems; 5) Thought Problems; 6) Attention Problems; 7) Delinquent Behavior; and 8) Aggressive Behavior. The profiles for scoring display scores for every problem item, Internalizing, Externalizing, and total problem score.

The test-retest reliability of CBCL scale scores was supported by a mean test-retest of .87 for the competence scales and .89 for the problems scales over a 7-day period. Content Validity is supported by the ability of CBCL items to discriminate significantly between referred and nonreferred children. Construct validity is supported by numerous correlates of CBCL scales.

Procedures

Prior to first session, participants provided written consent (see Appendix A) for study participation and completed a demographic survey (see Appendix B). Participants also received the PCRI, FES, and CBCL prior to first session and at the end of the tenth session. Questionnaires were administered following a paper-pencil format and administration was consistent across program facilitators. Facilitators reviewed the procedures of the group and the importance of attending all of the ten sessions.

Results

Statistics

T test. Paired sample t tests were computed to evaluate change from pre- to post-treatment. The mean test scores before (pre-test) and after (post-test) the parents completed the parent course was compared to determine if the training produced significant changes.

Effect size. Effect sizes for score changes on pre-treatment and post-treatment test data (Kazdin, 1992) were computed to better understand the magnitude of observed effects and to facilitate cross study comparisons where:

$$ES = \frac{\text{Pre-treatment Mean} - \text{Post-treatment Mean}}{\text{S pooled x square root of } 1\text{-}r^2}$$

According to Cohen (1992), effect sizes ranging from .2 - .5 are considered small, .5-.8 are considered medium, and .8 or greater are considered large.

Clinical significance. This method for defining clinically significant change in psychotherapy outcome research has three documented purposes (Jacobson & Truax, 1991): 1) To establish a conventional way to define clinically significant change that can be applied (in theory) to any clinical disorder, 2) to define clinical significance with regard to psychotherapy outcomes in a way that incorporates the expectations of both a lay person and a professional, and 3) to provide a method for classifying clients as 'changed' or 'unchanged' through clinical significance criteria.

Clinical significance is conceptually independent of psychometric considerations and has been defined in many different ways. Jacobson, Follette, and Revenstorf (1984) suggested that a clinical significance criterion is when the post-test score is more likely to place the participant in a functional rather than a dysfunctional population. Other criteria used include: changes that are high enough in magnitude (Barlow, 1980); a specific level of change that is recognized by peers and significant others (Kazdin, 1977); Wolf, 1978); elimination of the presenting problem (Kazdin & Wilson, 1978); the normalization (Nietzel & Tull, 1988) or high end-state levels of functioning by the end of treatment (Mavissakalian, 1986); or changes that significantly reduce one's risk for various health problems.

Jacobson, Follette, and Revenstorf (1984) proposed an index of clinical significance that combines a cut-point defined by the intersection between dysfunctional or non-dysfunctional populations and an index of reliable change (RCI) identified by the standard error of measurement of the instruments used in the study or intervention program. Based on the cutoff scores and the RCI, the scores of participants place them in one of four categories: an 'improver', a 'no changer', a 'deteriorator', or 'recovered/clinically significantly changed'. If patients show sufficient change but do not cross over the cutoff score, they are considered in the category of an 'improver'. Even if the scores of patients indicate that they go better or worse, if their change scores are less than the reliable change value, then the participants are considered to be in the 'no changer' category. Participants fall in the 'deteriorator' category if their score gets worse and passes the reliable change score. Participants who surpass the defined cut-points and show reliable changes are said to be 'clinically significantly changed'. For example, if

the outcome change scores of participants are large enough to the point that they are outside the range that could be explained by measurement error, yet the participants post-score places them with the greater likelihood of being in the functional population, then these participants would be considered a treatment success.

In an effort to test the hypothesis that this intervention program, designed to improve family relationships and decrease child behavior problems, does affect participants view of the family environment (cohesion, conflict, and organization subscales) and total child behavior problems, an analysis of clinical significance was conducted and an index of clinical significance calculated (Jacobson, Follette, & Revenstorf, 1984). This index of clinical significance is based on formulas developed by Jacobson and Truax (1991), and were used to devise the cutoff score and RCI for the FES subscales and CBCL total problem scale (Table 1).

Table 1

Cutoff Scores and Reliable Change Index (RCI) for FES Subscales and CBCL Total Problems

Scales	Cutoff Scores	RCI
Cohesion	6.125	3.341
Conflict	3.58	2.661
Organization	5.27	2.539
CBCL Total Problems	56.88	7.151

Note. FES based on raw scores whereas, CBCL based on T scores

Based on recommendations by Jacobson and Truax (1991), the cutoff scores for each were devised using two normative samples. These samples provide normative data for functional and dysfunctional individuals drawn from the general population for each of the FES subscales cohesion, conflict, and organization (N = 1,432, SD = 1.47, mean = 6.73; SD = 1.91, mean = 3.18; SD = 1.90, mean = 5.47) and from a clinical sample (N = 788, SD = 2.13, mean = 5.25; SD = 2.07, mean = 4.02; SD = 1.97, mean = 5.07), respectively (Moos & Moss, 1986). The CBCL demographically matched normative data for functional and dysfunctional individuals drawn from the general population are (N = 582, SD = 9.8, mean = 50.0) and from a clinical sample (N = 582, SD = 10.7, mean = 64.4) (Achenbach, 1991). To calculate the cutoff score and RCI, the following formulas were used:

Cutoff Score:

$$\frac{(SD_1)(Mean_2)+ (SD_2)(Mean_1)}{SD_1+SD_2}$$

RCI: 1) $S_E = \text{Pooled SD}\sqrt{1-r_{xx}}$

$$\text{Pooled SD} = \frac{[(N_1-1)(SD_1)] + [(N_2-1)(SD_2)]}{(N_1-1) + (N_2-1)}$$

2) $S_{diff} = \sqrt{(2)(S_E^2)}$

3) $RCI = (S_{diff})(1.96)$

The means and standard deviations of the two normative samples were used to determine the cutoff scores. For the RCI, the standard error (S_E) was computed by taking the square root of $1-r_{xx}$ (r_{xx} = internal consistency of the FES subscales and CBCL total problem score), and then multiplying this value by the pooled standard deviation of the two norms. Then the standard difference (S_{diff}) was calculated and multiplied by 1.96 to arrive at the final RCI score. Being contained in the 95% confidence interval provides assurance that the amount of change is reliable.

For example, the cutoff score (refer to table 1 for complete list) for the CBCL total problems was 56.88, while the RCI was 7.151. Therefore, the cutoff score of 56.88 (estimated 57) means those participants having a score of ≥ (greater than or equal to) 56.88 were considered in the "dysfunctional" population range, whereas those whose scores were ≤ (less than or equal to) 56.88 were considered in the "functional" range. As a result, in order for participants' change to be considered clinically significant, their post-treatment scores must be less than or equal to 56.88 in order to go from the dysfunctional range to a functional range and their CBCL total problems must drop by the estimated RCI score of ≥ (greater or equal to) 7.151.

Findings

The study was designed to describe the effectiveness of delivering an intervention to parents of adolescents experiencing behavior problems and examine the immediate success of the intervention in improving parenting practices, family environment, and youth adjustment. Results indicated improvement over the course of treatment on overall

measures of the parent-child relationship, family environment, and child behavior problems.

Assessment of parent-child relationship. Prior to analysis of the PCRI subscales, it was first determined, using the validity scales of the PCRI, that all participants produced valid and interpretable protocols at pre-treatment and post-treatment. We hypothesized that after treatment parents would report higher subscale scores on parental support, involvement, communication, and limit setting as measured on the Parent Child Relationship Inventory. Paired sample t tests on each of these subscales are reported in Table 2.

Table 2

Pre- and Post-Treatment Effect Sizes for Parent Child Relationship Inventory Subscales

Subscale	Pre-Mean	SD	Post-Mean	SD	*t*	ES
Parent Support	44.25	11.35	47.58	11.21	-4.02**	1.18
Involvement	38.67	13.12	43.00	12.30	-2.34**	.70
Communication	38.00	13.78	45.00	13.48	-3.41**	1.02
Limit Setting	47.25	10.39	51.33	8.79	-2.14*	.67

**p < .05, *p < .10

As shown, caretakers who completed the intervention reported significant improvements in parental support from pre-treatment ($M = 44.25$, $SD = 11.35$) to post-treatment ($M = 47.58$, $SD = 11.21$), with $t = -4.022$, $p < .05$ and a large effect size = 1.18. The negative signs for these t tests are indicative of high PCRI t scores reflecting positive

parenting characteristics. Parent involvement also showed significant improvements from pre-treatment (M = 38.67, SD = 13.12) to post-treatment (M = 43.00, SD = 12.30), with t= -2.340, $p < .05$ and a medium effect size = .70. Significant improvements in communication from pre-treatment were also reported as (M = 38.00, SD = 13.78) to post-treatment (M = 45.00, SD = 13.48), with t= -3.405, $p < .05$ and a large effect size = 1.02. There was also a clear trend for participants to report improvements in limit setting from pre-treatment limit setting (M = 47.25, SD = 10.39) to post-treatment (M = 51.33, SD = 8.79), with t= -2.135, $p < .10$ and a medium effect size = .67. In general, participants endorsed improvements on each of the PCRI subscales included in the analysis.

Assessment of family environment. The effects of treatment were evaluated as to improvements in family environment as measured by these subscales of the Family Environment Scale: increase in Cohesion, increase in Organization and decrease in Conflict within the family system. Paired sample t tests on each of these subscales are reported in Table 3.

Table 3

Pre- and Post-Treatment Effect Sizes for Family Environment Subscales

Subscale	Pre-Mean	SD	Post-Mean	SD	t	ES
Cohesion	37.75	17.44	40.50	13.48	-0.72	0.24
Conflict	56.08	10.06	51.58	7.14	1.94*	.83
Organization	44.00	9.80	53.33	10.48	-3.56*	1.15

**p < .05, *p < .10

Item means are also reported for each FES subscale to facilitate interpretation of results and comparison across subscales. No significant difference was found in cohesion from pre-treatment (M = 37.75, SD = 17.44) to post-treatment (M = 40.50, SD = 13.48), with t= -0.723, however there was a small effect size = 0.24. Caretakers who completed treatment reported a trend suggestive of reductions in conflict from pre-treatment (M = 56.08, SD = 10.06) to post-treatment (M = 51.58, SD = 7.14), with t= 1.939, $p < .10$ and a large effect size = .83. Family organization showed significant improvements from pre-treatment (M = 44.00, SD = 9.80) to post-treatment (M = 53.33, SD = 10.48), with t= -3.557, $p < .10$ and a large effect size = 1.15. Negative t tests reflect elevated t scores and are interpreted relative to the content of the subscale.

Results from clinical significance analysis of the FES cohesion subscale show that 0 participants 'recovered', 2 'improved', 10 remained 'unchanged', and 0 'deteriorated' (Table 4). On the FES conflict subscale, 2 participants 'recovered', 3 'improved', 7 remained 'unchanged', and 0 'deteriorated' (Table 5). Analysis from the FES organization scale showed that 4 participants 'recovered', 1 'improved', 7 remained 'unchanged', and 0 'deteriorated' (Table 6)

Table 4

Individual Analysis for FES Cohesion Subscale (N = 12)

Clinical Status	n	(%)
Recovered	0	(0%)
Improved	2	(17%)
Unchanged	10	(83%)
Deteriorated	0	(0%)

Table 5

Individual Analysis for FES Conflict Subscale (N = 12)

Clinical Status	n	(%)
Recovered	2	(17%)
Improved	3	(25%)
Unchanged	7	(58%)
Deteriorated	0	(0%)

Table 6

Individual Analysis for FES Organization Subscale (N = 12)

Clinical Status	n	(%)
Recovered	4	(33%)
Improved	1	(8%)
Unchanged	7	(58%)
Deteriorated	0	(0%)

Assessment of child functioning. The effects of treatment were evaluated as to improvements in child behavior problems as measured the total problem score of the Child Behavior Checklist. A paired sample t test on the total score is reported in Table 1. Item means are also reported for the CBCL score to facilitate interpretation of results and comparison across subscales. Upon completion of the treatment, caretakers reported significantly less total child behavior problems from pre-treatment ($M = 58.17$, $SD =$

12.90) to post-treatment (M = 53.25, SD = 14.73), with t= 3.484, $p < .05$ and a large effect size = .91.

Results from clinical significance analysis of the CBCL total problems show that 2 participants 'recovered', 3 'improved', 7 remained 'unchanged', and 0 'deteriorated' (Table 7).

Table 7

Individual Analysis for CBCL Total Problems (N = 12)

Clinical Status	n	(%)
Recovered	2	(17%)
Improved	3	(25%)
Unchanged	7	(58%)
Deteriorated	0	(0%)

Conclusions

The purpose of this study was to determine whether a parent training program, the Parent Project, designed for parents of children experiencing behavior problems would benefit the parent-child relationship, the family environment, and overall child behavior problems. The program is based on the theoretical underpinning that improvements in the parent/child relationship, teaching skills competencies designed to reduce family conflict, and training caretakers in effective discipline methods will reduce child behavior problems. The results of this study suggest that the Parent Project has clinical value in these targeted areas.

Parent-Child Relationship

Given the results of the study it appears that the intervention was statistically significant and effective in increasing parental support (large effect size), involvement (medium effect size), communication (large effect size), and limit setting (medium effect size) as measured on the Parent Child Relationship Inventory. Given the theory behind the program we would expect to see these findings because each of these subscales is directly related to the core of the program. With regard to parental support it is likely that improvement could be linked to initial assignments such as "catch your children doing something right and give them a positive stroke". An example of homework designed to encourage involvement and yield change is "Tell your children how much they are loved everyday this week and ask about their day". Changes in communication are likely attributed to interventions such as asking parents to refuse to argue with their children

and addressing how to prepare and plan discussions, especially those related to problematic behavior. Limit Setting was likely reinforced through activities such as providing action plans; a structured intervention designed to strengthen caretaker's ability to identify appropriate consequences for specific behaviors.

The improvements in the parent-child relationship tap into the core constructs of the program and are known to be related to positive adjustment in children (Linfoot et al., 1999; Stevens-Long & Macdonald, 1993). Primarily, these findings reflect changes that the caregiver manifested in their parenting practices and the resulting impact on the parent-child relationship.

Family Environment

The changes in parenting practices were accompanied, to a lesser degree, by changes in the family environment. We hypothesized that the program would result in an increase in cohesion and organization and a decrease in conflict. The results of this study did not support a significant difference in family cohesiveness however a small effect size was found. Significant improvements were noted in family conflict (large effect size) and family organization (large effect size). The modest findings in cohesiveness may be related to the idea that changes in a parent do not necessarily result in changes in the family system. It may be that if we tracked participants for a longer period of time we would ultimately see changes in the family environment. The results of clinical significant analysis also indicate that cohesion showed the least amount of participants who 'recovered' or 'improved'. Most of the parents did not change on their reports of family cohesion. This finding corroborates the implications that cohesion may

take place over time or requires multiple systems (e.g., other parent, child, school) to invoke change on the connectedness of the family structure.

Improvements in conflict are likely related to interventions such as having parents take a time out at the first hint of anger or defensiveness and negotiating a compromise over a small issue. It may be that these constructs showed greater effects of change, as they are more amenable by the caretaker in that they have a choice on how to structure the family and react in a way that reduces the likelihood that a problem will escalate into a sense of family conflict. These finding are intuitive with the program's focus on decreasing conflict and also corroborate research indicating the importance of overcoming coercive family interactions for the mental health of the parents and children involved (Kazdin, 1996; Webster-Stratton, 1996; Linfoot et al., 1999). Clinical significance also showed that almost half of the participants either met criteria for 'recovered' or 'improved' on this measure. These participants have either crossed from dysfunctional to the functional range or made clinically significant progress towards improvement in decreasing conflict within the family environment.

With regards to organization it is likely that lessons in creating structure and consistency (including lists of rules and chores for their daily activities and following through with enforcement) could be linked to positive outcomes on this measure. Clinical significance findings indicated that most participants 'recovered' from the dysfunctional to the functional range on organization within the family environment. This finding appears consistent with the content of the program, which fosters a greater level of structure in the home. Planning activities to spend time together and setting clear limits and expectations are some examples of how organization is enhanced. This

concept taps into a more concrete set of behaviors that can be adapted and implemented into the family and is theoretically consistent with the curriculum of the program.

Child Functioning

The changes invoked through the parent training also resulted in positive outcomes for adolescents' behavior. The Parent Project produced a significant post-treatment improvement (large effect size) in adolescents' total problem score on the Child Behavior Checklist. Improvements in child behavior problems as a result of strengthening parent-child relationship and introducing parenting skills are also supported by past research. Other studies that have utilized caretakers as the participant in the program have also resulted in desirable changes in child behavior (Forehand & King, 1977; Forehand & Peed, 1979).

Clinical significance was shown with 42% of the participants noting either 'recovered' or 'improved' behavior change with movement either to or towards the dysfunctional to the functional range. From the measures used it is likely that an increase in parental support, involvement, communication, limit setting, and organization, along with a decrease in conflict have contributed to overall reduction in reports of child behavior problems.

The success of this program suggests that caretakers can be taught to be effective change agents of their children's problematic behaviors through a behavioral approach that integrates relational components with parent training. It is also important to note that no one 'deteriorated' in the program, supporting the notion that intervention was

successful at making change in the positive direction for family relationships and child behavior outcomes.

Clinical Significance in Individual Participants

Of the twelve participants eight were either 'improvers' or 'recovered' (on the FES and/or the CBCL) from the dysfunctional to the functional range and four were 'no changers' (Table 8). In reviewing who the program was and was not as effective for it appears that one common denominator in functional improvement was whether the participant became involved in the group. Those caretakers that took an active role in discussions and were open to participating with in-group and at home activities tended to report greater improvements in family environment and child behavior. Additionally, they reported greater involvement in the adolescent's life during in-class discussions. Another trend observed in those who reported improvement and/or recovery was an appearance of motivation, observed by asking questions and being open and attentive to feedback from group leaders and other participants.

Of the four 'no-changers' two types tended to emerge. One type involved caretakers that had appeared much more frustrated and defeated in their parenting and discipline attempts. An example would be a person that feels they have already tried everything and is hesitant or resistant to believing that something else may work. The other type involved those caretakers who reported few problems at the onset of the group. These participants were already functionally adapting to the adolescent behavior problem for which they were initially referred to the group (e.g., skipping classes). For example, one grandparent had taken over custody of her grandchild and had already been

implementing a family environment with structure and consistency. This grandparent was an active member of the parenting group and became involved in discussions and homework assignments, however by the end of the group the FES and CBCL results remained in the functional level and thus, improvement or recovery would not have applied since they did not need to cross from the dysfunctional to the functional range.

Table 8

Participant outcomes by clinical significance categories for the FES subscales and CBCL total score (N = 12)

Participant	Cohesion	Conflict	Organization	Total CBCL
1	No Change	No Change	Recovered	Recovered
2	Improved	Improved	No Change	No Change
3	No Change	No Change	No Change	No Change
4	No Change	No Change	No Change	No Change
5	No Change	No Change	No Change	No Change
6	No Change	Improved	No Change	Recovered
7	No Change	No Change	Recovered	No Change
8	No Change	No Change	Recovered	Improved
9	No Change	Recovered	No Change	Improved
10	Improved	Recovered	Recovered	No Change
11	No Change	No Change	No Change	No Change
12	No Change	Improved	Improved	No Change

Limitations

To be socially valid, it is in the best clinical interest that any interventions produce positive changes that are maintained over a reasonable period of time. One limitation in this study was the lack of access to contact these caretakers and gather follow-up data to assess for maintenance of change. Therefore, we can only conclude that the improvements from the Parent Project were successful up until termination of the group and do not have data from our study to suggest long-term benefits. Other studies have found that at least some behavioral changes in children were maintained over periods ranging from 2 months to 1 year (Firesonte, Kelly, & Fike, 1980; Hamilton & MacQuiddy, 1984; Scott & Stradling, 1987; Webster-Stratton, 1992).

Additionally, another major limitation of the current study was that it lacked wait-list or no treatment control group estimates of change against which change made by treated individual could be evaluated. The lack of a wait-list or not treatment control group therefore makes it difficult to rule out alternative explanations for the findings obtained in the current study and definitively attributing these finding to the treatment under investigation.

Future Research

Future research will ideally include a larger sample size of treated individuals, as well as wait-list or no treatment control group estimates of change that can serve as a baseline against which changes made by treated individuals can be evaluated. Also, follow up measures with the Parent Project will be useful in future research with this program to help determine maintenance of benefits. Additionally, research could move

to a discriminating strategy to test which of the specific ten modules produced the most change and which did not.

References

Achenbach, T. M. (1991). *Manual for the Child Behavior Checklist/4-18 and 1991 Profile*. Burlington, VT: University of Vermont Department of Psychiatry.

Barlow, D. H. (1980). Behavior therapy: The next decade. *Behavior Therapy, 11*(3), 315-328.

Cohen, J. (1992). A power primer. *Psychological Bulletin, 112*(1), 155-159.

Eyberg, S. M., Boggs, S. R., & Algina, J. (1995). Parent-child interaction therapy: a psychosocial model for the treatment of young children with conduct problem behavior and their families. *Psychopharmacology Bulletin, 31*(1), 83-91.

Forehand, R. L., & King, H. E. (1977). Noncompliant children: Effects of parent training on behavior and attitude change. *Behavior Modification, 1,* 83-108.

Forehand, R. L., Peed, S. (1979). Training parents to modify noncompliant behavior of their children. In A. J. Finch, Jr., & P. C. Kendall (Eds.), *Treatment and research in child psychopathology* (pp. 159-184). New York: Spectrum.

Gerard, A. B. (2000) *Parent-Child Relationship Inventory (PCRI) manual.* Los Angeles, CA: Western Psychological Services.

Hutchings, J., Appleton, P., Smith, M., Lane, E., & Nash, S. (2002). Evaluation of two treatments for children with severe behaviour problems: Child behaviour and maternal mental health outcomes. *Behavioural and Cognitive Psychotherapy, 30,* 279-295.

Irvine, A. B., Biglan, A., Smolkowski, K., Metzler, C. W., & Ary, D. V. (1999). The effectiveness of a parenting skills program for parents of middle school students is small communities. *Journal of Consulting and Clinical Psychology, 67* (6), 811-825.

Jacobson, N. S., Follette, W. C. & Revenstorf, D. (1984). Psychotherapy outcome research: Methods for reporting variability and evaluating clinical significance. *Behavior Therapy, 15,* 336-352.

Jacobson, N.S., & Truax, P. (1991). Clinical significance: A statistical approach to defining meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology, 59,* 12-19.

Kazdin, A. E. (1977). Assessing the clinical or applied importance of behavior change through social validation. *Behavior Modification, 1,* 427-452.

Kazdin, A. E. & Wilson, G. T. (1978). *Evaluation of behavior therapy: Issues, evidence, and research strategies.* Cambridge, MA: Ballinger.

Kazdin, A. E. (1985). *Treatment of antisocial behavior in children and adolescents.* Homewood, IL: Dorsey.

Kazdin, A. E. (1996). Problem solving and parent management training in treating aggressive and antisocial behavior. In E.D. Hibbs & P.S. Jensen (Eds.), *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (pp. 377-408). Washington, DC: American Psychological Association.

Kazdin, A. E. (2003). *Research Design in Clinical Psychology (4th ed.).* Boston: Allyn & Bacon.

Knapp, P. A., & Deluty, R. H. (1989). Relative effectiveness of two behavioral training programs. *Journal of Clinical Child Psychology, 18,* 314-322.

Linfoot, K., Martin, A. J., & Stephenson, J. (1999). Preventing conduct disorder: A study of parental behaviour management and support needs with children aged 3 to 5 years. *International Journal of Disability, Development and Education, 46* (2), 223-245.

Mavissakalian, M. (1986). Clinically significant improvement in agoraphobia research. *Behaviour Research and Therapy, 24*(3), 369-370.

McGlinchey, J. B. & Jacobson, N. S. (1999). Clinically significant but impractical? A response to Hageman and Arrindell. *Behavior Research and Therapy, 37*(12), 1211-1217.

McMahon, R. J., Forehand, R., & Griest, D. L. (1981). Effects of knowledge of social learning principles on enhancing treatment outcome and generalization in a parent training program. *Journal of Consulting and Clinical Psychology, 49*(4), 526-532.

Moos, R. H. & Moos, B. S. (1981). *Family Environment Scale manual.* Palo Alto, CA: Consulting Psychologists Press.

Nietzel, M. T. & Trull, T. J. (1988). Meta-analytic approaches to social comparisons: A method for measuring clinical significance. *Behavioral Assessment, 10,* 159-169.

Rotto, P. C., & Kratochwill, T. R. (1994). Behavioral consultation with parents: using competency-based training to modify child noncompliance. *School Psychology Review, 23*(4), 669-693.

Scott, S., Spender, Q., Doolan, M., Jacobs, B., & Aspland, H. (2001). Multicentre controlled trial of parenting groups for childhood antisocial behaviour in clinical practice. *Behavior Management Journal, 323*, 1-7.

Serketich, W. J., & Duman, J. E. (1996). The effectiveness of behavioral parent training to modify antisocial behavior in children: a meta-analysis. *Behavior Therapy, 27*, 171-186.

Smith, M., Lane, E., & Nash, S. (2002). Evaluation of two treatments for children with severe behavior problems: child behavior and maternal health outcomes. *Behavioral and Cognitive Psychotherapy, 30,* 279-295.

Stevens-Long, J. & Macdonald, S. (1993). Empathy, cognitive generativity, and parenting. In J. Demick, K. Bursik, & R. Dibiase (Eds.), *Parental development* (pp.89-105). Hillsdale, NJ: Lawrence Erlbaum Associates.

Tracy, T. (2000). Solution focused strategic parenting of challenging teens: A class for parents. *Family Relations, 49*(2), 165-168.

Webster-Stratton, C. H. (1996). Early intervention with videotape modeling: Programs for families of children with Oppositional Defiant Disorder or Conduct Disorder. In E.D. Hibbs & P.S. Jensen (Eds.), *Psychosocial treatments for child and adolescent disorders: Empirically based strategies for clinical practice* (pp. 377-408). Washington, DC: American Psychological Association.

Webster-Stratton, C., & Hammond, M. (1998). Conduct problems and level of social competence in Head Start children: Prevalence, pervasiveness and associated risk factors. *Clinical Child Psychology and Family Psychology Review, 1,* 101-124.

Webster-Stratton, C., Hollinsworth, T., & Kolpacoff, M. (1989). The long-term effectiveness and clinical significance of three cost-effective training programs for families with conduct-problem children. *Journal of Consulting and Clinical Psychology, 57*(4), 550-553.

Webster-Stratton, C., Reid, M. J., & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology, 30*(3), 283-302.

Wolf, M. M. (1978). Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis, 11*(2), 203-214.

Wolfe, R. B., Y Hirsch, B. J. (2003). Outcomes of parent education programs based on reevaluation counseling. *Journal of Child and Family Studies, 12*(1), 61-76.

Appendix A

Informational Letter

Potential Factors Related to Parent Project Program

Purpose

You are invited to participate in this study. The goal of the study is to investigate the effectiveness of the parent training course you agreed to attend. The study will be used to gather information that will help educators better understand how to facilitate caretakers in attaining the skills and support needed to help children who are experiencing various behavioral problems at school. The study is being conducted as part of the graduate student investigator's degree requirements.

Requirements for Participation

You must be, 18 years of age or older, and agreed to participate in the 10-week parent training course.

Procedure

Participation in the study will only require that you consent to the researchers having access to information you provided on questionnaires that you completed as part of your participation in the group. Your responses to the questionnaires will be kept confidential and only the researchers will have access to the information.

Risks

There is no more than minimal risk involved in participating in the study. If anxiety or other problems should occur, you will be provided with the opportunity to speak with the graduate student investigator. In case problems persist, please contact either Loma Linda University Psychological Services Clinic at (909) 558-8576 or Dr. David Vermeersch at (909) 558-7116.

Benefits

You will probably not receive any benefits from participating in this study. However, your participation will help educators and health care professionals to understand more about parenting children who are experiencing behavioral problems. It will help educators and other health care professionals to anticipate and better provide for the needs of children who are exhibiting behavioral problems.

Participants' Rights

Your participation in this study is completely voluntary. You have the right to withdrawal your consent to participate at any time. If you decide to stop, your questionnaires will be returned to the San Bernardino School District Office.

Confidentiality

All the information that is collected in this study will be kept strictly confidential. The information will be kept in a locked file cabinet in the district office. Any information that is removed from the San Bernardino District Office will not have any of your

personal information that could identify you. All measures you completed will be anonymous. No measures will be scored until your identifying information is separated from the measures. Any publication of presentation resulting from this study will refer only to the entire group of people who completed the measures.

Additional Costs/Reimbursement

There is no cost to you for participating in this study, nor any reimbursement for your effort.

Impartial Third Party Contact

If you wish to contact an impartial third party not associated with this study regarding any concerns or complaints that you may have, please feel free to contact the Office of Patient Relations at Loma Linda University Medical Center, Loma Linda, CA, 92354, phone (909) 558-4647 for information or assistance.

Informed Consent Statement

Once you have read the contents of this informational letter, please sign, print, and date your name below to indicate your consent to participate in the study. This consent does not waive your rights, nor does it release the investigators, institution, or sponsors from their responsibilities. You may call the graduate student investigator, Patricia E. Fernandez, M.A., or her faculty advisor, David Vermeersch, Ph.D., at Loma Linda University, Department of Psychology during normal office hours at 909-798-0324 if you

have additional questions or concerns. Please keep a copy of this letter for your future reference.

_____	_____
Participant's name	Date
_____	_____
Participant's signature	GSI's signature

Appendix B

Demographic Information

Date:

Name of person completing form: _____

1. Date of Birth (mm/dd/year): ___/___/____

2. Marital Status: ___Single ___Married ___Divorced ___Separated ___Widowed

3. Gender: ___Male ___Female

4. What is your relationship to the Child? _____

5. What is the age of the Child? _____

6. What is the gender of the Child? ____Male ____Female

7. Ethnicity or Race: ___African American ___Alaskan Native ___Asian Heritage ___Hispanic ___Native American ___Pacific Islander ___Caucasian ___Multi-Ethnic Other:_____

8. Religion: ___LDS ___Catholic ___Protestant ___SDA ___Other Christian ___Buddhist ___Hindu ___Jewish ___Moslem ___Sikh ___None Other:_____

9. Which category best describes your annual income?
___$0-$20,000 ___$20,001-$40,000 ___$40,001-$60,000 ___$60,001-$80,000 ___$80,001 or more

10. Did you graduate high school? ____Yes ____No

11. What is your highest level of education? _____

12. What is your occupation? _____