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## DEVELOPMENT AND DESCRIPTION OF AN EMPIRICALLY BASED ECOBEHAVIORAL TREATMENT PROGRAM FOR CHILD MALTREATMENT

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Victims of child maltreatment and their families evince a myriad of behavioral problems, including deficits in parenting skills, social skills, safety skills, anger, stress, and financial management, mood disorders, and abusive behavior. Controlled treatment outcome studies in child maltreated samples have indicated that many of these problems are responsive to clinical intervention strategies. However, empirically based practitioners who treat child maltreatment are faced with the inevitable task of effectively integrating these treatments into their clinical programs. Therefore, this paper describes the development of an ecobehavioral treatment program for child maltreatment that is founded on a comprehensive integration of previously validated procedures. The program's development, and methods of assessment and intervention, will be underscored, including therapist training strategies, and solutions to problems that sometimes occur. Data in support of the program is examined, but primarily as a means to demonstrate how evaluative components may be utilized in practice settings to guide intervention. Copyright © 1999 John Wiley & Sons, Ltd.

Families characterized by child maltreatment (physical, psychological, sexual) often evince multiple psychological problems and functional impairments. For instance, perpetrators have demonstrated elevations in depression (Chaffin, Kelleher, & Hollenberg, 1996; Culp, Culp, Soulis, & Letts, 1989), stress (Holden & Banez, 1996; Straus, 1980), and poor relationships with family members (Holden & Banez, 1996), and maltreated children have displayed problems in their relationships with significant others and their parents (Grist-Litty, Kowalski, & Minor, 1996; Stern, Lynch, Oates, O'Toole, & Cooney, 1995), depression (Allen & Tarnowski, 1989; Koverola, Pound, Heger, & Lytle, 1993), anxiety (Hughes, 1988), and disruptive behavior (Dubowitz, Black, Harrington, & Verschoore, 1993; Hughes, 1988; Stern *et al.*, 1995). Results of treatment

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Contract grant sponsor: State of Florida Department of Health and Rehabilitative Services.  
Contract grant number: JH023.

outcome studies suggest that cognitive behavioral interventions have been relatively effective in the remediation of these difficulties, particularly in maltreating parents (see Wolfe & Wekerle, 1993). Indeed, efficacy has been established for home-based treatments targeting child management skills of primary caregivers (Wolfe, Sandler, & Kaufman, 1981), home-based family systems therapy incorporating child management and relationship enhancement exercises (Brunk, Henggeler, & Whelan, 1987), contingency contracting and problem solving strategies (Wolfe & Sandler, 1981), interpersonal safety skills (Wurtele, 1990), anger/stress management (Acton & Daring, 1990; Barth, Blythe, Schinke, Stevens, & Schilling, 1983; Campbell, O'Brien, Bickett, & Lutzker, 1983; Egan, 1983; Schinke, Schilling, Kirham, Gilchrist, Barth, & Blythe, 1986), and interpersonal skills training designed to reduce risk of harsh physical punishments (Kolko, 1996).

According to the ecobehavioral model, child maltreatment is due to a complex interaction of multiple variables, and not simply caused by one factor, such as the parent's level of stress, the parent's history of disciplining the child, the ability of the child to recognize when to leave the parent alone, or the perceived seriousness of any child misbehavior (Wesch & Lutzker, 1991). Child maltreatment, and its associated problem behaviors, must be treated comprehensively and ideally within the environmental context in which the problem behaviors occur. Project 12-Ways exemplifies such an approach, as this program includes multiple interventions that are implemented *in situ* (Lutzker & Rice, 1984). Project 12-Ways has demonstrated lower child abuse recidivism rates when compared to matched control groups (Lutzker & Rice, 1984, 1987; Wesch & Lutzker, 1991), and its individual components have successfully trained maltreating parents to stimulate their infants (Lutzker, Lutzker, Braunling-McMorrow, & Eddleman, 1987), identify home stressors, install home safety equipment, provide cleanliness training (Barone, Greene, & Lutzker, 1986; Tertinger, Greene, & Lutzker, 1984; Watson-Perczel, Lutzker, Green, & McGimpsey, 1988), identify symptoms of illness in children (and later initiate appropriate intervention) (Sarber, Halasz, Messmer, Bickett, & Lutzker, 1983), plan and budget meals to improve child nutrition (Delgado & Lutzker, 1985; Sarber *et al.*, 1983), and improve child hygiene skills with contingent reinforcement (Lutzker, Campbell, & Watson-Perczel, 1984).

Thus, child maltreatment is a diverse problem necessitating multifaceted intervention delivered in the environment where the maladaptive behaviors are occurring. However, there is a relative dearth of published treatment outcome studies investigating *comprehensive* interventions for child maltreatment (Oates & Bross, 1995). Given the variety of problems evidenced in maltreated samples, it becomes obvious that empirically based practitioners who treat child

maltreatment are faced with the inevitable task of integrating validated interventions into their practice settings (i.e., child protective service agencies, psychology clinics).

Therefore, the purpose of this paper is to describe the development of a home-based, ecobehavioral treatment program for child maltreatment that is founded on a comprehensive integration of previously validated procedures. Methods of assessment and intervention will be underscored, including implementation strategies, and solutions to problems that sometimes occur. Data in support of the program will be examined, but primarily as a means to demonstrate how evaluative components may be utilized in practice settings to guide intervention.

## **GENERAL PROGRAM STRATEGIES**

### **Establishing Rapport**

Guardians of children who have been reported to child protective service agencies usually do not request counseling on their own initiative, and are often guarded as the first session begins. To further complicate relations between therapists and patients, therapists often feel uncomfortable providing praise and empathy in the homes of child victims of maltreatment. This discomfort is easily indicated to their patients when praise is attempted, which often leads patients to interpret their comments as being patronizing or insincere. Thus, we have implemented fundamental exercises in our training program to improve the perspective taking skills and praising style of our therapists. For instance, when clinical cases are reviewed during weekly case conference meetings, therapists are instructed to identify family strengths and brainstorm potential statements of empathy and praise. We have also found therapy to be more stimulating and enjoyable when close family members and neighbors not living in the home are involved in treatment upon the guardian's consent. Another strategy is the provision of token gifts to children, which adds to their excitement when therapists come to their home.

### **Improving Patient Participation**

The program philosophy assumes a skills oriented approach to the remediation of child maltreatment. Therefore, our therapists rely extensively on role-playing. Unfortunately, caregivers of maltreated children are usually reluctant to engage in this procedure because their participation in this procedure provides an

objective evaluation of potential skill deficits, which may subsequently be reported to others (i.e., caseworkers, judges). Role-playing may also be an anxiety evoking experience, as their abilities are regularly scrutinized by others. We have found the following strategies to be effective in motivating caregivers to comply with role-playing procedures: (i) instructing patients to perform role-plays rather than asking the patient to 'give it a try', (ii) excusing persons who are not involved in the role-play, (iii) performing initial target skills with the participant concurrently, (iv) avoiding laughter when modeling, and (v) providing instructions/prompts when a lack of effort to conduct the behavior has initially occurred.

Noncompliance to therapy assignments often occur, primarily as a result of the therapist's lack of appropriate enforcement. If an assignment is not performed, and the therapist says 'That's okay don't worry about it', the family member will probably think assignments are not important, which will obviously decrease the likelihood of future compliance. Consequential statements reflecting displeasure are equally ineffective. Therefore, we instruct therapists to blame incomplete therapy assignments on extraneous variables (e.g., rough week at work), and then immediately instruct the person to perform the recording process in retrospect. If noncompliance to the assignment is a result of illiteracy, therapists may assign a literate family member to assist in secretarial duties, or instruct the illiterate participant to use pictures to represent target behaviors.

Premature termination of therapy, and patient 'no-shows' to scheduled sessions, are relatively common in child abuse samples. We have markedly improved the percentage of sessions attended by our patients by conducting telephone reminder calls to the guardian, and children 10 years old or greater, a few days before each scheduled session. The first phone call requires less than 5 minutes, and includes a brief review of the program, and attempts to elicit potential benefits of session participation from the patient. Potential difficulties in attending the session are also generated, including solutions to these problems. Subsequent phone calls, of about 3 or 4 minutes duration, include brief reviews of patient successes, and inquiries regarding patient goals for the session. Telephone messages to close neighbors, or session reminder post-cards, may be used when no telephones are present in the child's home. When families are not in their homes at scheduled therapy times, therapists wait up to 20 minutes, or sometimes drive around the neighborhood in search of relevant family members. In addition, because our interventions are standardized, if a therapist is unable to attend a scheduled appointment, another therapist may be substituted to attend the session. We have also found it important to maintain periodic contact with Child Protective Service caseworkers and judges (e.g., monthly standardized progress reports of patient target behaviors which are mostly 'fill-in-the-blank' or, telephone calls). These brief contacts improve system relations and number

of referrals, and help to keep patients motivated to cooperate in therapy. Threatening patients to disclose information to probation officers or child protective caseworkers regarding their noncompliance in therapy is typically ineffective, and often hurts rapport. Conversely, however, caregivers may be told that their hard work will be reflected in a monthly letter to their probation officer, judge, and so on.

### **Maintaining Therapist Enthusiasm**

Child abuse programs evidence high staff turnover rates of employment. Stress, due to unmotivated patients and travel in dangerous low-income areas, is the most frequently mentioned reason for staff 'burn-out' or termination. Indeed, effective implementation of intervention requires a sophisticated understanding of its application in a variety of situations, and therapist style and methods are constantly reviewed by others who are under obligation to be critical of their weaknesses and mistakes (i.e., judges, case workers, patients). Therefore, to improve program morale we have incorporated several strategies. When traveling in crime infested neighborhoods, therapists conduct therapy in pairs, and schedule appointments so that sessions terminate prior to dusk. Whenever possible, therapists travel to homes in the same car, ideally in male/female dyads. The cost-effectiveness of providing therapy in patient homes using two therapists is justified for several reasons, including (i) less stress and greater feelings of support and safety for the therapists, resulting in lower employment turnover, (ii) the assessment time goes twice as fast, which leads to fewer drop-outs and less tardiness by impatient patients, and allows therapists to schedule more sessions during prime hours, (iii) therapists can review clinical case strategies and score assessment data during travel time to patient homes, and (iv) most third-party funding agencies will reimburse both therapists for their time, provided the therapists worked with the parent and youth separately for the therapy that was billed. Other advantages to utilization of co-therapists include greater treatment protocol adherence, increased learning opportunities for therapists due to observation of exemplary co-therapist techniques, and opportunities to plan session agendas and discuss case notes during the rides to and from session. Therapists are also routinely reinforced for their accomplishments during each of our weekly program meetings. At the start of each meeting we pass out a list ('Catching My Co-Therapist Being Good'), and have each staff member record at least one procedure, technique, or innovative idea that was effectively implemented in therapy by a fellow staff member. The statements are sometimes descriptive (e.g., Andres—'our 5 year-old patient commented on how

much she likes it when Andres comes because he brings her tapes to watch while we work with her mother'), but usually broad and unspecific (e.g., Orlando—'Worked hard to engage a difficult adolescent in therapy'; Faye—'You are absolutely fabulous!! Always so prepared for our sessions'; Elisa—'Her encouraging words have meant a lot to me'). The list of compliments is subsequently read to the group, and staff members volunteer elaboration on their experiences for about 10 or 15 minutes.

### **Therapist Training**

Therapists are primarily Masters and Doctoral candidates in clinical psychology, and undergraduate psychology majors. Undergraduates are usually mature students who are at the top of their class, and their work ethic is carefully examined prior to their acceptance in the program. About 30% of our student therapists are volunteers who allocate 10 to 15 hours per week to the project, including approximately 3.5 hours of training and supervision. However, most participate as clinical or research practicum students. Training meetings, which occur 60 to 90 minutes per week, focus on learning to effectively implement program assessment measures and interventions. Most students are initially very inexperienced in the treatment of child maltreatment. Therefore, all students are required to read a treatment manual prior to program participation, which delineates each therapy component, including sample rationales, specific steps involved in administering each intervention, and sample dialogues. The student therapists are also required to attend two corresponding training workshops of about 8 hours duration. Modeling and role-playing techniques are chiefly relied on as the primary method of teaching, and assuring that students have learned, the interventions. After therapists are mastered in these workshops, therapists are assigned a caseload of about two (for undergraduate students and relatively inexperienced therapists) to four families. In demonstrating mastery, therapists are permitted to utilize therapy prompting lists which summarize the specific behavioral steps to be implemented for each intervention in the treatment manual (e.g., 'Provide a rationale for positive practice', 'Instruct the patient to model positive practice'). However, the therapists are only allowed 5 seconds to view each step. Although therapist skill and style vary, we require only that the therapists effectively implement each step as protocol dictates, however rough.

Upon mastery, therapists are required to attend weekly training meetings of 60 to 90 minutes duration. Time requirements of training meetings are proportional to performance. Thus, less practiced therapists are required to remain in these meetings for the 90 minutes duration. Students are assigned to read one treatment outcome study of child maltreatment per week, which is subsequently

reviewed during the training meeting for about 10 minutes. Whenever possible, inexperienced therapists are paired in therapy with an experienced therapist.

Students are required to attend a structured case conference meeting each week (1 hour duration). The case is presented by one of the students for about 20 minutes, according to a specific agenda (e.g., reason for referral, description of all relevant persons in the victim's life, family strengths, results of psychological testing procedures, recommended methods of intervention). The remaining conference time is spent discussing extenuating circumstances and other relevant information with the other students, as appropriate (e.g., unique problems, generating solutions to problems), or discussing administrative program concerns (e.g., timely progress notes, encouraging effective relationships with caseworkers).

Group supervision occurs each week, and is strongly focused on maintaining protocol adherence (90 minutes duration, ideally four therapists). First, the supervisor computes the percentage of cases that were seen by each therapist during the past week, and records these percentages in a log book. Therapists with high percentage scores are praised, and therapists who evidence low percentage scores are sometimes asked to generate strategies which may increase the session attendance of their patients. The supervisor randomly reviews one audiotape from the caseload of each therapist for about 20 minutes. Prior to reviewing each audiotape, the therapist presents a succinct summary of the case following a specified agenda (e.g., number of sessions conducted with family, family members involved in treatment, specific therapies implemented, response of patients to interventions, suggested methods to be implemented during the next session). Blaming patients for treatment failures, and asking supervisors for therapy recommendations, are discouraged. Instead therapists are instructed to briefly state the clinical problem, and evaluate the pros and cons of potential solutions prior to making their own decision. If an appropriate solution is not generated, the other counselors (and less often the supervisor) may suggest additional solutions. Therapists are also encouraged to research treatment methods in psychology data bases. Thus, the primary role of the supervisor is to mention strategies that make protocol adherence easier to follow, and role-play behavioral therapy skills with therapists.

## **DEVELOPMENT OF EMPIRICALLY BASED ASSESSMENT PROTOCOL**

There are obvious advantages of implementing a comprehensive standardized battery of tests and measures since maltreated children and their families evince multiple problems. However, there are disadvantages as well, most notably,

erroneous participant responding due to fatigue or upset regarding excessive time requirements. Therefore, we first reviewed studies of child maltreatment to identify commonly used assessment methods of child maltreatment, and subsequently classified these measures according to the areas assessed. Instruments requiring quick and easy administration with adequate psychometric properties were included, and slight modifications were performed, whenever necessary.

## DESCRIPTION OF ASSESSMENT PROTOCOL

In an effort to balance parsimony with the utilization of a comprehensive assessment battery, therapists administer a standardized battery of instruments, which excludes irrelevant subscales whenever possible (e.g., Fear of Dogs and Small Animals from the Fear Survey Schedule for Children—Revised). Additional assessment tools are later administered, but only when indicated (i.e., reports from patients/others, endorsed items which appear outstanding, elevated subscales). Our pilot investigations suggested that many family members were exaggerating their literacy due to embarrassment, were completing questionnaires without discrimination due to fatigue/upset, or frequently did not understand word meanings. Therefore, we found it necessary to orally administer the inventories and replace relatively difficult vocabulary words with easier-to-understand synonyms (therapists were trained to administer assessment procedures without bias, e.g., leading questions, nodding head). This strategy appeared to result in greater accuracy of reporting, and put the patients more at ease, based on their anonymous post-treatment evaluations of the program. Five minute breaks are scheduled every 20 minutes to discuss relevant hobbies, sporting events, or other relaxing events with the patients to improve participation.

Pre-treatment assessment includes two sessions of 90 minutes duration in the home of the child, and then again at post-treatment, and 3 month follow-up. During the initial session, one therapist administers a structured intake interview with the legal guardian(s), while the other therapist conducts a structured interview with the target child in a private room. During the intake session, interviewers assess outstanding medical problems, developmental milestones and abilities, and family information relevant to the child and guardian, including a functional analysis of the presenting problem. We have found it necessary to differentiate our program from the legal system to improve rapport. In this endeavor, therapists inform caregivers of our state government's definitions of child maltreatment, their professional obligations to report such instances, and the patient's rights to confidentiality in all other areas, excluding elder abuse,



suicidal or homicidal intent, and court mandation. The latter procedure increases patient trust and reports of undesired parenting practices. Caregivers are also told that information disclosed to program therapists may be integrated into a psychological report, and that it is customary for their child protective service caseworkers to request the report for safety of the child, and legal examination. When caregivers refuse to consent for treatment, therapists simply leave a business card with the name and number of our clinic, tell the family it was a pleasure serving them, and request that they contact the clinic if treatment is desired. Therapists then tell the referral agent (e.g., caseworker) that the patient denied therapy. In almost all cases, the external agent convinces the family to consent to treatment.

During the second session, therapists administer the battery of measures listed below, based on age-appropriateness of the child, and the presenting problem. Children younger than 6 years old are not administered questionnaires. Thus, the battery is comprehensive, but not time-consuming for the reasons mentioned above.

## **Child Measures**

### *Children's Depression Inventory (CDI)*

The CDI (Kovacs, 1983) is a 27-item self-report questionnaire measuring mood, pessimism, appetite loss, suicidality, and other depressive symptomatology in children and adolescents. Scores range from 0 to 54, with higher scores indicating greater severity of depression. Approximate time to administer (ATA) is 12 minutes.

### *Revised-Children's Manifest Anxiety Scale (RCMAS)*

The RCMAS (Reynolds & Richmond, 1978) consists of 37 items which evaluate anxiety in children and adolescents. In addition to a score that reflects an attempt to present oneself favorably (lie scale), subscale scores are derived for General Anxiety, Physiological Anxiety, Worry and Oversensitivity, and Social Anxiety. ATA = 15 min.

### *Fear Survey Schedule for Children—Revised (FSSC-R)*

The FSSC-R (Ollendick, 1983) consists of 80 items which evaluate fears in children and adolescents. Scores are obtained for Fear of Failure and Criticism, Fear of the Unknown, Fear of Injury and Small Animals, Fear of Danger and

Death, Medical Fears, and Total Fear. However, we recommend only the two former subscales. ATA = 15 min.

#### *The Youth Satisfaction Scale—Revised (YSS-R)*

The YSS-R (Donohue, Van Hasselt, Warshal, Hersen and Schoenwald) is a 10-item self-report measure assessing happiness of the child with their caregiver to ten domains of the relationship (i.e., Overall Happiness, Communication, Chores, Friends, Curfew, Discipline, Dress, Rewards, School Performance, and Home Conduct Rules). Items are rated on a 0–100% scale of happiness. Psychometric properties of the original scale (see Besalel & Azrin, 1981) were not ascertained. However, the YSS-R has demonstrated adequate reliability and validity in maltreated children and adolescents (Donohue *et al.*, 1996). ATA = 3 min.

#### *The Children's Version Family Environment Scale (CVFES)*

The CVFES (Pino, Simons, & Slawinowski, 1983) consists of 30 items which assess the youth's perceptions of his/her family environment. Children must be between 5 and 11 years old. The CVFES measures ten areas related to the family environment (i.e., cohesion, expressiveness, conflict, independence, achievement orientation, intellectual–cultural orientation, active–recreational orientation, moral–religious emphasis, organization, control). Adolescents are administered a longer 90-item version (Family Environment Scale—Revised; FES-R; Moos & Moos, 1986). Child ATA = 15 min; adolescent ATA = 27 min.

#### *The Children's Impact of Traumatic Event Scale—Revised (CITES-R)*

The CITES-R (Wolfe *et al.*, 1991) is administered only to those children suspected to be victims of sexual abuse. The CITES-R consists of 54 items which assess the impact of abuse from the child's perspective (i.e., post-traumatic symptoms, social reactions, abuse attributions, eroticism). ATA = 20 min.

### **Caregiver Measures**

#### *Beck Depression Inventory (BDI)*

The BDI (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) is a self-report measure consisting of 21 items which assess the intensity of depressive symptoms

(range, 0–63). Scores 11–17 suggest mild depression, scores 18–29 reflect moderate depression, and scores of 30 or more indicate severe depression. ATA = 5 min.

### *Parenting Stress Index Short Form (PSISF)*

The PSISF (Abidin, 1990) assesses stress in the parent–child system. Scores are determined separately for child, parent, and parent–child domains. The child domain assesses perceived adaptability, demandingness, mood, and child’s level of distractibility and activity. Child acceptability, child reinforces parent, and parental attachment comprise the caregiver–child dysfunctional interaction domain. The caregiver domain measures depression, restriction of role, social isolation, and relationship with spouse. ATA = 20 min.

### *The Eyberg Child Behavior Inventory (ECBI)*

The ECBI intensity scale (Eyberg & Ross, 1978) lists 36 disruptive behaviors. The parent indicates on a seven-point scale (1, never; 7, always) how often the child exhibits each behavior. Additionally, a problem scale assesses whether or not the parent perceives each of the behaviors as problematic (1, yes; 0, no). ATA = 5 min.

### *Parent Satisfaction Scale—Revised (PSS-R)*

The PSS-R (Donohue *et al.*, 1996) is a ten-item self-report measure assessing happiness of caregivers with their children in ten domains of their relationship: Overall Happiness, Communication, Chores, Friends, Curfew, Discipline, Dress, Rewards, School Performance, and Home Conduct Rules. Items are rated on a 0–100 scale of happiness. Psychometric properties of the original scale (Besalel & Azrin, 1981) were not ascertained. However, the PSS-R has demonstrated good reliability and validity in caregivers of maltreated children (Donohue *et al.*, 1996). ATA = 3 min.

### *The Child Abuse Potential Inventory*

The CAPI (Milner, 1986) consists of 160 items designed to detect persons who engage in child abusive behavior, thus identifying children at risk for maltreatment. An Abuse Potential Scale may be calculated, along with three validity scales. Scores are weighted, and range from 0 to 486 (higher scores

indicate greater abuse potential). The CAPI yields factor scores to assess areas closely related to abuse (i.e., distress, rigidity, unhappiness, loneliness, problems with others, problems with child, problems with self, problems with family). ATA = 40 min.

#### *Family Environment Scale—Revised (FES-R)*

The FES-R consists of 90 items assessing perceptions of the family environment of adults (see FES-R in Child Measures section above for description of domains which are assessed). ATA = 27 min.

#### *Children's Sexual Behavior Inventory (CSBI)*

The CSBI (Friedrich *et al.*, 1992) is a 106-item checklist completed by parents that assesses their children's sexual behavior (i.e., self-stimulation, sexual aggression, gender-role behavior, personal boundary violations). The measure is administered only to caregivers of children suspected of sexual abuse. ATA = 37 min.

#### *Home Safety and Beautification Form (HSBF)*

The HSBF (Donohue, Miller, Van Hasselt, & Hersen, 1998) was originated from the Home Accident Prevention Inventory (Tertinger, Greene, & Lutzker, 1988). The HSBF includes 15 items relevant to home hazards (e.g., toxins, electrical hazards), cleanliness, home beautification (e.g., adequate decor), and stimulation (e.g. adequate toys, children's books). Assessors tour each room in the child's home, and indicate the number of violations in each item category (e.g., three toxins found in garage, one electrical hazard found in baby's bedroom).

## **DEVELOPMENT OF TREATMENT PROTOCOL**

Development of the treatment program followed a number of discrete, on-going, empirical phases. The first phase involved a review of the literature to determine victim and perpetrator symptomology due to the various forms of child maltreatment, and to identify the most successful interventions to remediate these problems. Based on this review (see outcome studies referenced

above), a number of empirically derived treatment procedures were integrated to comprehensively address motivation in therapy, environmental hazards and neglect, anger control, behavioral child management, relationship enhancement, and common skill deficits relevant to child care (e.g., toileting, self-hygiene).

Treatment manuals were written for each intervention, and were intended to be clear and simple so that therapists could follow them as guides during the sessions. Each manual included a brief overview of the treatment method, an example rationale, and specific steps for treatment implementation. Initial manuals were subsequently evaluated by having the training coordinator model the role of the therapist, and therapists experienced in the treatment of maltreated children took turns modeling the role of their patients. When problems were encountered with the manual during these interactions, the group performed problem solving until a solution was selected. After the training session, the coordinator modified the manual to include all revisions, and distributed this revised manual to all program therapists with instructions to be prepared for its implementation during the next training session. During this next session, all therapists took turns modeling the role of a therapist, and the training coordinator modeled a compliant patient. Again, if problems were experienced with the manual, or if possible improvements became apparent, the group utilized problem solving to select a solution, and the manual was again revised. As difficulties were ameliorated in the revision process, the modeling of patient noncompliance was intensified.

The last stage of development involved an evaluation of each treatment manual *in vivo*. Specifically, the manual of latest revision was given to all therapists to utilize with their cases. Each therapist was given instructions to administer treatment as the manual described, and subsequently report to the training coordinator any difficulties of treatment implementation, including the therapist's suggestions to improve the manual. Problems were addressed in training meetings where all program therapists were available to generate solutions that were subsequently incorporated. Thus, manuals were continuously revised as new problems were experienced in the homes. When revisions were insufficient, new manuals were originated. Interestingly, many manuals appeared on paper to be intuitively quite sound, but were ineffective in practice, and were therefore eliminated from protocol.

The aforementioned method of treatment development took full advantage of the therapists' experiences in the homes and helped to decrease therapist complaints regarding patient difficulties. Indeed, therapists became focused on the identification of solutions to clinical problems and appeared to take great pride in their work as a result of having been part of developing the treatment protocol.

## TREATMENT PROTOCOL

Intervention consists of 16 home-based sessions of about 2 hours duration scheduled on a weekly basis. Additional booster sessions are scheduled as needed. Role-playing, behavioral rehearsal, and descriptive reinforcement strategies are extensively used, and most therapies are implemented sequentially and cumulatively. Thus, after an intervention is implemented for the first time, it is reviewed during all subsequent sessions, albeit to a lesser extent. All family members living in the home of the child victim (and family members and close friends not living in the home, whenever appropriate) are encouraged to participate together during the first 40 to 60 minutes of each session. During this time, communication skills training procedures are administered to improve relationships in the family. Family members are instructed to initiate expressions of appreciation and to communicate things that are liked about family members. For instance, each session is initiated by instructing participating family members to exchange things that are loved, respected or admired about each other (e.g., 'daddy cooks for me', 'mommy comes home at night', 'my brother sticks up for me'). Families are also encouraged to schedule pleasant activities throughout the week, and these activities are subsequently reviewed during sessions. The family is encouraged to eliminate hazards and beautify the home during tours of each room. The therapist first asks the patients to enter the room where praise is elicited from the patients and therapist for methods that have improved its safety and aesthetics. The therapist then requests that patients identify home hazards using the Home Safety and Beautification Form as a prompt (see Assessment Measures section above). The patient and therapist subsequently generate methods of ameliorating each identified hazard. Only in the absence of caregiver generated solutions does the therapist suggest strategies that have worked for others in similar situations. During these tours, basic nutrition and financial management skills training procedures are carried out, as indicated.

The latter 30 to 50 minutes of each session are spent with the child and primary caregiver separately. Child interventions focus on teaching children to identify early cues to violence, decrease risk of harm, and engage in escape/avoidance strategies, as needed (see Margolin, 1979). In this endeavor, therapists first disclose common precursors to violence that have been reported by other children and professionals (e.g., frowning perpetrator, throwing objects). For each identified risk factor, children are asked to report similar experiences, including strategies that the child may have attempted to enhance safety and well-being. Therapists demonstrate alternative strategies, whenever appropriate. These strategies may include leaving the home to go to a relative's house, calling

a close neighbor for help, hiding, passively agreeing with the perpetrator, or including non-perpetrating significant others in escape/avoidance practice, whenever possible. Interpersonal safety skills are reviewed in a similar manner (e.g., refusing offers to leave with strangers, refusing sexual advances, conflict resolution). Fifteen to 20 minutes of the child session involves pleasant discussion of pro-social ambitions, hobbies, and interests of the child (e.g., achievement in school, athletics, non-delinquent social events).

Individual time spent with the caregiver is primarily focused on learning nonaversive methods of parenting, including methods of increasing motivation to use such disciplines. In this endeavor, therapists help caregivers generate their own list of negative consequences of aversive disciplines and maltreatment. The unpleasantness of these consequences is subsequently reviewed, and empathy is provided by the therapist (e.g., 'It must be nerve racking to hear your child cry and whine for such a long time after she's spanked. Let's try another discipline that works, but doesn't result in such an aversive situation for you'). Behavioral rehearsal is used to teach caregivers to praise desired behaviors, and caregivers are assigned to monitor times in which they 'catch their child being good'. Contingency management strategies (e.g., point system) are also implemented to increase caregiver efforts to reinforce youth for desired behaviors. Innovative exercises are conducted to teach caregivers to appreciate situational factors that influence children to engage in undesired behaviors, and that are beyond the child's control. For instance, the therapist reads from a list of situations that are said to influence children to engage in undesired behavior that are at least somewhat out of the child's control (e.g., drug abusing relatives, violence on television). After each situation is disclosed, caregivers are asked to rate the probability that the situation may influence their child to engage in undesired behavior, and caregivers are asked to explain how the higher rated situations may account for the undesired behaviors of their children. Positive practice (Besalel-Azrin, Azrin, & Armstrong, 1977) is emphasized as the primary disciplinary technique throughout therapy. In this procedure, role-playing and self-monitoring procedures are used to teach the caregiver to discipline undesired behaviors by (i) telling the child that the undesired behavior is at least partially the fault of some external influence (e.g., 'It's hard to get up in the middle of the night and go potty because the bathroom is so far down the hallway'), and (ii) instructing the child to practice the desired behavior several times (e.g., 'We just need to practice. Please lay down, shut your eyes, and practice getting up and going potty 6 times').

In another procedure, caregivers are asked to imagine ('think aloud') themselves terminating negative emotional states in response to initial indications of undesired child behaviors. This intervention involves the following sequence of

imaginal procedures in response to imagining the initial undesired behavior (e.g., 'I'm in the living room, and my son starts to walk to the front yard to meet his sister without putting his plate in the sink'): (i) stating negative consequences associated with abusive behavior (e.g., 'If I get upset I'll just get my blood pressure up, and my screaming may wake up my wife'), (ii) stating situational factors that assist in removing blame from the child (e.g., 'It's really important to him to be with his sister, and she has left without him in the past'), (iii) briefly relaxing (e.g., 'Let me just take a few deep breaths and think calm thoughts'), (iv) brainstorming appropriate nonaversive disciplines (e.g., 'I could tell him to come back and tell him to put the plate away', 'I could tell him that he can't go outside the rest of the night' . . .), (v) imagining successful implementation of the selected 'best' nonaversive discipline (e.g., 'I'm telling him to come back and put the plate away, and he says that he's sorry. Now he's putting the plate in the sink. I tell him to do it again so he doesn't forget next time and he puts another plate in the living room and starts to walk toward the kitchen with the plate'), and (vi) stating positive consequences resulting from the selection of the nonaversive discipline (e.g., 'I'm so glad that I made my son do positive practice with the plate. He's learning good habits, and I'm not stressed out'). Several of these trials are attempted during each session, and therapists provide assistance and prompts throughout the trials (e.g., 'Great, how many times do you want him to practice?'). When time permits, the latter 10 to 20 minutes of caregiver-focused intervention is spent demonstrating daily living skills related to child care (e.g., assertiveness skills with difficult landlords to improve living conditions, reviewing positive aspects of the child's progress in school, scheduling playtime with their children, potty-train toddlers using the Dry Bed procedure). (For a detailed description of the treatment program, see Donohue, Miller, Van Hasselt, & Hersen, 1997.)

### **Treatment Integrity**

To maintain treatment integrity therapists follow a treatment manual (see Donohue *et al.*, 1997), and utilize in-session prompting checklists that depict step-by-step instructions corresponding to each intervention. Instructions in the prompting checklists are clear, succinct, and never more than 1 page per intervention. If therapists 'lose their place' while employing the prompting checklists (i.e., forget the last step reviewed), they are trained to simply tell the patient, 'Excuse me, I have to review my notes'. Post-treatment feedback forms completed by the patients have indicated that patients have a tendency to underestimate the competencies of younger therapists, particularly when these



therapists spend 'too much time' referencing their checklists during sessions. However, patients report that this lack of confidence is short-lived, particularly when therapists appear to be prepared for their sessions.

We have also found it useful to have our therapists take turns implementing therapy steps during treatment sessions whenever therapy is initiated together, which forces therapists to depend on protocol adherence to assure smooth transitions. The training supervisor also randomly attends patient sessions, in addition to attending sessions whenever protocol adherence problems are evidenced in random sampling of audio-taped sessions. To maintain therapist credibility, the supervisor is introduced as a program representative who is conducting a routine observation. The observation allows the supervisor to gain a greater appreciation of the presenting problems in the family so that relevant feedback may be provided to the therapist to improve adherence.

Lastly, student evaluations are anchored to protocol adherence. In this regard, objective indicators of performance are easily obtained by summing the percentage scores of therapist performance in various program activities (i.e., percentage of randomly selected audio-tapes with greater than 90% adherence, percentage of therapy sessions attended by patients in caseload, percentage of program meetings attended, percentage of outcome studies read as scheduled, percentage of psychological reports turned in on time), and computing an average percentage score. This percentage score becomes the practicum letter grade for students (i.e., A, 90–100%; B, 80–89%). Students are also informed that all staff letters of recommendation for students to internships, employment agencies, and graduate programs will include this information. It may appear that some of these standards are too high, as some variables are beyond the control of the students (e.g., a therapist can not control session attendance). However, our data indicate that these variables are very much in the control of the therapists. For instance, random checks of session audio-tapes indicate that the implementation of various interventions are consistently at 100% protocol adherence. Moreover, in rare instances when sub-standard performance occurs (less than 5% on any performance measure), therapists are encouraged to perform 'make-up' procedures to improve their evaluation scores (e.g., reading extra studies, maintaining additional patients in caseload, writing more psychological reports).

In extenuating circumstances therapists must detour from their agendas, and implement unprescribed interventions. In these situations, the therapist first asks the relevant patient(s) whether the unique problem may be addressed at the end of the session (usually the last 15 minutes). If not, the therapist negotiates a specified duration in which to review the problem, and subsequently performs problem-solving strategies until a solution is generated during the determined

time. If the problem is not sufficiently solved during this time (or if the problem is more involved; e.g., reported child abuse), therapists are instructed to inform the patient that the problem is worthy of special attention, and that the therapist will need to conduct research to identify an empirically derived solution. The identified intervention is subsequently integrated into the next session agenda, usually planned to occur at the end of the session.

## PROGRAM EVALUATION

### Method

#### *Subjects*

One hundred and seventeen children and their primary caregivers were referred to the treatment program by child protective service workers following a state-documented report of child maltreatment. Twenty-two of these subjects were excluded from the study because intervention was not initiated, a primary caregiver was unavailable for baseline assessment (e.g., child in temporary shelter), at least 50% of the standardized pre-treatment assessment battery was not administered (note: children under age six were not administered assessment inventories, and were therefore not excluded from the study due to the latter criterion), or intervention did not follow the standard 16-session format because of extenuating circumstances (e.g., more than 16 sessions were provided due to court mandate). Of the remaining 95 potential subjects, 47 (50%) completed the standard 16-session format and were included in the study.

As summarized in Table 1, primary caregivers were 18–67 years old ( $M = 35.2$ ,  $SD = 10.0$ ). Forty-three (92%) were female, 25 (53%) were

Table 1. Caregiver demographic information

<i>Demographic</i>	<i>Number</i>	<i>Percentage</i>	<i>Mean</i>	<i>SD</i>
Age	47		35	10
Female	43	92		
Married	25	53		
Perpetrators of abuse	24	51		
Living with child	45	96		
Gross income between 10,000 and 20,000	23	49		
Fewer than 12 years of education	27	58		
Number of children in the home	47		2.8	1.4
History of self-reported sexual abuse	6	13		
History of self-reported physical abuse	15	32		

married/cohabiting, 35 (75%) were biological mothers of the child, five (11%) were biological grandparents, three (6%) were biological fathers, and the remaining four (9%) were other relatives or step- or foster parents. Twenty-four (51%) of these primary caregivers were responsible for the abusive incident that led to the referral, and 45 (96%) lived with the child. Twenty-three (49%) had a yearly gross income between \$10,000 to \$20,000 (range = \$0 to \$35,000), 58% had less than 12 years of education, and 16% had completed college or graduate school. Homes included 1 to 7 children ( $M = 2.8$ ,  $SD = 1.4$ ), and 1 to 4 adults ( $M = 1.9$ ,  $SD = 0.8$ ). During their childhood, six (13%) of the primary caregivers reported that they were sexually abused, and 15 (32%) reported that they were physically abused.

Table 2. Demographic information on maltreated children

<i>Demographic</i>	<i>Number</i>	<i>Percentage</i>	<i>Mean</i>	<i>SD</i>
Age	47		9	5
Female	27	57		
Court-mandated to treatment	19	40		
Minority racial descent	31	66		
Reported for neglect	24	51		
Reported for physical abuse	21	45		
Reported for multiple forms of abuse	12	26		
Reported for sexual abuse	7	15		
Reported for psychological abuse	7	15		

Table 2 summarizes demographic characteristics of the child victims. Ages of the 47 maltreated children were newborn to 17 years ( $M = 8.5$ ,  $SD = 4.9$ ). Nineteen (40%) were court-mandated to receive treatment, 31 (66%) were of minority descent (45% African-American, 19% Hispanic, 2% Asian), and 27 (57%) were female. Twenty-four (51%) children were reported by the state protective service worker to have been neglected, 21 (45%) were reported to have been physically abused, 7 (15%) were reportedly sexually abused, 7 (15%) were reportedly psychologically abused, and 12 (26%) were reported to have suffered more than one form of abuse.

### *Procedure*

Children were typically scheduled for their initial assessment session within one week of receiving the referral from child protective services. A team of two assessors conducted assessment procedures with the primary caregiver and children 6 years and older ( $N = 31$ ). Assessment was conducted in the child's

residential placement (e.g., home, foster home, shelter). Two primary caregivers did not live with the target child at the time of intake, and were, therefore, interviewed separately. One assessor interviewed the target child while the other assessor interviewed the primary caregiver separately in another room. The pre-treatment assessment phase typically included two or three 90 min. sessions scheduled one week apart. However, some cases necessitated additional assessment sessions due to a variety of reasons (e.g., noncompliance with protocol, initial refusal to consent to treatment, tardiness or unavailability for scheduled sessions, home distractions, illiteracy). Upon assessment completion, families were scheduled for intervention, usually within seven days. The mean number of weeks between the initial assessment session and the first intervention session was 3.5 ( $SD = 1.8$ ). Children and their caregivers were generally scheduled to receive post-treatment assessment within 1 week of their 16th session of intervention.

## Results

### *Treatment Outcome*

*Caregiver Measures.* Within-group  $t$  tests were used to evaluate change from pre- to post-treatment. To control family-wise error rate for an alpha of 0.05 (addressing the problem of inflated alpha resulting from multiple comparisons), paired  $t$  tests were evaluated using a Bonferroni-corrected alpha level ( $p < 0.002$ ). Thus, the customary significance level of 0.05 was not used in favor of the more conservative 0.002 alpha level. Nevertheless, to aid interpretation, the probability values were listed, whether significant or not. The results (see Table 3) indicated that caregivers demonstrated significant improvements in most measures. On the CAPI, caregivers showed significant improvements in 'ego strength', abuse potential, loneliness, distress, and problems with family. Improvements were most striking in the area of stress, as all but one scale of the PSI were significantly improved. Thus, at post-treatment, relative to pre-treatment, caregivers perceived their children as being significantly more adaptable and less demanding. The Parent domain of the PSI indicated that caregivers perceived themselves as being less depressed, restricted, and socially isolated. The latter improvements were consistent with results obtained from the revised Parent Satisfaction Scales. According to this measure, caregivers were more satisfied with their children in communication, home conduct, response to discipline, overall, and with the friends of their children. Caregiver satisfaction with chores was also improved ( $p < 0.003$ ), although not significantly according

Table 3. Within-group *t* tests from pre- to post-treatment (caregiver measures)

Measure	Pre-treatment		Post-treatment		N	t	P (1 tail)
	Mean	(SD)	Mean	(SD)			
Beck Depression Inventory	11.1	(8.8)	8.1	(9.3)	38	2.12	<0.05
Eyberg Child Behavior Checklist							
Intensity Scale	108.4	(44.7)	90.1	(45.9)	35	2.17	<0.05
Problem Scale	13.2	(12.3)	7.9	(8.2)	35	2.42	<0.01
Child Abuse Potential Inventory							
Abuse	181.39	(118.9)	124.1	(100.3)	28	4.45	<0.001*
Loneliness	7.3	(4.4)	4.8	(3.8)	28	3.88	<0.001*
Distress	100.3	(85.3)	60.9	(68.4)	28	3.86	<0.001*
Rigidity	24.2	(18.0)	24.2	(19.0)	28	0.02	=0.49
Unhappiness	21.3	(16.1)	14.0	(12.7)	28	3.20	>0.002*
Problems with Child	9.0	(8.8)	8.9	(8.2)	28	0.49	=0.31
Problems with Family	13.9	(11.5)	7.4	(9.1)	28	3.67	<0.001*
Problems with Others	13.1	(7.2)	9.8	(8.8)	28	2.12	<0.05
Ego Strength	23.3	(12.1)	29.1	(10.5)	28	3.79	<0.001*
Parenting Stress Index							
Total Score	95.8	(22.2)	81.3	(23.3)	36	3.73	<0.001*
Parental Stress	33.9	(9.2)	28.8	(9.1)	36	4.08	<0.001*
Parent-Child Dysfunction	28.4	(8.3)	24.5	(8.3)	36	2.38	=0.01
Child	33.5	(9.3)	27.9	(8.7)	36	3.60	<0.001*
Parent Satisfaction Scale							
Overall Satisfaction	77.0	(30.4)	89.5	(17.9)	37	3.88	<0.001*
Communication	69.2	(31.5)	81.8	(23.4)	39	3.98	<0.001*
Home Conduct	45.8	(37.6)	70.6	(30.3)	36	4.30	<0.001*
Response to Discipline	45.8	(39.5)	75.6	(26.5)	36	5.14	<0.001*
Curfew	83.6	(24.4)	90.0	(20.5)	31	1.38	=0.09
Household Chores	57.0	(39.7)	71.2	(32.0)	33	2.94	=0.003
Friends	68.6	(27.8)	83.6	(22.2)	36	3.49	<0.001*
Way Child Dresses	81.1	(30.9)	81.4	(30.9)	37	0.07	=0.47
Reaction to Rewards	81.7	(24.9)	80.8	(21.3)	36	-0.27	=0.39
School Work	71.9	(31.7)	75.8	(25.9)	31	0.70	=0.25

\*Significance, according to the conservative Bonferroni test.

Note: To aid in interpretation, some of the signs of the *t* tests have been changed so that a positive *t* value indicates improvement (i.e., decrease in symptoms, increase in prosocial functioning).

to our conservative standards. Other measures approaching significance included the BDI ( $p < 0.02$ ), the Problem and Intensity scales of the Eyberg Child Behavior Problem Checklist ( $p = 0.01$  and  $p < 0.02$ , respectively), and the Unhappiness scale ( $p < 0.002$ ) and Problems with Others scale of the CAPI ( $p = 0.02$ ). It should be mentioned that the CAPI was not included in the original battery of tests, and some items of the Parent Satisfaction Scales do not

apply for younger children (e.g., curfew), hence there is missing data for both measures.

*Child measures.* Child improvement in psychological functioning from pre- to post-treatment was similarly evaluated using within group *t* tests. Again, a Bonferroni correction ( $p < 0.003$ ) was used to control family-wise error rate for an alpha of 0.05. In contrast to their caregivers, results indicated that children did not demonstrate significant improvements in any measure (see Table 4).

*Validity scales.* We hypothesized that caregivers and their children would be especially motivated to minimize functional impairments at pre-treatment assessment (relative to post-treatment assessment) because many families completed the intake examination shortly after engaging in the abusive episode that led to referral. Therefore, they may have suspected that pre-treatment

Table 4. Within-group *t* tests from pre- to post-treatment (child/adolescent measures)

Measure	Pre-treatment		Post-treatment		N	t	P (1 tail)
	Mean	(SD)	Mean	(SD)			
Child Depression Inventory	10.6	(8.7)	9.3	(6.7)	25	0.68	=0.25
Fear Survey Schedule for Children—R							
Fear of the Unknown	29.4	(7.7)	27.2	(7.3)	26	1.12	=0.14
Fear of Criticism	39.2	(8.4)	37.9	(8.4)	26	0.60	=0.28
Revised-Child Manifest Anxiety Scale							
Total Anxiety	12.7	(5.8)	12.3	(5.1)	27	0.29	=0.39
Physiological Anxiety	4.2	(2.1)	4.2	(1.7)	27	-0.07	=0.47
Worry/Overconcern	5.6	(2.7)	5.2	(2.7)	27	0.64	=0.26
Social Concentration	3.0	(2.0)	2.9	(1.7)	27	0.08	=0.47
Youth Satisfaction Scale*							
Overall Satisfaction	88.0	(25.0)	86.8	(21.6)	25	-0.30	=0.38
Communication	86.8	(21.6)	74.8	(32.8)	25	0.33	=0.37
Home Conduct	74.0	(35.1)	78.8	(28.0)	25	-0.63	=0.27
Discipline	62.8	(36.9)	69.6	(31.7)	25	1.02	=0.15
Curfew	74.3	(31.1)	71.4	(33.7)	21	-0.30	=0.38
Household Chores	80.0	(26.1)	76.8	(30.8)	21	-0.44	=0.33
Reaction to Friends	81.3	(25.9)	81.3	(27.6)	24	-0.00	=0.50
Reaction to Dress	83.6	(28.7)	82.8	(32.6)	25	-0.11	=0.45
Rewards	80.0	(34.7)	84.8	(20.4)	25	0.65	=0.25
School Work	83.2	(24.6)	74.0	(34.9)	25	-1.33	=0.10

*Note:* To aid in interpretation, some of the signs of the *t* tests have been changed so that a positive *t* value indicates improvement (i.e., decrease in symptoms, increase in prosocial functioning).

\*Some Youth Satisfaction Scale domains are not applicable to younger age ranges (e.g., curfew).

Table 5. Within-group *t* tests from pre- to post-treatment (validity scales)

Measure	Pre-treatment		Post-treatment		N	t	P (1 tail)
	Mean	(SD)	Mean	(SD)			
Child Abuse Potential Inventory*							
Lie Scale	7.2	(4.0)	6.8	(4.1)	28	0.66	=0.25
Random Responses Scale	2.3	(1.5)	2.0	(1.3)	28	0.79	=0.22
Inconsistency	5.0	(2.4)	4.3	(1.8)	28	1.64	=0.06
Parenting Stress Index							
Defensive Responding	20.8	(5.6)	17.8	(5.6)	36	3.97	>0.001
Revised-Child Manifest Anxiety Scale							
Lie Scale	3.8	(2.5)	3.1	(2.6)	26	1.59	=0.06

Note: \*The CAPI indicated that the number of caregivers 'faking good' at pre-treatment was 16 (57% of those tested), and the number of caregivers 'faking good' at post-treatment was 15 (54%). No caregivers were found to 'fake bad', according to the CAPI, at either pre- or post-treatment.

assessment results would be used to support possible court prosecution efforts. Consequently, pre-treatment and post-treatment scores for the following validity scales were compared using within-group *t* tests: Child Abuse Potential Inventory (Lie scale, Random Responses, Inconsistency), Parenting Stress Index (Defensive Responding), and Child Manifest Anxiety Scale (Lie scale). As shown in Table 5, caregivers responded defensively to the Parenting Stress Index ( $p < 0.001$ ). No other significant differences were found. As noted in Table 5, about 50% of the caregivers demonstrated significantly elevated scores on the Fake Good scale of the CAPI at both pre- and post-treatment assessment, indicating that about half of the caregivers in this sample were attempting to deny problem behaviors/symptoms associated with child maltreatment before and after treatment.

## CONCLUDING COMMENTS

Increasingly, there is a bias to support programs which utilize empirically derived methods of assessment and intervention. Consistent with this bias, state and private child mental health facilities are being pressured by funding agencies to demonstrate the efficacy of their programs using standardized methods and validated measures (Stroul, Pires, Roebuck, Friedman, Barrett, Chambers, & Kershaw, 1997). However, these demands are reasonable since basic pre- versus post-intervention improvements appear to be quite sufficient in demonstrating program efficacy, at least for substance abuse programs (see Humphreys,

Hamilton, Moos, & Suchinsky, 1997). As we have indicated in this paper, such evaluation is feasible with appropriate training.

In the evaluation of this program, caregivers of maltreated children demonstrated clear and dramatic improvements in their psychological functioning and relationships with their children. Further, they reportedly decreased their child abuse potential consequent to intervention. Caregivers perceived themselves as having more social support, were less distressed overall (and regarding the raising of their children), reported fewer problems with family, and felt better about themselves. They also reported greater satisfaction with their children in communication, home conduct, response to discipline, overall, and with friends of their children. Validity scales indicated that caregiver-reported improvements were not due to their denying psychopathology at post-treatment more so than at pre-treatment assessment. Indeed, caregivers were more likely to deny negative symptomatology at pre-treatment, at least in the area of stress. Although the number of persons attempting to 'fake good' was essentially equal at both assessment points, a high percentage of caregivers attempted to present themselves favorably during pre- and post-treatment assessment. An alternative strategy would have been the customary strategy of excluding all persons from our evaluation who demonstrated significantly elevated lie scales on measures of child abuse potential. However, this would have excluded more than half of the caregivers evaluated in this program, a finding which is common among referrals from state child protective service agencies. These findings support the inclusion of multiple validity scales when evaluating child abuse treatment programs, particularly treatment outcome studies of this population.

In contrast to caregivers, children reported no significant changes in their levels of depression, fears, anxieties, and relationship with their parents following intervention. In explaining the failure of these children to report significant improvements (whereas caregivers did), it should be noted that these children, in general, did not report significantly impaired at pre-treatment on the measures that were presently employed. Thus, there may have been a statistical ceiling effect in evaluating the child measures (i.e., scores did not have room to improve). It is also possible that intervention may have prevented exacerbations in mood resulting from the passage of time, or that the child interventions were significantly inconsequential in these areas. Indeed, most of the time with the individual child included implementation of interventions that addressed safety and self-protection skills, something that was not formally evaluated. The same is true of observational methods of parent/child interactions, such as those reported by Forehand & McMahon (1981). Indeed, there appeared to be a striking resemblance between the negative condition of homes and severity of child maltreatment pre-treatment. Unfortunately, however, we did not develop



this evaluation component until the project was significantly under way. Anecdotally, program staff and caseworkers observed noticeable improvements in the condition of patient homes and the conduct of children at post-treatment, which is consistent with the many studies conducted by John Lutzker and his colleagues (see the review in the Introduction). In retrospect, our program evaluation should have included objective results relevant to the condition of the homes (e.g., home hazards) utilizing standardized methods (i.e., Lutzker's HAPI, or the Home Safety and Beautification Form mentioned above).

Although preliminary, the standardized format of this program was able to accommodate (i) clinical heterogeneity across the life-span (*in utero* to late adulthood), (ii) a broad spectrum of family constellations, (iii) multiple and unexpected changes in residential placement of target victim(s), (iv) disparate developmental, intellectual, educational, cultural, and socio-economic levels, (v) various types and severity levels of abuse, and (vi) multiple perpetrators and victims of maltreatment. The latter accommodation offers particular promise as siblings of identified maltreated children, and other family members in the home, are sometimes abused and in need of treatment (Carroll, 1994; McKernan-McKay, 1994; Stark & Flitcraft, 1988).

There are great benefits in providing home-based intervention in child maltreated populations (see Donohue, Ammerman, & Zelis, 1997; Kolko, 1996). Home and school visits facilitate behavior change in the natural environment, provide opportunities to observe and reduce home hazards, enhance home beautification, and permit the observation of (and subsequently provide intervention in response to) negative interactions and behaviors that are specific to the home setting. Further, the home-based format does not exclude families who are unable to attend outpatient therapy. We recommend that therapists attempt to obtain a commitment from each family member to be at their home 30 minutes prior to the scheduled session in order to verify the appointment via phone call (or use neighbor's phone if no home phone), instruct family member to meet therapists outside their homes at the scheduled appointment time, turn off television and radios during sessions, leave doors open when conducting individual therapy, and inform friends and relatives not to phone or visit during sessions (unless they intend to participate in therapy, in which case they should be encouraged to attend the session).

## ACKNOWLEDGEMENTS

The authors gratefully acknowledge the commitment and contributions of Faye Johnston, Elisa Miller, Orlando Prizio, and the many volunteers and practicum students who participated in this project.

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