

Reducing Adolescent Oppositional and Conduct Disorders: An Experimental Design Using the Parenting with Love and Limits® Model

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Ineffective parenting behaviors such as poor supervision, rejection, harsh and inconsistent discipline and poor parenting techniques may place adolescents at risk for developing oppositional 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. In 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). Dropout rates in the treatment group among 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 vs. 55% control) over a 12-month follow-up period.

Key Words: Recidivism • re-adjudication • community-based intervention • Parenting with Love and Limits • delinquency • family therapy • oppositional disorder • conduct disorder • juvenile offender

Research reveals that adolescents are at risk of engaging in delinquent behaviors when they are exposed to ineffective parenting techniques (Ingram, Patchin, Huebner, McCluskey, & Bynum, 2007; Loeber & Farrington, 1998; Mmari, Blum, & Teufel-Shone, 2010; Patterson, 1992; Warr, 2005;), parental rejection (Barnow, Lucht, & Freyberger, 2005; Hughey & Weisz, 1997; Richter, Krecklow, & Eisemann, 2002; Stuewig & McCloskey, 2005);

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harsh and inconsistent discipline (Conger and Simons, 1997; Edwards, Dodge, Latendresse, Lansford, Bates, Pettit, G., et al., 2010; Shaw & Scott, 1991), and poor family relationships (Rowe & Liddle, 2003). 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 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 and Limits® group therapy program was evaluated to determine not only its effect on adolescent behavior, but also its influence 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 youth that provides both group and family therapy for adolescents and their parents. In addition to engaging the family in the therapeutic process, PLL incorporates treatment fidelity protocols that allow for determination of a more conclusive association between program outcomes and the PLL model than therapist characteristics or other extraneous factors (Hoag & Burlingame, 1997; Stevens & Morral, 2003; Waltz, Addis, Koerner, & Jacobson, 1993). PLL fidelity protocols include use of 1. comprehensive training manuals for family therapy groups and individual coaching sessions, 2. videotape monitoring and feedback of therapist adherence to the PLL model, 3. therapy callbacks with scripted dialogue and tune-ups, 4. therapist coaching fidelity checklist (24 items) monitoring and scoring, and 5. therapist group fidelity checklist (42 items) monitoring and scoring. To date, PLL has been implemented in juvenile justice systems throughout the United States and in Norway. It has been used as both a community-based alternative to juvenile residential placement as well as a re-entry program for delinquent youths making the transition 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 been used primarily 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 eager initially to learn new skills in a parenting group but have no one to show them how to use the skill through role-play 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 they deliver it 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, while family-based approaches are widespread, some authors (Liddle & Dakof, 1995; Rowe & Liddle, 2003) have raised questions as to their efficacy. Of particular concern is the effective engagement of caregivers in their child's treatment. 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. Parents' reluctance to engage in the therapeutic process can present formidable obstacles when attempting to engage in family-based interventions for delinquent youth.

Third, not only is there a lack of definitive evidence about the efficacy of these approaches, but iatrogenic effects are also possible (Dishion, McCord, & Poulin, 1999; Santisteban, Coatsworth, Perez-Vidal, Kurtines, Schwartz, LaPerriere, & Szapocznik, 2003). Within therapeutic groups, interaction among adolescent peers with violent behaviors may inadvertently reinforce problem behaviors in other youths. Santisteban et al. (2003) reached such a 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).

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 (Dusenbury, Brannigan, Falco, & Hansen, 2003; Moncher & Prinze, 1991; 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 (Hoag & Burlingame, 1997; Stevens & Morral, 2003; 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, Liddle, Rowe, Turner, Dakof, & LaPann, 1998; Huey, Henggeler, Brondino, & Pickrel, 2000). Interventions using 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 challenge 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; Miller & Tonigan, 1996; Neff & Zule, 2002; Rogers, Martin, Anthony, Massaro, Danley, Crean, et al., 2001; Sellers & Vik, 1999; Sheldon, Howells, & Patel, 2010;), 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, in the Maintenance stage clients work to prevent relapse and consolidate gains made.

Family therapy interventions that encompass assessment and consideration of clients' readiness for change have been found to decrease dropout rates in mental health treatment of adults (Miller & Tonigan, 1996; Neff & Zule, 2002; Sellers & Vik, 1999). Orlando, Chan, and Morral (2003) concluded that because decreased dropout rates

increase the likelihood of successful alleviation of presenting symptoms, the use of Prochaska and colleagues' (1992) 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 with oppositional defiant or conduct disorder diagnoses (American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed.,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 by 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 with oppositional defiant or conduct disorder diagnoses (*DSM-IV*, 1994). Thirty-eight adolescents and their parents were assigned randomly 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 years old; the average age of participants was 15 years.

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

participants (57%). The youths had committed a wide variety of concurrent crimes, with shoplifting as the most commonly occurring offense.

The PLL 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; Rowe, Parker-Sloat, Schwartz & Liddle, 2003; Springer & Orsbon, 2002).

Two group facilitators led a small group of parents, caregivers, and their teenagers (no more than 4 to 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 the program used breakout groups. 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 oftentimes 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 facilitator delivered the program in the same manner by following a published step-by-step leader's guide (Sells, 2002). A standardized fidelity manual was also used to train group facilitators on how to implement the program consistently (Sells, 2002). The PLL program provided a step-by-step roadmap on how to stop oppositional defiant or conduct disorder behavior problems and used extensive role-playing and modeling throughout the following six class modules:

1. Understanding Why Your Teen Misbehaves: Parents learned why their teen creatively uses extreme behaviors such as disrespect, running away, violence, or other acts of "parent

abuse” to defeat parents continually 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 the reasons their traditional methods of contracting have been ineffective as well as five operational strategies to create improved contracts with the innovative use of both positive and negative consequences.
4. Troubleshooting: Parents learned how to troubleshoot their teen's efforts to defeat the newly developed contracts.
5. Stopping the Seven Aces: Parents chose from a menu of creative consequences to stop their teen's "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 learned 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. Parents can complete the CBCL themselves, or an interviewer can administer the CBCL. It consists of 118 items related to behavior problems scored on a 3-point scale ranging from "not true" to "often true" of the child. Twenty social competency items 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 as well as plays and works alone. Individual item intraclass correlations (ICC) of greater than 0.90 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 0.84 for behavior problems and 0.97 for social competencies. Test-retest reliability of mothers' ratings was 0.89.

The Parent and Adolescent Readiness Scales (PRS). This measure is a modified version of the University of Rhode Island Change Assessment (URICA) scale (McConaughy, 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 (McConaughy 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 (Precontemplation, Contemplation, Action, and Maintenance). Stage scores (i.e., means on each set of 8 items for each subject) have been converted to standardized scores (mean = 50, $SD = 10$). A decrease in mean Precontemplation stage scores between the pretest and posttest indicates a decrease in respondents' unwillingness or inability to change. Similarly, a decline in mean Contemplation stage scores may signify a transition from mere contemplation of action to behavioral change. Reduced Precontemplation and Contemplation mean stage scores, coupled with increased Action and Maintenance scores, reflect a progression through the stages of change Prochaska and his colleagues (1992) set forth.

The Index of Parental Attitudes (IPA). 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 0.97 and has demonstrated exceptional known-groups validity and acceptable construct validity (Hudson, 1997). Decreases in IPA scores between the pretest and posttest signify a decline in parent-child relationship problems. Scores decreasing below the threshold of 70 reflect a decreased likelihood for familial violence.

The Parent-Adolescent Communication Scale (PACS). This measure contains 20 items that use 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). The Open Family Communication Scale comprises questions designed to assess the degree of openness in family communication. Questions are positive statements related to the family's expression of feelings, listening skills, and attempts to understand one another's views. Higher scores reflect a greater degree of openness. Alternatively, the Problems in Family Communication Scale examines the "extent of

problems in family communication” (Barnes & Olson, 1985, p. 441) by using negative statements regarding family members’ difficulties communicating and lack of communication skills. Scores on this scale are reverse-coded in value and added to the Open Family Communication Scale for an additive total scale score. Higher total scores reflect stronger parent–adolescent communication. In a national study, alpha reliabilities for each subscale were 0.87 and 0.78, respectively; test-retest reliabilities were 0.78 and 0.77. Several studies have supported the construct validity of the instrument (Hazzard, Christensen, & Margolin, 1983; Margolin & Fernandez, 1983; Olsen, McCubbin, Barnes, Larsen, Muxen, & Wilson, 1982; Plake & Conoley, 1995; Sales, Milhausen, Wingood, DiClemente, Salazar, & Crosby, 2008).

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 6 months after the completion of the parenting program and then again 12 months after 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 after release from PLL and probation services, respectively. In addition, juveniles in the control group on average spent a total of 543 days in detention, while juveniles in the treatment group spent 72 total days in detention.

Attendance rates of both parents and teenagers in the parenting group were relatively high with an 85% attendance rate among parents and an 80% attendance rate among youth, signifying strong family engagement in the PLL program. Because 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 in detention at the time classes were conducted was also absent.

These high attendance rates and high engagement by both parents and adolescents correlated positively with the stages of readiness scales. According to the Parent and Adolescent Readiness Scale (PRS), mothers in the treatment group went from a standardized pretest mean score of $\bar{x}=17.85$ to a mean of $\bar{x}=10.29$ in the posttest score within the Precontemplation stage. This indicates that mothers were making the transition from Precontemplation to advanced stages of readiness for change. In the control group the mothers remained relatively constant, with a

standardized pretest mean of $\bar{x}=20.92$ and a posttest mean $\bar{x}=19.07$. Anecdotal reports of the mothers in the treatment group suggested that their attitude started with “My adolescent has a problem and I have nothing to do with it and I have no intention of changing” and changed to “My teenager has a problem and I am part of the solution with a responsibility to help fix my teenager’s behavioral problems.

Positive movement also occurred in the Action stage of development whereby mothers in the treatment group moved from a standardized mean score of $\bar{x}=33.08$ to a mean score of $\bar{x}=38.00$, whereas the mothers in the control group showed no change or got worse (pretest $\bar{x}=30.67$ and posttest $\bar{x}=30.69$). In other words, by the end of the intervention, 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.

Adolescents’ PRS scores paint a similar, albeit not identical, picture to that of the parents. The adolescents receiving PLL services demonstrated little change in their before and after Precontemplation mean scores (pretest $\bar{x}=18.00$ and posttest $\bar{x}=17.90$); they appeared to have 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 (pretest $\bar{x}=29.00$ and posttest $\bar{x}=35.27$) reflecting modification in their behaviors, experiences, and/or environment to remedy problems. While Action and Maintenance scores increased for youth in the treatment group, these scores declined for control group participants between pre and posttest administration.

Adolescents believed that their communication with their mothers had improved significantly more so than adolescents who had not received treatment (control group), as illustrated in mean changes in the Parent–Adolescent Communication Scale (PACS) scores. Conversely, control group mean scores actually declined, suggesting that family communication worsened among control group participants. Mirroring this finding, mothers in the treatment group perceived that communication with their teens had also improved significantly more so than their control group peers. Average PACS scores for PLL mothers increased from 58.07 to 78.64, while control group mothers declined by a factor of 6.32 between pre and posttest assessments.

Table 1. *Comparisons of Treatment and Control Condition Participants on Family Communication, Parental Attitudes, and Readiness for Change Outcomes*

Measure	Pretest		Posttest		t-test
	Treatment	Control	Treatment	Control	
Parent-Adolescent Communication Scale (PACS): Teen to Mother	57.67	63.29	68.75	46.58	3.60**
Parent-Adolescent Communication Scale (PACS): Mother to Teen	58.07	63.72	78.64	57.40	4.29**
Index of Parental Attitudes (IPA): Mother	73.21	71.35	46.47	76.60	4.49**
Parent and Adolescent Readiness Scale (PRS): Adolescents					
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*
Parent and Adolescent Readiness Scale (PRS): Mother					
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

* $p \leq .05$ ** $p \leq .01$.

Note. Parent-Adolescent Communication Scale: higher scores reflect greater communication between parent and adolescent. Index of Parental Attitudes: lower scores reflect greater parental contentment with his/her child, with scores greater than 30 indicative of a clinical problem and scores above 70 reflective of severe stress and increased potential for familial violence. Parent and Adolescent Readiness for Change: the table presents standardized scores. Decreased Precontemplation and Contemplation subscales signify fewer respondents reporting an unwillingness/inability to change or reporting contemplation of action, without behavior change, respectively.

Another important indicator of improvement in familial relations was the change in PLL parents' attitudes and contentment toward their children. As measured by using the Index of Parental Attitudes (IPA), mean scores decreased significantly from 73.21 to 46.47. This change signified a reduction in severe familial stress and decreased likelihood for violence within the family. Control group mothers reported an increase in mean IPA scores over the course of the study. Table 1 provides the pretest and posttest PRS, PACS, and IPA scores for the treatment and control conditions.

The results of the analysis of the Child Behavior Checklist support the efficacy of the PLL group intervention (see Table 2). On all but two subscales, the PLL group members improved significantly more 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 Complaints. Because the PLL intervention does not purport to improve health functioning, this result was expected. The second subscale speaks to delusional thinking (Thought Problems). 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.

The most significant difference between the treatment and control groups was within the Aggressive Behaviors 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 reduced significantly. 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's 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 influence on program outcomes. The low

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

Measure	Pretest		Posttest		F Ratio
	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**

* $p \leq .05$ ** $p \leq .01$

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 problem 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 families are engaged in the treatment process through interventions designed

to address parent and adolescent communication, parental limit setting and contracting, and emotional connectedness and support (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 after release from residential commitment (Strategic Plan Report, 2003). By comparison, youth served by the PLL program had reported recidivism rates of 16%.

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, which reduces the variability of therapist skill and experience). 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 from 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 addressed out-of-control adolescents specifically 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. When developed, the curriculum noted Prochaska et al.'s (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 involved parents actively, while other clinical outcome studies have involved the adolescents only. 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 (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 breakouts 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 groups that are primarily process groups versus adolescents in groups with their parents and a highly structured breakout curriculum) to explore potential iatrogenic effects in group therapy further.

Future studies are also needed to determine whether 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 the spouses 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 effect of both parenting education groups and aftercare programs such as individual family therapy. Even though the relatively low recidivism rates of the treatment group were encouraging, it is likely that adolescents with conduct disorder behavior diagnoses

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 studies combining psychoeducational training with family therapy to assist parents in application of these skills (DeGarmo et al., 2009; Roback, 2000; Wagner, Brown, Monti, Myers, & 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 hone these new skills with their adolescents while also addressing underlying family dysfunctions that might 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 helping to motivate and engage 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 (PLL) 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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