# Reducing Adolescent Oppositional and Conduct Disorders: An Experimental Design Using Parenting with Love and Limits

SCOTT P. SELLS[1]
Parenting with Love and Limits

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## Abstract

Ineffective parenting behaviors such as poor supervision, rejection, harsh and inconsistent discipline, and poor parenting techniques, may place adolescents at risk for developing opposition and conduct disorders. Parental behavior can increase or decrease an adolescent's risk for delinquency and other problem behaviors. The Parenting with Love and Limits (PLL) model was developed to address these issues and engage families in delinquent youths' treatment. Using an experimental design, the PLL treatment group demonstrated a significant reduction in aggressive behaviors, depression, attention deficit disorder problems, and externalizing problems as measured by the Child Behavioral Checklist (CBCL). Drop-out rates in the parenting group by parents and teenagers were extremely low with an 85% attendance rate by the parents and an 80% attendance rate by youths. Compared with the control group, the PLL treatment group significantly improved parents' readiness to change and resulted in significantly lower recidivism rates (16% PLL, 55% control) over a 12-month follow-up period.

KEYWORDS: recidivism, re-adjudication, community-based, Parenting with Love and Limits, intervention, delinquency, effectiveness, cost savings, services, juvenile offender.

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## Introduction

Research reveals that adolescents are at risk of engaging in delinquent behaviors when they are exposed to ineffective parenting behaviors such as poor parental supervision (Mmari, Blum, & Teufel-Shone, 2010; Ingram, Patchin, Huebner, McCluskey, & Bynum, 2007; Warr, 2005; Patterson, 1992), parental rejection (Barnow, Lucht, & Freyberger, 2005; Stuewig & McCloskey, 2005; Richter, Krecklow, & Eisemann, 2002; Hughey & Weisz, 1997), harsh and inconsistent discipline (Edwards et al., 2010; Conger and Simons, 1997; Shaw & Scott, 1991), and poor parenting techniques (Mmari et al., 2010; Loeber & Farrington, 1998). According to Williams and Chang (2000), "Juveniles will return to future delinquent acts if their parents remain unchanged in the areas of consistent limit setting, rebuilding emotional attachments, and improved communication" (p. 159).

Previous studies evaluating programs meant to reduce delinquent behaviors in adolescents have generally focused solely on adolescent behavior as the outcome of interest (Greenwood, 2008). Few studies have evaluated juvenile justice interventions relative to parental involvement and readiness for change. In the current study, the Parenting with Love Limits group therapy program was evaluated to determine not only its effect on adolescent behavior, but also its impact on parent factors, as well as the parent-adolescent relationship and readiness for change.

Parenting with Love and Limits (PLL) is a manualized structural-strategic program for delinquent youths that provides both group and family therapy for adolescents and their parents. In addition to engaging the family in the therapeutic process, PLL also incorporates treatment fidelity protocols that allow for a more conclusive association between program outcomes based on the PLL model, rather than therapist characteristics or other extraneous factors (Stevens &

Morral, 2003; Hoag & Burlingame, 1997; Waltz, Addis, Koerner, & Jacobson, 1993). It does so through strict fidelity protocols and adherence to the PLL therapeutic model. To date, PLL has been implemented in juvenile justice systems throughout the United States and in Norway. It has been utilized as both a community-based alternative to juvenile residential placement, as well as a re-entry program for delinquent youths transitioning from residential care back to the community.

## Family Engagement in Delinquency Interventions

Therapeutic groups for parents can provide caregivers with skills to reduce aggressive, antisocial, and delinquent behavior among children and adolescents (e.g. DeGarmo, Chamberlain, Leve, & Price, 2009). Delinquency interventions have traditionally focused only on the individual youth, with cursory to no involvement of the youth's caregivers in the therapeutic process. This may in part be due to four primary obstacles that can be encountered in attempting to engage the family and implementing group therapies.

First, group therapy has primarily been used as a stand-alone intervention. There is often no seamless integration between group and family or individual therapy into one continuum of care. As a result, parents may be initially eager to learn new skills in a parenting group, but have no one to show them how to use the skill through role plays in a family therapy format (cf., Forgatch, Bullock, & Patterson, 2004). As such, parents may learn a new skill in group only to see it fail when it is delivered improperly for the first time at home. As a result, their faith in the effectiveness of the parenting groups and motivation to continue treatment may plummet. This is a primary reason why stand-alone group therapy programs have shown adverse effects (DeGarmo et al., 2009; Roback, 2000).

Second, even though parenting groups are widespread, questions have been raised as to their efficacy and utility (Rowe & Liddle, 2003). Parents may believe that their adolescents are solely responsible for their delinquent behaviors and may therefore resent coming to parenting groups as a consequence of their adolescent's involvement in the juvenile justice system. Reluctance to engage in the therapeutic process and varying perceptions as to the effectiveness of parenting groups can present formidable obstacles when attempting to involve caregivers in delinquency interventions.

Third, not only is there scant evidence about the efficacy of these approaches, there are also possible iatrogenic effects (Dishion, McCord, & Poulin, 1999; Santisteban, et al., 2003). Within therapeutic groups, interaction among adolescent peers with violent behaviors may inadvertently reinforce problem behaviors in other youths. Santisteban et al., (2003) reached a similar conclusion stating: "Although group therapy may be less costly to implement, any consideration of cost-effectiveness must also consider the possibility of clinical deterioration" (p. 131). This may be an understatement by Santisteban and his colleagues as intervention researchers may be reluctant to publish null effects and, least of all, negative effects (Dawes, 1994; Glass & Smith, 1978).

Finally, another problem is that, until recently, there has been a lack of group therapy studies or studies in general with outcomes tied to treatment fidelity (Moncher & Prinze, 1991; Dusenbury, Brannigan, Falco, & Hansen, 2003; Tucker & Blythe, 2008). Use of a treatment fidelity protocol provides reassurance that positive findings were due to the model's procedural steps and not an artifact of a therapist's characteristics or some other factor(s). Without use of a treatment fidelity protocol, study results can be suspect (Stevens & Morral, 2003; Hoag & Burlingame, 1997; Waltz, et al., 1993).

In recent years, fidelity studies have been conducted on family therapy models for adolescent conduct disorders and substance abuse (Henggeler, Melton, Brondino, Scherer, & Hanley, 1997; Hogue, et al., 1998; Huey, Henggeler, Brondino, & Pickrel, 2000). Interventions utilizing parenting groups should similarly manualize procedures and set forth and adhere to clear fidelity protocols.

Engaging delinquent adolescents and their parents in both group and family therapy treatment remains a formidable challenge. One proposed mechanism for addressing this dilemma is to assess both youths' and parents' motivation for change. Readiness for change or amenability to treatment is a relatively novel outcome for the juvenile justice field. Yet, it has been associated with increased retention (Hogue, Dauber, & Morgenstern, 2010; Sheldon, Howells, & Patel, 2010; Neff & Zule, 2002; Rogers et al., 2001; Sellers & Vik, 1999; Miller & Tonigan, 1996), engagement (Sheldon, et al., 2010; Chambers, Eccleston, Day, Ward, & Howells, 2008), and behavioral change (DiClemente, Doyle, & Donovan, 2009).

The focus here on readiness for change is based on the change model developed by Prochaska, DiClemente, and Norcross (1992). In this model, four stages of change (Precontemplation, Contemplation, Action, and Maintenance) lead to a readiness to change in clients. In the *Precontemplation* stage, clients have little intention of changing their behavior in the foreseeable future. The client is not yet considering change or is unwilling or unable to change. Often, clients in Precontemplation fail to see the disconnect between their purported goals and actual behaviors. Clients reach the *Contemplation* stage when they are aware that a problem exists and begin to acknowledge concerns. The client may be considering the possibility of change, but is typically ambivalent and/or uncertain. During the following *Action*

stage, clients modify their behavior, experiences, and/or environment to remedy problems. Finally, clients work to prevent relapse and consolidate gains made in the *Maintenance* stage.

Service delivery that encompasses assessment and consideration of clients' readiness for change has been found to decrease dropout rates in mental health treatment of adults (Miller & Tonigan, 1996; Neff & Zule, 2002; Sellers & Vik, 1999). Orlando, Chan, & Morral (2003) concluded that since decreased dropout rates increase the likelihood of successful alleviation of presenting symptoms, the use of Prochaska et al.'s model in treatment planning is promising.

In an effort to engage the family in the treatment of delinquent youths, while avoiding the obstacles outlined previously, PLL implemented a six-week parenting group after creating a series of treatment fidelity protocols. The parenting group targeted adolescents within the juvenile court system who were diagnosed with oppositional defiant or conduct disorder (DSM-IV; American Psychiatric Association, 1994). The group actively involved both parents and their adolescents.

The primary goals of the current study were: 1) to examine the extent to which active parent and teen involvement in the six-week PLL parent education group reduced adolescents' conduct disorder behaviors; 2) to determine whether reductions in conduct disorders would be sustained over a 12-month follow-up period, as measured by recidivism, or re-arrest rates; and 3) to evaluate whether PLL lowered parent dropout rates and increased levels of motivation, engagement and group attendance rates using Prochaska's Stages of Readiness scale. In addressing the third goal, the specific aim was to examine whether parents stayed at the stage of readiness that existed before the first parenting group began or whether they would move to the higher levels of readiness, thereby lowering parental resistance.

## Methods

The study targeted adolescents within the Georgia juvenile court system who were diagnosed with oppositional defiant or conduct disorder (DSM-IV; American Psychiatric Association, 2000). Thirty-eight adolescents and their parents were randomly assigned into either the PLL parenting group or a control group. The treatment group consisted of 19 adolescents and their parents who received PLL group therapy over a six-week period. The adolescents ranged in age from 12 to 17, with the average participant being 15 years old.

Each participant had been adjudicated for a delinquent offense and was disposed to probation through the juvenile court. The control group of 19 adolescents and their families received the customary probation services, which included counseling, community schools, and/or community service. Participants from both groups were matched before random assignment based on type of offense, gender, age, and socioeconomic status. The majority of the adolescents were African American (82%), while 12% were Caucasian and 1% were Hispanic. Both males and females were represented in the sample, with males accounting for the majority of the participants (57%). The youths had committed a wide variety of concurrent crimes, with shoplifting being the most commonly occurring offense.

### *The Parenting with Love and Limits Group Model*

The six-week PLL group therapy program was developed following a three-year process and outcome evaluation study (Sells, 1998; Sells, 2000; Sells, Smith & Sprenkle, 1995) and integrated principles of a structural family therapy approach. Structural Family Therapy is rated a Model Program in the United States Department of Education's *Applying Effective Strategies to Prevent or Reduce Substance Abuse, Violence, and Disruptive Behavior Among Youth* (Scattergood, Dash, Epstein, & Adler, 1998). Programs using the framework of structural family therapy have

consistently demonstrated success in reducing or eliminating conduct disorders in adolescents (Labia & Rokutani, 2002; Springer & Orsbon, 2002; Rowe, Parker-Sloat, Schwartz & Liddle, 2003**).**

Two group facilitators led a small group of parents, caregivers, and their teenagers (no more than 4-6 families with no more than 12 people total in the group) in six classes, each two hours long. Two co-facilitators were needed, as breakout groups were used in the program. Parents and teens met together collectively as a group during the first hour and then broke into separate groups during the second hour. The rationale for these breakouts was that often times both parents and teens needed to meet separately to address issues that they could not resolve within the collective group, such as venting frustrations with one another or developing effective consequences.

The PLL model provided parents with a detailed six-module treatment manual on curtailing their teenagers' behavioral problems. To assist in intervention delivery, workbooks were available for parents and their children. Each group facilitators delivered the program in the same manner through a published step-by-step leaders guide (Sells, 2002). A standardized fidelity manual was also used to train group facilitators on how to consistently implement the program (Sells, 2002). The PLL program provides a step-by-step roadmap on how to stop oppositional defiant or conduct disorder behavior problems, as well as uses extensive role playing and modeling throughout the following six class modules:

1. Understanding Why Your Teen Misbehaves: Parents learned why their teen creatively use extreme behaviors such as disrespect, running away, or violence to commit acts of "parent abuse" to continually defeat parents when they try to regain control of their household.

2. Button Pushing: Parents learned how their teen skillfully "pushes their hot buttons" and teens learned how parents push theirs.
3. Ironclad Contracting: Parents learned how and why their traditional methods of contracting have been ineffective and five operational strategies to create improved contracts with the innovative use of both positive and negative consequences.
4. Troubleshooting: Parents learned how to troubleshoot teens' efforts to defeat the newly developed contracts.
5. Stopping the Seven Aces: Parents choose from a menu of creative consequences to stop the teens' "Seven Aces": disrespect, truancy, running away, drug or alcohol use and abuse, sexual promiscuity, violence, and threats of suicide.
6. Reclaiming Lost Love: Both parents and teens learn how years of conflict have reduced parents' ability to nurture their teens and six strategies needed to reclaim this lost capability.

*Measures*

The Child Behavior Checklist (CBCL). The CBCL is a validated, standardized assessment instrument that measures behavioral problems and social competencies of children as reported by parents. The CBCL can be self-administered or administered by an interviewer. It consists of 118 items related to behavior problems that are scored on a 3-point scale ranging from "not true" to "often true" of the child. There are also 20 social competency items used to obtain parents' reports of the amount and quality of their child's participation in: sports, hobbies, games, activities, organizations, jobs, chores, and friendships. It also measures school functioning and how well the child gets along with others and plays and works by him/herself. Individual item intraclass correlations (ICC) of greater than .90 are reported between item scores

obtained from mothers at 1-week intervals, both mothers and fathers completing the measure on their children, and three different interviewers obtaining CBCL from parents of demographically matched triads of children. Stability of ICCs over a 3-month period was .84 for behavior problems and .97 for social competencies. Test-retest reliability of mothers' ratings was .89.

The Parent and Adolescent Readiness Scales (PRS). This measure is a modified version of the University of Rhode Island Change Assessment (URICA) scale (McConnaughy, Prochaska, & Velicer, 1983). Both parents and adolescents received the PRS separately. The measure contains 32 Likert questions and is designed to have a single factor, unidimensional scale (McConnaughy, et al., 1983) which is a continuous, ratio level measurement. Thus, participants can achieve high scores on more than one of the stages of readiness (Precontemplative, Contemplative, Action, and Maintenance). Stage scores (i.e., means on each set of 8 items for each subject) have been converted to standardized score (i.e., Z-scores: mean=50, standard deviation=10).

The Index of Parental Relations. This measure contains 25-items that assess the extent, severity, and magnitude of problems in the parent-child relationship. The range of scores is from 25 to 175 with scores above 30 indicating a clinically significant problem. Scores above 70 indicate severe stress on the part of the respondent with an increased possibility of violence. The IPA has a mean alpha of .97 and has demonstrated exceptional known-groups validity and acceptable construct validity (Hudson, 1997).

The Parent Adolescent Communication Scale (PACS). This measure contains 20 items using a 5-item Likert scale. Each question ranges from "strongly disagree" to "strongly agree." The measure contains two subscales representing open family communication and problematic family communication (Barnes & Olson, 1985). Alpha reliabilities for each subscale are .87 and

.78; test-retest reliabilities are .78 and .77. Several studies have supported the construct validity of the instrument (Olsen, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1982; Hazzard, Christensen, & Margolin, 1983; Margolin & Fernandez, 1983; Plake & Conoley, 1995; Sales, Milhausen, Wingood, DiClemente, Salazar, & Crosby, 2008). Tests of criterion-related validity using clinical status as the criterion (referred/non-referred) also support the validity of the instrument. Importantly, demographic variables such as race and socio-economic status accounted for a relatively small proportion of score variance.

Recidivism or relapse rates for all 38 adolescents who completed the program were measured through Georgia juvenile court records for each adolescent. Re-arrest records were obtained for all 38 adolescents six months after the completion of the parenting program and then again after twelve months of completing the program.

## Results

Treatment group youth had significantly lower recidivism rates (16%) than that of the control group (55%) over a 12-month period following release from PLL and probation services, respectively. Juveniles in the control group spent a total of 543 days in detention while juveniles in the treatment group spent 72 total days in detention.

Attendance rates in the parenting group by both parents and teenagers were relatively high with an 85% attendance rate by parents and an 80% attendance rate by youth, signifying strong family engagement in the PLL program. Since parents were not court ordered to attend the program, attendance rates were particularly noteworthy. The one parent who failed to attend all six classes was present at each of the other five classes. One adolescent was also absent due to being in detention at the time the classes were being conducted.

This high attendance rates and high engagement by both parents and adolescents positively correlated with the stages of readiness scales. According to the Parental Stages of Readiness Scale (PRS) mothers in the treatment group went from a pretest mean score of $\bar{x}$ =19 to a mean of $\bar{x}$ =9 in the posttest score within the Precontemplation stage. This indicates therefore that mothers were transitioning from Precontemplation to advanced stages of readiness for change. In the control group the mothers remained constant, with a pretest mean of $\bar{x}$ =20 and a posttest mean $\bar{x}$ =19. Anecdotal reports of the mothers in the treatment group suggested that their attitude started with a "my adolescent has a problem and I have nothing to do with it and I have no intention of changing" to "my teenager has a problem and I am part of the solution with a responsibility to help fix my teenager's behavioral problems."

This same positive movement also occurred in the Action stage of development whereby mothers moved from a mean of $\bar{x}$ =31 to a mean score of $\bar{x}$ =40, whereas the mothers in the control group showed no change or got worse (pretest $\bar{x}$ =30 and posttest $\bar{x}$ =29). In other words, by the end of the group the posttest Action scores showed that mothers were ready to take some action to change their adolescents' behavior problems by employing contracting and consistent limit setting as parenting methods. The initial attitudes within the Precontemplation stage were now translated into a desire to take some action steps to help their adolescent. This change in motivation and commitment by the parent correlated with the 85% parent attendance rate.

The Adolescent Readiness Scale paints a similar albeit not identical picture to that of the parents. For the adolescents, there was no change in their Precontemplation before and after mean scores (pretest $\bar{x}$ =15 and posttest $\bar{x}$ =15); there appeared to be no attitude or belief system change as a result of treatment. However, even without a professed change in attitude,

adolescents achieved a significant change in their Action scores, indicating a desire for some kind of action or change (pretest $\bar{x}$ =26 and posttest $\bar{x}$ =36). It is unclear if the adolescents wanted their parents to change or whether they were willing to make changes themselves.

Adolescents believed that their communication with their mothers had improved significantly more so than adolescents who had not received treatment (control group). This was mirrored by the mothers' perception that communication with their teens had also improved significantly more so than their control group peers. Readiness for treatment also showed significant differences between the two conditions for adolescents across Contemplation, Action, and Maintenance subscales. On the Precontemplation subscale, teens in the control group scored higher than those in treatment group. A similar result was found in Precontemplation scores of mothers when comparing treatment and control conditions.

Mothers in the treatment condition showed significant improvement more so than the control group mothers except for scores in the Maintenance stage where there was no difference between the treatment and control conditions. Finally, adolescents' perception of mothers' parenting skills also were significantly different from the control group. Results of these measures are given below. Table 1 presents the means, standard deviations and t-test scores.

INSERT TABLE 1 HERE

The results of the analysis of the Child Behavior Checklist support the efficacy of the Parenting with Love and Limits (PLL) group intervention (see Table 2). On all but two subscales, the PLL group significantly improved more so than the control group participants after controlling for the pretest scores. It is instructive to examine the two subscales on which the PLL families did not improve more so than the control group condition participants. The first subscale concerns Somatic Problems. Since the PLL intervention does not purport to improve

health functioning, this result was expected. The second subscale speaks to delusional thinking. Although the PLL intervention does improve conduct disorders and their related sequelae, it is not designed to treat adolescents with psychotic symptomology. On balance, the scores on the composite scale that showed overall functioning documented that treatment group participants fared significantly better than their control group counterparts.

INSERT TABLE 2 HERE

The most significant difference between the treatment and control groups was within the Aggressive subscale ($\bar{x}$ =67.43 pretest vs. $\bar{x}$ =58.14 posttest) in the treatment group and ($\bar{x}$ =70.83 pretest vs. $\bar{x}$ =71.67 posttest) in the control group. Aggressive behaviors in the control group actually increased, while in the treatment group they were significantly reduced. Aggressive behaviors are a hallmark of conduct disorders so the large reduction is noteworthy.

Other common symptoms of conduct disorders such as attention deficit problems and externalizing problems (i.e., blaming others and taking no personal responsibility for one own actions) were also significant. Symptoms such as depression were significant but not nearly to the degree of the other symptoms. This is to be expected as depression is not a major symptom of conduct disorder behavior.

## Discussion

The results indicate that parents' participation in adolescents' treatment of severe behavioral problems can have a positive impact on program effectiveness. The low recidivism rates (16% in the PLL condition versus 55% in the control group), fewer detention days (72 days in the PLL condition versus 543 days in the control group), and significant reductions in aggressive behaviors suggest that the PLL intervention represents an effective method for treating delinquent youths. These findings support the ongoing literature that adjudicated adolescents can avoid returning to

delinquent acts if their parents improve in the areas of limit setting, emotional connections, and improved communication (Williams & Chang, 2000).

Generally, parents are not actively involved in their teenagers' rehabilitation within the juvenile justice system. Court diversion programs are designed in part to prevent future delinquent acts, probation placements, and expensive commitment programs. Yet, the focus of these programs is primarily on the individual youth**.** Although there may be short-term gains, the recidivism rates for these teenagers once they return home can be quite high. In a recent report on juvenile justice in the State of Georgia, 56% of the 4,420 adjudicated youth in 2003 re-offended within three years of returning from short-term wilderness programs and another 44% recidivated following release from residential commitment (Strategic Plan Report, 2003). By comparison, youth served by the PLL program had reported recidivism rates of sixteen percent.

Another encouraging finding was the high parent attendance rates of 85% with attrition rates of roughly 5%, suggesting that the *type* of parenting program used may be a critical factor. Although the findings were from a small randomized sample, the results are encouraging. Equally impressive was the voluntary nature of parents' participation (i.e., parents were not court-ordered into treatment). The high attendance rates may be attributed to three central areas.

First, one key feature of the PLL program was the use of a treatment fidelity protocol (i.e., manualized adherence). By reducing the variability of therapist skill and experience, participants experienced PLL in the manner in which it was intended. Because the PLL program was designed to inspire confidence and hope in parents, it was important to capture this quality. As one parent noted that, "In past parenting classes we just have to sit there and get lectured to. It's boring. But these classes work. The ladies that run the class are high energy, exciting, and really know what they are doing. It is completely different than what I expected. I look forward to coming."

Second, the parenting program curriculum itself was tailored for conduct disordered adolescents with difficult and unmotivated parents. This tailoring process took place over three years of preliminary studies (Sells, 1998; Sells, 2000). The PLL modules specifically addressed out-of-control adolescents and spoke directly to the unique treatment issues that parents face. This in turn fostered increased levels of interest and motivation.

Third, the PLL curriculum was designed to "start where the client or parent is" on the level of treatment readiness of parents and adolescents. The curriculum developed noted Prochaska, et al., (1992) observation that therapists often request parents to initiate action (e.g., producing a behavioral contract) when they are not ready to do so. Understandably, parents fail to follow therapists' directives because they and therapists are not on the same "developmental sheet of music." Study results suggest that the PLL participants' levels of readiness increased and with it, the likelihood of an effective treatment effort. Thus, if a program starts at participants' level of readiness, improved outcomes relative to motivation and attendance may likewise be realized.

The results of this study do not support findings from other studies (Dishion, et. al., 1999; Santisteban, et. al., 2003) that group therapy for adolescents may actually create iatrogenic effects or clinical deterioration. By contrast, adolescents in this study showed clinical improvement in aggressive behaviors to improved parent-child communication. It is speculated that the PLL program actively involved parents, while other clinical outcome studies only have involved the adolescents. Thus, adolescents in the study treatment group were exposed not only to their peers, but also to their parents. The adolescents met their peers in planned breakout groups for relatively short periods of time (one hour per group for breakout and one hour together with their parents) to complete specific tasks (e.g., positive rewards for following rules in their homes). The break outs were not open ended process groups but highly structured. The active involvement of parents

combined with the high structure may have created a different context for participants. Future studies are needed to isolate and compare these two treatment programs (i.e., conduct disorder adolescents alone in group that are primarily process groups versus adolescents in groups with their parents and a highly structured break out curriculum) to further explore potential iatrogenic effects in group therapy.

Future studies are also needed to determine if recidivism rates are altered or affected by a dual family household versus a single parent household. A limitation of this study was that the majority of the 19 treatment group parents were single parent mothers (n=13). The remaining six mothers had spouses, but they were unable to attend. As a result, we were unable to determine the effects of a dual parent household on the areas of recidivism, parent-child communication, stages of readiness, or changes in parental attitudes.

Future interventions and evaluations should also explore the combined impact of both parenting education groups and aftercare programs like individual family therapy. Even though the relatively low recidivism rates of the treatment group were encouraging, it is likely that adolescents diagnosed with conduct disorder behaviors may require additional aftercare intervention. While studies have highlighted the utility of psychoeducation in adolescent conduct disorder treatment, including parent training (Bamberg, Toumbourou, Blyth, & Forer, 2001; Schmidt, Liddle, & Dakof, 1996) and skills training (McGillicuddy, Rychtarik, Duquette, & Morsheimer, 2001), there is a severe deficit of combining psychoeducational training with family therapy to assist parents in application of these skills (DeGarmo, et al., 2009; Roback, 2000; Wagner, Brown, Monty, & Waldron, 1999). A study by Smith, Sells, Rodman and Reynolds (in press), concluded that optimal treatment with conduct disorders required components of both psychoeducational groups and family therapy.

Group therapy can provide parents with the skills training, education, and necessary support from other parents to reduce their adolescents' resistance and to engage them in the treatment process. In addition, follow-up family therapy aftercare can show parents how to tweak these new skills with their adolescents while also addressing underlying family dysfunctions that would jeopardize successful application of newly acquired parenting skills. Family therapy complements group psychoeducational applications such as those reported here and may serve to prevent chronic difficulties from re-emerging with a concomitant return of dysfunctional parenting behaviors.

Although the parenting education program reported here is a promising beginning in motivating and engaging adolescents and their parents, it is not a definitive answer. Future studies are needed to combine parenting skills and aftercare services such as family therapy to form a continuum of care that can address parenting skill deficits and the underlying family problems that create or contribute to these deficits. Finally, future studies are needed with larger sample sizes to generalize findings to a broader population. The preliminary outcomes from this small-scale randomized evaluation design suggest that the Parenting with Love and Limits group therapy approach may be an effective mechanism for reducing oppositional and conduct disorder behaviors among delinquent youths disposed to probation.

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Table 1. Pre- and Post-Test Means and T-Test Statistics (Post-test) on Family Communication, Parental Attitudes and Readiness for Change Outcomes

| Measure | Pre-test | | Post-test | | t-test |
|---|---|---|---|---|---|
| | Treatment | Control | Treatment | Control | |
| Communication: Teen to Mom | 57.67 | 63.29 | 68.75 | 46.58 | 3.60** |
| Communication: Mom to Teen | 58.07 | 63.72 | 78.64 | 57.40 | 4.29** |
| Index of Parental Attitudes: Mom | 73.21 | 71.35 | 46.47 | 76.60 | 4.49** |
| Teens' Readiness for Change | | | | | |
| Precontemplation | 18.00 | 22.31 | 17.90 | 25.38 | -2.53* |
| Contemplation | 33.44 | 29.00 | 33.23 | 30.56 | 2.07* |
| Action | 29.00 | 28.88 | 35.27 | 27.00 | 3.38** |
| Maintenance | 27.30 | 27.40 | 35.20 | 26.53 | 2.45* |
| Moms' Readiness for Change | | | | | |
| Precontemplation | 17.85 | 20.92 | 10.29 | 19.07 | -5.41** |
| Contemplation | 33.23 | 37.60 | 30.56 | 32.57 | 2.67* |
| Action | 33.08 | 30.67 | 38.00 | 30.69 | 5.61** |
| Maintenance | 31.08 | 27.00 | 33.87 | 31.79 | 1.11 |

Table 2. Comparisons of Treatment and Control Condition Participants on Child Behavior Checklist (CBCL) Scales

| Measure | Pre-test | | Post-test | | F-test |
|---|---|---|---|---|---|
| | Treatment Mean (SD) | Control Mean (SD) | Treatment Mean (SD) | Control Mean (SD) | |
| Anxiety/Depression | 57.14 (8.17) | 55.83 (7.88) | 52.57 (3.91) | 58.67 (6.24) | 9.06** |
| Withdrawn/Depression | 58.93 (9.40) | 62.83 (6.77) | 55.36 (4.92) | 63.50 (7.49) | 8.96** |
| Somatic Complaints | 53.64 (6.18) | 56.83 (6.13) | 51.36 (3.32) | 53.08 (4.44) | 0.94 |
| Social Problems | 57.93 (8.39) | 61.91 (6.20) | 59.36 (4.38) | 65.42 (5.09) | 7.94* |
| Thought Problems | 60.93 (9.16) | 55.25 (5.45) | 51.5 (3.67) | 52.67 (4.08) | 0.54 |
| Attention Problems | 65.57 (11.5) | 66.17 (11.02) | 56.57 (5.69) | 69.75 (8.49) | 21.95** |
| Rule-Breaking Problems | 67.29 (10.94) | 75.33 (7.30) | 60.07 (8.07) | 69.33 (9.44) | 23.17** |
| Aggressive Behaviors | 67.43 (12.77) | 70.83 (14.22) | 58.14 (6.78) | 71.67 (13.01 | 32.79** |
| Internalizing Problems | 55.93 (9.50) | 59.08 (5.23) | 50.79 (5.66) | 58.92 (7.70) | 7.88* |
| Externalizing Problems | 64.07 (15.80) | 73.08 (9.54) | 56.57 (11.21) | 71.83 (10.11) | 24.37** |
| Total Problems | 62.93 (11.78) | 66.75 (6.78) | 55.43 (7.79) | 69.67 (6.31) | 26.49** |