Journal of Consulting and Clinical Psychology
2009, Vol. 77, No. 3, 429–438


0022-006X/09/$12.00 DOI: 10.1037/a0015028

# How Attendance and Quality of Participation Affect Treatment Response to Parent Management Training

Robert L. Nix and Karen L. Bierman
Pennsylvania State University

Robert J. McMahon
University of Washington

The Conduct Problems Prevention Research Group

This study examined whether attendance and quality of participation in parent management training predicted treatment response. Data were from 445 parents (55% minority, 62% single; almost all of low socioeconomic status) who had 1st-grade children with severe conduct problems. Quality of participation in weekly parent groups was based on group leader ratings. Parent outcomes were based on interviewer ratings, behavioral observations, parent reports, and teacher ratings. Results of hierarchical linear models suggested that few family characteristics predicted attendance in this efficacy trial and that attendance was not related to changes in parenting over the year. However, several family characteristics predicted quality of participation in parent management training, and this in turn predicted changes in parental perceptions, warmth, physical punishment, and school involvement. From a clinical perspective, these findings suggest that it is not enough to get parents to attend sessions; it is also necessary to facilitate their active engagement in the therapeutic process.

*Keywords:* parent management training, engagement, attendance, participation

Parent management training is one of the most effective interventions for children's conduct problems (Kazdin & Weisz, 1998; McMahon, 2006). As parents change their own behaviors, children tend to improve. To reap the benefits of this training, we assume, parents must attend sessions and must participate in a meaningful way once there. Meaningful participation entails listening attentively, trying hard to understand novel ideas, being receptive to new ways of interacting with children, asking questions when appropriate, actively contributing to discussions and role plays, and attempting to incorporate new approaches in daily routines (Baydar, Reid, & Webster-Stratton, 2003; Dumas, Nissley-Tsiopinis, & Moreland, 2007). However, there is little empirical evidence about the value of participation one way or the other (Nock & Ferriter, 2005). It might be that most parents, even the quiet or resistant group members, benefit from child behavior management training (Yalom, 1995). Verbal activity appears unrelated to treatment response in some group therapy (Soldz, Budman, Demby, & Feldstein, 1990). Or, it might be that high quality of participation, not mere attendance, is necessary. Quality of participation is the best predictor of session productiveness in some individual therapy (Smith & Grawe, 2003). One of our goals in this study was to identify which parents attended parent management training and exhibited high-quality participation; a more important goal was to determine whether attendance and quality of participation were related to treatment response.

## Predictors of Attendance and Quality of Participation

Despite the demonstrated effectiveness of parent management training, it can be difficult to entice parents to attend and participate in a manner that produces change. This is a particular chal-

Robert L. Nix, Prevention Research Center, Pennsylvania State University; Karen L. Bierman, Department of Psychology, Pennsylvania State University; Robert J. McMahon, Department of Psychology, University of Washington. Members of the Conduct Problems Prevention Research Group are, listed in alphabetical order, as follows: Karen L. Bierman, Department of Psychology, Pennsylvania State University; John D. Coie, Department of Psychology, Duke University; Kenneth A. Dodge, Center for Child and Family Policy, Duke University; Mark T. Greenberg, Department of Human Development and Family Studies, Pennsylvania State University; John E. Lochman, Department of Psychology, University of Alabama; Robert J. McMahon, Department of Psychology, University of Washington; and Ellen E. Pinderhughes, Department of Child Development, Tufts University.

Karen L. Bierman, John D. Coie, Kenneth A. Dodge, Mark T. Greenberg, John E. Lochman, and Robert J. McMahon are the developers of the Fast Track curriculum and have a publishing agreement with Oxford University Press. Robert J. McMahon is a member of the Treatments That Work Scientific Advisory Board with Oxford University Press. He is a coauthor of *Helping the Noncompliant Child* and has a royalty agreement with Guilford Publications.

Support for this research was provided by the National Institute of Mental Health through Grants R18MH48083, R18MH59051, R18MH50952, R18MH50953, K05MH00797, and K05MH01027 to the Conduct Problems Prevention Research Group. The Center for Substance Abuse Prevention provided support through a memorandum of support with the National Institute of Mental Health, and the Department of Education provided support through Grant S184430002. We thank Joseph Schafer for his help with the multiple imputation procedures. We also thank the children, parents, teachers, school district personnel, research staff members, and clinical staff members who made Fast Track possible. More information concerning Fast Track is available at www.fasttrackproject.org

Correspondence concerning this article should be addressed to Robert L. Nix, Prevention Research Center, 109 South Henderson Building, Pennsylvania State University, University Park, PA 16802. E-mail: rnix@psu.edu

lenge when programs are offered on a preventive basis, before parents are motivated to seek help on their own.

Empirical research suggests that family characteristics, particularly single-parent status, socioeconomic disadvantage, and younger maternal age, are frequently associated with low levels of attendance (Reyno & McGrath, 2006; Spoth, Goldberg, & Redmond, 1999). Factors that contribute to experienced distress, such as unpleasant life events, parental depression, low social support, and neighborhood disadvantage, also can impede attendance (Kazdin, Mazurick, & Bass, 1993; Reyno & McGrath, 2006). The severity of child behavior problems sometimes appears to decrease attendance at parent management training (Kazdin et al., 1993) but sometimes appears to motivate attendance (Baydar et al., 2003).

It is unclear whether the same family characteristics that predict attendance are related to quality of participation in parent management training. Socioeconomic disadvantage, family distress, parental depression, and single-parent status have predicted lower quality of participation in some studies (Baydar et al., 2003; Dumas & Albin, 1986; Dumas et al., 2007). However, similar risk factors have predicted positive engagement in other studies (Baydar et al., 2003; Dumas et al., 2007).

## Relations Among Attendance, Quality of Participation, and Treatment Response

To date, few studies have addressed the extent to which attendance and the quality of participation are related to treatment response. There is some evidence that attendance does not predict treatment response (Smolkowski et al., 2005). For example, cultural adaptations of family programs can increase recruitment and attendance quite dramatically without affecting outcomes (Kumpfer, Alvarado, Smith, & Bellamy, 2002). There is other evidence that response to parent training is more heavily determined by socioeconomic disadvantage and family distress than by attendance or participation (Dumas & Albin, l986). A more recent study, however, found that quality of participation, but not attendance, predicted treatment response, including improvements in parent's depression and teacher ratings of child behavior (Garvey, Julion, Fogg, Kratovil, & Gross, 2006).

Because parent management training is often conducted in groups, the quality of participation of other group members might contribute to each parent's treatment response. In adult psychotherapy, there is a relation between perceptions of the group process and perceived learning, as rated by individual participants and group leaders (Piper, Marrache, Lacroix, Richardson, & Jones, 1983). The way in which group members rate each other's quality of participation also affects each group member's individual improvement (Ogrodniczuk & Piper, 2003).

## The Present Study

This study examined how attendance and quality of participation affect treatment response to parent management training. It focused on the group-based parent management training that was provided in Fast Track, a multicomponent intervention designed to prevent the development of serious conduct problems (Conduct Problems Prevention Research Group [CPPRG], 1992). We know that Fast Track was successful in improving many parenting behaviors and child outcomes (CPPRG, 1999). This study explored how that happened.

Our first goal was to determine whether the family characteristics that predicted attendance at parent groups also predicted quality of participation. On the basis of findings from previous research, we hypothesized that demographic attributes (e.g., race, single-parent status, parent age, parent education, and occupational prestige), stressful circumstances (e.g., unpleasant life events, being depressed, low social support, features of the home environment, and neighborhood quality), and the severity of children's behavior problems (both at home and at school) would negatively affect both attendance and quality of participation. We anticipated that we could lessen the impact of those family characteristics on attendance, but we predicted they still would hinder high-quality participation.

Our second goal was to determine whether attendance and quality of participation in parent management training were related to treatment response. We suspected that attendance was necessary but not sufficient. We hypothesized that high quality of participation would be related to greater gains in the targeted parenting domains, such as positive perceptions of children, warm interactions, reduced physical punishment, and involvement in children's education.

Our third goal was more exploratory. We examined the quality of participation of other group members as a predictor of a parent's treatment response. Although prior studies have suggested that interpersonal dynamics influence individual responses in adult group therapy, few if any studies of parent management training have examined such effects.

Our final goal was to determine whether attendance and quality of participation mediated the relation between family characteristics and parents' treatment response. Evidence of the mechanism by which family characteristics undermined family progress could help us refine future preventive interventions.

In pursuing those goals, this study had several strengths. First, it included an unusually large and diverse sample of families. Second, it used nested analyses, as is most appropriate for interventions received in groups. Third, this study relied on multiinformant outcome measures from parents, teachers, interviewers, and direct observations. Fourth, it focused on outcomes affected by intervention, and this focus instilled confidence that the changes we sought to understand were meaningful.

## Method

All aspects of this study were approved by the institutional review boards at Duke University, Vanderbilt University, Pennsylvania State University, and University of Washington.

### *Participants*

Fast Track selected 55 elementary schools serving low-income areas of Durham, North Carolina; Nashville, Tennessee; rural central Pennsylvania; and Seattle, Washington. Schools at each site were blocked into matched sets on the basis of size, percentage of students receiving reduced-price lunches, and ethnic composition and were randomly assigned to intervention or control conditions.

Within each school, a two-stage screening process identified those children at highest risk for the development of severe conduct problems. First, teachers rated the oppositional–aggressive behaviors of all kindergarten children in three consecutive cohorts/years ($n$ = 9,594). Parents then rated the aggressive–oppositional behavior of children who scored in the upper 40% on the teacher screen (91% participation rate, $n$ = 3,274). Teacher and parent scores were standardized and combined. Working downward from the highest total score, we selected children into the study until desired sample sizes were reached within sites, cohorts, and intervention conditions ($n$ = 891). Deviations were made when a child changed schools before first grade ($n$ = 59), a family refused to participate in the initial interview ($n$ = 75), or only one girl was in an intervention group.

The identified high-risk children who were attending intervention schools in the fall of first grade were invited to participate in Fast Track. This subsample included 445 children (72% boys; 45% European American, 53% African American, and 2% Asian American, Latino, or American Indian). Children were about 6 years old ($M$ = 6.47 years, $SD$ = 0.48) when the intervention began. Average $t$ scores on the externalizing scales of the Teacher's Report Form (Achenbach, 1991b) and the parent-reported Child Behavior Checklist (Achenbach, 1991a) were in the clinical range, at 66.31 and 61.34, respectively.

The parents (or primary caregivers) of these Fast Track children faced multiple stressors. Sixty-two percent of parents were single; 31% had not completed high school; and 45% were unemployed. About 45% of parents reported symptoms of depression in the clinical range. Twenty-three percent of parents were adolescents when the Fast Track child was born. Almost 40% of families were large and included 3 to 8 children. In 6% of families, the primary caregiver was not a parent.

### *The Fast Track Intervention*

During the first-grade intervention year, children participated in a universal social–emotional learning curriculum at school. They also participated in social skills training groups, a peer-pairing program designed to foster friendships with classmates, and individual academic tutoring.

*Fast Track parent groups.* During the first-grade intervention year, the caregivers of the Fast Track children were invited to 22 weekly parent groups. Across the four sites and three cohorts, there were 86 parent groups, each with about five or six families. To minimize barriers to involvement, we paid careful attention to the organization of parent sessions. Parent groups were held at children's schools in the late afternoons or on weekends. Transportation, child care, refreshments, and financial incentives ($15 per family per session) were provided. Although all adults who were involved in child rearing were invited to attend parent groups, it was usually mothers who attended groups regularly.

Parent groups were led by Fast Track family coordinators, who had advanced degrees and/or many years of experience in human services, and an assistant group leader, who usually was a graduate student. Family coordinators from all sites met for joint training at the beginning of the intervention. Family coordinators within each site participated in ongoing group and individual supervision. They followed a detailed manual for each session, so content was always similar across parent groups.

The curriculum of our parent groups was based on previous interventions with evidence of their efficacy (Forehand & McMahon, 1981; Webster-Stratton, 1989). The groups were focused on improving positive parent–child interactions, reducing harsh and punitive discipline, increasing consistent limit setting, and improving parents' involvement in children's education. We used a problem-solving model that was designed to actively engage parents in reflecting on parenting issues and setting goals. Sessions incorporated discussions, video examples, and role-play exercises to teach new strategies and present alternative means of handling common child-rearing challenges.

At the end of each 60-min parent group, there was a 30-min "sharing" time in which parents and children participated in structured activities, so parents could practice the new skills they had just learned. During biweekly home visits, family coordinators helped parents generalize lessons from groups to the home and addressed other concerns that might affect children's success.

### *Data Collection Procedures*

Most study data were collected during summer home interviews by research assistants who were not involved in delivering clinical services to the family and who were naive to intervention status. After reviewing confidentiality and obtaining consent, one research assistant interviewed the parent, and another research assistant interviewed the child in a separate room. All questions were read to parents. Research assistants also had teachers complete questionnaires about each child and family. Families and teachers received payment for their time.

Before they collected any data on their own, research assistants were required to demonstrate high levels of competence and reliability. They received extensive training, which included watching videotapes of interviews, observing other staff members administer live interviews, and administering practice and live interviews while they were being observed.

### *Measures*

All measures of family characteristics and baseline parenting were assessed the summer prior to the first-grade intervention. Attendance and quality of participation were assessed throughout the first-grade year. Outcome measures of parenting were assessed in the summer following the first-grade intervention.

*Family characteristics.* This study included several family characteristics that could predict attendance, quality of participation, and treatment response. Child race was coded as 1 for European Americans and 0 for all others. Single parent was coded as 1 for parents who were unmarried and did not have a long-term partner living in the home and 0 for all others. Parent age represented how old the parent was when the Fast Track child was born. Parent education was based on the highest grade parents had completed and was coded according to the 7-point Hollingshead scale. Parent occupation represented an index of professional skills and was coded according to the 10-point Hollingshead scale.

Our measure of stressful life events (Developmental History/Life Changes interview; available at www.fasttrackproject.org) represented the number and severity of 16 events, such as death of a loved one or loss of a job, during the past year (0 = *no exposure,* 1 = *minor stressor,* and 2 = *major stressor*). Parental

depression (Center for Epidemiological Studies Depression Scale; Radloff, 1977) represented how often parents had experienced 20 symptoms related to depression, such as crying, in the last week (1 = *rarely* to 4 = *almost all the time*; α = .88). Social support (Inventory of Parent Experiences; Crnic, 1983) reflected parents' satisfaction with six forms of instrumental and emotional support provided by family members and friends (0 = *very dissatisfied* to 3 = *very satisfied*; α = .77). The quality of the home environment (Post-Visit Inventory; available at www.fasttrackproject.org) was based on three ratings made by the parent interviewer, regarding the safety, cleanliness, and number of rooms in the home (α = .61; interrater agreement = .64). Neighborhood quality was the composite of three standardized measures (α = .69): United States Census Bureau data of five community characteristics, such as the percentage of families living in poverty (α = .92); parent ratings of five items about safety (Neighborhood Questionnaire; available at www.fasttrackproject.org; α = .70); and four interviewer ratings of factors such as noise level and the condition of the physical environment (Post-Visit Inventory; available at www.fasttrackproject.org; α = .70, interrater reliability = .69).

Child home behavior (Oppositional and Aggressive Behavior Scale of the Parent Daily Report; Chamberlain & Reid, 1987) was based on parents' reports of the presence or absence of 11 behaviors, such as hit somebody or teased somebody, on 3 separate days (α = .84). Child school behavior (Authority Acceptance Scale of the Teacher Observation of Classroom Adaptation—Revised; Werthamer-Larsson, Kellam, & Wheeler, 1991) included 10 teacher-rated items, such as stubborn and fights (0 = *almost never* to 5 = *almost always*; α = .93).

*Attendance and quality of participation in parent groups.* Parent group attendance was recorded by family coordinators and was computed as the percentage of sessions present. Quality of participation was rated by family coordinators, on the basis of criteria that are similar to those recommended and used elsewhere (e.g., Cunningham & Henggeler, 1999; Dumas et al., 2007; Karver, Handelsman, Fields, & Bickman, 2005). Family coordinators discussed the guidelines for ratings in group supervision and reviewed ratings of specific families in individual supervision.

Quality of participation for families in Cohort 1 was rated after each parent group. It was based on five items: the amount of participation in the parent group, the amount of participation in parent–child sharing time, the quality of participation in the parent group, the quality of participation in parent–child sharing time, and the completion of between-session homework assignments. Each item had three or five response options; higher scores represented more attentive, focused, and appropriate engagement (α = .88, when each rating was averaged across weeks and standardized). The correlation between the total score for the fall and spring was .68 ($p < .001$). Because family coordinators believed weekly ratings rarely changed and were redundant, quality of participation for families in Cohorts 2 and 3 was rated in December and May. It was based on six items: degree of interest displayed in the parent group, degree of interest displayed in the parent–child sharing time, degree of participation in the parent group, degree of participation in the parent–child sharing time, comprehension and acceptance of concepts in the parent group, and quality of implementation of skills in the parent–child sharing time. Each item had four behaviorally anchored response options; higher scores represented higher quality engagement (α = .90). The correlation for the total score for the fall and spring was .58 ($p < .001$). (Copies of the ratings of quality of participation are available from Robert L. Nix.)

For families in all cohorts, we computed and then combined mean scores for fall and spring. We standardized these scores among families in each cohort to create comparable scores across the rating systems. Scatter plots of scores (standard score vs. rank score) revealed virtually identical distributions across the rating systems. When analyses for this study were conducted separately, depending on how quality of participation was assessed, there were few meaningful differences. When interactions were computed between quality of participation and form of assessment, none were statistically significant. This suggested that both measures of quality of participation performed similarly.

*Parenting measures.* Four parenting domains were assessed in this study to represent a broad range of potential parent group effects. After parents described their child's personality, their relationship with their child, their child's strengths, and their child's particular challenges, interviewers made a rating of parental perceptions of the child (1 = *vague, unaware*; 2 = *slightly aware*; 3 = *average awareness*; 4 = *above average awareness*; 5 = *very perceptive*). Prior research has demonstrated that insight into children's experiences is related to quality of parental care (Newberger & White, 1989) and can be a protective factor in high-risk environments (Sameroff & Seifer, 1983). Parental warmth was assessed by observation of parent–child interactions during 20 min of semistructured tasks (Crnic & Greenberg, 1990). Child interviewers used 5-point Likert scales to make six ratings, such as sensitivity and gratification (α = .87 and .90 for the pre- and postintervention assessments, respectively; interrater reliability = .73). Use of physical punishment (Developmental History/Life Changes interview; available at www.fasttrackproject.org) was based on six vignettes describing common child behavior problems, including hitting another child and defying a parental request. After each vignette, the parent was asked to list the different ways she or he had addressed similar problems in the past year. The percentage of vignettes in which the parent freely recalled using a form of physical punishment was computed. The final parenting domain was school involvement (Kohl, Lengua, McMahon, & CPPRG, 2000), assessed via teacher ratings of 21 items, such as attendance at school events and support for child learning at home (α = .91 and .90 for the pre- and postintervention assessments, respectively).

## Results

Descriptive statistics for all variables are presented in Table 1. Once values for parent age and physical punishment were log transformed, skewness and kurtosis for all variables were below 1.12. Values for all variables were within the range of their response options; outliers appeared valid and simply reflected less common circumstances, such as the older age of primary caregivers who were grandmothers or the unusually high scores of parents who were clinically depressed. The inclusion/

Table 1
*Descriptive Statistics of Study Measures*

| Variable | *N* | *M* | *SD* | Min. | Max. |
|---|---|---|---|---|---|
| Race (1 = European American, 0 = other) | 445 | 0.45 | na | 0.00 | 1.00 |
| Single parent | 445 | 0.62 | na | 0.00 | 1.00 |
| Parent age, years | 445 | 25.20 | 6.73 | 13.62 | 60.17 |
| Parent education | 444 | 3.95 | 1.10 | 1.00 | 7.00 |
| Parent occupation | 444 | 2.36 | 2.55 | 0.00 | 9.00 |
| Stressful life events | 441 | 5.25 | 4.24 | 0.00 | 22.00 |
| Parental depression | 444 | 0.79 | 0.49 | 0.00 | 2.85 |
| Social support | 444 | 2.20 | 0.59 | 0.00 | 3.00 |
| Home environment | 415 | 9.28 | 1.87 | 3.00 | 12.00 |
| Neighborhood quality | 445 | 0.00 | 1.00 | −3.23 | 2.25 |
| Child home behavior | 443 | 0.26 | 0.17 | 0.00 | 0.83 |
| Child school behavior | 445 | 1.73 | 1.07 | 0.00 | 4.90 |
| Parent group engagement | | | | | |
| Attendance | 445 | 0.67 | 0.29 | 0.00 | 1.00 |
| Quality of participation | 416 | 0.00 | 1.00 | −3.50 | 1.61 |
| Preintervention parenting | | | | | |
| Perceptions of child | 441 | 3.17 | 0.92 | 1.00 | 5.00 |
| Parental warmth | 445 | 3.62 | 0.80 | 1.17 | 5.00 |
| Physical punishment | 444 | 0.21 | 0.21 | 0.00 | 1.00 |
| School involvement | 388 | 1.03 | 0.59 | 0.00 | 3.40 |
| Postintervention parenting | | | | | |
| Perceptions of child | 429 | 3.25 | 0.95 | 1.00 | 5.00 |
| Parental warmth | 427 | 3.74 | 0.82 | 1.00 | 5.00 |
| Physical punishment | 430 | 0.15 | 0.18 | 0.00 | 1.00 |
| School involvement | 426 | 0.98 | 0.51 | 0.00 | 3.00 |

*Note.* na = not applicable.

deletion of outliers did not affect study results. For all analyses, we relied on multiple imputation procedures appropriate for nested designs (Schafer & Yucel, 2002). We created 25 complete data sets and combined parameter estimates across those data sets to minimize problems from missing data.

Correlations among family characteristics are presented in the top of Table 2. Correlations between family characteristics and parenting outcomes are presented in the bottom of the table. Correlations between family characteristics and attendance/quality of participation are presented in Table 3, where they can be compared with their unique effects. Correlations between attendance/quality of participation and parenting outcomes are presented in Table 4, where they can be compared with their unique effects.

Table 2
*Correlations Between Study Measures*

| Variable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Family characteristics | | | | | | | | | | | | |
| 1. Race | — | | | | | | | | | | | |
| 2. Single parent | −.40 | — | | | | | | | | | | |
| 3. Parent age | .08 | −.16 | — | | | | | | | | | |
| 4. Parent education | .05 | −.14 | .38 | — | | | | | | | | |
| 5. Parent occupation | −.01 | −.07 | .27 | .41 | — | | | | | | | |
| 6. Stressful life events | .24 | .01 | .06 | .06 | .02 | — | | | | | | |
| 7. Parental depression | −.06 | .21 | −.20 | −.24 | −.21 | .20 | — | | | | | |
| 8. Social support | .10 | −.12 | −.01 | .00 | −.01 | −.15 | −.30 | — | | | | |
| 9. Home environment | −.01 | −.13 | .13 | .22 | .22 | −.09 | −.16 | .03 | — | | | |
| 10. Neighborhood quality | .45 | −.34 | .20 | .26 | .25 | .05 | −.29 | .14 | .33 | — | | |
| 11. Child home behavior | .25 | −.12 | .08 | .12 | .00 | .21 | .16 | −.21 | .03 | .08 | — | |
| 12. Child school behavior | −.16 | .17 | .00 | −.08 | −.09 | −.02 | .07 | .01 | −.09 | −.16 | .00 | — |
| Postintervention parenting | | | | | | | | | | | | |
| Perceptions of child | −.15 | .04 | .09 | .33 | .28 | .00 | −.18 | .03 | .18 | .04 | −.09 | −.06 |
| Parental warmth | .17 | −.20 | .10 | .25 | .28 | .10 | −.19 | .09 | .21 | .26 | .08 | −.14 |
| Physical punishment | −.13 | .04 | −.04 | −.15 | −.07 | .05 | .10 | −.04 | .00 | −.15 | .02 | .01 |
| School involvement | .01 | −.10 | .20 | .23 | .18 | .00 | −.19 | .08 | .03 | .12 | .02 | −.05 |

*Note.* Correlations with an absolute value greater than .12 are statistically significant at the .01 probability level.

Table 3
*Factors Associated With Attendance and Quality of Participation in Parent Groups*

| | Attendance | | Quality of participation | |
|---|---|---|---|---|
| Variable | Zero-order correlation | Standardized partial regression coefficient | Zero-order correlation | Standardized partial regression coefficient |
| Race | .15** | .10 | .14** | −.06 |
| Single parent | −.07 | .00 | −.19*** | −.20 |
| Parent age | .12** | .10 | .19*** | .03 |
| Parent education | .07 | .07 | .27*** | .16** |
| Parent occupation | −.05 | −.07 | .26*** | .15** |
| Stressful life events | .08 | .03 | .06 | .05 |
| Parental depression | −.04 | −.07 | −.15*** | −.05 |
| Social support | −.05 | −.07 | .01 | −.02 |
| Home environment | −.03 | .00 | .17*** | .11 |
| Neighborhood quality | .01 | −.09 | .17*** | −.05 |
| Child home behavior | .08 | .03 | .01 | −.06 |
| Child school behavior | .00 | .02 | −.13** | −.07 |

*Note.* $^{**}p < .01$. $^{***}p < .001$.

### *Predictors of Attendance and Quality of Participation*

On average, parents attended 17 of the 22 scheduled parent management training sessions. Over 75% of parents attended at least 11 sessions, and over 25% of parents attended at least 20 sessions. Only 4% of parents did not attend any sessions. Although some parents received the lowest scores possible, most parents received high scores for the quality of their participation. Parents in Cohort 1 received an average score of 2.63 on the 3-point scales. Parents in Cohorts 2 and 3 received an average score of 3.28 on the 4-point scales. In this sample, the correlation between attendance and quality of participation was .38 ($p < .001$), which is comparable to the correlation found in other studies (e.g., Dumas et al., 2007).

In the first stage of data analyses, we identified family characteristics that predicted attendance and quality of participation in parent management training. As shown in the first column of Table 3, zero-order correlations revealed that being European American and being older were slightly related to parents' attendance at group sessions. In contrast, as shown in the third column of Table 3, zero-order correlations suggested that several family characteristics were related to parents' quality of participation, including being European American, having a spouse or long-term partner, being older, having more education, having a more prestigious job, being less depressed, having a better home environment, living in a better neighborhood, and having a child with less severe behavior problems at school. (Given the large sample size and the large number of tests conducted, only findings that were significant at the $p < .01$ level are reported throughout this study.)

To determine the unique contribution of those family characteristics to attendance and quality of participation, we estimated hierarchical linear models, in which families were nested within their parent management training groups. In these hierarchical linear models, all 12 family characteristics, site, and cohort were included. In these analyses, only random intercepts were estimated; the effect of an independent variable was never allowed to vary across groups. Intraclass correlation coefficients revealed that the specific groups parents were part of accounted for 3% of the variance in attendance ($p$ = ns) and 22% of the variance in quality of participation ($p < .001$), after all other factors were considered.

As shown in the second column of Table 3, these hierarchical linear models revealed that no family characteristics were uniquely related to attendance at parent management training. None of the standardized partial regression coefficients were statistically significant, once the effects of the other family characteristics, cohort, site, and the nesting of families within groups were accounted for. In contrast, as shown in the fourth column of Table 3, hierarchical linear models revealed that both parent education and parent occupation were uniquely related to quality of participation, with standardized partial regression coefficients of .16 ($p < .01$, 95% confidence interval [CI] = .05–.27) and .15 ($p < .01$, 95% CI = .05–.25), respectively,

Table 4
*Attendance and Quality of Participation as Predictors of Parents' Treatment Response*

| | Attendance | | Quality of participation | |
|---|---|---|---|---|
| Variable | Zero-order correlation | Standardized partial regression coefficient | Zero-order correlation | Standardized partial regression coefficient |
| Perceptions of child | −.01 | −.01 | .20*** | .14** |
| Parental warmth | −.01 | −.09 | .26*** | .14** |
| Physical punishment | −.04 | .00 | −.16*** | −.16** |
| School involvement | .16*** | .09 | .31*** | .23*** |

*Note.* $^{**}p < .01$. $^{***}p < .001$.

even after controlling for the other family characteristics, site, cohort, and group effects.

### *Predictors of Treatment Response*

In the second stage of data analyses, we tested whether attendance and quality of participation in parent management training groups predicted parents' response to the Fast Track intervention. As shown in the first column of Table 4, zero-order correlations revealed that parents' attendance at groups was not related to parents' perceptions of children, parental warmth, or physical punishment at the end of the first-grade year; however, attendance was related to school involvement. In contrast, as shown in the third column of Table 4, zero-order correlations revealed that quality of participation in groups was related to all four domains of parenting. Because the absolute values of the correlations between the domains of parenting ranged from .08 ($p$ = ns) to .30 ($p <$ .001), it is unlikely that similarities in findings are due to redundancy in measurement alone.

To determine the unique contribution of parents' attendance and quality of participation to treatment response, we again estimated hierarchical linear models and nested families within their parent management training groups. In these models, we included the 12 family characteristics, site, and cohort as covariates to ensure their effects were not mistakenly attributed to attendance or quality of participation. In addition, we included the pretreatment score for the outcome measure of parenting to increase the precision of estimates and to model change in the parenting domains. (The correlations between the pre- and postintervention scores of the four domains of parenting ranged from .33 [$p <$ .001] to .43 [$p <$ .001].) Once again, only random intercepts were estimated; the effects of the independent variables were constant across parent groups. Intraclass correlation coefficients revealed that, once all other factors were accounted for, the specific treatment groups that parents were part of accounted for 6% of the variance in parents' perceptions of children ($p$ = ns), 14% of the variance in parental warmth ($p <$ .01), 1% of the variance in physical punishment ($p$ = ns), and 16% of the variance in school involvement ($p <$ .01).

As shown in the second column of Table 4, the hierarchical linear models revealed that attendance at parent groups was not uniquely predictive of change in any parenting domain. However, as shown in the fourth column of Table 4, quality of participation in parent groups was uniquely predictive of change in all four parenting domains. Even when we controlled for the 12 family characteristics, site, cohort, pretreatment scores on the same parenting measure, attendance at parent groups, and the nesting of parents within groups, quality of participation continued to account for unique variance in all four parenting domains. The partial regression coefficients of quality of participation were as follows: $\beta$ = .14 ($p <$ .01, 95% CI = .03–.24) for parents' perceptions of children; $\beta$ = .14 ($p <$ .01, 95% CI = .04–.25) for parental warmth; $\beta$ = −.16 ($p <$ .01, 95% CI = −.27 to −.06) for physical punishment; and $\beta$ = .23 ($p$ = .001, 95% CI = .13–.34) for school involvement.

### *The Effect of Other Group Members on Parents' Treatment Response*

Next, we explored whether the quality of participation of other group members affected a parent's treatment response. To do this, we reestimated the hierarchical linear models predicting change in the four parenting domains, but we added the average quality of participation score for all other group members. In the groups, there was a moderate relation between individual parent's quality of participation and the group average quality of participation ($r$ = .31, $p <$ .001).

The addition of this average score produced virtually no change in the coefficients for the variables in the hierarchical linear models, including parents' own quality of participation. Moreover, the average quality of participation of other group members was not related to change in parents' perceptions of children, $\beta$ = −.10 ($p$ = ns); change in parental warmth, $\beta$ = .02 ($p$ = ns); change in use of physical punishment, $\beta$ = .08 ($p$ = ns); or change in school involvement, $\beta$ = .02 ($p$ = ns).

### *The Mediating Role of Quality of Participation*

In the final stage of data analysis, we wanted to determine whether quality of participation in parent groups mediated relations between family characteristics and parents' treatment response (Dearing & Hamilton, 2006). Attendance at parent groups could not be a significant mediator because it was not uniquely predicted by the preintervention family characteristics, and it was not uniquely related to any of the outcomes.

In the first stage of data analyses, we determined that parent education and parent occupation were significant and unique predictors of quality of participation in the parent groups. In the second stage of data analyses, we determined that quality of participation was a significant and unique predictor of perceptions of the child, parental warmth, physical punishment, and school involvement. When we assessed the indirect paths between those two family characteristics and each parenting outcome, using a test of joint significance with asymmetric confidence intervals (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), quality of participation always emerged as a significant mediator at the .01 probability level. This result suggests that parent education and parent occupation affected treatment response because of their initial impact on parents' quality of participation.

## Discussion

This study examined attendance at parent groups, quality of participation, and treatment response. It found that family characteristics, such as demographic attributes, stressful family circumstances, and the severity of children's behavior problems, tended to be unrelated to attendance at parent groups, but they were related to quality of participation. Moreover, this study found that quality of participation, rather than attendance, was the consistent predictor of treatment response.

The fact that there were virtually no meaningful predictors of attendance at parent groups probably reflects Fast Track's special efforts to facilitate participation. Previous studies have found that risk factors related to conduct problems are often associated with dropping out of treatment for those problems (Kazdin et al., 1993; Reyno & McGrath, 2006). Fast Track was designed to surmount most barriers and to support access to treatment for all families. By holding groups in children's schools at convenient times, by offering snacks and small monetary incentives, and by providing

child care and transportation as necessary, Fast Track made it more likely that all families could attend parent management training.

Although we were able to minimize the impact of family characteristics on parents' attendance at groups, those factors still appeared to influence the quality of participation. In general, parents who faced more challenges in their lives—particularly those parents with less education and lower skill jobs—were less likely to show high-quality participation in the parent management training. This finding is consistent with prior research of similar families (Dumas et al., 2007).

The fact that attendance at parent groups was not uniquely related to treatment response in Fast Track could be due to a ceiling effect or restricted range. As in other studies with high rates of attendance (e.g., Beauchaine, Webster-Stratton, & Reid, 2005), the majority of parents might have gone to enough sessions to bring about change; this may have left insufficient variability with which to detect dose–response relations.

The most important finding of this study was that, in addition to merely attending groups, parents needed to be engaged in groups to achieve the greatest treatment response. Although most mental health professionals might have suspected as much, there are few studies that have documented this relation (Nock & Ferriter, 2005). This finding affirms the value of working hard to ensure that all families feel comfortable actively contributing to discussions and participating in intervention activities.

Overall, the magnitude of the effects of quality of participation on the four parenting domains was small to moderate. It was encouraging to learn, however, that quality of participation in 22 parent groups could have an impact on family interactions formed over many years. It may be that children's school entry represents a time of natural transition for parents, when they are more open to reflecting on and making changes in their caregiving practices.

It was interesting that significant between-group effects existed for parental warmth and school involvement, even after we controlled for all of the family characteristics and parents' quality of participation. Most likely, these between-group effects were due to the family coordinators who functioned as group leaders and provided home visits to each parent. Previous research has found that the quality of the relationship that parents form with their therapist may be important in eliciting both attendance and engagement (Robbins, Turner, Alexander, & Perez, 2003). In previous research from Fast Track, the engagement of family coordinators predicted the quality of participation of parents (Orrell-Valente, Pinderhughes, Valente, Laird, & CPPRG, 1999). Notably, the engagement of family coordinators was higher when they came from backgrounds similar to those of parents and had similar experiences.

It was surprising that the quality of participation of other group members did not contribute to parents' own treatment response. One of the reasons for providing parent management training in groups is so parents can learn from each other. This appears to be less important than parents' own engagement in the learning process.

The mediation analyses suggested that parents with less education and with less prestigious jobs tended to participate less enthusiastically in the parent groups and tended to make fewer treatment gains as a result. In another study that examined profiles of participation in the various components of Fast Track (Nix, Pinderhughes, Bierman, Maples, & CPPRG, 2005), we identified a subset of families who showed low rates of attendance at groups but who were quite willing to receive home visits. These families were disproportionately African American and low in socioeconomic status. In light of the findings from both studies, one hypothesis is that the educational format of the Fast Track groups—and of most other parent management training—is less comfortable for parents of low socioeconomic status. The standard curriculum of these groups might seem less relevant to parents who are struggling under conditions of severe hardship. These families appear to be more receptive to parenting interventions that are delivered individually. Such an approach enables a more flexible tailoring of material to the parent's educational level. It also allows staff members to better understand families' particular circumstances and to personalize suggestions.

### *Limitations of the Present Study*

As with most research, several factors affect confidence in the conclusions that can be drawn from this study. First and most important, we relied on family coordinators who led parent groups to make ratings of quality of participation. The family coordinators may have noticed which parents appeared to be improving and simply rated them more highly on the process measures. Although previous research that has used similar measures of quality of participation has found high levels of agreement between the ratings of group leaders and assistants (Dumas et al., 2007), we did not have our assistants complete these ratings, and we did not videotape sessions. There was no way for us to assess reliability.

Second, our measure of quality of participation was rather general and nonspecific. It appears that quality of participation was important to treatment response, but it is unclear which aspects of quality of participation were truly meaningful.

Third, Fast Track did not collect data on family coordinators and how their behaviors and worldviews affected parents' treatment response. Differences in how family coordinators interacted with each parent might have made an important contribution to individual change.

Fourth, because this study included only families in the intervention condition of Fast Track, it was not possible to determine whether there was improvement among parents who did not attend groups on a regular basis and who did not display high quality of participation. We know those parents did not improve as much as did parents who were more actively engaged, but it would take a different kind of study to assess absolute level of improvement.

Fifth, this study focused on the relations between parent group experiences and parent outcomes, but families participated in several other components of Fast Track as well. Exploratory analyses suggested that attendance and the quality of participation in home visits—which were rated by the same family coordinators who rated quality of participation in parent groups—were unrelated to improvements in parenting. Nonetheless, it could be that engagement across the different components of Fast Track contributed to the treatment response we examined here.

Sixth, it is important to remember that we examined changes in parenting behavior during children's first-grade year only. This study suggests that the lowest risk parents made the greatest initial gains. However, other research suggests that Fast Track was most effective at preventing psychiatric diagnoses among the highest risk children (CPPRG, 2007). It would be a mistake to overgen-

eralize the findings presented here and assume that programs such as Fast Track are not effective for families with the greatest need.

Finally, this study was based on data from a multicomponent efficacy trial. The primary goal of Fast Track was to demonstrate whether serious conduct problems could be prevented at all. It is unclear what aspects of this kind of trial would apply to settings with fewer resources.

### *Summary and Clinical Implications*

This study has a simple take-home message: To make the greatest gains, parents not only must attend parent management training but also must participate in a high-quality manner. The ability and willingness of parents to pay attention, stay on topic, participate in discussions, and enact role plays in their groups was uniquely related to improvements in parents' perceptions of children, warmth, use of nonharsh discipline, and school involvement.

At this point, there is more empirical evidence about how to ensure attendance than how to promote high-quality participation. Some intervention programs have reported especially high rates of engagement among distressed youths and families (e.g., Cunningham & Henggeler, 1999); there may be valuable lessons to learn from those exemplar interventions. We know that the way clinicians interact with parents can affect the quality of their participation in treatment (Harwood & Eyberg, 2004; Orrell-Valente et al., 1999; Patterson & Forgatch, 1985). We also know that parents are more engaged when treatment focuses on parenting stress or adult issues as well as child management training (Kazdin & Whitley, 2003; Prinz & Miller, 1994). It is not surprising that parents are more engaged when they perceive treatment as relevant to their needs (Kazdin, 2000). There is promising recent evidence that motivational interviewing can help parents access services relevant to their needs (Shaw, Dishion, Supplee, Gardner, & Arends, 2006). There also is recent evidence that the strategic use of video feedback can help parents reflect on and change the most fundamental aspects of their relationships with their children (Hoffman, Marvin, Cooper, & Powell, 2006). As treatment providers become more adept at facilitating high-quality participation, families are more likely to benefit from preventive interventions.

## References


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

Achenbach, T. M. (1991b). *Manual for the Teacher's Report Form and 1991 Profile.* Burlington, VT: University of Vermont Department of Psychiatry.

Baydar, N., Reid, M. J., & Webster-Stratton, C. (2003). The role of mental health factors and program engagement in the effectiveness of a preventive parenting program for Head Start mothers. *Child Development, 74,* 1433–1453.

Beauchaine, T. P., Webster-Stratton, C., & Reid, M. J. (2005). Mediators, moderators, and predictors of 1-year outcomes among children treated for early-onset conduct problems: A latent growth curve analysis. *Journal of Consulting and Clinical Psychology, 73,* 371–388.

Chamberlain, P., & Reid, J. B. (1987). Parent observation and report of child symptoms. *Behavioral Assessment, 9,* 97–109.

Conduct Problems Prevention Research Group. (1992). A developmental and clinical model for the prevention of conduct disorder: The FAST Track Program. *Development and Psychopathology, 4,* 509–527.

Conduct Problems Prevention Research Group. (1999). Initial impact of the Fast Track prevention trial for conduct problems: I. The high-risk sample. *Journal of Consulting and Clinical Psychology, 67,* 631–647.

Conduct Problems Prevention Research Group. (2007). The Fast Track randomized controlled trial to prevent externalizing psychiatric disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 46,* 1250–1262.

Crnic, K. A. (1983). *Inventory of Parent Experiences.* Unpublished manuscript, Pennsylvania State University.

Crnic, K. A., & Greenberg, M. T. (1990). Minor parenting stresses with young children. *Child Development, 61,* 1628–1637.

Cunningham, P. B., & Henggeler, S. W. (1999). Engaging multiproblem families in treatment: Lessons learned throughout the development of multisystemic therapy. *Family Process, 38,* 265–281.

Dearing, E., & Hamilton, L. C. (2006). Contemporary advances and classic advice for analyzing mediating and moderating variables. *Monographs of the Society for Research in Child Development, 71,* 88–104.

Dumas, J. E., & Albin, J. B. (1986). Parent training outcome: Does active parental involvement matter? *Behaviour Research and Therapy, 24,* 227–230.

Dumas, J. E., Nissley-Tsiopinis, J., & Moreland, A. D. (2007). From intent to enrollment, attendance, and participation in preventive parenting groups. *Journal of Child and Family Studies, 16,* 1–26.

Forehand, R., & McMahon, R. J. (1981). *Helping the noncompliant child: A clinician's guide to parent training.* New York: Guilford Press.

Garvey, C., Julion, W., Fogg, L., Kratovil, A., & Gross, D. (2006). Measuring participation in a prevention trial with parents of young children. *Research in Nursing and Health, 29,* 212–222.

Harwood, M. D., & Eyberg, S. M. (2004). Therapist verbal behavior early in treatment: Relation to successful completion of parent–child interaction therapy. *Journal of Clinical Child and Adolescent Psychology, 33,* 601–612.

Hoffman, K. T., Marvin, R. S., Cooper, G., & Powell, B. (2006). Changing toddlers' and preschoolers' attachment classifications: The Circle of Security intervention. *Journal of Consulting and Clinical Psychology, 74,* 1017–1026.

Karver, M. S., Handelsman, J. B., Fields, S., & Bickman, L. (2005). A theoretical model of common process factors in youth and family therapy. *Mental Health Services Research, 7,* 35–51.

Kazdin, A. E. (2000). Perceived barriers to treatment participation and treatment acceptability among antisocial children and their families. *Journal of Child and Family Studies, 9,* 157–174.

Kazdin, A. E., Mazurick, J. L., & Bass, D. (1993). Risk for attrition in treatment of antisocial children and families. *Journal of Clinical Child Psychology, 22,* 1–16.

Kazdin, A. E., & Weisz, J. R. (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology, 66,* 19–36.

Kazdin, A. E., & Whitley, M. K. (2003). Treatment of parental stress to enhance therapeutic change among children referred for aggressive and antisocial behavior. *Journal of Consulting and Clinical Psychology, 71,* 504–515.

Kohl, G. O., Lengua, L. L., McMahon, R. J., & the Conduct Problems Prevention Research Group. (2000). Parent involvement in school: Conceptualizing multiple dimensions and their relations with family and demographic risk factors. *Journal of School Psychology, 38,* 501–523.

Kumpfer, K. L., Alvarado, R., Smith, P., & Bellamy, N. (2002). Cultural sensitivity and adaptation in family-based prevention interventions. *Prevention Science, 3,* 241–246.

MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods, 7,* 83–104.

McMahon, R. J. (2006). Parent training interventions for preschool-age children. In R. E. Tremblay, R. G. Barr, & R. DeV. Peters (Eds.),

*Encyclopedia on early childhood development* (pp. 1–8). Retrieved May 23, 2006, from http://www.excellence-earlychildhood.ca/documents/McMahonRJANGxp.pdf

Newberger, C. M., & White, K. M. (1989). Cognitive foundations for parental care. In D. Cicchetti & V. Carlson (Eds.), *Child maltreatment: Theory and research on consequences of child abuse and neglect* (pp. 302–316). New York: Cambridge University Press.

Nix, R. L., Pinderhughes, E. E., Bierman, K. L., Maples, J. J., & the Conduct Problems Prevention Research Group. (2005). Decoupling the relation between risk factors for conduct problems and the receipt of intervention services: Participation across multiple components of a prevention program. *American Journal of Community Psychology, 36,* 307–325.

Nock, M. K., & Ferriter, C. (2005). Parent management of attendance and adherence in child and adolescent therapy: A conceptual and empirical review. *Clinical Child and Family Psychology Review, 8,* 149–166.

Ogrodniczuk, J. S., & Piper, W. E. (2003). The effect of group climate on outcome in two forms of short-term group therapy. *Group Dynamics: Theory, Research, and Practice, 7,* 64–76.

Orrell-Valente, J. K., Pinderhughes, E. E., Valente, E., Jr., Laird, R. D., & the Conduct Problems Prevention Research Group. (1999). If it's offered, will they come? Influences on parents' participation in a community-based conduct problems prevention program. *American Journal of Community Psychology, 27,* 753–783.

Patterson, G. R., & Forgatch, M. S. (1985). Therapist behavior as a determinant for client noncompliance: A paradox for the behavior modifier. *Journal of Consulting and Clinical Psychology, 53,* 846–851.

Piper, W. E., Marrache, M., Lacroix, R., Richardson, A. M., & Jones, B. D. (1983). Cohesion as a basic bond in groups. *Human Relations, 36,* 93–108.

Prinz, R. J., & Miller, G. E. (1994). Family-based treatment for childhood antisocial behavior: Experimental influences on dropout and engagement. *Journal of Consulting and Clinical Psychology, 62,* 645–650.

Radloff, L. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Journal of Applied Psychological Measurement, 1,* 385–401.

Reyno, S. M., & McGrath, P. J. (2006). Predictors of parent training efficacy for child externalizing behavior problems—a meta-analytic review. *Journal of Child Psychology and Psychiatry, 47,* 99–111.

Robbins, M. S., Turner, C. W., Alexander, J. F., & Perez, G. A. (2003). Alliance and dropout in family therapy for adolescents with behavior problems: Individual and systemic effects. *Journal of Family Psychology, 17,* 534–544.

Sameroff, A. J., & Seifer, R. (1983). Familial risk and child competence. *Child Development, 54,* 1254–1268.

Schafer, J. L., & Yucel, R. M. (2002). Computational strategies for multivariate linear mixed-effects models with missing values. *Journal of Computational and Graphical Statistics, 11,* 421–442.

Shaw, D. S., Dishion, T. J., Supplee, L., Gardner, F., & Arends, K. (2006). Randomized trial of a family-centered approach to the prevention of early conduct problems: 2-year effects of the Family Check-Up in early childhood. *Journal of Consulting and Clinical Psychology, 74,* 1–9.

Smith, E. C., & Grawe, K. (2003). What makes psychotherapy sessions productive? A new approach to bridging the gap between process research and practice. *Clinical Psychology and Psychotherapy, 10,* 275–285.

Smolkowski, K., Biglan, A., Barrera, M., Taylor, T., Black, C., & Blair, J. (2005). Schools and homes in partnership (SHIP): Long-term effects of a preventive intervention focused on social behavior and reading skill in early elementary school. *Prevention Science, 6,* 113–125.

Soldz, S., Budman, S., Demby, A., & Feldstein, M. (1990). Patient group activity and outcome in group psychotherapy: New findings. *International Journal of Group Psychotherapy, 40,* 53–62.

Spoth, R., Goldberg, C., & Redmond, C. (1999). Engaging families in longitudinal preventive research: Discrete-time survival analysis of socioeconomic and social–emotional risk factors. *Journal of Consulting and Clinical Psychology, 67,* 157–163.

Webster-Stratton, C. (1989). *The parents and children series.* Eugene, OR: Castalia.

Werthamer-Larsson, L., Kellam, S. G., & Wheeler, L. (1991). Effect of first grade classroom environment on shy behavior, aggressive behavior, and concentration problems. *American Journal of Community Psychology, 19,* 585–602.

Yalom, I. D. (1995). *The theory and practice of group psychotherapy* (4th ed.). New York: Basic Books.

Received January 16, 2008
Revision received December 8, 2008
Accepted December 19, 2008 ■