

Enhancing the Effectiveness of Self-Administered Videotape Parent Training for Families with Conduct-Problem Children

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Parents of 43 conduct-problem children, aged 3–8 years, were randomly assigned to one of two treatments: an individually self-administered videotape modeling treatment (IVM) and IVM treatment plus therapist consultation (IVMC). Randomization also included a waiting-list control group (CON). Compared with the control group, both treatment groups of mothers reported significantly fewer child behavior problems, reduced stress levels, and less use of spanking. Home visit data indicated that both treatment groups exhibited significant behavioral changes. There were relatively few differences between the two treatment conditions. However, the IVMC children were significantly less deviant than the IVM children, suggesting that the IVMC (with therapist consultation) treatment was superior to self-administered treatment with no therapist involvement. The added benefits of therapist involvement are discussed.

The prevalence of children with conduct problems is high and far exceeds personnel and resources available for dealing with them. Moreover, most of the traditional parent training intervention programs have been costly and time-consuming and have rarely reached those most in need of services. There is an urgent need to develop and evaluate standardized low-cost programs

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of treatment which can be used for mass parent training in prevention and intervention.

One method of training parents that has potential for an efficient, cost-effective program is to use a standardized videotape modeling parent training program. In a recent randomized study, Webster-Stratton, Kolpacoff, and Hollinsworth (1988) reported that a self-administered videotape modeling treatment (IVM), which did not have the benefit of therapist leadership or group support, resulted in significant improvements in parent reports of child conduct problems and parent-child interactions compared with control families' reports and behavioral interactions. The implications of these findings for reaching more families in a cost-effective manner are evident. However, it must be noted that while the IVM treatment was extremely cost-effective, it was not as potent as the treatment approach which combined videotape modeling and therapist-led group discussion (GDVM). Compared with the GDVM treatment families, the IVM parents reported significantly less positive consumer satisfaction scores, higher parent stress levels, higher mother reports of children's behavior problems, and fewer mother praise statements when interacting with their children.

We sought to determine how to enhance the effectiveness of the IVM treatment while maintaining its cost-effectiveness. Since IVM families in the earlier study had reported that the lack of personal contact and feedback with a therapist was a limitation of the self-administered videotape program, we chose to add brief personalized therapist consultation along with the standardized IVM program to improve its effectiveness. It was proposed that therapist consultation would permit the parents to ask questions and get personal feedback and reinforcement from a therapist for their efforts. The therapist in turn would be sensitive to the unique styles and problems of particular families and help "fine-tune" parenting approaches with families. This approach would still be more efficient because the basic concepts and principles could be covered in a cost-effective manner by the standardized videotapes. Moreover, the IVM's stated advantages of flexibility, self-pacing, self-control, and low cost would also be maintained with this approach.

The purpose of this study was to compare the effectiveness of two cost-effective self-help videotape parent training programs for families with conduct-problem children: (a) an individually administered videotape modeling treatment without therapist consultation (IVM); and (b) an individually administered videotape modeling treatment with therapist consultation (IVMC). In addition, a waiting list control group was studied. It was hypothesized that the IVMC treatment with personalized therapist attention and consultation would be superior to the other two conditions.

METHOD

Subjects

Criteria for study entry required that (a) the child be between 3–8 years old; (b) the child have no debilitating physical impairment, intellectual deficit, or history of psychosis and be receiving no treatment at the time of referral; (c) the primary referral problem be child misconduct that has been occurring for more than 6 months (e.g., noncompliance, aggression, oppositional behaviors); and (d) parents rate their child as having a clinically significant number of behavior problems according to the Eyberg Child Behavior Inventory (ECBI) (Eyberg & Ross, 1978). A Total Problem Score of 11 was used as the cutoff score because it is more than 1 standard deviation above the mean on this measure.

Study parents who completed treatment included 43 families (43 mothers and 26 fathers). Of these, 26 (60.5%) were married, and 17 (39.5%) were single (all mothers). The mean age of mothers was 34.8 years and of fathers was 36.7 years. Family social class, as determined by Hollingshead and Redlich's (1958) Two-Factor Index, yielded a wide range of social class: Class 5 ($n = 2$), Class 4 ($n = 7$), Class 3 ($n = 18$), Class 2 ($n = 10$), and Class 1 ($n = 6$). Interviews indicated that 11 (25.6%) of the mothers had experienced spouse abuse and 18 (41.9%) of the families reported alcoholism or drug abuse in the immediate families. Six (14.0%) of the mothers reported prior involvement with Child Protective Services.

Study children included 34 boys and 9 girls with a mean age of 5 years and 1.2 months. The mean number of behavior problems reported at pretreatment according to ECBI was 20.6 ($SD = 4.9$), indicating that the children were clearly in the clinical range according to Eyberg and Ross (1978) (for nonclinical range, $M = 6.8$, $SD = 3.9$).

Assessment

Subjects were evaluated before and 1 month after treatment by parent perceptions of child adjustment, by mother biweekly observations and reports of discipline used, by parenting stress level, and by independent observations of parent–child interactions in the home. Finally, parents completed a consumer satisfaction measure concerning their perceptions of the therapy they received.

Parent Perception of Child Adjustment

Child Behavior Checklist (CBCL). The parent form of the CBCL (Achenbach & Edelbrock, 1983) consists of 118 items, each rated on a 0–2 point scale. The items constitute multiple behavior–problem scales derived separately for boys and girls in different age groups (e.g., 4–5 years, 6–11 years). In this study, the Total Behavior Problem summary score was of primary interest because it applies to a variety of behavioral problems in all age and sex groups.

Eyberg Child Behavior Inventory. The ECBI (Eyberg & Ross, 1978; Robinson, Eyberg, & Ross, 1980) is a 36-item behavioral inventory of child conduct–problem behavior for 2- to 16-year-old children. The response format yields two scores: a Total Problem score, which indicates the total number of behavior problems, and an Intensity score, which indicates the frequency with which conduct problems occur. Reliability coefficients for the ECBI scales range from .86 (test–retest) to .98 (internal consistency). In this study, only the Intensity score was used because it is so highly correlated with the Problem Score and because it measures the frequency of behavior problems and therefore is a more sensitive measure of treatment outcome (Boggs, Eyberg, & Reynolds, in press).

Mother Observations

The Parent Daily Reports (PDR) (Chamberlain, 1980; Chamberlain & Reid, 1987) consist of a list of 19 negative and 19 prosocial behaviors commonly exhibited by children. During the intake, parents were asked to select those negative behaviors from the list that they felt were major problems as well as those positive behaviors that would be particularly pleasing to them if performed by their child. During phone calls, the checklist was read to the mothers, who were asked to observe and report on the occurrence or nonoccurrence of the target behaviors for the previous 24 hours. After asking about the positive and negative behaviors on the PDR, the interviewer asked about the occurrence of spanking, time out, and low-rate events such as fire setting and running away. The PDR has been shown to have good test–retest reliability and to correlate significantly with concurrent home observation data (Chamberlain & Reid, 1987).

Parent Personal Adjustment

The Parenting Stress Index (PSI) (Abidin, 1983) contains 126 items that are divided into two major domains reflecting stress in the parent–child rela-

tionship. The first domain represents parent characteristics and includes seven subscales that constitute the total Parent Domain score. These are Depression, Attachment, Restricted Role, Competence, Isolation, Spouse Support, and Health. The second domain, representing child characteristics, was not used in this study because there were already two other measures of child characteristics. The PSI has been shown by Abidin (1983) to have acceptable content, concurrent, and construct validity. Alpha reliability coefficients were reported to be .95, and test-retest reliabilities ranged from .82 to .71 (Abidin, 1983).

Home Observations

Each mother-child or father-child interaction was observed in the home for 30 min on two evenings during the week (between 4:30 p.m. and 7:30 p.m.) at pretreatment assessment and again twice at posttreatment assessments. During these observations, an attempt was made to impose as little structure as possible, and family members were asked to "do what you would normally do." Whether the father or mother was observed first was randomly determined.

The Dyadic Parent-Child Interaction Coding System (DPICS) (Robinson & Eyberg, 1981), consisting of 29 behavior categories, was used to observe parent-child interactions in the home. From the parent behavior categories, three separate summary variables were formed: total praise, total critical statements, and total no-opportunity commands (commands to which the child is given no opportunity to respond). For the target child, one variable was examined: total child deviance (the sum of the frequency of whine, cry, physical negative, smart talk, yell, destructive, and noncompliance ratings). In addition, a new nonverbal affect dimension developed by the authors was added, *parent affect*, which was defined as the emotional tone of the behaviors and was coded on the basis of nonverbal gestures, body posture, facial expressions, and tone of voice or inflections. Every 5 min, coders paused and rated parent affect on a 5-point scale ranging from unrestrained negative affect (5) to neutral affect to exuberant affect (1). These behaviors were selected from the DPICS coding system to focus on behaviors that have been shown to discriminate clinic from nonclinic families (Forehand, King, Reid, & Yoder, 1975; Lobitz & Johnson, 1975; Webster-Stratton, 1985).

Home observations were made by six extensively trained observers who were blind to the hypotheses and to the group membership of the subjects. Initially, the observers received extensive training and were required to maintain 80% reliability with practice tapes before conducting "live" home observations. It took approximately 4-6 months for observers to become

reliable. To maintain accuracy and prevent observer drift, observers had ongoing weekly training sessions and practiced on prescored videotape interactions. To assess reliability, a second observer independently coded at least 30% of all the home observations. Reliability was calculated in two ways: by the ratio of percent of agreements to total number of agreements and disagreements and by Pearson product-moment correlations between ratings for each separate behavior dimension. The percent agreement reliability was calculated for each 5-min segment and was based only on occurrences (not nonoccurrences) of behavior noted. Mean overall interrater agreement was 73% (range 72–90%) and the product-moment correlations calculated between observers ranged from .70 for affect, .94 for child deviance, .95 for praise, .98 for commands, to .99 for critical statements.

Social Validity Measures

The Consumer Satisfaction Questionnaire, which we adapted from the work of Forehand and McMahon (1981), consists of 40 items with a 7-point Likert scale response format. Statements were made to which the parent could respond (from strongly agree to strongly disagree). Responses were transformed into scores from 1 to 7, with 7 the most positive. Four subscales measured parents' perceptions about child behavior improvement, format of treatment difficulty (e.g., videotapes, group discussion), treatment usefulness, and the overall difficulty of the parenting skills that were taught. The internal consistency of the subscales in this study ranged from .71 to .90.

Treatment Conditions

Once subjects were accepted for entry, they were randomly assigned to one of three conditions.

Individually Administered Videotape Modeling Treatment. The parents (17 mothers and 10 fathers) assigned to the IVM came to the clinic weekly for 10 self-administered sessions. Single parents came alone and married parents came with spouses. Each week a secretary provided them with a room and with 1 of the 10 videotaped programs to watch (approximately 250 vignettes and 25 min of videotape per program). The content of the videotapes included a modification of the interactional model (Hanf & Kling, 1973), focusing on play skills, praises, and tangible rewards (videotapes 1–4). The last half of the program focused on teaching parents nonpunitive discipline approaches and a specific set of operant techniques (Patterson, 1975; Forehand & McMahon, 1981) and problem-solving approaches (videotapes 5–10).

The videotape treatment has been described in detail elsewhere (Webster-Stratton, 1987). The IVM parents did not have the benefit of any therapist feedback. The average time parents took to complete the programs over the 10 weeks was 9.29 hours ($SD = 2.1$). All 17 mothers completed all 10 sessions while 2 of the 10 fathers missed only one session. No families dropped out of treatment.

Individually Administered Videotape Training Plus Therapist Consultation. The parents (16 mothers and 9 fathers) assigned to the IVMC saw the same videotapes as IVM. They were told that they could call the therapist any time they liked over the 10-week period with any questions or concerns they wanted to discuss. They were scheduled for two individual 1-hour appointments with a therapist, one half-way through the program after the play, praise, and tangible reward programs and one at the end of the program after the limit-setting and discipline programs. Parents were told they could use these appointments to ask questions not covered or not understood from the videotape program and to discuss any other family issues that concerned them. The average time parents took to complete the self-administered videotapes was 10.5 hours ($SD = 3.4$). Fourteen mothers and 8 fathers completed all 10 sessions. Two families originally assigned to this treatment condition dropped out, one after two sessions and one after four sessions.

Waiting-List Control Group. The parents (14 mothers and 9 fathers) assigned to the control condition received no treatment and had no contact with a therapist. After waiting 12 weeks, control subjects were assessed a second time and assigned to one of the two treatment conditions. Two families dropped out during the waiting period.

Therapist

One female clinician with a doctorate in clinical child psychology was the therapist for all the families in the IVMC. She had extensive prior experience (10 years) with behavior-problem children and family counseling. She had received an intensive training program to be familiar with the videotape modeling program. All consultation sessions were audiotaped and she kept detailed notes of each session.

RESULTS

Treatment effects were evaluated by mother and father self-report measures (ECBI, CBCL, PSI); by maternal daily observations and reports of

discipline (PDR); by mother and father behaviors (no-opportunity commands, praise, criticism, affect); by child behaviors (total deviance); and by consumer satisfaction. With baseline values serving as covariates, each set of dependent variables was initially submitted to a multivariate analysis of covariance (MANCOVA). Since the child behavior measure was comprised of one summary variable, rather than a set, the analysis for this variable was based on a three-group analysis of covariance (ANCOVA). When MANCOVA revealed a significant effect, this was followed by preplanned comparisons of each treatment group with the control group and with each other.

The multivariate analysis of variance (MANOVA) revealed no significant differences between the three groups on demographic or family background variables (marital status, education, income, social class, or child's sex). Also, an analysis of variance (ANOVA) did not indicate a significant difference between the two treatment groups in terms of numbers of hours of IVM training.

Parent Report Measures

The MANCOVA revealed a significant group effect for the set of three mother report variables, $F(6, 66) = 2.82, p < .01$. According to the preplanned comparisons for the IVM treatment, mothers reported significantly ($p < .01$) less frequent behavior problems on the ECBI Intensity score and significantly less stress on the PSI compared with waiting-list control mother reports. The IVMC mothers also reported significantly less stress on the PSI compared with control mothers. When the two treatment groups were compared with each other, they were remarkably similar, and no significant differences occurred. For the father report measures, MANCOVA revealed no significant group effect for the set of variables.

Mother Observations

The MANCOVA for the mother observations on the three PDR telephone variables was not quite significant: $F(6, 68) = 1.99, p < .07$. However, it seems clinically relevant to note that individual comparisons indicated that both IVM and IVMC mothers reported significantly ($p < .01$) less use of spanking than control mothers' reports. Untreated control families used 3–4 times the amount of spanking as treated families. No significant differences occurred between the two treatment groups. See Table I.

Parent Behavior Summary Variables

The MANCOVA revealed a significant group effect for the set of mother behavior variables, $F(8, 62) = 2.30, p < .03$. For the IVM treat-

Table 1. Parent Report Measures Before and After Treatment by Group^a

Report measure	IVM				IVMC				CONTROL				IVM vs. IVMC	IVM vs. control	IVMC vs. control		
	Pre		Post		Pre		Post		Pre		Post					IVM vs. control	IVMC vs. control
	M	(SD)	M	(SD)	M	(SD)	M	(SD)	M	(SD)	M	(SD)					
ECBI intensity	164.59	(29.0)	123.00	(28.3)	155.54	(17.1)	129.08	(26.2)	157.36	(21.4)	139.73	(23.0)	1.10	2.68 ^b	1.10	2.68 ^b	
Mother	147.11	(19.9)	115.88	(16.7)	137.28	(26.5)	120.00	(29.1)	148.57	(18.9)	141.28	(12.9)	1.62	2.87 ^b	1.62	2.87 ^b	
Father																	
CBCL total behavior problem	49.29	(19.2)	37.59	(18.4)	64.46	(21.6)	45.15	(22.7)	50.73	(17.3)	39.73	(14.2)	1.42	.25	1.42	.25	
Mother	41.22	(14.5)	30.33	(15.9)	51.28	(15.7)	31.86	(13.2)	51.28	(15.9)	43.57	(18.2)	1.71	1.01	1.71	1.01	
Father																	
PSI parent domain	145.17	(30.3)	135.82	(25.7)	153.46	(22.5)	133.84	(20.7)	152.37	(13.8)	153.09	(21.8)	3.23 ^b	2.04 ^c	3.23 ^b	2.04 ^c	
Mother	115.22	(22.7)	116.11	(16.9)	115.86	(28.2)	110.57	(19.6)	142.43	(13.7)	134.43	(20.5)	1.14	.54	1.14	.54	
Father																	
PDR target negative behaviors	5.79	(1.8)	4.59	(2.6)	5.36	(2.5)	3.88	(2.2)	5.55	(1.5)	4.57	(1.5)	.81	.22	.81	.22	
Mother	1.06	(1.5)	.35	(.78)	1.21	(1.8)	.21	(.58)	1.09	(2.0)	1.09	(1.7)	2.58 ^b	2.12 ^b	2.58 ^b	2.12 ^b	
Father	5.60	(2.4)	7.27	(3.9)	5.88	(2.3)	7.28	(3.7)	5.50	(2.8)	5.72	(2.1)	1.31	1.73	1.31	1.73	
Prosocial																	

^aNote: IVM = 17 mothers and 9 fathers; IVMC = 14 mothers and 7 fathers; control = 12 mothers and 7 fathers. IVM = individually administered videotape modeling; IVMC = individual videotape modeling plus therapist consultation; control = waiting-list control. ECBI = Eyberg Child Behavior Inventory; CBCL = Child Behavior Checklist (raw scores); PSI = Parent Stress Inventory; PDR = Parent Daily Reports.

^bp < .01.

^cp < .05.

ment, mothers were observed to exhibit significantly more praise statements with their children and more positive affect than control mothers with their children. For the IVMC treatment, mothers were also observed to have more positive affect with their children than controls and showed a trend ($p < .10$) toward fewer criticisms than control mothers. When the two treatment groups were compared with each other, the only significant difference was that the IVMC mothers had significantly fewer commands than the IVM mothers. The MANCOVA for the set of father behaviors was not significant.

Child Behavior Variables

A three-group ANCOVA revealed a significant overall group effect for total child deviance when children were observed interacting with mothers, $F(2, 38) = 4.31, p < .02$. The IVMC children showed significant reductions in total deviance when interacting with their mothers compared with control children's interactions with their mothers. The IVM children did not indicate a significant difference when compared with the control children. When the two treatment groups were compared with each other, the IVMC children exhibited significantly fewer deviant behaviors than the IVM children with their mothers. The ANCOVA did not reveal a significant group effect for total child deviance when children were observed interacting with fathers. See Table II.

Consumer Satisfaction

Both treatment groups reported high scores on consumer satisfaction measures for treatment format usability, difficulty, and child improvements. The MANOVA did not reveal a significant treatment effect for the mothers' or fathers' consumer satisfaction variables.

DISCUSSION

The first important finding was that regardless of therapist feedback this 10-week standardized self-administered videotape parent training program led to significant improvements in mother reports of their children's behavior problems as well as reduced mother stress levels and reported use of daily spankings when compared with control mother reports. Approximately two-thirds of the parents reported their children as having CBCL scores in the normal range. The program also led to improvements in two of the four mother behaviors when interacting with their children, as well

Table II. Parent-Child Behavior Summary Scores Before and After Treatment by Group^a

Behavior	IVMC				CONTROL				IVM vs. IVMC					
	IVM		IVMC		CONTROL		IVMC							
	Pre	Post	Pre	Post	Pre	Post	Pre	Post						
M	(SD)	M	(SD)	M	(SD)	M	(SD)	M	(SD)	IVM vs. control				
Total no-opportunity commands														
Mother	23.44	(22.3)	20.62	(17.3)	23.93	(21.9)	13.78	(7.5)	17.36	(9.4)	15.23	(5.8)	.79	2.24 ^b
Father	13.10	(10.8)	15.70	(8.1)	16.61	(11.1)	11.94	(9.9)	22.43	(15.6)	21.07	(16.9)	.14	1.18
Total criticisms														
Mother	16.73	(19.6)	14.8	(16.7)	14.96	(10.5)	8.36	(5.1)	11.59	(7.9)	12.2	(7.3)	.06	1.79
Father	8.25	(6.7)	7.45	(4.6)	9.33	(5.1)	4.83	(4.5)	9.92	(7.6)	11.00	(10.3)	.93	1.19
Total praise														
Mother	5.53	(4.5)	12.79	(13.7)	7.43	(6.3)	8.21	(6.6)	3.36	(4.1)	3.41	(3.3)	.78	2.25 ^b
Father	1.55	(1.2)	6.35	(4.4)	3.11	(5.6)	4.78	(3.7)	5.50	(3.7)	5.50	(3.7)	.42	.55
Positive affect														
Mother	2.99	(3.7)	2.82	(.37)	2.91	(.22)	2.80	(.23)	2.98	(.31)	3.09	(.26)	2.20 ^b	2.38 ^b
Father	2.95	(.33)	2.79	(.28)	2.88	(.18)	2.68	(.20)	2.77	(.42)	2.95	(.15)	2.40 ^b	1.49
Child total deviance														
With mother	43.94	(29.9)	38.00	(25.4)	42.03	(33.7)	24.14	(11.5)	29.80	(8.4)	35.45	(19.2)	2.66 ^c	2.34 ^b
With father	31.95	(23.9)	29.90	(16.51)	30.44	(11.4)	22.44	(19.7)	36.14	(23.2)	32.43	(22.6)	.84	.09

^aNote: IVM = 17 mothers and 9 fathers; IVMC = 14 mothers and 7 fathers; control = 12 mothers and 7 fathers. IVM = individually administered videotape modeling; IVMC = individual videotape modeling plus therapist consultation; control = waiting-list control.

^b $p < .05$.

^c $p < .01$.

as to significantly reduced child deviant behaviors. The findings for fathers were mostly nonsignificant, but given the small sample size of fathers (nine per group) and the trends for the fathers' data to closely parallel the mothers' data (based on a larger sample size per group), the suggestion can be made that similar effects could be noted for fathers. These data replicate a prior study (Webster-Stratton *et al.*, 1988), also indicating the effectiveness of self-administered parent videotape training in changing parent reports and parent-child behaviors.

The next purpose of the study was to determine the added benefits of including personalized therapist consultation and feedback in combination with a standardized self-administered videotape treatment. The only significant difference found between the two treatment groups was that the IVMC mothers exhibited fewer no-opportunity commands and the IVMC children were less deviant with their mothers than the IVM children. Surprisingly, parent reports on children's behaviors and consumer satisfaction scores did not reveal differences between the two groups. However, the significant behavioral data for the children would suggest that the self-administered treatment with therapist consultation was somewhat superior to IVM treatment without therapist involvement.

It was interesting to note how the IVMC parents used the therapist's time and consultations. The two 1-hour consultations were audiotaped and transcriptions of the sessions were subjected to qualitative analyses to determine the core issues for the families. Mostly the parents used the therapist sessions to report on their children's improvements and to get positive feedback for their efforts. They sought encouragement to continue the parenting techniques even when the child's behavior changes seemed to be slow in occurring. They also used the consultation sessions to clarify and problem-solve with the therapist in regard to generalizing the parenting principles they had learned from the programs to other situations not specifically shown on the videotapes. The most commonly raised child problems were sibling and peer conflicts, enuresis, cheating, lying, sleep difficulties, and school or day care issues. Given the finding that IVMC children seemed to improve more than the IVM children, and given that each IVMC family only received 2 extra hours of personal therapist time above and beyond the standardized videotape program, this investment of therapist time would seem well worth the effort. The result is that therapist's time is spent more efficiently in monitoring and reinforcing a family's progress, detecting any inappropriate use of principles or misunderstandings of concepts, dealing with resistant areas, and helping with generalization of learned parenting skills and principles to other problems and settings. We found that the therapist time was spent in a collaborative consulting role with parents engaged in the process of "fine-tuning" the parents' learning by problem-solving and reinforcing their

own ideas rather than reiterating principles, lecturing, or telling the parents how they "should handle" problems. Such an approach seemed to give the parents more credit and responsibility for their own learning and to foster self-efficacy and self-control in the families. In essence, the videotape program seemed to provide a rough fit and answers to most of the parents' questions. However, the therapist consultations helped customize the tailoring of the therapy to provide the best fit for the unique problems and needs of each family.

Several limitations of the study deserve comment. First, the fact that the IMVC only added 2 hours of therapist consultation to the training package makes it both difficult to detect differences between the two experimental groups and also to adequately test the contributions of the therapist. On the other hand, adding substantially more personalized therapist time to IVMC would defeat the original purpose of developing low-cost self-administered programs which can be widely disseminated. A second limitation of the study is the lack of long-term followup data. It is unknown how the effects of the IVMC program will last over time. However, in our prior study (Webster-Stratton *et al.*, 1988) we conducted 1- and 2-year followups of a different cohort of families treated in the IVM program and found that the IVM immediate treatment effects were not only highly stable but that the children continued to improve over time. Third, the small sample size for fathers in this study makes it difficult to determine the effectiveness of these programs for fathers, although our prior study with a larger sample size of fathers would suggest that such a treatment program would be quite effective with fathers.

In summary, these data suggest that self-administered videotape modeling parent training is effective in altering parent-child behaviors and attitudes and can be further enhanced by the use of personal therapist consultations. These findings have implications for reaching many more families in a cost-effective manner. Perhaps such videotapes programs could be shown to parents via satellite or on public television with a toll-free number for parents to call in to a therapist with questions or concerns. The therapist role would be not only to answer questions but to identify those families needing more intensive, personalized therapy. Such a program would also seem to be promising as an effective prevention program to help prevent behavior problems from escalating in the first place.

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