

## The Long-Term Effectiveness and Clinical Significance of Three Cost-Effective Training Programs for Families With Conduct-Problem Children

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We evaluated the long-term effectiveness of three cost-effective parent training programs for conduct-problem children. One year posttreatment, 93.1% of families (94 mothers and 60 fathers) were assessed on the basis of teacher and parent reports and home observations. Results indicated that all the significant improvements reported immediately posttreatment were maintained one year later. Moreover, approximately two thirds of the entire sample showed "clinically significant" improvements. There were very few differences between the three treatment conditions except for the "consumer satisfaction" measure indicating that the treatment combining group discussion and videotape modeling was superior to treatments without both components.

A growing body of evidence supports the efficacy of videotape modeling social learning-based approaches for training parents who have behavior-problem children. The cost effectiveness of the programs and their ability to be disseminated to large numbers of parents, even self-administered without a therapist, make them an appealing alternative to the more costly, traditional forms of treatment for child-behavior problems, which rarely reach those most in need of services. However, while they have been shown to produce short-term results (e.g., O'Dell, O'Quinn, Alford, O'Brian, Bradlyn, & Giebenhain, 1982; Webster-Stratton, 1984), little is known about their long-term effects or their ability to produce "clinically relevant" improvements (Jacobson, Follette, & Revenstorf, 1984; Kazdin, 1977).

Recently Webster-Stratton, Kolpacoff, and Hollinsworth (1988) conducted a study to determine the active change-inducing ingredient of a parent training program based on therapist-led group discussion and videotape modeling (GDVM). They randomly assigned families with conduct-problem children to one of four conditions: An individually self-administered videotape modeling treatment (IVM), a group discussion videotape modeling treatment (GDVM), a group discussion treatment (GD), and a waiting-list control group (CON). Results immediately posttreatment suggested that all three treatment programs resulted in significant parent-report and parent-child behavioral improvements compared with waiting-list control families. There were relatively few differences between the three treatment conditions, although the differences found consistently favored the combined GDVM treatment. The results relative to the IVM treatment also suggested the potential power of parents to learn how to change their own behaviors, as well

as their children's behaviors, from self-administered videotape programs. However, it was unclear whether the IVM treatment program that did not have skilled therapist feedback or group support would be able to sustain its effectiveness or whether the GDVM program would be able to maintain its superiority over the other two treatment approaches over time.

The present study determined (a) whether the three treatment groups maintained their initial effectiveness or resulted in significant group differences at 1-year follow-up assessments and (b) the extent to which each treatment program produced clinically important changes, that is, improvements within the nonclinical range of functioning.

### Method

The original subjects in the study were 114 mothers and 80 fathers with conduct-problem children, aged 3 to 8 years. Once they were admitted to the study, we randomly assigned them to one of three treatment programs or to a waiting-list control group. Parents assigned to GDVM treatment met weekly for 10-12 2-hour sessions in groups of 10-15 parents. A therapist led a group discussion focused on over 200 videotape vignettes of parent-child interactions. The parents assigned to the IVM condition met weekly for 10-12 self-administered videotape sessions. They saw the identical videotapes as the parents in the GDVM condition without the benefit of therapist feedback or group discussion. Parents assigned to the GD condition met weekly for 10-12 2-hour sessions, in groups of 10-15 parents. A therapist led a group discussion of the same topics as covered in GDVM, only without the benefit of videotape examples. The control families waited for 4 months and then were randomly assigned to one of the three treatment conditions.

Of the original 114 families, seven mothers and seven fathers either dropped out before posttreatment assessment or did not complete 50% of the treatment sessions; six mothers and three fathers dropped out of the control group during the 4-month waiting period. Of the remaining 101 mothers and 70 fathers who completed treatment and immediate posttreatment assessments, 94 mothers (93.1%) and 60 fathers (85.7%) and their children completed 1-year follow-up assessments. Of those 7 mothers and 10 fathers who completed treatment but not one-year fol-

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4.45,  $p < .001$ ; GDVM mothers also perceived their treatment program as significantly easier to implement than did IVM mothers,  $t(87) = 3.60$ ,  $p < .001$ . GD mother consumer evaluation scores generally fell intermediate between GDVM and IVM mother scores. Analyses of father scores revealed significant effects for the "consumer satisfaction" score concerning difficulty of implementing parent skills,  $F(2, 50) = 4.84$ ,  $p < .01$ . Further comparisons revealed that GDVM fathers perceived their treatment programs as easier to implement than did IVM fathers,  $t(50) = 3.11$ ,  $p < .003$ , who did not have the benefit of therapist-led group discussion.

Analyses of the Follow-up Satisfaction Questionnaire revealed that 52 mothers (57.8%) and 25 fathers (45.5%) were still concerned about at least one behavior problem with their children. Of those concerned parents, 18 mothers and 4 fathers were concerned about peer and sibling problems; 19 mothers and 6 fathers with noncompliance; 9 mothers and 1 father with hyperactivity; and 13 mothers and 1 father with aggression. Only 2 of the 101 families had received further therapy for their child over the year after treatment, but 15 (16.7%) mothers and 6 (10.9%) fathers reported they wanted more therapy for their child. Forty-six (52.3%) families wanted a refresher parenting course. Nine (9.9%) of the children were receiving special education in school, and three had been put on medication for Attention Deficit Disorder. Over the year since treatment, 12 of the mothers had received therapy for marital problems; 14 mothers for depression. In addition, 6 mothers and 2 fathers indicated that they wanted therapy for marital problems; 13 mothers and 7 fathers for depression. Note that 31.1% of mothers and 9.1% of fathers reported two or more problems; thus the bulk of the mothers' complaints were made by somewhat less than one third of the sample, while 42% of mothers and 54.5% of fathers reported no further complaints or needs for services for their families. Chi-square analyses revealed no differences between the three treatment groups in terms of numbers or types of parent concerns about their children or posttreatment therapy sought.

Finally, to assess the "clinical significance" of follow-up findings, we used several conservative criteria. For the parent reports of the child adjustment criterion, parents had to report a CBCL  $T$  score of 63 or lower, because Achenbach and Edelbrock (1983) have identified this score as the cutoff point between normality and deviancy. Next, mother reports of target negative behaviors (PDR) had to be reduced 50% from baseline level, and spanking had to be reported stopped. For the behavior outcome criterion, parent criticisms and physical negative behaviors toward their children, and child deviance with parents had to be reduced 30% from baseline at follow-up assessments. We based these percentage reductions on previous studies with conduct-problem children, which reported 30–50% reductions as indicators of treatment success (Dumas & Wahler, 1983; Patterson, 1974; Webster-Stratton, 1985).

Results indicated that approximately 66.7% of mothers and 78.2% of fathers reported their children having CBCL scores in the normal range. On the PDR telephone reports, 57.1% of mothers reported a 50% reduction in target negative child behaviors and 87.8% reported no spanking. On the behavior ob-

servation measures, 58.1% of mothers and 72.9% of fathers showed a 30% reduction in critical and physical negative behaviors, while 50% of children showed a 30% reduction in deviant behaviors when interacting with mothers and 69% when interacting with fathers. Chi-square analyses of the percentages of families who were clinically improved revealed no significant differences between the three treatment groups, except for a significantly greater percentage of GDVM mothers who reported they had stopped spanking in comparison with mothers of the other two treatment groups. In general, the percentages of families who were clinically improved were higher for the GDVM treatment group, regardless of outcome criterion.

In summary, this study suggests that all three parent training programs led to reliable and sustained improvements at least up to 1 year for approximately two thirds of the sample. These findings are similar to other parent-training studies, which have suggested that 30–50% of treated parents fail to show clinically significant improvements (Forehand, Furey, & McMahon, 1984; Wahler & Dumas, 1984). Although there were relatively few differences between the three treatment groups, the fact that the GDVM produced more "consumer satisfaction" and more significant  $t$  tests at follow-up suggests that the combined GDVM treatment was still somewhat superior to therapy with just vidcotape (IVM) or just group discussion (GD). Nonetheless, it is particularly noteworthy that the most cost-effective IVM program sustained its effectiveness over time, did not reveal any deterioration, and was comparable to the other two treatment conditions, especially for fathers. Further research is now needed to understand the characteristics of nonresponders to these treatment programs in order to develop improved treatment programs and to maximize long-term effectiveness.

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