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THE USE OF SKILLS TRAINING PROCEDURES IN THE TREATMENT OF A CHILD-ABUSIVE PARENT

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Summary—Recent behavioral formulations suggest that child abuse can often be conceptualized in terms of skill deficits of the parent. In the present case study, training was used to improve an abusive parent's anger-assertion, child management, and personal problem-solving skills; deficits in all three areas were functionally related to prior episodes of violence. Treatment across these skill areas was introduced in multiple baseline fashion. The effectiveness of treatment was demonstrated by (1) assessments of assertion, child management, and problem-solving knowledge following each training session; (2) parent monitoring data on the frequency of child-related and anger problems at home throughout the intervention; (3) performance on skill generalization measures; and (4) objectively-rated parent–child interactions during pre- and post-training home observation probes.

Over the past several years increased psychological attention has been given to the problem of child abuse. This has probably occurred for several reasons. First, physically abusive behavior directed by parents towards children is one of the most extreme forms of family dysfunction encountered by most clinicians. Of children seen in hospitals and determined to be victims of abuse, mortality rates of 10% or higher are not unusual (McRae, Ferguson, and Lederman, 1973; Smith and Hanson, 1974), while other estimates suggest that 5000 children die each year from nonaccidental injury inflicted by parents (Helfer, 1973). Additionally, the prevalence of child abuse is greater than once thought. While estimates are subject to unreliability due to definitional imprecision and other methodological difficulties, most investigations indicate that from 60,000 cases (Education Commission of the States, 1973) to 500,000 cases (Helfer and Kempe, 1976; Light, 1973) occur each year.

While early theories on the causes of child abuse tended to focus broadly on parent psychopathology or sociological factors, a number of investigators now suggest that abusive conduct can be accounted for in terms of specific social interactional variables (Burgess, 1979) and parent skill deficits [Friedman, Sandler, Hernandez and Wolfe, 1981; Kelly, 1983; Wolfe, Kaufman, Aragona and Sandler, 1981 (a)]. The variables most often identified as critical to producing abusive behavior include lack of nonviolent child-management skills, inadequate knowledge concerning child behavior, anger-control deficits, over-arousal to cues of child misbehavior, and limited resources for solving problems that exacerbate stress and hinder adaptive functioning [See discussions by Burgess, 1979; Dubanowski, Evans and Higuchi, 1978; Kelly, 1983; Wolfe *et al.*, 1981 (a)].

Following from this model, several recent studies have described interventions for teaching abusive parents to use effective, nonviolent child management skills. With training conducted in groups [Wolfe, Sandler and Kaufman, 1981 (b)] or with individual families (Crozier and Katz, 1979; Denicola and Sandler, 1980; Sandler, Van Dercar and Milhoan, 1978; Wolfe, St. Lawrence, Graves, Brehony, Bradlyn and Kelly, 1982), the major aim of

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these projects has been to decrease parent use of physically aversive controls and increase the use of nonviolent and positive child-management skills.

All of these interventions have yielded promising results and, taken together, suggest that a skills training approach to treatment may be quite useful when intervening with child-abusive parents. However, these studies have focused almost exclusively on child-management issues. Since abusive behavior often appears to be multi-determined, and because stresses and skill deficits other than those related to child management may also contribute to episodes of parental violence, many abusive parents can benefit from more comprehensive forms of skills training. Depending on the antecedents of parent violence in a given family, this might include training in anger control, social skills/assertiveness or problem-solving techniques. In the interventions which included attention to anger control techniques (Denicola and Sandler, 1980; Wolfe *et al.*, 1981 (b)), promising changes in parent and child behavior were observed. However, further efforts are needed to "tailor" specific training interventions to the observed skills deficits of abusive parents.

In the current case study, extensive interviews and observations were made to analyze functionally the antecedents to an abusive parent's violent episodes. Following this assessment, skills-training techniques were sequentially applied across several different problem areas (assertiveness/anger control, child-management skills, and problem-solving skills) that were related to her episodes of violence and frustration. In doing so, this study illustrates how behavioral procedures can be systematically targeted, not only to child-management deficits, but also to other adaptive deficits of child-abusive parents.

METHOD

Subject

The subject, Jill, was the 36-year-old mother of an 11-year old son. She was divorced and lived in an apartment at the time of treatment. Jill was referred to our Child Psychology Clinic by a local social welfare agency specializing in child abuse and neglect cases.

The family's history indicated a number of incidents of physically abusive behavior directed toward the child. These included frequent episodes of harsh spanking, as well as one incident when the mother stabbed her son in the leg with a knife. According to the reports of all parties (the social agency staff, court records, the mother, and the child), episodes of abuse occurred when the mother was extremely angry. Physical violence by Jill was followed by reported periods of guilt and remorse; during these times, she was apologetic and overly lenient towards her son's misbehavior. Thus, the parent's discipline was inconsistent. She was cooperative with the therapists and indicated that she would like to learn to control her anger and become a more effective parent.

Extensive parent interviews and consultation with the referring agency were conducted to identify factors associated with Jills episodic violence. To do this, the therapist and subject closely reviewed the circumstances surrounding occasions in the past when the parent behaved violently towards her child. Based on the initial assessment, four problem areas appeared to be functional antecedents to her abusive behavior. First, the unsuccessful handling of interpersonal problems with other adults was associated with an increase in the parent's general anger or frustration. The mother reported that when people (such as her boyfriend, neighbors, or others) took advantage of her, she responded passively but later became angry "inside" and was more likely to react harshly to her child. A second antecedent was her son's own aversive behavior. Particularly when she was angry, the child's misbehavior (including noncompliance, tantrumming, and talking back) elicited further parental anger, violence, and punitiveness. Third, Jill reported that she felt stressed by problems in living and her inability to make decisions; she reported being unable to prioritize and accomplish her household responsibilities, determine the best way to handle interpersonal problems with her boyfriend and family, and successfully seek employment. Finally, deficits in anger control skill were evident since all occasions of abusive behavior occurred when the parent was angry and "out of control."

Because these four areas (unassertiveness, child-management skill deficits, problem-solving skill deficits, and poor anger-control skills) were reported as problematic and because all appeared to be functionally related to the parent's child-abusive episodes, they were targeted for closer assessment and treatment.

Detailed assessment and measures

Pretreatment assessment was conducted in all four skill areas using a variety of measures. Table 1 summarizes these assessment measures.

Assertion assessment. As Table 1 shows, role plays of six social-conflict situations were constructed. The scenes were developed following interviews with Jill; each role play was of a conflict situation that had actually taken place during the preceding 2-month period. The format of the role plays included a narrated scene description followed by three escalating prompts delivered by a partner. The mother's responses were tape recorded and rated on

Table 1. Overview of assessment and treatment evaluation measures

Skill deficit area	Assessment methods	Rating of assessment data
1. Assertion in social conflict situations	Six role plays of interpersonal conflicts requiring assertiveness	Each subject response videotaped and rated for presence of appropriate and inappropriate assertion component behaviors
	Assertion Inventory (AI) and Fear of Negative Evaluation Scale (FNE)	Self-report inventories yielding total scale scores
2. Child management	Parenting knowledge test consisting of 14 items, each describing a behavior problem exhibited by the subject's child	Oral responses to each test item rated for presence of three components: use of an appropriate management technique, use of anger or coping technique, and statement of plan
	Daily self-monitoring of own and child's behavior	Subject monitored daily frequency of "Positive Mother Behavior," "Negative Mother Behavior," "Aversive Child Behavior," and "Conflict Avoidance Behavior"
	Home observation probes of mother–child interactions	20- to 24-min observations conducted while mother and child interacted normally; continuous 15-s intervals rated for presence of praise, questions, talking, crying/whining/screaming, commands, and noncompliance
3. Problem-solving skills	Seven problem situations depicting problems of concern to the subject	Oral responses to each problem were recorded, transcribed, and rated on components of problem solving skill (process score, relevant steps, and overall effectiveness)
4. Anger	Daily self-monitoring of anger	Highest level of anger monitored each day using a 9-point scale
	Novaco Anger Inventory	Self report inventory yielding total anger score

components of effective assertion including eye contact, voice quality, refusal content, request for new behavior, acknowledgement of the conflict, proposal of a solution, and a statement of her feelings.* Ratings of inappropriate behavior were also made (aggression, compliance, irrelevant statements, and refusal to discuss the conflict). To obtain a quantified measure of social skill, the total number of appropriate and inappropriate components included in each role play scene was calculated.

Two self-report measures of assertion were also administered. These were the Assertion Inventory (AI) (Gambrill & Ritchey, 1975) and the Fear of Negative Evaluation Scale (FNE) (Watson and Friend, 1969).

Child-management skill assessment. As indicated in Table 1, child-management skill was assessed in three ways, through performance on a child-management knowledge test, through self-monitoring, and by parent–child observation home probes. Items for the knowledge test were developed by interviewing Jill and identifying situations when she had become angry because of her son's misbehavior. These misbehaviors became items of the knowledge test. For each misbehavior description (item), Jill was asked to describe how the misbehavior should be handled. Each response was audiotaped, transcribed, and rated on three criteria: (1) the use of an appropriate behavior management technique (attention withdrawal, reinforcement, etc.); (2) the use of an anger or coping technique (e.g. remaining calm); and (3) a statement of intention to carry out the plan. Each test item received a score from 0 (no criteria met) to 3 (all criteria included).

Each day, the mother also monitored aspects of her child's and her own behavior at home. These were the frequency with which (1) she praised or rewarded her son's good conduct ("Positive Mother Behavior"); (2) she shouted at, screamed at, or physically reprimanded him ("Negative Mother Behavior"); (3) the child was noncompliant, talked back, or engaged in other aversive misbehavior ("Aversive Child Behavior"); and (4) she responded to a conflict by leaving the room or sending the child away ("Conflict Avoidance Behavior").

*For reasons of brevity, full definitions of the behaviors rated in the assertion role play scenes and in the parent–child interaction home probes are not included in this case study report. However, the definitions of the target behaviors are those commonly reported in the literature.

Finally, home observations of parent–child interaction were conducted twice before, and once after, treatment. In each assessment, two observers visited the home and unobtrusively coded behavior occurring naturally in the living room. Observation periods of 20–24 minutes were divided into continuous 15-sec intervals, and the observers independently noted the occurrence of several target behaviors in each interval. The rated behaviors, as defined by Jones, Reid, and Patterson (1974) were: compliments and praise; questions; talking; crying; whining or screaming; commands; and noncompliance. All behaviors were rated for both the mother and child, except noncompliance which was rated for child only.

Problem-solving skill assessment. The mother's interview reports of specific life problems, difficulties, and frustrations were used to construct a problem-solving skill assessment measure. Seven problems, reflecting everyday frustrations at home, at work, or in relationships, were written in short vignette form. An example of the vignettes was "Sometimes you find that things you need to do at home pile up until you are forced to deal with all of them at once. How would you handle this situation?" Jill then described her solution, and the response was recorded and transcribed. Each response was later rated on criteria of problem-solving effectiveness as specified by D'Zurilla and Goldfried (1972) and Spivak, Platt, and Shure (1976). Solutions received a problem-solving process score (one point awarded each for defining a goal, generating alternative to pursue). The number of relevant steps (Spivak *et al.*, 1976) were also counted in each response. Finally, the rater assigned a number score, from 1 to 9, to reflect the overall effectiveness of the solution.

Anger assessment. Throughout treatment, Jill each day monitored her highest level of anger from 1 = completely calm to 9 = extremely angered. In addition, the Novaco Anger Inventory (NAI) (Novaco, 1975) was administered before and after treatment.

At the end of each training session, role plays of the assertion scenes, the child-management inventory, and the problem-solving vignettes were administered. Daily monitoring records of parent–child behavior and anger ratings were made throughout the entire intervention period. All of these constituted the primary dependent measures in the multiple baseline analysis. At the conclusion of the intervention, all other assessments that had been conducted before treatment were repeated (FNE, AI, and NAI inventories; and, home observations of parent–child interactions). Finally, to evaluate generalization of the trained skills, the assertion, child management, and problem-solving items administered in the baseline assessment were randomly divided into training and generalization items. The generalization items were readministered on two occasions and again at a 4-month follow-up assessment.

Experimental design overview

Following this pretreatment assessment, a skills-training intervention was implemented to target, sequentially and in multiple baseline fashion, three deficit areas in the parent's functioning: unassertiveness–anger control, poor child-management skills, and deficient problem-solving. Treatment was conducted during weekly clinic visits, with attention first focused on improving assertiveness and anger control (nine sessions), then on child-management skills (eight sessions), and finally on problem-solving skills (six sessions).

Treatment procedures

Treatment was conducted by two therapists, one male and one female, who were present for all sessions. Each session made use of behavioral skills training procedures including a discussion and rationale for the skills being targeted that day, instruction, modeling by the therapists, role-played behavior rehearsal, verbal feedback to shape the subject's correct skill, and at-home practice assignments. Session duration was approximately 45 min.

In the initial treatment phase focusing on assertiveness and anger control, Jill was taught to exhibit verbal and nonverbal components of effective assertion during conflict situations with others. The role play assertion training scenes were used for behavior rehearsal. In conjunction with this, cognitive and relaxation-based techniques for controlling anger were trained. The mother was taught to practice deep-breathing relaxation, identify anger-related cognitions, and utilize appropriate self-statements to cope with anger arousal (cf. Novaco, 1975).

When child management became the targeted skill area, the same general treatment procedures (instruction and written materials, therapist modeling, rehearsal of responses, and feedback) were used to teach the parent nonviolent means for controlling her child's misbehavior and for increasing positive behavior. Techniques emphasized in this phase included reinforcement of desirable behavior, alternatives to physical punishment, the use of time out and loss of privileges, and consistency in handling problem situations. When these techniques were covered, the aims were to increase the parent's knowledge of correct management techniques, to allow her to verbally rehearse how she would handle management problems, and then to practice the skill at home between sessions.

Training in problem-solving skill was conducted in the manner described by D'Zurilla and Goldfried (1972) and Spivack *et al.* (1976). The problem-solving process was described to the mother, and she was taught to apply problem-solving skills (defining the problem, generating and evaluating alternatives, selecting the best solution) to the situations she had reported as difficult. Following therapist modeling and discussion of the problem-solving process, Jill verbally rehearsed the same steps and received feedback and corrective instructions from the therapists. She was again asked to apply the skill to problems occurring at home between visits.

At the conclusion of each session, performance on assertiveness role plays, problem-solving vignettes, and the child management knowledge test was assessed.

Follow-up. Four months following the conclusion of training, Jill was assessed for behavior change maintenance. The study's primary measures (assertion role plays, problem-solving vignettes, and child management test) were administered. For 1 week, the parent again completed her at-home monitoring records of child management behaviors and daily anger. No training preceded the follow-up assessment, although Jill was told to use those skills that had been covered earlier. Through a 15-month

post-treatment period, contact was maintained with the agency that had first referred Jill to assess her longer-term status.

RESULTS

Inter-rater reliability

Reliability assessment procedure. Two different raters independently scored 36–44% of all tapes of the parent's performance on the assertion role plays, child-management knowledge tests, and problem-solving vignettes. The data subjected to reliability checks were randomly selected and included at least one assessment from each training phase, including follow-up. Forty per cent of the generalization probes were also included in these checks. Inter-rater agreement was computed using Pearson product-moment correlations between the two raters' scores from each of the behaviors or ratings described below.

During the in-home observations, two raters independently coded each of the parent–child interaction behaviors throughout the entire observation periods. Inter-rater reliability for occurrence was calculated by dividing agreements by agreements plus disagreements × 100 for each coded behavior.

Reliability results. Inter-rater reliability coefficients for the assertion behaviors ranged from 0.72 (inappropriate components) to 0.96 (appropriate comments). Inter-rater agreement for the child management test scores was 1.00. Reliabilities on the problem-solving measure ranged from 0.74 (effectiveness rating) to 0.98 (problem-solving score). Mean inter-rater reliabilities for the parent–child interaction codings were from 0.60 (crying, whining) to 1.00 (compliments, praise).

Skills acquisition

Figure 1 presents the results of training in the three skill areas targeted for treatment. During the baseline sessions, the parent showed deficits in her assertive responses, performed very poorly on the child-management knowledge measure, and exhibited deficits in problem-

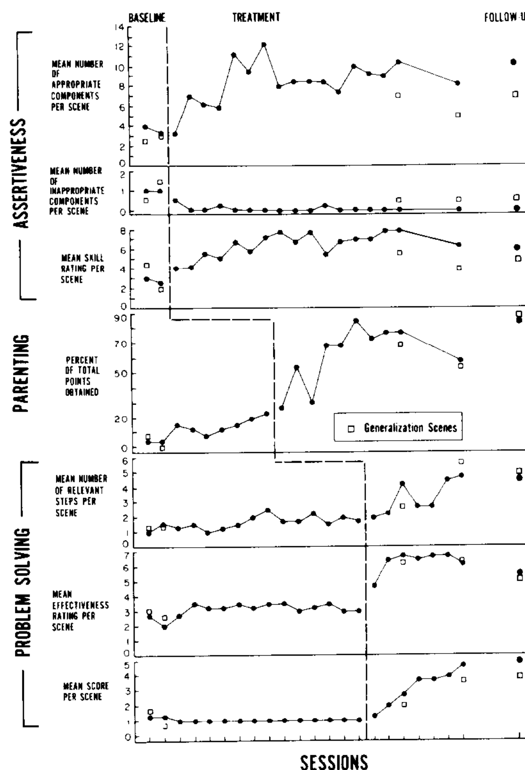

Fig. 1. Subject performance on measures of assertiveness, parenting knowledge, and problem solving. Solid dots connected by a line indicate performance on measures administered at the end of each session, while the open points indicate performance on the generalization scenes or assessment.

solving skill. When training was introduced to improve Jill's ability to handle social conflict situations, immediate improvement was observed on all three measures of assertiveness (e.g. the number of appropriate component behaviors in each scene increased, overall skill ratings increased, and inappropriate behaviors decreased). Next, when intervention focused on increasing the parents knowledge of child-management techniques, a substantial increase in her test scores was found. Finally, all three measures of problem-solving skill (number of relevant steps, overall effectiveness rating, and problem-solving score) showed substantial increases contingent upon specific training in this area. Generalization probes in the three

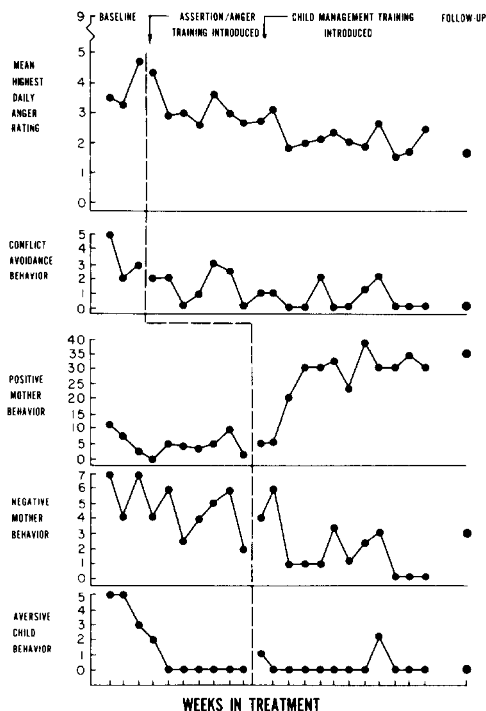

Fig. 2. Monitored ratings of the parent's daily anger, and monitored weekly frequencies of conflict avoidance, positive mother, negative mother, and aversive child behaviors in the home setting.

skill areas, assessing performance on measures that had never been specifically trained, were substantially higher late in treatment than during baseline. Finally, skill maintenance at follow-up was observed for all measures, including the generalization probes.

Inspection of the data in Fig. 1 indicates that change in each skill area always occurred at the time the skill was targeted for treatment, demonstrating multiple baseline experimental control of behavior change. Taken together, these results show that Jill acquired the trained skills and exhibited them effectively on the assessment measures.

Self-monitored behavior in the home setting

Figure 2 presents data from the subject's monitoring records throughout the course of the intervention and at 4-month follow-up. This figure shows the parent's daily anger ratings (average for each week) and the *weekly* frequencies of conflict avoidance behavior, positive mother behavior, negative mother behavior, and aversive child behavior.

Inspection of this figure reveals a gradual but progressive decrease in average daily anger levels beginning when training in assertion and anger control was initiated (week 4). As the figure also shows, the four self-monitored aspects of parent–child interaction also improved at the time training in this area occurred (week 11). Specifically, the frequency of passively avoiding and leaving conflict situations with the child decreased when child-management training took place. The rate of positive mother behavior increased dramatically during child-management training, indicating that the mother reported the use of praise and rewards much more frequently. Finally, the frequency of aversive child behavior decreased to near zero levels, but did so at the time the parent received anger/assertion training. These results indicate improvement in the handling of the child at home, improved use of appropriate management techniques, and decreased levels of parent anger. All monitoring measures except frequency of aversive child behavior showed change at the time that intervention focused on the specific skills area. In addition, maintenance of the treatment gains was observed on all five self-monitored measures at follow-up.

Home observations of parent–child interactions

The percentage of intervals where the mother engaged in the coded behaviors for the two pre-treatment observations sessions and the post-treatment session, respectively, were as follows: questions, 25, 17, and 15%; talking, 20, 29, and 54%; commands, 15, 8, and 12%; and, compliments, praise, 0, 1, and 1%. Thus, the most notable change in the mother's interaction behavior following treatment was a large increase in the rate of talking (+120%) over the average pre-treatment rate. For the son, the percentage of intervals for each coded behavior

in the three observation sessions were: talking, 30, 33, and 62%; questions, 5, 10, and 15%; crying, whining, screaming, 0, 5, and 2%; and, noncompliance, 2, 0, and 1%. The son's data indicate substantial increases following treatment in both talking to the mother (+94%) and asking questions (+100%) over average pre-treatment rates of occurrence. For both the mother and son, all appropriate interaction behaviors (with the exception of questions by the mother) increased over average pre-treatment rates and all inappropriate or aversive behaviors decreased with treatment.

Self-report inventories

The subject's pretreatment on the Novaco Anger Inventory (NAI) was 288; following the intervention, her anger score on the NAI was reduced to 268. Similar improvement was found on the FNE, where a reduction in fear of disapproval scores was found (23 at pre-treatment to 17 after treatment was completed). Interestingly, AI scores revealed very little change (discomfort: 125 at pre-treatment, 133 at post-treatment; response probability: 89 at pre-treatment, 96 at post-treatment).

In summary, when training was sequentially introduced to improve the subject's skills in the problem areas of assertiveness/anger control, child-management skill, and problem-solving ability, improvement was found on the in-clinic measures assessing these competencies. Self-monitored data collected throughout the intervention indicated a reduction in mean daily anger levels and improvement in both child behavior and the subject's reported use of management skills; in general, these changes took place at the time treatment was focusing on anger control and child-management techniques. In-home probe observations of parent–child interactions revealed increased parent skill at the post-treatment relative to pre-treatment observations. The only measures which failed to show substantial change were the standardized self-report inventories.

Agency report follow-up

Fifteen months following treatment, the child welfare agency originally referring the subject indicated that there had been no recurrence of family violence and the mother–child relationship was reported to be "very positive." The child was receiving grades of A and B in school, and the parent was employed full-time. The agency reported that the child was no longer "at risk."

DISCUSSION

This case study illustrates that skills training procedures can be successfully applied to reduce episodes of violence in a child-abusive parent. As several investigators have pointed out, an initial assessment task with these families is functionally analyzing prior episodes of violence in order to pinpoint relevant antecedents to abusive conduct (Burgess, 1979; Friedman *et al.*, 1981). In the current case, violent behavior toward the child appeared most likely to occur when (a) the parent was angry at some other adult in her life, (b) the parent felt frustrated by problems that she was unable to solve satisfactorily, and (c) the child misbehaved. In this way, the likelihood of violent agressive responses when the child misbehaved appeared to be higher when the parent also felt aroused, frustrated, or angry due to the ineffective handling of other living problems. This pattern of several antecedents is consistent with previous reports suggesting that child abuse may be multidetermined and not linked to a single causal factor, but rather to several skill or coping deficits (Burgess, 1979; Dubanowski *et al.*, 1978; Friedman *et al.*, 1981; Kelly, 1983).

Assertive/anger control training, child-management skills training, and training in problem-solving were applied sequentially in this study. Treatment was successful in teaching the parent more effective social skills for handling interpersonal frustration in her own relationships with others, improving her knowledge of appropriate nonviolent child management skills, and increasing her ability to develop solutions to problems that had previously

elicited feelings of frustration and anger. In all cases, skill assessment and training were tailored to specific situations the parent had reported as personally troublesome. Thus, the situations practiced in the assertive training phase were based on interpersonal problem interactions actually reported as troublesome for her; the situations tapped by the child management measure were derived from her reports of difficulties she had with her son; and the problem-solving situations practiced in training involved actual problems she found frustrating.

Applied treatment research with child abusive families is often difficult due to the private, low frequency, and observationally inaccessible nature of the abusive act itself. However, to the degree that clinicians can identify and then alter skill deficits that are functionally related to a given parent's violent behavior, it should be possible to develop more effective treatments for these families. Training in child management skills has already yielded very promising results for some abusive families (Crozier and Katz, 1979; Friedman *et al.*, 1981; Wolfe *et al.*, 1981). Efforts to extend and further tailor comprehensive skills-training packages, as demonstrated in this case study, also appear promising for the treatment of these families.

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