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Training abusive parents in the use of anger control procedures for improving parent-child interactions

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TRAINING ABUSIVE PARENTS IN THE USE OF ANGER CONTROL PROCEDURES FOR IMPROVING PARENT-CHILD INTERACTIONS

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ABSTRACT

The purpose of the present study was to evaluate the effectiveness of a home-based multicomponent anger management program utilizing self-control procedures for: (a) decreasing frequencies of aversive parent behaviors directed toward target children and (b) altering parents' angry feelings and subjective urges to physically harm their children in provocation situations. Abusive parents from three at-risk families were trained in the use of anger management skills to aid them in coping with arousal on cognitive, somatic, and behavioral levels, simultaneously. Results indicated that the training procedures were successful in significantly reducing rates of aversive parent behavior exhibited in the home across all treated family units. The program also appeared successful for decreasing parents' angry urges and their daily rates of "feeling angry" when provoked by their children. These reductions in the parents' rates of aversive behavior and angry feelings following anger control training were maintained at stable levels over a 6 month follow-up period.

Child abuse and neglect have plagued humanity for centuries, but only in the last decade has society moved from simple awareness of the problem to actual concern about it (Wolkenstein, 1977). Much more important has been the change in our view of what constitutes abuse. In past centuries there was little "awareness" of abuse because of the latitude given parents in the treatment and rearing of their children. Today, abuse can be classified as a major health problem. The total number of actual cases per year is difficult to obtain, but estimates generally range from 200,000 to 250,000 (Zalba, 1971) to more extreme upper limit estimates of between 2.5 and 4.1 million cases per year (Gil, 1974).

The child abuse literature, from the mid 1960's to the present, has used a variety of terms to describe child abuse, including the "maltreatment syndrome in children" (Birell, 1968; Fontana, 1968), the "battered child syndrome" (Helfer, 1970), the "battered baby syndrome" (Ounsted, 1968; Kempe, 1971), "cruelty to children" (Fleming, 1968), "child beating" (Sattin & Miller, 1971) and "maternal violence" (Forrest, 1974).

Many differing definitions of child abuse can be found, varying along a continuum from a primary focus on deviant actions of child caretakers to a primary focus on

physical injuries accrued by the child. Gil (1969) defined child abuse to be an occurrence where a caretaker injures a child, not by accident but in anger or deliberately. Similarly, Sattin and Miller (1971) see abuse as involving direct physical assault by at least one parent, thereby endangering the welfare of the child. However, Kempe (1971) favors describing abuse as a clinical condition, typically manifested by broken bones or other physical trauma diagnosed by X-rays. Similar medically oriented definitions are adopted by other authors as well (Roth, 1975; Schmitt & Kempe, 1975).

Other definitions of abuse differentiate between various types and degrees of abuse (Alvy, 1975); some include stipulations regarding the frequency of recurrence of the act (Sandgrund, Gaines, & Greene, 1974), and still others assert that such factors as failure to thrive, child theft, abandonment, and emotional maltreatment are necessary corollaries to the abusive act (Gelles, 1976). According to Light (1973), however, the most widely accepted definition of child abuse is provided by Kempe and Helfer (1972) who define an abused child as "any child who receives nonaccidental physical injuries or emotional trauma as a result of acts or omissions on the part of his/her parents or guardians."

Just as there are a variety of definitions of child abuse, so too are there many hypotheses regarding its possible

causes. Few of these theories have been satisfactorily investigated using rigorous control procedures, but it is nonetheless necessary to briefly review some of the major ones to provide an idea of existing treatment approaches and to create a background for understanding the intervention techniques that form the basis of the present thesis.

Causal Theories of Abuse

Current theories of child abuse generally fall into four categories. The mental illness (psychopathological) model focuses on internal factors and emphasizes a personality defect in the caretaker that allows for aggressive impulses to be expressed too freely as the primary cause of abuse (Holter & Friedman, 1968; Paulson & Blake, 1969; Spinetta & Rigler, 1972). Proponents of the environmental-stress model, as developed by Gil (1969), argue that chance environmental factors (e.g., poverty) place enormous amounts of stress on poor people, thereby weakening their self-control, increasing frustration, and leading them to ultimately strike out violently against their children. In a very similar vein, the social-psychological theorists (Gelles, 1973) view child abuse as a particular form of adaptation to stress and postulate that abuse is precipitated by the interaction of structural stress (lack of adequate occupational, financial, and educational resources for parents in charge of child welfare) and the social acceptability of physical punishment of children.

However, the foremost causative theory of child abuse is the psychodynamic model (Helfer, 1973; Kempe, 1973; Steele, 1974). It postulates three critical components of abuse. First, the parent must have the potential to abuse, primarily as a result of receiving an inadequate model of correct (non-abusive) parenting in his/her own childhood. Second, the child must be seen by the parent as being "different or special" (as compared to other children), whether he or she really is or not (i.e., the parents hold unrealistic expectations of child capabilities). And third, a specific crisis situation must occur which precipitates the subsequent abusive incident.

In addition to the factors mentioned in the four models above, several other factors have been shown to contribute to or be related to physical abuse of children. They include qualitative differences in degree of physical discipline employed by parents (Blumberg, 1974), parental ignorance of child development patterns (Tracy & Clark, 1974), past experience of maltreatment by the parents (Gil, 1974), and low parental thresholds for anger arousal and management (Novaco, 1976).

Although firm conclusions regarding the precise causes of abuse are unwarranted at this time, it is safe to assume that physical abuse of children is not a uniform phenomenon with a solitary set of causal factors, but rather a multidimensional phenomenon that cannot be explained by any one theoretical model.

The following summarizes the factors mentioned by one or more of the major causal theories of abuse: (a) unrealistic expectations for the child; (b) a strong belief in the value of physical punishment as a discipline method; (c) deficits in knowledge of child development processes; (d) parents who have had no nonabusive parent models from which to learn nonviolent child management methods; and (e) low tolerance for frustration and strong anger arousal reaction patterns in response to stress situations. The position taken here is that these factors interact with environmental events, such that parents are likely to abuse their children when a crisis occurs.

Types of Intervention for Abuse

Once a case of child abuse has been identified, regardless of the precipitating causes, some means must be found to intervene in the situation, prevent repetition of the incident, and still provide the child with a family and a home (Hurt, 1974). Helfer (1970) described a continuum of five levels of intervention pertinent to this problem: (a) no intervention; (b) little meaningful intervention; (c) separation of the child from the parents; (d) making the home safe for the child; and (e) making the home safe for the child and in addition resolving the cause of the incident. Helfer indicates that level five is the ideal solution, but in most cases level four becomes a more practical goal.

The various intervention programs currently available are either preventative or medical in nature and span a range from voluntary self-help organizations to complex programs staffed by professionals coordinating resources from the entire community. Examples of self-help groups include Parents Anonymous, where members provide mutual support to instill strength and self-confidence and to help direct their destructive aggressive feelings into constructive channels (Zauner, 1972), and telephone crisis reassurance services such as the Child Abuse Listening Mediation (CALM) program where a 24 hour phone hotline provides abusive parents with someone to reach out to in times of crisis and stress (Tapp, 1974). Intensive family psychotherapy intervention services, provided by clinical psychiatrists and social caseworkers using transactional analysis, traditional psychoanalysis, and Gestalt techniques to help parents confront and deal with their abuse problems, are also mentioned commonly in the treatment literature (David, 1974; Green, 1976; Justice, 1976).

A number of authors have more recently advocated a community-based team treatment approach (using either in or out-patient settings) as a viable alternative to traditional psychotherapeutic methods for treating abusive parents and their children. Helfer (1970) has formulated a model for establishing such a community oriented "crisis control center" directed at child abusers and their victims. Some facets

of the Helfer program include hospitalization for the child (if needed), diagnosis of family problems, and treatment for both parents and children. Professional services are provided by pediatricians, psychologists, social workers, lawyers, school personnel and other community agents to aid the family in reestablishing a better home environment. Several small scale adaptations of Helfer's model are described in the literature. For example, Paulson and Chaleff (1973) describe a structured program of family therapy where abusive parents are helped to develop better parenting skills and attitudes during a 3 month treatment period while day care services are provided for their abused children.

Other non-hospital based treatment centers for abusive families abound (Barnes, 1974; Burt, 1974; Colman, 1975; Galdston, 1970; Lovens & Rako, 1975; Martin, 1976; Parke & Collmer, 1975), providing a variety of services including occupational therapy, emergency shelter, crisis hotlines, professional and lay therapists, parent aides, crisis nurseries, parent skill training and marriage counseling. Varying degrees of success have been reported by these multidimensional treatment facilities, however almost all such programs have one weakness in common--they suffer from a lack of controlled evaluation and reliable follow-up of parents and children who have been treated for abusive behavior.

To summarize, most treatment programs for abuse have focused on a global "gangbusters" family approach, with

emphasis being on insight-oriented therapy for both parents and children and little concern for experimental demonstration of treatment effectiveness. Treatment approaches which focus on teaching parents more effective methods for handling anger and more positive techniques for child management have rarely been investigated in child abuse research.

Deficits in Intervention Programs for Abusive Parents

Behavior management training. Extensive surveys of the child abuse literature indicate that the systematic use of behavioral procedures for training abusive parents has been somewhat neglected. Intervention approaches which focus on the use of behavior management techniques to produce positive and consistent changes in parent-child interactions are only recently being investigated empirically. However, four current exceptions to the general paucity of behavioral treatments for child-abusive families are worthy of mention.

Assuming that (a) abusive parents utilize harsh methods of child discipline, and (b) that abusive parenting tactics are learned from exposure to abusive parent models, Tracy and Clark (1974) implemented a small scale behavioral treatment program with abusive parents. They attempted to decrease the frequency of violent acts by training parents to use positive child-rearing methods (e.g., how to reinforce rather than punish). Although the study lacked adequate experimental controls and data collection strategies, it nevertheless provides a background for more rigorous research

using behavioral interventions to alter abusive parenting response patterns.

Three more stringently controlled parent training programs, by Sandler, Van Dercar, and Milhoan (1978), Crozier and Katz (1979), and Denicola and Sandler (1980), have recently been described. The Sandler et al. training program involved 2 abusive parents and utilized reading assignments, role playing, and contingent reinforcement of parenting skills. Results indicate that several constructive changes in parent-child interactions were maintained over a 5 month post-training period. However, various omissions in their procedural descriptions (e.g., no information on length of parent training sessions, amount of therapist time involved, no cost-benefit analyses of treatment effects, etc.), coupled with insufficient data on effects of treatment on child behaviors, makes strong conclusions regarding the efficacy of the training program unwarranted.

A very similar, though more explicitly detailed, parent training effort was undertaken by Crozier and Katz. In their study, a home-based training package was employed to teach three abusive parents (a) to use positive behavior management techniques (e.g., reinforcement, time-out, etc.) with their children, (b) to self-record and reinforce their own appropriate behaviors, and (c) to target child behaviors needing change and to develop plans for changing them. Results indicate that parents so trained showed significant reductions in their rates of aversive behavior along with

concurrent increases in positive behavior directed toward their children. These changes in parent behavior endured over a 4 month followup period, though two 1-hour sessions of booster training were necessary in one family for treatment effects to be maintained.

Another training effort involving two abusive parents was reported by Denicola and Sandler. They utilized instructions in simple parenting and self-control techniques to improve interactions in two abusive families. Results indicate that parent training was effective for reducing parental rates of aversive behavior and increasing rates of prosocial behavior. However, due to (a) insufficiencies in data presented on treatment effects for abused children, (b) lack of measurement on self-control components, and (c) inability to discern relative effects of training procedures because of weak experimental design, extrapolations from their results must be limited.

The encouraging preliminary findings of Sandler et al., Crozier and Katz, and Denicola and Sandler indicate that training parents in the use of simple behavior management strategies may be a viable alternative to traditional psychotherapeutic methods for dealing with abusive families. The findings certainly justify further and more refined experimental investigation on the training of abusive parents in effective but nonpunitive child-rearing and disciplinary procedures.

Anger control training. Though research on training abusive parents to utilize positive behavior management techniques for dealing with their children is scarce, even more conspicuously lacking are parent training programs which include direct components for helping parents control overt expressions of anger and aggression. To date, this author could find no evidence for the existence of any structured program placing primary emphasis on training abusive parents to use self-control techniques for coping with anger arousal in stress situations. Such a state of affairs can be considered a serious obstacle to the development of more effective programs for dealing with abusive parents, especially in light of findings by authors such as Novaco (1975) on the value of self-instruction and relaxation procedures for the regulation of uncontrolled anger.

Anger control techniques have been shown to be quite beneficial for arousal regulation with a variety of client populations. Novaco (1977b) successfully employed a stress innoculation approach to anger management for training law enforcement officers to cope with various provocation situations. Results indicate that 74% of officers who underwent training reported significant improvement in controlling their anger reactions when provoked. A similar multicomponent procedure consisting of cognitive preparation, skill acquisition, and rehearsal/practice phases was used clinically (Novaco, 1977a) to control the violent verbal and physical outbursts of anger exhibited by a hospitalized neurotic-

depressive male client. One curious side-effect of treatment was a significant reduction of impulsive aggression as a response to disruptive behaviors performed by the patient's children. This change in the client's mode of responding when provoked is especially interesting because no structured effort was made during treatment to actually teach him more appropriate methods for handling his children under stress. Perhaps if abusive parents can be trained to regulate anger arousal within themselves, they too may experience fewer urges to strike out against their children. Such weakened urges may in turn be manifested behaviorally, resulting in significant reductions in parental rates of aversive behavior.

The anger management procedures advocated by Novaco assume that emotional arousal and the subsequent course of action taken by the person experiencing the arousal are determined by one's interpretation of a stress situation. Treatment, therefore, first focusses on developing the client's cognitive and affective coping skills and then provides for the practice of these skills through exposure to regulated doses of stress. The goal of the program is to promote adaptive coping with provocation.

The usual innoculation procedure involves three basic steps: (a) cognitive preparation--designed to educate clients about the functions of anger and about their personal anger patterns, as well as providing a rationale for treatment; (b) skill acquisition--designed to teach clients how to maintain a task orientation to provocation, how to use

self-instructions to guide coping behavior, and how to use relaxation/deep-breathing exercises as a means for controlling internal arousal levels; and (c) application practice--designed to aid clients in building proficiency in the use of their newly-acquired coping skills through role-playing in hierarchically structured stress situations. It is the contention of the present author that an anger control program similar to the type outlined above could be used successfully to reduce the incidence of child abuse perpetrated by abusive parents.

Purpose of the Present Study

The purpose of the present study was to examine the effectiveness of self-control procedures for teaching abusive parents to manage their anger better in stress situations. This anger control training program was evaluated on the basis of how effectively it (a) decreased frequencies of negative parental actions/verbalizations directed toward target children, and (b) altered parental "feelings" of anger and subjective urges to physically harm children within the home situation. Direct in-home observations of parent-child interactions and parent-generated self-ratings (and diary-monitoring) of anger arousal experiences served as the primary data collection/assessment measures.

Based on suggestions by Novaco (Note 1), the anger control program utilized three principal components; (a) teaching parents about the functions of, determinants of, and

physiological symptoms of anger arousal; (b) teaching parents to employ self-reinforcement and deep-breathing (relaxation) techniques in provocation situations; and (c) giving parents opportunities to practice self-control skills, with gradual exposure to arousal-inducing stimuli and with corrective feedback provided immediately following skill performance. During treatment of a parent, if the program as outlined was not producing the desired effect on negative behaviors and angry attitudes, an additional phase was included which focused on teaching parents specific positive child management skills to use in the home.

The anger control treatment package was designed to increase parental tolerance in stress-provoking situations and increase parental use of non-punitive behavior change techniques, while decreasing the use of violence-related disciplinary methods. It was hoped that by providing parents with efficient anger management coping skills and effective alternatives for child behavior change, their need to employ abusive tactics would be eliminated. It was also hoped that positive changes in parent coping behavior would function to facilitate improvement in child behavior patterns, thereby making the environment within the home a more pleasant one.

Method

Subjects and Settings

Referrals of parents with abuse problems were solicited

through personal and telephone contact with social service and community agencies in the Stockton/San Joaquin County area such as Child Protective Services, the Child Abuse Council, and local parenting groups. Persons contacted were informed that a program for training abusive parents in better anger control techniques was being conducted under the direction of a local psychologist affiliated with the University of the Pacific (the thesis chairperson, Dr. Rogert Katz). Agency representatives were then asked for referrals of any families (either single parent or intact) with one or more preschool aged children (ages 2 to 6 years) who had previously been abused.

Of those families referred, the subjects selected were the first three non-related family units that satisfied the prerequisites listed above. In each family, at least one of the natural parents had to be previously designated as child-abusing, either by self-report or by documentation from social service agents in the community. Referred families who did not meet the criteria for admission into the program were provided with information regarding other available local parent-help groups which might satisfy their needs, such as counseling services, parenting courses, and area crisis hotlines.

Family A was a low-middle class intact family with three children, an 8 month old (M), a 4 year old (F), and a 5½ year old (F). The 4 year old and 5½ year old daughters served as the target children. Prior to the start of the study, the

parents had been referred by relatives to Child Protective Services because of the extreme disciplinary tactics (e.g., hitting children with coat hangers, books, etc.) and verbal abuse they sometimes used with their children. The father, aged 31, was a high school graduate currently employed in a blue-collar occupation. The mother, aged 29, was an eighth grade graduate with no high school experience and unemployed at the time of the study. Both parents described their daughters as children with "learning problems" and in this way viewed them as different from the other child in the family (a son). Both parents also described themselves as often "out of control" in their dealings with the children. The mother indicated that as a child she too had experienced both physical and emotional abuse.

Family B was a lower class single parent family with four children, a 4½ year old (M), a 6 year old (M), an 11 year old (M), and a 13 year old (F). Prior to entering the study, the eldest child had been removed from the home by Child Protective Services at the mother's request because of her fear of hurting this daughter in a fit of rage if she remained within the home. The 4½ and 6 year old sons served as the target children in the study. The mother, aged 30, was a high school graduate currently receiving public assistance and simultaneously enrolled at a local junior college. The mother indicated she had never been physically abused as a child, but because of personal and financial pressures she saw herself as becoming an abusive parent in handling her own

children. For example, she said that when problems at school upset her or made her angry, she found herself relieving the frustration more and more often by hitting and/or verbally berating her children.

Family C was a lower class single parent family with one child, a son, age 2½ years, who served as the target child. The mother had been referred to Child Protective Services by a neighbor and fellow church member who had noticed odd bruises and marks on the child while babysitting for the mother on several occasions. The mother, aged 27, was a high school graduate, currently unemployed, and receiving public assistance at the time of the study. She was reportedly very involved in a local church group and indicated that she had been physically abused as a child. She indicated that she often felt "unable to control herself" once she began to physically discipline her son.

For all families involved in the study, social class membership was determined by means of parent self-reported ratings. All family observation and parent training sessions were conducted in the subjects' respective homes at prearranged times throughout the study.

Design

A multiple baseline across subjects (parents) design was used to examine the effects of anger control training on rates of positive and negative parent and child behaviors and on subjective feelings of anger arousal experienced by

the parents. Baseline measurements were taken concurrently in all families and then treatment was introduced sequentially across the different family units, in an attempt to control for "history" as a possible confounding variable.

For family units A and B, treatment was implemented after a predetermined number of baseline data collection days had expired, as suggested by Azrin (1977). For these families, baselines were taken for 5 and 8 days respectively, and treatment was introduced on Days 6 and 9. However, in the case of Family C, baseline data revealed dangerously high levels of abusive parent behavior (e.g., much hitting, pinching, and other forms of physical abuse) occurring within the home. Because baseline points for Family C were grossly deteriorating in nontreated directions, baseline data was collected for only 3 days and training was introduced on Day 4. In the case of Family C, because intervention was instituted immediately, a true three-leg multiple baseline became unattainable. Therefore, data collected on Family C can be viewed solely as a replication of effects observed with Families A and B.

Dependent Measures

Measures were taken to assess the effectiveness of the anger control training program for altering (a) rates of aversive parent behavior directed toward target children, and (b) parental "urges to get angry" when exposed to potential provocation sequences. These measures were (a) repeated

direct in-home observations of positive and negative (aversive) parent and child behaviors by trained observers, (b) pre and post-training administrations of the Novaco Anger Scale (1976), and (c) pre to post-training comparisons of data on parental "urges to anger" as collected daily by parent self-monitoring.

Home observations. The primary data to be collected was information on frequencies of positive and aversive parent and child behaviors collected by trained observers in the home situation using occurrence/non-occurrence procedures. This data collection took place two to four times per week during baseline and training phases and three times per month during the followup period. Each data collection session lasted approximately 30 minutes. The scheduled times for these in-home observations varied from week to week. Parent and child behaviors were recorded concurrently but independently during 90 consecutive 20 second intervals. Intervals were structured so that observers viewed family interactions for 10 seconds and then recorded behaviors for the remaining 10 seconds of the interval. Observers were cued as to exactly when to observe and record by listening to a pre-recorded tape played during each observation session. An earphone was used to provide these taped sounds to observers without disrupting other family members.

Parent and child behaviors observed were a composite of 17 categories defined by Patterson, Ray, Shaw, and Cobb

(Note 2). Aversive child behaviors observed consisted of the following categories: crying, dependency, destructiveness, noncompliance, teasing, and whining. Aversive parent behaviors consisted of negative commands, disapproval, humiliation, negativism, yelling, and negative physical contact (intended to inflict pain on the child). Positive child behaviors consisted of expressions of praise/approval toward parents and compliance with requests. Positive parent behaviors observed consisted of stating and following through on contingencies and expressing praise/approval toward the child. Making appropriate requests was a neutral behavior observed in both parents and children.

Each of the previously mentioned behaviors (both positive and aversive) were operationally defined (Appendix A) and were recorded on a single data sheet designed specifically for in-home observation of these particular behavior categories (Appendix B). Observers in the home recorded occurrences of targeted behaviors on the data sheets provided by: (a) marking a vertical slash through the code representing any aversive or positive behavior performed by a father in any 20 second interval; (b) marking a horizontal slash through the code representing any aversive or positive behavior performed by a mother in any interval; and (c) marking a circle around the code representing any aversive or positive behavior performed by a target child in any observation interval.

In tabulating the data collected during each observation session, the author obtained a Total Aversive Behavior score by graphing the percentage of intervals in which at least one aversive parent or child behavior occurred. Similarly, the percentage of intervals per session in which at least one positive parent or child behavior occurred determined the Positive Behavior score. Total Aversive Behavior scores and Total Positive Behavior scores were calculated separately for parents and children.

Pre and post-training NAS scores and parent self-monitored data. In addition to the in-home data collected to reflect changes in parent behavior, two techniques for assessing anger control training effects on parental feelings of anger were also utilized. Overall anger scores obtained from pre-training and post-training administrations of the 80 item Novaco Anger Scale were compared to determine whether or not anger control training produced decreases in the magnitude of the parent's proneness to become angry when exposed to anger provoking situations. Also, comparisons were made between frequency counts of "urges to anger" recorded by parent self-monitoring during early training sessions and frequency counts obtained during later training and follow-up sessions, to evaluate whether anger management training produced positive effects on each parent's subjective experience of anger arousal.

Social validation data. Lastly, in addition to collecting

data on dependent measures of treatment effectiveness, consumer satisfaction data was obtained from parents by means of a brief questionnaire during final training sessions.

Observer Training, Reliability, and Research Termination

Three experimentally naive observers were trained to collect data using lecture/discussion and roleplay situations. Observer training was continued until at least an 80% figure of reliability was achieved between all observers recording target behaviors independently. Next, permission was obtained from parents for observations to begin in the homes, and then the observer for each family collected preliminary data for at least two 30 minute sessions to acclimate the family to his/her presence in the home and to gain practice in observing in real life settings. Data from such pre-baseline sessions were not used in the analysis of treatment effects.

Observer agreement was assessed at least once in the baseline phase and at least once in treatment and follow-up phases for each family, by having two independent observers simultaneously collect data on targeted parent and child behaviors. Agreement was calculated by effective percentage agreement for occurrences of targeted behaviors. The total number of agreements (both independent observers recorded the same behavior during the same time interval) was divided by the total number of agreements plus disagreements (only one observer recorded the behavior during an interval) and multiplied by 100 to yield a percentage of agreement figure

for each observation session when reliability data was collected. In the event that interobserver agreement percentages fell below the criterion 80% level over two consecutive reliability sessions, an observer retraining meeting was held to review the behavioral code. Attempts were made to ascertain where interobserver problems were occurring so that behavioral definitions could be made more specific. Also, additional training in the use of the code was provided for observers as deemed necessary by the experimenter.

Observers collected data in the homes of all three families on a regularly scheduled basis throughout baseline, treatment, and follow-up conditions. For Families A and B, data collection was terminated when the prescribed 6 month follow-up period had expired. For Family C, data collection was ended after 2 months of follow-up because the family moved out of the state at that time.

Anger Control Training Program

The anger control training program consisted of three basic components: (a) teaching parents the functions, determinants, and physiological symptoms of anger arousal; (b) teaching parents to employ self-monitoring, self-instruction, and deep-breathing/relaxation techniques for effective control over anger in provocation situations; and (c) providing opportunities for parents to practice self-management skills in a controlled setting with corrective feedback available for skill performance.

Anger control training was designed to be completed by parents in six to eight 90 minute in-home training sessions. All training was conducted with parents and therapist alone--no observers were present. Target children were not involved in the first two phases of the training; however, they were utilized in some of the roleplay/practice sequences during the final phase of intervention whenever the therapist and parents agreed it was beneficial to include them. A complete outline of the anger control training format that was used is provided in Appendix C. A general account of the events contained in each training session is provided below.

Session One: Initial interview. The initial in-home contact with each family was made by the therapist (following telephone contact by either the referral agent or the therapist to obtain permission to visit the home) for the purpose of explaining details of the intervention program to the parents. Parents were asked for permission to have observers in their home two to four times per week for 30-45 minute observation sessions at various prearranged times when parents felt it was most likely that they might get extremely angry or "explode." Parents were told that they would initially receive training in the use of some newly developed techniques for recognizing and controlling their anger. They were also informed that in the event that other methods for regulating their behavior toward their children were needed, they would be taught to use some specific positive

child-management skills. Any questions the parents had regarding general aspects of the intervention program were answered by the therapist at this time.

The rationale for home-based observation and training was then discussed with the parents. They were informed that because most of their anger toward their children took place in the home, this was where their anger reaction patterns must be changed. Weekly home observations were justified by explaining the importance of closely monitoring angry parent-child interactions so problems could be handled rapidly before they escalated into crises where abuse was likely to result. Parents were asked to confine the family's activities to a single room in the home when observers were present, so a true picture of all important family interaction patterns could be obtained by the observers. Also, to motivate parents to participate fully in the program, an extrinsic reward of one free day or night of child care provided by the therapist was offered to parents, contingent upon each parent's completion of the entire 6-8 session training program. Lastly, parents were asked to sign a standardized form giving their consent to home-based observations, anger control training, child management booster sessions (if necessary), and follow-up data collection upon completion of the intervention program (see Appendix D).

Session Two: Pretreatment anger assessment. The second in-home session was used for the administration of various

pre-treatment tests. A modified version of a self-report rating scale (Dimensions of Anger) developed by Novaco (1976) was employed first to assess the parameters of the individual parent's anger reactions (see Appendix E). In addition, to determine the range of situations in which parental anger was aroused and the overall magnitude of parental proneness to provocation, an inventory of provocation circumstances (the Novaco Anger Scale) was also used (see Appendix F). The scale consisted of 80 items for which respondents rated their degree of anger on a 5-point scale. The total numerical score for the scale was the principal index of parental anger. The highest possible anger score achievable on the scale was 400 points. Such a score would indicate an extremely angry individual.

Once pretests were completed, the therapist reviewed test performance with the parents. High-anger items were used as initial discussion topics in conducting a structured analysis of parent anger patterns. The therapist also assisted parents on an individual basis to operationally define "anger" as each experienced it. Once satisfactory concrete definitions for anger had been devised, the therapist instructed parents in the use of standard wrist counters, as a convenient method for accurately counting the occurrence of angry urges. This self-monitoring system for recording daily anger responses remained an integral feature of the entire training program.

In accordance with suggestions made by Mahoney and

Thoresen (1974), attempts were made to assure the reliability of parents' self-monitored data. Steps taken toward this goal included: (a) using a simple recording system (wrist counters) and having parents practice their use before beginning data collection, (b) using concise definitions of the item to be recorded (anger) and posting definitions for readily accessible referrals, (c) checking on self-monitored data accuracy through the use of related measures (diary entries) and (d) validating self-report data by comparing it to other objective corroborative data (rates of aversive parent behavior).

Session Three: Cognitive preparation. Training Session Three was designed to educate parents in detail about their personal anger patterns. The session began with a review of self-monitored data collected by parents since the previous training session. Next, parents were provided with handouts outlining key ideas relating to anger and its ultimate regulation. A sample of the handout is provided in Appendix G. These key ideas were then reviewed orally by the therapist.

After handouts were given and reviewed, the therapist conducted a "situation x person x mode of expression" analysis of parent anger problems. Using an interview-answer format, the therapist helped parents to identify the specific persons and particular situations that triggered their anger and aided parents in recognizing the cognitive, somatic, and

behavioral determinants of anger arousal. At the end of Session Three, parents were asked to continue collecting self-monitored data on their "urges to anger." They were also instructed to begin keeping a diary of their daily anger experiences. Diary entries were to be made nightly, and were to consist of detailed accounts of the day's situations which provoked anger in the parents. Lastly, a set of index cards was given to parents on which they were asked to construct a hierarchy of common anger-provoking sequences derived from their daily experiences, to be used in subsequent training sessions. This assignment was to be completed prior to Session Four whenever possible.

Sessions Four to Six: Skill acquisition. The fourth, fifth, and sixth training sessions were designed (a) to familiarize parents with three basic techniques for coping with anger arousal and (b) to provide for modeling of techniques by the therapist along with subsequent rehearsal by parents. All training sessions began with a review of self-monitored data collected since the previous session. This was followed by a review of recent diary accounts in an attempt to continually refine the parents' picture of the exact persons, settings, etc. that provoked them to anger. If parents needed help in completing or modifying their index card hierarchy, it was given by the therapist at this time. All training sessions ended with the therapist instructing parents to continue their daily monitoring of angry urges

and their daily diary recording of anger incidents.

The focus of Training Session Four was on providing parents with techniques for coping with anger arousal on an affective level. To achieve this goal, parents were instructed in the use of a simple relaxation/deep-breathing sequence that could be employed at the first sign of physiological arousal to alleviate tension and serve as a cue for remaining calm. The sequence consisted of focused deep breathing (i.e., inhale through nose, exhale through mouth) coupled with numerical counting (i.e., one... two... three... etc.). It was chosen over other relaxation training techniques such as the one used by Novaco (e.g., Jacobsen method of tensing muscles), because it could be employed by parents "at any time, any place" without prolonged interruption of household routines. Once the therapist had modelled correct usage of the relaxation procedure, parents practiced using it and obtained feedback from the therapist on their performance. Parents were urged to continue practicing the technique as part of their assigned homework before the next training session.

The focus of Training Session Five was on providing parents with techniques for coping with anger on a cognitive level. To achieve this goal, parents were instructed in the use of self-instructions. They were taught to say these messages to themselves during various stages of a provocation sequence to help them cope constructively with their internal appraisals of anger experiences. A handout of sample self-

instructions that parents could use in the home situation was provided by the therapist (see Appendix H) who also urged parents to compile a personal list of similar self-instructions that they would feel comfortable using. Once again, the therapist modelled the correct use of self-instructions and showed parents how to integrate the use of self-instructions with the relaxation sequence they had previously learned. Corrective feedback was provided for skill performance by parents and skill usage in the home situation was urged prior to Training Session Six.

The focus of Training Session Six was on providing parents with techniques for coping with anger arousal on a behavioral level. To achieve this goal, parents were taught to adopt a problem-solving approach to conflict. The therapist instructed parents in ways to communicate feelings and express anger assertively and constructively rather than with hostility. Coaching was provided to parents by the therapist in being direct and explicit when making their wishes for behavior change known to others. Attempts were also made to (a) help parents view anger situations as <u>problems needing solutions</u>, and (b) help parents remain task-oriented during provocation. Modelling, roleplaying, and corrective feedback were again utilized to shape up behavioral problem solving skills in parents. The therapist also instructed parents to continue to practice and employ all the coping techniques they had mastered so far in the home in their daily interactions with their children prior to

the next session.

Sessions Seven to Eight: Applied practice and post-treatment assessment. The two final training sessions were designed (a) to provide parents with structured opportunities to practice their anger management skills and (b) to assess pre to post-training differences in parental ability to respond appropriately in anger-provoking situations. Using the index card hierarchy of at least five anger-producing scenarios constructed in previous training sessions, parents were gradually exposed to regulated amounts of anger stimuli. Beginning with the most innocuous scene, parents were required to role play the appropriate use of all skills they had learned during training in each hierarchy situation until they had satisfactorily worked through even the most anger-inducing hierarchy item. Continuous coaching, modelling, and feedback were provided by the therapist as needed during these progressively more difficult roleplay/practice sessions, in order to strengthen parental competence in managing anger arousal.

At the end of the last anger control practice session, parents were again asked to complete the Novaco Anger Scale (1976) to assess any pre to post-treatment differences in their responsiveness to anger provocation. Results of post-testing were made available to parents. In addition, the therapist asked parents for subjective feedback and obtained written "consumer satisfaction" data (Appendix I) regarding

the overall usefulness and likability of various components of the training program. Requests for suggestions for program improvement were also made at this time. Lastly, the therapist asked parents to continue collecting their self-monitoring data and to continue making diary entries, so they could continue to see for themselves the progress they were making at controlling their anger. Arrangements for follow-up visits were made during the final training session as well.

Upon completion of anger control training, a 6 month follow-up period was instituted to assess maintenance of training effects. Because data from Family C indicated less stable changes in parent and child behavior patterns than had been achieved with Families A and B, the author decided to provide this parent at this point with three 60-minute sessions of training in specific behavioral child management techniques. These additional treatment sessions were applied at the therapist's discretion in accordance with a pre-set criterion for success of the initial anger program (i.e., skill training would occur if the trend of decreasing rates of aversive parent behavior during treatment failed to be maintained upon completion of the anger control package). A brief summary of this optional training phase is outlined below.

Child Management Skills Training

For Family C, child management skills "booster" training

was conducted in three 60-minute sessions in the home. It consisted of two basic components: (a) briefly familiarizing the mother through a lecture/discussion format with the basic principles of social learning theory (e.g., what is reinforcement? how is it given? what is punishment? how is it applied? etc.) and (b) training the mother to use selected behavior management procedures (e.g., contingent reinforcement, appropriate ignoring, targeting and defining behaviors to be changed, etc.) to improve parent-child interactions.

During the initial training session, the therapist discussed usage of behavioral child-rearing concepts with the parent. Material to be presented orally was obtained by the therapist from the first eight chapters of the book Parents Are Teachers (Becker, 1976). Discussion of concepts presented orally was supplemented by trainer modeling and parental practice of actual usage of each novel child management procedure as it was reviewed. The therapist provided corrective feedback and praised the mother for her appropriate performance of targeted skills while continually stressing the need for consistency (across varied situations) when using new management techniques with children. Explanations were also provided as to why previously used negative discipline methods probably failed to produce the desired results with her child (e.g., because negative discipline methods were actually serving as a form of attention for the child who continued to seek any attention he could get from mom).

During the final training sessions, more demonstrations of the correct use of positive behavior change procedures in typical family-life situations were provided by the trainer. Roleplaying was also continued. Initially, the mother played the child's part in a problem situation with the trainer acting as the parent using appropriate behavioral skills. Roles were then reversed, with the trainer playing the child's part and the parent acting as a model for the correct use of the targeted skill. The trainer continuously shaped appropriate parental actions during these sessions using praise and additional modeling as needed. After completion of the first two booster sessions (with parent and therapist working together) the target child was included in role-playing sequences of the final booster session to facilitate actual parental usage of skills trained. Decisions to include the child in training were made conjointly by the therapist and the parent.

Once booster training sessions were completed and the parent had demonstrated correct use of skills in all practice situations, she was instructed by the therapist to employ her new skills in dealing with her child. Follow-up data collection was then instituted and continued for 2 months (of the 6 month scheduled follow-up period) until the family moved out of the state. All anger control and behavior management training sessions occurred in the absence of observers. Observers were unaware of when families were being provided with anger control and/or booster training.

Results

All data collected by in-home observation are presented separately for each family unit. Figures 1 - 7 represent the percentage of intervals in which Aversive and Positive Behaviors occurred for parent(s) and targeted child(ren) in each family.

Interobserver Agreement

Interobserver agreement estimates for percentage agreement reliability during in-home observation periods ranged from 86% to 100%. Interobserver agreement was computed for sessions 3, 8, 15, and 24 for Family A; sessions 6, 12, 22, and 29 for Family B; and sessions 2, 6, and 16 for Family C. The mean agreement for each family across all behavior codes averaged 97.6%, 97.3%, and 97.1% for Families A, B, and C, respectively. (See Table 1.)

In-Home Observations

Family A. Visual inspection of Figures 1 and 2 for Family A indicates that during baseline sessions, overall scores for aversive behavior by parents were on the increase. At the same time, positive behavior scores for mother and father were at or near zero level prior to the introduction of the training package. The baseline rate of aversive behavior for the mother averaged 11.2% and for the father averaged 17.8%. Rates of aversive behavior for both parents combined averaged approximately 29% during baseline observations. The baseline rate of positive behavior exhibited

Table 1

Mean Reliabilities and Ranges of Each Behavior Code for Each Family and for All Families Combined

Behavior Code	Range			Mean Reliability			Overall Mean Reliability
	Fam. A	Fam. B	Fam. C	Fam. A	Fam. B	Fam. C	
DI	98-100	92-98	96-100	99	95	98	97
NE	96-100	94	92-96	98	94	94	95
NC	98-100	96-100	92-98	99	98	95	97
TE	86	--	88	86	--	88	87
PN	100	100	100	100	100	100	100
YE	92-100	96-100	94-100	96	98	97	97
WI	100	100	98-100	100	100	99	99
DS	--	--	96-100	--	--	98	98
HU	--	92	--	--	92	--	92
CR	98	100	98-100	98	100	99	99
CN	94-100	92-98	96-98	97	95	97	96
DEP	--	--	--	--	--	--	--
RQ	96-100	98-100	98-100	98	99	99	99
SC	99	94-98	98-100	99	96	99	98
AP	98-100	98-100	98-100	99	99	99	99
CO	100	98-100	96-100	100	99	98	99
FT	--	--	--	--	--	--	--
Overall Ranges	86-100	92-100	88-100	M.R. across all Beh. Codes 97.6%	97.3%	97.1%	

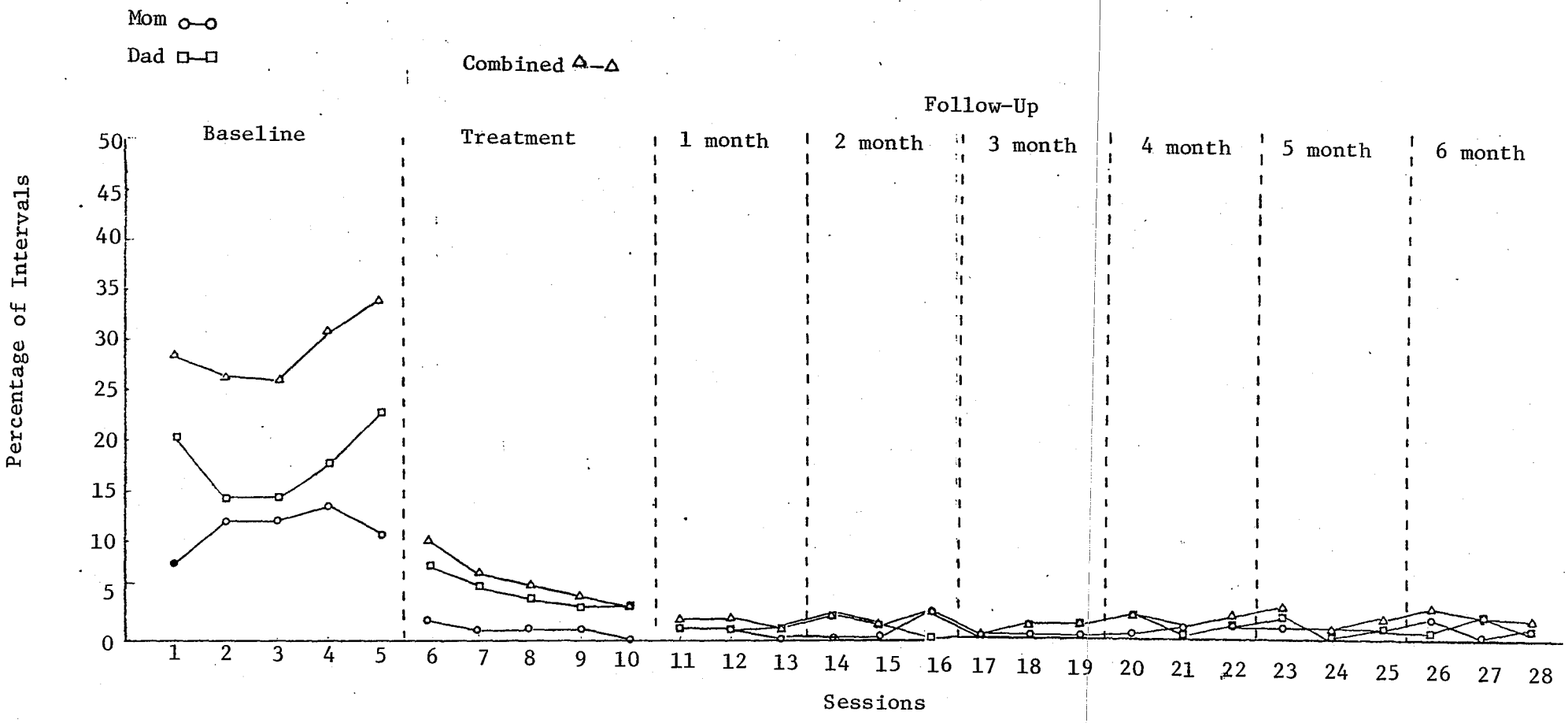

Figure 1. Percentage of intervals in which at least one Aversive Behavior for the Father (□) or for the Mother (o) or for both parents Combined (△) occurred.

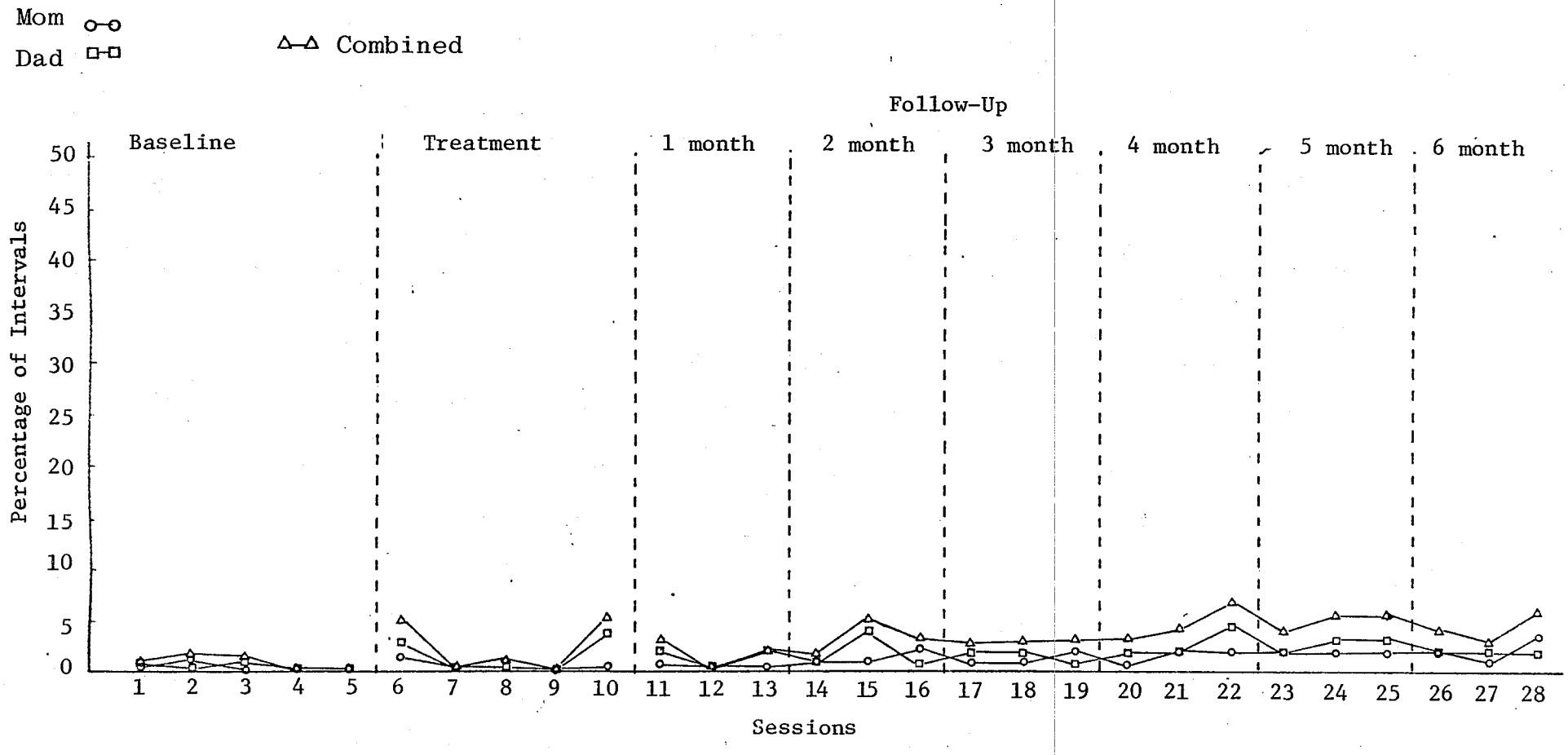

Figure 2. Percentage of intervals in which at least one Positive Behavior for the Father (□) or for the Mother (o) or for both parents Combined (△) occurred.

by mother averaged .4% while positive scores for father averaged .4%, yielding a combined positive behavior average during baseline of .8%.

During the treatment phase, rates of aversive behavior by parents decreased quickly. Rates of aversive behavior for the mother during training averaged 1% and rates for the father averaged 4.6%. During training, rates of aversive behavior for both parents combined averaged approximately 5.6%. This represents a reduction in excess of 79% from baseline levels of aversive parent behavior. In addition, mean rates of positive parent behavior increased slightly during the treatment phase. Positive behavior scores during training for the mother averaged .9% and positive scores for father averaged 1.5%, yielding a combined positive score average of 2.4% during the training phase. Positive parent scores thus increased by about 65% over baseline levels during anger control training, even though positive rates following treatment were still extremely low.

During the extended 6 month follow-up period, aversive parent behaviors continued to decline and maintained themselves at very stable levels. Furthermore, rates of positive parent behaviors tended to increase slightly during the follow-up period. Rates of aversive behavior for parents during follow-up averaged 1.7%, while rates of positive parent behavior averaged approximately 3.5%.

Inspection of Figure 3 for Family A indicates that baseline scores for aversive behavior by the children appeared

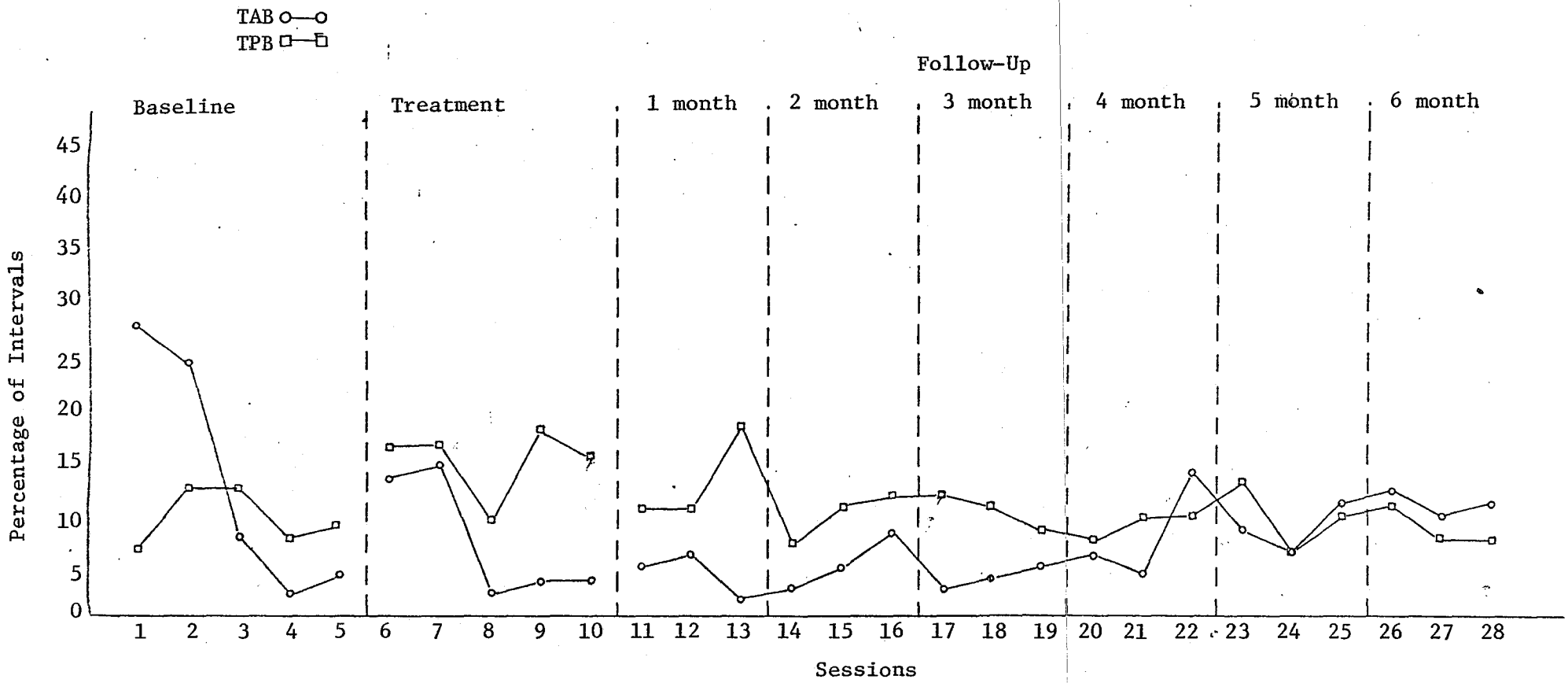

Figure 3. Percentage of intervals in which at least one Aversive Behavior (o) and/or at least one Positive Behavior (□) for the two children occurred.

unstable yet high, with a mean of 13.6%. Reactive effects attributable to the observer's presence are represented in the sharp declining trend in rates of child aversive behaviors occurring during initial baseline sessions. Simultaneously during baseline, rates of positive behavior exhibited by the children averaged 9.4%. During parent training, mean aversive child behavior rates remained very unstable, decreasing slightly to about 7.3% while mean rates of positive child behavior increased slightly to approximately 15.1%. During the 6 month follow-up period, mean rates of aversive and positive child behaviors continued to fluctuate and remain unstable. Rates of aversive child behavior averaged approximately 6% whereas rates of positive child behavior averaged about 9.3% over the extended follow-up period.

Family B. Inspection of Figure 4 for Family B indicates that during baseline, scores for aversive behavior by the mother were steadily increasing while positive behavior scores appeared stable yet near zero levels. Mean baseline rate of aversive behavior was about 28% and the mean rate of positive behavior was approximately 1.1%.

During the anger control training phase, aversive behavior by the mother decreased sharply from baseline and positive behavior increased simultaneously. During treatment, the mean rate of aversive parent behavior was 7.4% and the mean rate of positive parent behavior was

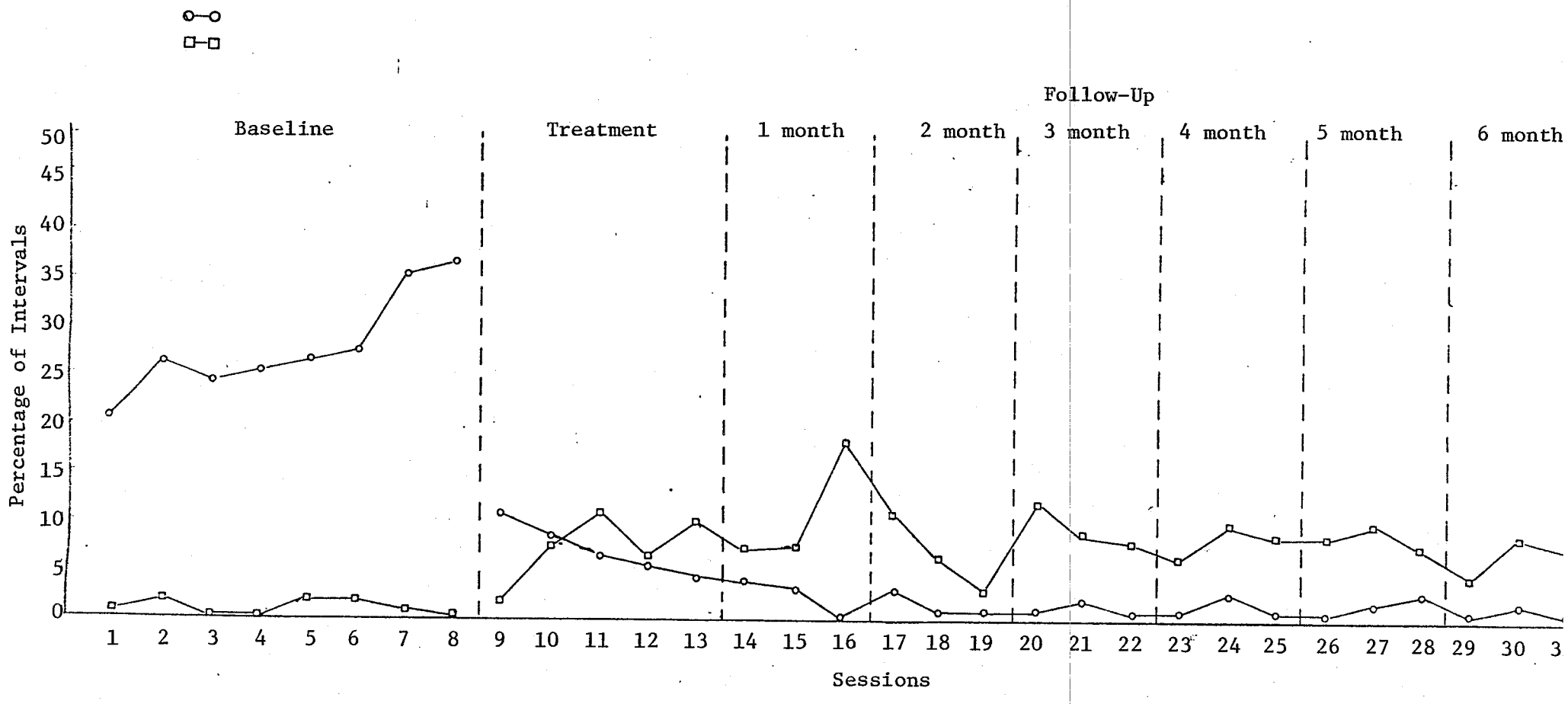

Figure 4. Percentage of intervals in which at least one Aversive Behavior (o) and/or at least one Positive Behavior (□) for the Mother occurred.

approximately 7.6%. Such a decline in mean rate of aversive behavior during training represents a reduction of about 74% from baseline level. Likewise, mean positive behavior scores increased by a margin of about 86% over baseline level.

During the extended 6 month follow-up period, rates of aversive behavior for the mother continued to decrease and become stable averaging approximately 1.5%. Rates of mother's positive behavior continued to increase slightly as well, averaging around 8.9% overall during the follow-up period.

Inspection of Figure 5 for Family B shows that baseline rates of aversive behavior by the target children were fairly stable, with a mean rate of 6.2% and a mean rate for positive child behaviors of 3.5%. During parent training, mean aversive behavior rates for target children escalated to approximately 9.2% while rates of positive child behavior increased simultaneously to a mean level of 9.2% as well. During the 6 month follow-up period, rates of aversive and positive child behaviors both decreased slightly and then remained fairly stable. Mean rates of aversive child behavior were approximately 6.5% and mean rates of positive child behavior were about 4.4% over all follow-up sessions.

Family C. Inspection of Figure 6 for Family C indicates that during baseline, scores for aversive behavior by the mother were sharply increasing to crisis proportions,

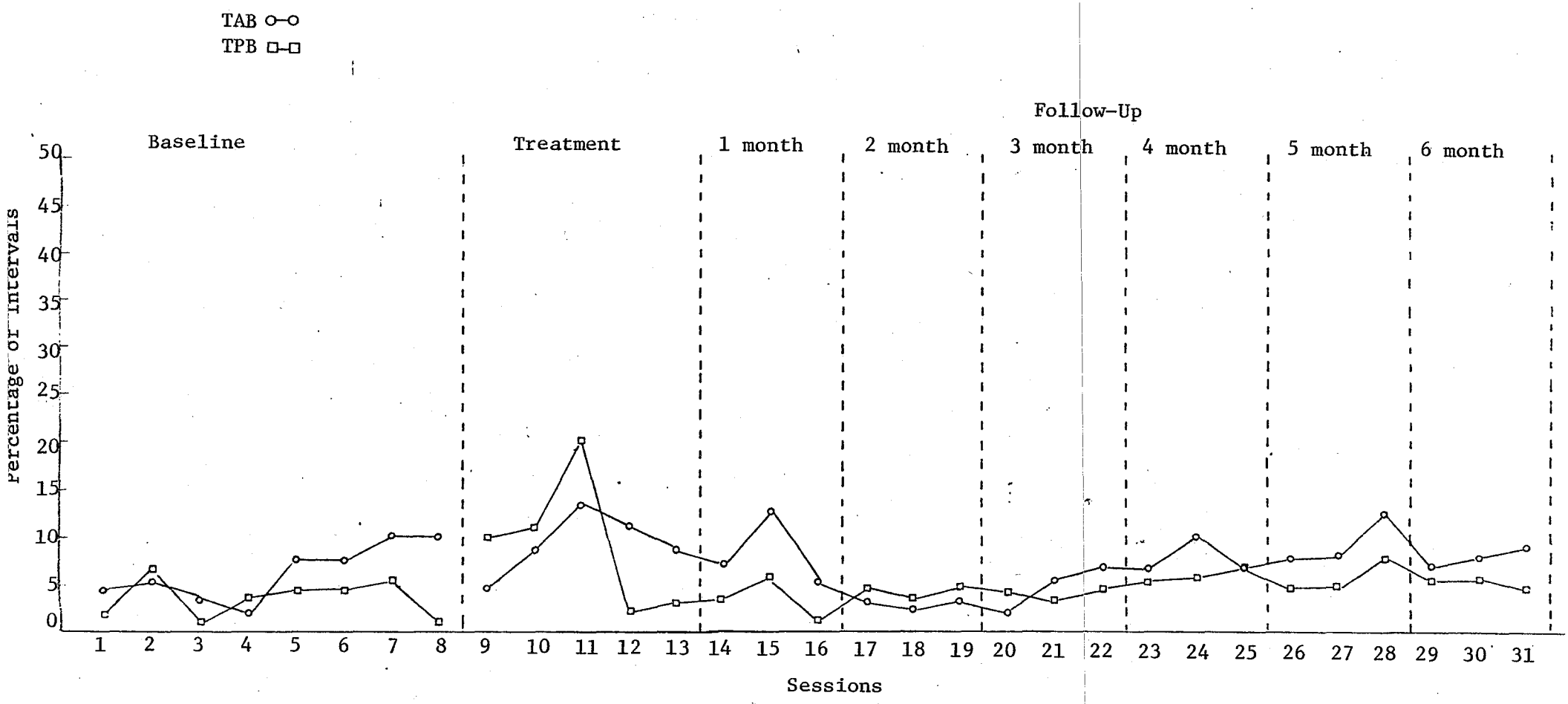

Figure 5. Percentage of intervals in which at least one Aversive Behavior (o) and/or at least one Positive Behavior (□) for the two children occurred.

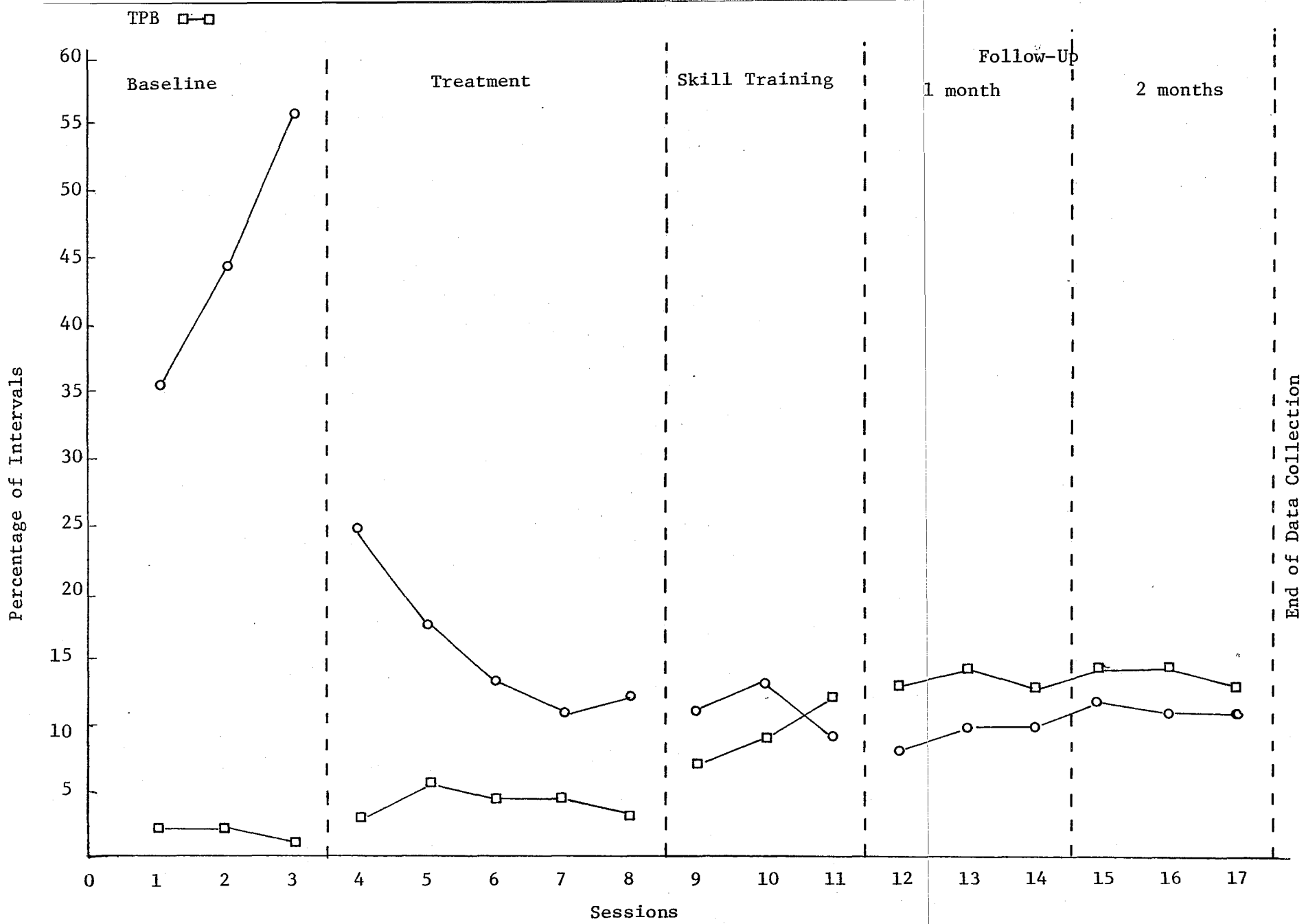

Figure 6. Percentage of intervals in which at least one Aversive Behavior (o) and/or at least one Positive Behavior (□) for the Mother occurred.

while positive behavior scores remained at near zero levels. Baseline rates of aversive behavior for this mother averaged about 48% whereas baseline rates of positive behavior averaged 1.7%.

During the anger control training phase, the mother's rate of aversive behavior dropped rapidly to an average of about 15.6%, while her mean rate of positive behavior increased slightly to approximately 4.2%. Such a decline in the rate of aversive behavior during treatment represents a reduction of about 68% from baseline level. Likewise, mean positive behavior rates increased 60% over baseline level.

During the 3 session child management training segment provided to this mother following completion of the anger control program, her mean rate of aversive behavior continued to decline some to a level of approximately 11.1%. Simultaneously, the mother's rate of positive behavior continued to increase to an average of about 9.3%. These changes continued to be manifested during the 2 month follow-up prior to Family C's move out of the state. During this brief follow-up period, rates of aversive behavior for the mother averaged 10.3% while mean rates of positive behavior were approximately 13.5%.

Inspection of Figure 7 for Family C shows that baseline rates of aversive behavior exhibited by the target child were high yet fairly stable. The mean rate for the child's aversive behaviors was about 43%, while the rate for his

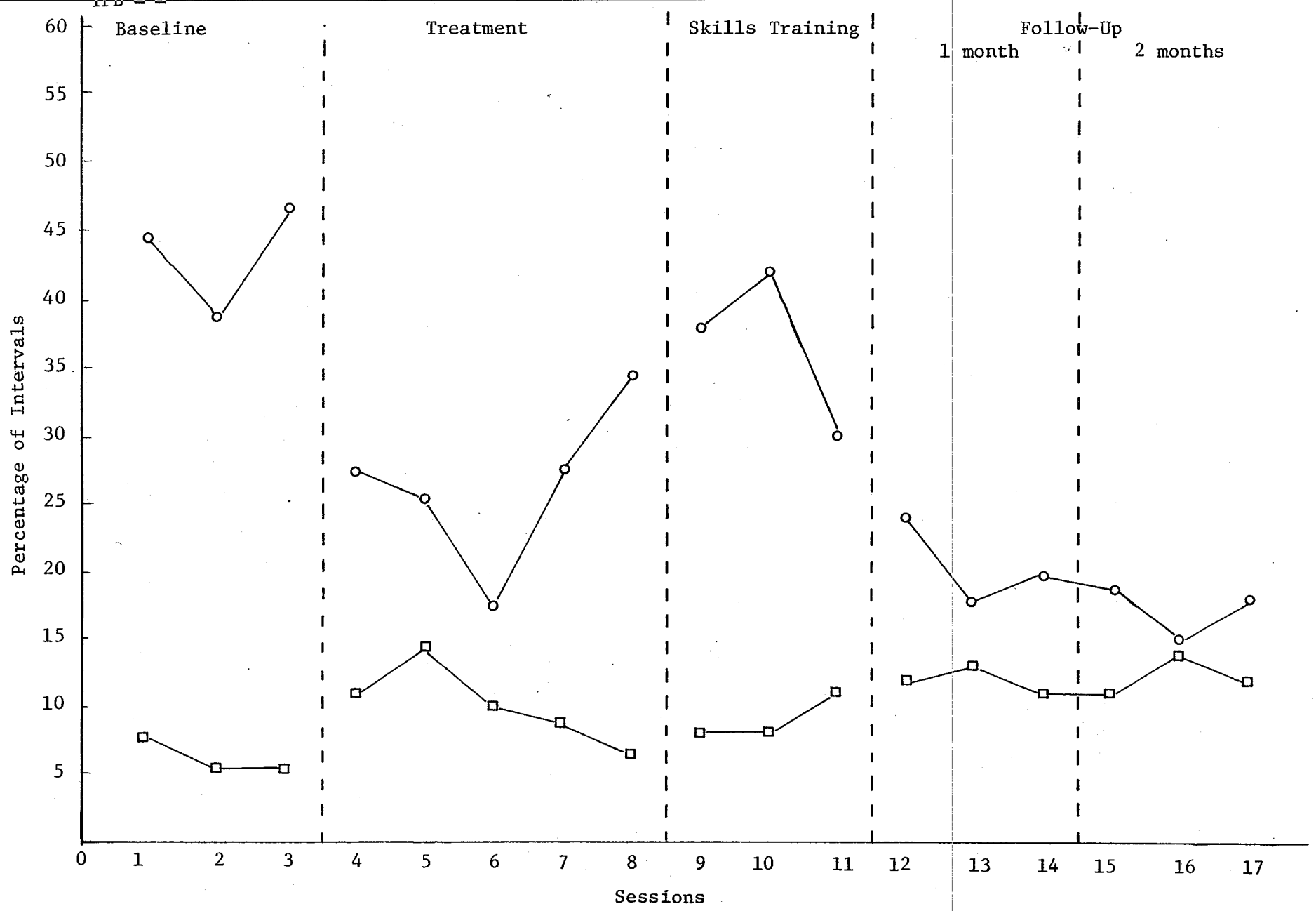

Figure 7. Percentage of intervals in which at least one Aversive Behavior (o) and/or at least one Positive Behavior (□) for the Child occurred.

positive behaviors averaged approximately 6.3% during the baseline period. During parent training, aversive behavior rates for the target child temporarily decreased to an average of 26.6% while mean rates of positive child behavior increased simultaneously to about 10.2%. Then, when the mother underwent the three booster sessions of child management training, the child's mean rate of aversive behavior once again increased sharply to about 36.6% while mean rate of positive child behavior decreased to a level of approximately 9%. During the brief 2 month follow-up period, rates of aversive child behavior sharply declined again, to an average of about 19%, while mean rates of positive child behavior increased slightly to approximately 12.1% and were maintained at fairly stable levels.

Pre and Post-Training Novaco Anger Scale Scores

In order to ascertain differences between pre and post-training scores on the Novaco Anger Scale, the most anger-arousing end of the five point scale for each item was assigned a 5 while the least anger-arousing end of the scale was assigned a value of 1. Thus on the 80 item scale, the scores possible ranged from 80 (least anger-arousing) to 400 (most anger-arousing). Difference scores between pre and post-training administrations were then determined for each parent by subtracting their post-test scores from their pre-test scores. (See Table 2.)

The absolute scores obtained on the pretest administration

Table 2

Pre and Post-Training Novaco Anger Scale Scores and Numerical Point Differences for all Trained Parents

	Pre-Training Score	Post-Training Score	Difference Score	Percentage of Change
Mother A	322	225	97	31%
Father A	323	188	135	42%
Mother B	338	194	144	43%
Mother C	325	190	135	42%

of the Novaco Anger Scale by the mother and father in Family A were 322 and 323, while their absolute post-test scores were 225 and 188, respectively. Thus their difference scores were 97 for the mother and 135 for the father, representing a 31% and 42% reduction from pretest anger levels for mother and father following anger control training. The mother in Family B obtained pre and post-test scores of 338 and 194 on the Novaco Anger Scale, yielding a difference score of 144 points--approximately a 43% reduction in anger arousal from pretraining levels. The mother in Family C achieved pre and post-test scores of 325 and 190 on the anger scale, obtaining a difference score of 135--again representing about a 42% reduction from pretraining arousal levels.

Parent Self-Monitoring Data

Frequencies of "angry urges" experienced and counted daily by all parents during the first 4 weeks of the anger control training program are presented graphically in Figures 8, 9, and 10. Figure 8 shows the gradual decline in the number of angry urges experienced daily by the mother and father in Family A. Angry urges counted by the mother decreased during training from a level of 12 per day to a level of 1 per day. Likewise, angry urges experienced by the father decreased from about 18 per day to a level of approximately 2 per day during training.

Figures 9 and 10 show similar declining trends in angry urges experienced by the mothers in Families B and C. Angry

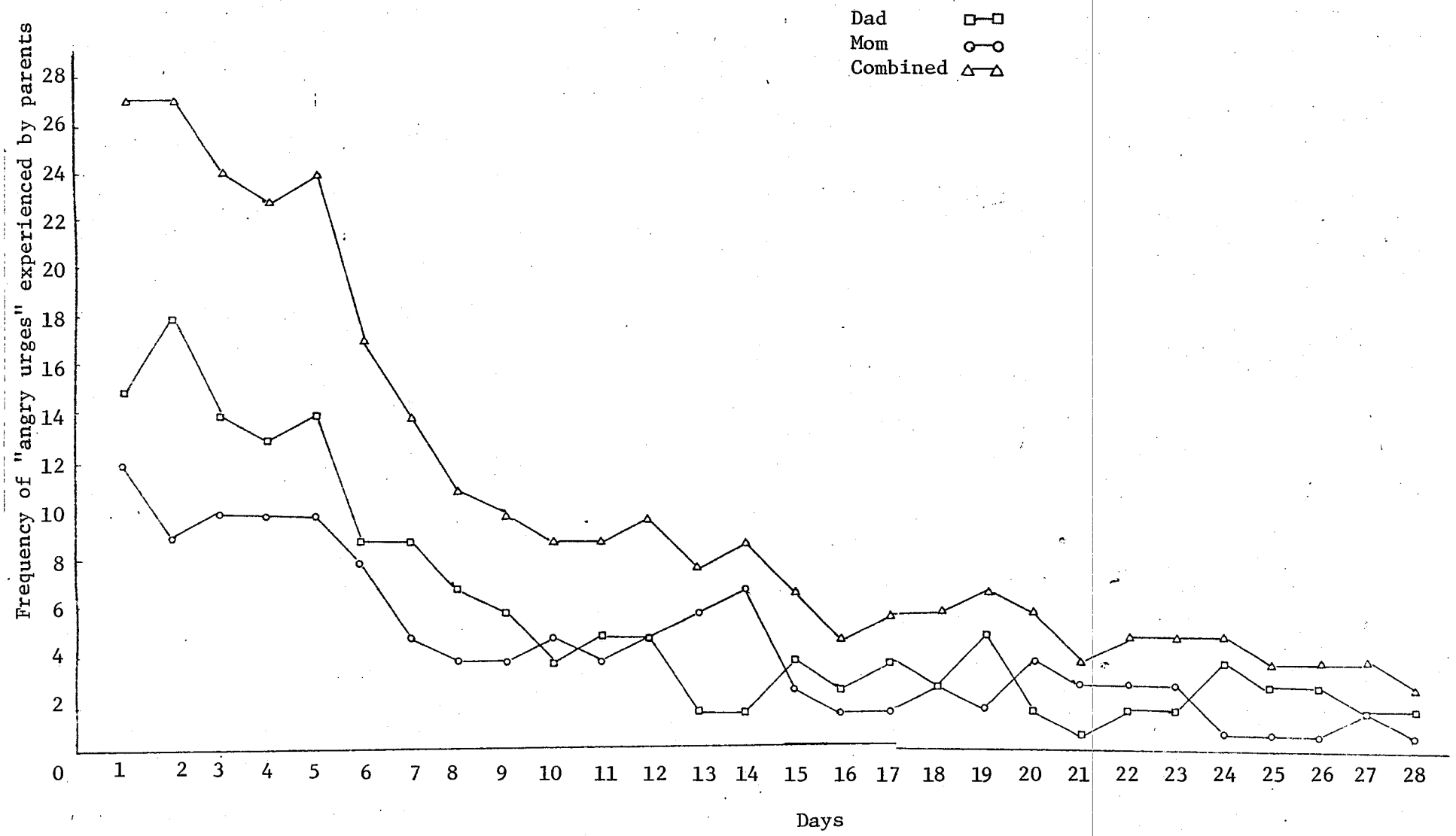

Figure 8. Frequency of angry urges experienced daily by the Father (□) and the Mother (o) in Family A.

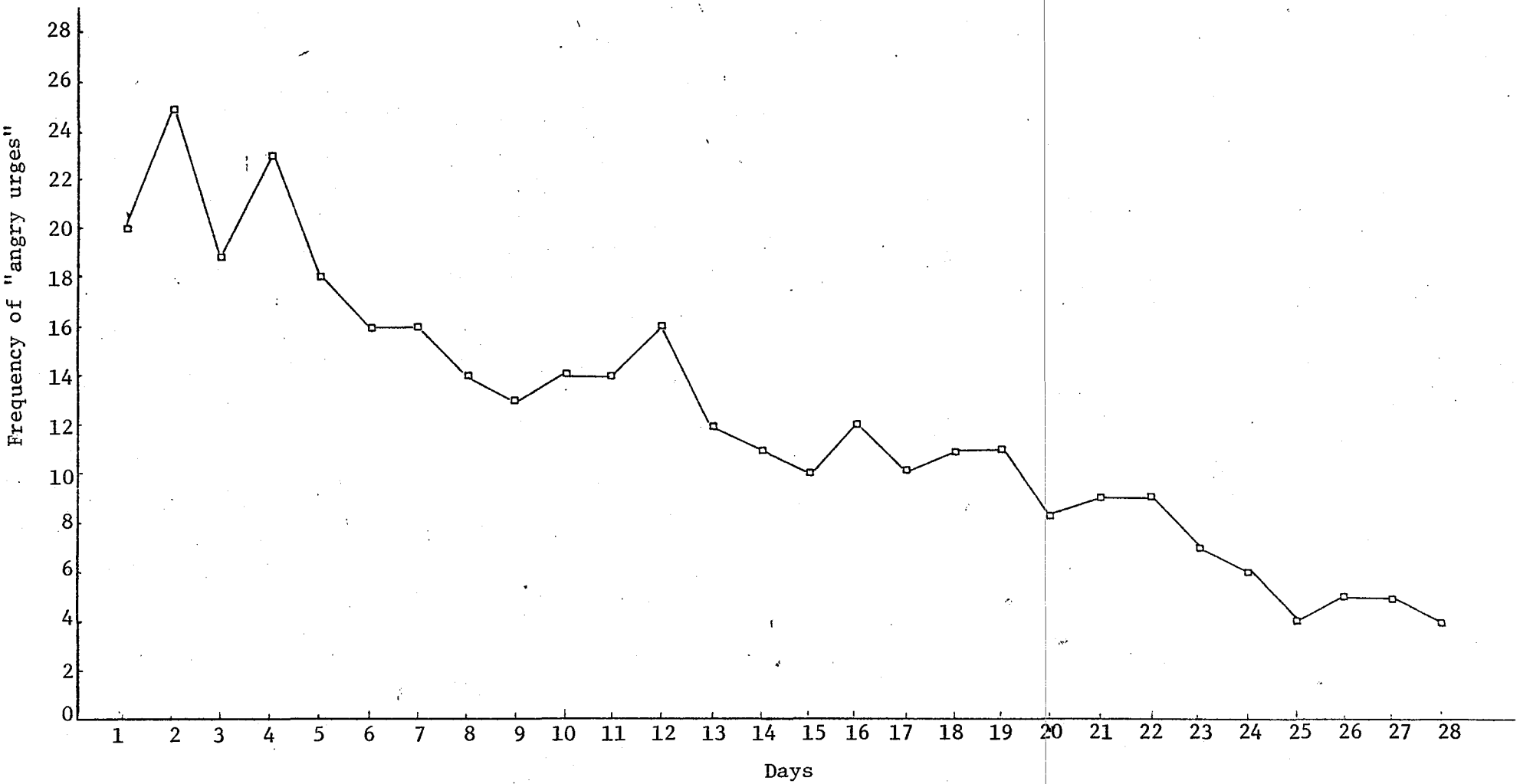

Figure 9. Frequency of angry urges experienced by the Mother (□) in Family B.

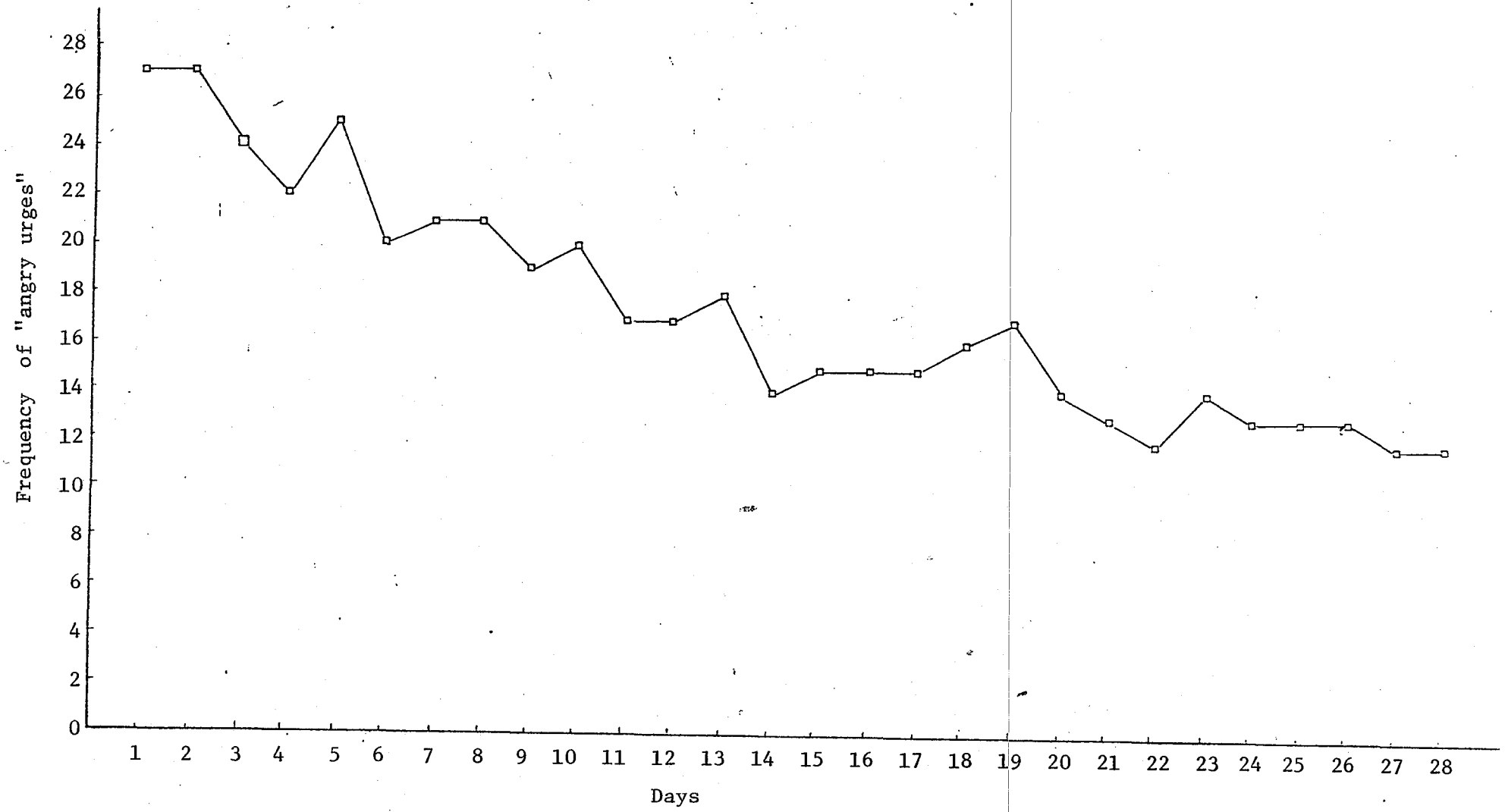

Figure 10. Frequency of angry urges experienced by the Mother (□) in Family C.

urges recorded by the mother in Family B decreased during anger control training from a level of 25 per day to a level of approximately 4 per day. For the mother in Family C, frequencies of angry urges declined from a level of 27 angry urges per day to a level of about 12 per day during the training period. Furthermore, all parents in all treated families indicated that during and immediately following anger management training they felt more controlled in handling their "urges to strike out" when provoked.

Discussion

Results of the present study indicate that the multi-component anger control training program was effective across all treated families in substantially decreasing rates of aversive behavior exhibited by parents and in increasing rates of positive parent behavior when compared with base-line levels. With the implementation of treatment for each parent/family unit, frequencies of aversive parent verbalizations, physical actions, and urges to get angry were sharply reduced. Parental attitudes toward aggression and acting impulsively when provoked, as indicated by pre and post-training scores on the Novaco Anger Scale, also improved following anger control training. Furthermore, frequencies of angry urges experienced and counted by parents during daily self-monitoring decreased over time as well.

During treatment and follow-up phases, rates of positive parent behavior also showed marked increases from baseline

levels. Nevertheless, overall rates of positive interactions between parents and their children remained at relatively low levels in all families throughout the study. One possible explanation for the low rates of positive parent behavior could be that the data collection instrument utilized in this research was not designed to track all positive and neutral behaviors that occurred. Only certain classes of positive behavior (e.g., approval, compliance, etc.) and neutral behavior (e.g., requests) were pinpointed for observation. Thus interactions between parent and child where non-targeted incidents of positive or neutral behavior occurred were discounted and not recorded on the data sheets. Therefore, the positive behavior scores shown in Figures 1 - 7 may represent a conservative estimate of the positive behavior change that occurred overall.

It is important to note that the only real exception to the trend of low overall positive parent behavior rates as recorded by observers occurred in Family C, when the mother underwent three sessions of child management skills training following completion of the anger control program. During these booster training sessions and for the 2 month follow-up period afterward, the mother's rate of positive behavior increased by over 87% to an average of around 13.5% of the intervals. This was the highest rate of positive behavior recorded for any parent of those treated in the study and is especially interesting in light of the fact that Mother C registered the highest rates of aversive behavior (crisis

proportions) and almost the lowest rates of positive behavior of any participating parent prior to training. This sharp increase in positive behavior for Mother C occurred concurrent with the start of specific skill training in positive child-rearing techniques. This finding lends support for the idea of utilizing programs which combine anger control and child management skills training, in order to maximize the probability of positive parent-child interactions while minimizing parental use of aversive tactics resorted to in anger when dealing with children in stressful family situations. It is the opinion of this author that combining an anger control program (such as the one investigated here) with procedures for teaching positive child management skills (as in Crozier & Katz, 1979, and Denicola & Sandler's, 1980 research) would result in a more comprehensive approach to the treatment of child abusers.

It is also important to note that with the introduction of treatment for parents in each family, some target children showed similar reductions (though not of as great a magnitude as parent behavior changes) in their rates of aversive behavior. However, an exception to this trend of concurrence occurred in Family B. For this family, as anger control training progressed and the mother's rate of aversive behavior decreased, the target children's rate of aversive behavior rose to higher than baseline levels. A similar pattern occurred in Family C during the three sessions when the mother had booster training in child management skills. Both

of these incidents can be explained in terms of an "extinction burst" phenomenon. That is, when parents' rates of attention (although aversive in nature) began to decrease, the children reacted by behaving more aversively, thus attempting to provoke parents into once more providing the missed attention. Regardless of the causes, however, the occurrence of such instances of improved parent behavior coinciding with extremely high rates of aversive child behaviors, tends to support our contentions on the effectiveness of anger control training. That is, if the reasons for parent anger (e.g., children's aversive acts) were maintained at stable yet high levels throughout the study, but parents were angry less often following training, then an assumption that anger control techniques were operating successfully seems justified. Furthermore, such notions lend credence to Reid and Taplin's (Note 3) recommendation that in order to ultimately deal effectively with abusive families, all family members (including children) must be taught non-coercive alternatives to conflict resolution in the home. Thus, support is again provided for the idea that future child abuse intervention programs should combine procedures for dealing directly with children's aversive behaviors plus techniques for teaching parents to control their anger arousal in stress situations.

Pre and post-training difference scores for parents on the Novaco Anger Scale and results from parent self-monitoring exercises raise some interesting issues. For example, anger

control training resulted in 31% to 43% differences in parent anger scores when compared with pretreatment levels. Such objective decreases in anger arousal as reflected by these data corroborate subjective verbal report data provided by parents following training; parents stated that they "felt much more in control of tense situations than before." Furthermore, the gradual decline in parent "urges to get angry" as recorded during self-monitoring (and represented in Figures 8, 9, and 10) can also be viewed as substantiating evidence for increased control over anger and its expression by parents during the training phase. More importantly, however, these decreases noted in angry feelings (as recorded during self-monitoring) occurred concurrent with observed reductions in rates of aversive parent behavior and increases in rates of positive behavior. Such findings can be interpreted as evidence for the effectiveness of some component (although we cannot pinpoint the critical features without further extensive analyses) in the anger control training program which helps parents not only curb their aversive behavior, but also handle their urges to strike out in anger when provoked by their children.

As mentioned above, it is impossible at this time to state with certainty which component(s) of the anger control program was responsible for the substantial changes noted in parental attitudes and behavior following training. However, the issue must be raised regarding whether this intervention itself or some other unidentified variable(s)

acted to produce the observed changes. One variable that was introduced simultaneously with the treatment package was the presence of a sympathetic, supportive therapist. Because no attempt was made in this research to isolate the effects of therapist attention separately from other components of the anger control package, care should be taken in drawing definitive conclusions regarding the items responsible for alterations in parent behavior. Therapist attention (occurring inadvertently as a result of the therapist's mere presence in the home while delivering anger control training sessions) may prove to be a significant factor in eliciting behavior change from abusive parents, especially in light of the fact that abusive families are often "isolated" and therefore may tend to crave contact with and emotional support from others not normally available in their immediate family environment.

Other similar variables that could have influenced the amount of behavior and attitude change exhibited by parents across pre and post-training observation sessions were: (a) parental expectancies that they were going to "get better" or "have more control" over their anger reaction patterns following training; and (b) parental desires to confirm such expectancies while observers were present in their homes during direct observation periods. It should be noted that, even though parent self-report data and limited anecdotal evidence of observed changes in parent behavior (witnessed and reported to the author by child welfare specialists

acquainted with two of the parents involved in the study) seems to support the notion of improved parent behavior outside of observation sessions, more extensive research is needed before this issue can be resolved. Further investigation, focusing on isolating the effects of attention and expectancy variables within the overall anger control training model, is certainly warranted in future studies which utilize anger management techniques.

Caution is necessary when generalizing results from the present anger control study to other populations as well. The present research was conducted with parents who utilized extreme punishment techniques with their children when parental anger was provoked. For example, if a child smeared the walls with lipstick, many parents would get angry and would agree that some form of child discipline was necessary. However, where many parents might opt for some type of reasoning-based non-painful consequence for the child's inappropriate act, the parents involved in this study tended to behave rashly and to react immediately, with physical force and verbal abuse directed toward the child. Thus parents treated in this study and classified as "abusive" were distinguishable from commonly termed "battering" parents--those who hurt their children for reasons unrelated to the child's specific behavior at a given point in time. The present research needs replication with both abusive and battering types of troubled parents before accurate generalizations of treatment effectiveness can be made.

In addition, caution should be exercised in generalizing results from the present research until larger numbers of abusive parents with widely differing educational, ethnic, and economic backgrounds are exposed to similar anger control programs. In the present study, the parents who underwent anger control training were from Caucasian and Philippino backgrounds. They varied in educational level from eighth grade to junior college experience and were financially bracketed at the lower class to low-middle class earnings level. No black or Latin families were available for anger control training, as were no college graduate parents, and no parents in upper middle class or upper class economic categories. This anger control training research needs to be replicated with parents who vary across a wider continuum of cultural, educational, and economic boundaries, to ascertain any limits to its effectiveness that may be directly correlated with the presence of any one of these traditional socioeconomic variables. Religious beliefs and family disciplinary persuasions should also be investigated as factors which may inhibit or enhance parental attitude and behavior change following anger control training.

The total cost of the present anger control program in terms of both therapist time (which averaged approximately 10½ hours per family to deliver the in-home training sessions) and monetary expenses (which averaged about $4.00 per family to cover the purchase of wrist counters and index cards) seems to be definitively offset by the benefits accrued, in

terms of not only substantial changes in parental rates of aversive and positive behaviors but also in parental attitudes about their ability to remain "in control" in anger-provoking situations.[1]

Information solicited from parents after completion of the training indicated a high degree of satisfaction with the anger control program in general and for certain components of the program in particular. Parents seemed to like the self-monitoring and deep-breathing components of the training package most. Counting daily angry urges made them "more aware" of the extent of their proneness to get angry, and they felt the breathing/relaxation sequence aided them in remaining calm when provoked. It allowed them time to focus on the problem at hand rather than "flying into a rage first, and then thinking later." Parents appeared to dislike keeping a daily diary the most. Many felt it was a waste of time and tended to forget to make entries on a nightly basis. Parents generally liked using the self-instructions and indicated that they enjoyed "patting themselves on the back" when they controlled their anger well. Parents were also especially fond of the "free-babysitting contingency" that was put into effect to motivate parents to self-monitor daily and to complete the entire training program.

Upon completion of the anger control program, parents felt that they now possessed tangible skills that they could use, not only in their homes, but in a variety of social situations, for managing their anger reaction patterns better.

As a case in point, the father in Family A indicated that he was using his new control skills not only in dealing with his wife and children at home but also in coping successfully with his boss and co-workers on the job as well. Such anecdotal data supports Novaco's (1975) notion that anger control training programs can be utilized to provide people (and specifically parents) with new skills (for coping with anger arousal on affective, cognitive, and behavioral levels) that can in turn be employed by them in a variety of settings outside the original training environment.

Although the techniques used in the present research may not prove to be applicable for use with all types of violence and abuse occurring within unique family structures, they certainly offer a viable alternative for or adjunct to traditional forms of family therapy currently being utilized in treating documented abusive child caretakers. However, more research is needed in this area: (a) to improve upon the present anger control treatment package by identifying and eliminating unnecessary components, (b) to generalize program effectiveness by application across different abusive populations as noted earlier, and (c) to investigate the feasibility of combining anger control and child management programs for a more wholistic approach to the treatment of child abusers and their victims. Finally, research is also critically needed to assess which components of these types of programs are most efficient and effective for producing the ultimate positive non-violent results desired within the family unit.

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Footnotes

[1]Even if one were to place a monetary value (e.g., $5.00 per hour) on the amount of therapist time expended in this study for delivery of anger control training to all treated parents, costs would total less than $60.00 per family (inclusive of all training materials as well). Surely this can be considered a minimal investment, especially if its expenditure helps to insure more positive parent-child interactions and a reduced probability of violent family encounters within these homes.

APPENDICES

A. Observation Code Definitions

B. Data Collection Sheet

C. Anger Control Training Sessions Breakdown

D. Parental Consent Form

E. Dimensions of Anger Scale

F. Novaco Anger Scale

G. Sample of Handout Given to Parents

H. Samples of Anger Management Self-Instructions

I. Consumer Satisfaction Questionnaire

Appendix A

Observation Code Definitions

DI - Disapproval - Use this category whenever a person gives verbal or gestural disapproval of another person's behavior or characteristics. Shaking the head or finger are examples of gestural disapproval. "I do not like that dress," or "You eat too fast" are examples of verbal disapproval. In verbal statements it is essential that the content of the statement explicitly states disapproval of the subjects' behaviors or attributes, i.e., looks, clothes, possessions, etc.

NE - Negativism - This category is only used when making a statement with a neutral verbal message, but which is delivered in a negative tone of voice. For example, the child asks where mother is going as she leaves the house, and the mother answers "Next door" in such a way as to indicate that mother was upset that the child had asked.

NC - Noncompliance - This code is used when a person does not do what is requested of him/her. It would be marked, for instance, if a child is asked to do something by a parent, and the child does not start doing it in either the interval in which the request was made or in the immediately following interval.

TE - Tease - Use this category when a person is teasing another person in such a way that the other person is likely to show displeasure or when the person being teased is attempting to perform another behavior, but is unable to because of the teasing.

PN - Physical Negative - Used whenever a subject (either parent or child) physically attacks or attempts to attack another person. The attack must be of sufficient intensity to potentially inflict pain, i.e., biting, kicking, slapping, hitting, shaking, limb pulling, spanking, and taking an object roughly from another person. It does not matter if the act is intentional or not.

YE - Yell - Whenever a person shouts, screams, or talks loudly. The sound must be intense enough that if carried on for a sufficient time it would be extremely unpleasant.

WI - Whine - Used whenever a person states something in a slurring, nasal, high-pitched, falsetto voice. The main element is the voice quality, not the content of the statement.

DS - Destructiveness - Destroying, damaging, or attempting to destroy any object. The potential for damage must exist whether or not the damage actually occurs.

HU - Humiliation - Used whenever someone makes fun of, shames, or intentionally embarrasses another person. The tone of voice as well as the language used should be considered.

CR - Cry - Used for all forms of crying.

CN - Command Negative - A command in which immediate compliance is demanded and aversive consequences are implicitly or actually threatened if compliance is not immediate. Example - "Stop kicking the door!" or "Leave me alone!" (or else! implied by the voice tone).

DEP - Dependency - Requesting assistance in doing a task that a person is capable of doing him/herself and that is an imposition on the other person to fulfill the request.

SC - Stating a Contingency - This will typically take the form of an if-then sentence and can warn the child of a negative consequence the parent will carry out or can inform the child of a consequence that will be delivered following an appropriate performance of requested behavior. It would be stated in a neutral tone and quality of voice.

AP - Approval - Used whenever a person gives clear gestural or verbal approval to another person. It must include a clear indication of positive interest or involvement. Examples: smiles, head nods, hugs, "That's right," "Good," "Mommy loves you," etc.

CO - Compliance - A person beginning to do what is asked of him/her within the interval in which the command is made, or in the following interval after the command is given.

FT - Follow Through - When a parent follows through on a contingency he/she has stated within a reasonable period of time (within one interval's time) following either compliance to a request/command or noncompliance to a request/command.

RQ - Request - Asking another person to do something in a neutral or positive voice tone. Differs from a command primarily with regard to voice tone/posture of the person making the request.

Data Collection Sheet

DATE_____ RELIABILITY OBS._____

FAMILY NAME_____ TIME BEGIN_____

PRIMARY OBS._____ TIME END_____

1.	DI	NE	NC	TE	PN	YE	WI	DS	11.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT	RQ	HU	CR	CN	DEP	SC	AP	CO	FT
2.	DI	NE	NC	TE	PN	YE	WI	DS	12.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT	RQ	HU	CR	CN	DEP	SC	AP	CO	FT
3.	DI	NE	NC	TE	PN	YE	WI	DS	13.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT	RQ	HU	CR	CN	DEP	SC	AP	CO	FT
4.	DI	NE	NC	TE	PN	YE	WI	DS	14.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT	RQ	HU	CR	CN	DEP	SC	AP	CO	FT
5.	DI	NE	NC	TE	PN	YE	WI	DS	15.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT	RQ	HU	CR	CN	DEP	SC	AP	CO	FT
6.	DI	NE	NC	TE	PN	YE	WI	DS	16.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT	RQ	HU	CR	CN	DEP	SC	AP	CO	FT
7.	DI	NE	NC	TE	PN	YE	WI	DS	17.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT	RQ	HU	CR	CN	DEP	SC	AP	CO	FT
8.	DI	NE	NC	TE	PN	YE	WI	DS	18.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT	RQ	HU	CR	CN	DEP	SC	AP	CO	FT

9.	DI	NE	NC	TE	PN	YE	WI	DS	19.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT		RQ	HU	CR	CN	DEP	SC	AP	CO	FT
10.	DI	NE	NC	TE	PN	YE	WI	DS	20.	DI	NE	NC	TE	PN	YE	WI	DS
	RQ	HU	CR	CN	DEP	SC	AP	CO	FT		RQ	HU	CR	CN	DEP	SC	AP	CO	FT

Appendix C

Anger Control Training Sessions Breakdown

Session I: Initial Interview

1. Explain details of the intervention program (e.g., rationale for training, outline of things to be taught, etc.).
2. Answer any questions parents have about the program.
3. Obtain written permission for:
   (a) in-home observations two to four times per week
   (b) in-home anger control training sessions
   (c) booster sessions of child management training (if needed)
   (d) in-home follow-up data collection for a 6 month post-training period.

Session II: Pretreatment Anger Assessment

1. Administer pretreatment tests to assess the parameters and magnitude of parent anger reactions, to facilitate structured analyses of pre and post-training anger patterns.
   (a) Administer self-report rating scale (Dimensions of Anger)
   (b) Administer Novaco Anger Scale

2. Review test performance with parents. Use high anger responses as primary points for beginning discussion of their individual anger responses.
3. Therapist aids parents in developing operational definitions of individual anger arousal behaviors.
4. Instruct parents in the use of standard wrist counters.
5. Instruct parents to use counters to keep a daily record of the number of times they feel "angry" (i.e., experience angry urges) within the home situation.

Session III: Cognitive Preparation

1. Review self-monitored data collected by parents since the previous training session. Praise parents for appropriate data collection.
2. Provide parents with handouts outlining the functions of anger, determinants of anger, etc. to supplement the therapist's verbal discussion of these concepts.
3. Obtain statements from parents regarding (a) the degree to which they believe they have an anger problem; (b) the greatest concerns they have about their anger; and (c) how they think working on this problem will make their life different.
4. Conduct a "situation x person x mode of expression" analysis of each parent's anger problem. That is, examine the range of settings in which the parent

functions, the persons involved in those settings, and how anger is expressed when aroused under these varied circumstances.

5. Assess parent's deficits in anger control by examining the determinants of anger arousal. Examine the external events, internal processes, and behavioral reactions that are predominantly involved for each parent.

   A) External Events (frustrations, annoyances, insults, inequity, etc.) What particular aspects of situations trigger anger arousal? Are there any specific forms of provocation that you encounter most often which most easily arouse your anger? How reasonable is it to be angry when these events occur?

   B) Internal Factors (appraisals, expectations, self-statements)

      1. Cognitive - Try to make parents aware of how their thoughts influence their feelings. What do certain provocation events mean to the parents? How do they interpret the behavior of others? Does their anger stem from how they expect others to behave? Are such expectations unreasonable? What kinds of things do they say to themselves when provocation occurs?

2. Affective - How does your body feel when you are angry? Tense or agitated? Do you feel "on edge" or "wound up" when provoked? Do you experience any physical symptoms related to anger like headaches, nervous stomach, sweaty palms, flushed face? Can you laugh at yourself when angry?

C) Behavioral Factors (antagonism, hostility, avoidance, etc.) How do parents customarily respond when provoked? How does their behavior influence how they feel? How do others respond to their anger reactions? How capable are parents in communicating their feelings to others in a positive yet assertive way?

6. Ask parents to continue daily self-monitoring of angry urges.
7. Instruct parents to begin keeping a diary of their daily anger experiences. The diary should contain three pieces of information: (a) an account of each anger provoking incident; (b) an estimate of the degree of anger experienced; and (c) an estimate of the degree of anger control exercised.
8. Provide parents with a set of index cards and instruct them to compose a hierarchy of anger-producing scenarios before the next training session. Scenes should range from those which are minor annoyances to those which are extremely infuriating to parents.

Session IV: Skill Acquisition: Phase I

1. Review self-monitored data collected by parents. Also, review anger diary ratings and provide help with index card hierarchy situations if parents are having difficulty constructing scenes.
2. Using diary statements about recent anger experiences, continue to assess parents' anger problems. Get a more refined view of the exact situations, persons, and means of expression involved in their anger reactions.
3. Establish a hierarchy of anger experiences by ordering index cards containing anger scenarios so that a graduated series of 5 - 7 situations are produced. Set cards aside for use in later sessions.
4. Introduce relaxation training. Begin by providing a rationale for the use of relaxation procedures. Then teach parents how to do deep breathing exercises and emphasize the importance of breathing control in achieving relaxation.
5. Model correct deep breathing sequences for the parents and have them practice deep breathing themselves. The sequence is as follows: inhale deeply through nose, exhale deeply through mouth, count one ... repeat counting two ... repeat counting three ... up to 10 counts.
6. Provide praise and corrective feedback for parental

performance of the deep breathing/counting sequence.

7. Instruct parents to continue to practice the deep breathing exercises at home before the next training session.
8. Instruct parents to continue (a) daily monitoring of angry urges and (b) keeping the diary of daily anger experiences.

Session V: Skill Acquisition: Phase II

1. Review self-monitored data collected since the previous session and recent diary anger incidents. Praise parents for data collected.
2. Introduce cognitive intervention, by first explaining that our feelings are not caused by events themselves but by our thoughts/beliefs about those events. Mention the Ellis concept of A-B-C in making this point.
3. Select a provocation example from the parent's diary and identify the Antecedent events, Beliefs, and Consequent behavior. Make an attempt to alter B. Help the parent to alternatively view the situation. Modify their appraisal of its significance, the intentions of others, etc. Alter any maladaptive expectations involved in the incident. Get parents to pay particular attention to the internal dialogue they use before, during, and after an anger incident. Review whether or not anger was actually justified

Appendix C continued

in that particular situation.

4. Teach parents how to break down an anger experience into manageable chunks. Use an example to illustrate the various stages:
   (a) preparing for a provocation (when possible)
   (b) impact and confrontation
   (c) coping with arousal and agitation
   (d) subsequent reflection (thinking back over the conflict whether it was resolved or not)
5. Teach parents to use self-statements as a means for coping constructively with internal appraisals of a provocation experience. Provide parents with a handout listing sample self-instructions which they can use during various stages of provocation when interacting with their children, spouses, etc.
6. Model the appropriate use of self-instructions for parents using a diary anger incident. Then have parents practice using this strategy and provide feedback to parents when necessary. Also, show parents how to integrate the use of self-instructions into the relaxation sequence they have already mastered. Example: for each stage of anger: (a) take a deep breath; (b) count one; and (c) give yourself an appropriate self-instruction ... repeat sequence. Require parents to practice more.
7. Instruct parents to continue to practice deep

breathing/counting/self-instruction sequences when their anger is aroused at home.

8. Instruct parents to continue daily monitoring of their angry urges and diary recordings of anger experiences.

Session VI: Skill Acquisition: Phase III

1. Review self-monitored data and diary entries made since the previous session. Praise parents for their diligent data collection.
2. Emphasize how anger can be used as a cue to signal parents to act constructively in anger situations. Review material on breaking provocation events into stages and utilizing relaxation sequences coupled with self-instructions to cope with arousal.
3. Introduce behavioral interventions by teaching parents to adopt a problem-solving approach to conflict.
   (a) Use a diary incident to model/roleplay how to communicate feelings and express anger constructively. Have parents practice doing these.
   (b) Help parents to understand that confrontation does not mean hostility. Have parents roleplay a situation being as hostile as they can, and then examine their behavior and aid them in searching for more constructive forms of expression. Coach their assertive behavior -- help them become more proficient at being direct,

firm, and explicit in making requests for change in another person's behavior.

(c) Help parents remain task-oriented during provocation. Don't take things personally -- know what you want to get out of an anger situation and work toward that goal. Help parents to view anger situations as problems needing solutions.

(d) Have parents practice assertive problem solving behavior using roleplay and corrective feedback techniques.

4. Instruct parents to continue practicing all techniques mastered so far (deep breathing, self-instructions, and assertive problem solving) at home prior to the next training session.
5. Instruct parents to continue daily monitoring of their angry urges and diary recordings of anger incidents.

Sessions VII-VIII: Applied Practice and Post-Treatment Assessment

1. Review self-monitored data and diary entries made since the previous session. Praise parents for their accomplishments to date.
2. Bring out the index cards containing hierarchy of scenarios constructed during the 3rd and 4th training sessions. Have each parent role play the

appropriate use of all the skills he/she has learned during training, using the lowest anger arousal scene from the hierarchy as the setting for the initial applied practice session. Provide parents with coaching and corrective feedback as needed. End role playing of each scene by praising parents for using their new skills so proficiently.

3. Continue parent role playing, utilizing scenes which progressively elicit more anger arousal, until each parent has worked through all hierarchy items using anger control skills satisfactorily. Always coach, correct, and praise as necessary.
4. Re-administer the Novaco Anger Scale to assess pre to post-training differences in parent response to provocation. Also, ask parents for subjective feedback on various components of the training program and have each fill out a "consumer satisfaction" questionnaire with comments/suggestions for program improvement.
5. End anger control training on a positive note -- stress how proud you are of parental progress throughout the program.
6. Request that parents continue collecting self-monitoring data, so they can see for themselves the progress they will continue to make in anger control now that they possess positive coping skills.

7. Arrange for follow-up visits (for check-up and data collection purposes) and invite parents to contact you anytime between visits if they have questions regarding the use of their anger control skills with their children, spouses, etc.

Appendix D

Parental Consent Form

We, the undersigned, understand that we will be taking part in a research project that is being conducted by Sharlyne Nomellini under the supervision of Dr. Roger Katz, a licensed clinical psychologist, in partial fulfillment of requirements for Ms. Nomellini's Master of Arts degree in Psychology. We understand the purpose of the project is to teach us more effective ways of controlling our anger in our interactions with our children and more positive ways of handling our children's behavior. We understand that the techniques we will be trained to use will be fully explained to us before we are taught to use them, and that the learning of the techniques will require us to do simple writing and record keeping assignments.

We understand that one or two research assistants of Ms. Nomellini's will observe our family in our home 2-4 times per week for ½ hour each time, for up to but not more than 3 weeks prior to our being trained and for some time after we have been trained. We understand that our training in the use of these methods will take place in our home and that visits after the main part of the study is completed may also occur.

(continued)

We understand that there will be no unannounced visits to our home by anyone involved in this project and that signing this form does not legally obligate us to remain in the project. We may withdraw at any time, but we will try to (and it appears now as if we will) complete all of the training.

We, therefore, give our informed consent to all phases of the treatment as explained in this form and in more detail by Sharlyne Nomellini.

Mother's Signature _____

Father's Signature _____

Date Signed _____

Appendix E

Dimensions of Anger Reactions

Do your best to judge as accurately as you can the degree to which the following statements describe your feelings and behavior. That is, rate the degree to which each statement applies to you.

1. I often find myself getting angry at people or situations.

0	1	2	3	4	5	6	7	8
not at all	very little	a little	some not much	moderately so	fairly much	much	very much	exactly so

2. When I do get angry, I get really mad.

0	1	2	3	4	5	6	7	8
not at all	very little	a little	some not much	moderately so	fairly much	much	very much	exactly so

3. When I get angry, I stay angry.

0	1	2	3	4	5	6	7	8
not at all	very little	a little	some not much	moderately so	fairly much	much	very much	exactly so

4. When I get angry at someone, I want to hit or clobber the person.

0	1	2	3	4	5	6	7	8
not at all	very little	a little	some not much	moderately so	fairly much	much	very much	exactly so

5. My anger interferes with my ability to get my work done.

0	1	2	3	4	5	6	7	8
not at all	very little	a little	some not much	moderately so	fairly much	much	very much	exactly so

6. My anger prevents me from getting along with people as well as I'd like to.

0	1	2	3	4	5	6	7	8
not at all	very little	a little	some not much	moderately so	fairly much	much	very much	exactly so

7. My anger has had a bad effect on my health.

0	1	2	3	4	5	6	7	8
not at all	very little	a little	some not	moderately so	fairly much	much	very much	exactly so

Appendix F

Novaco Anger Scale

Instructions

The items on the scale describe situations that are related to anger arousal. For each of the items, please rate the degree to which the incident described by the item would anger or provoke you by using the following scale:

1	2	3	4	5
very little	little	a moderate amount	much	very much

Use the same scale for each of the items. Please mark your responses on the answer sheet provided. Try to imagine the incident actually happening to you, and then indicate the extent to which it would have made you angry by scoring the answer sheet.

In the actual situations, the degree of anger that you would experience certainly would depend on other factors that are not specified in the items (such as, what kind of day you were having, exactly who was involved in the situation, how the act occurred, etc.). This scale is concerned with your general reactions, and so the details of particular situations have been omitted. Please do your best to rate your responses in this general fashion.

1. You are waiting to be served at a restaurant. Fifteen minutes have gone by, and you still haven't even received a glass of water.

2. Being overcharged by a repairman who has you over a barrel.

3. Being singled out for correction, when the actions of others go unnoticed.

4. You are trying to rest or read, but there are children nearby who are making a lot of noise while playing.

5. Being called a liar.

6. You are in the midst of a dispute, and the other person calls you a "stupid jerk."

7. Hearing that a person has been deprived of his/her constitutional rights.

8. Someone borrows your car, consumes 1/3 of a tank of gas, and doesn't replace it or compensate you for it.

9. People who think that they are always right.

10. You unpack an appliance that you have just bought, plug it in, and discover that it doesn't work.

11. Struggling to carry four cups of coffee to your table at a cafeteria, someone bumps into you, spilling the coffee.

12. Getting your car stuck in the mud or snow.

13. You are typing a report hurrying to make a deadline, and the typewriter jams.

14. Employers who take advantage of their employees' need for work by demanding more than they have a right to.

15. Watching someone bully another person who is physically smaller than he is.

16. Persons in authority who refuse to listen to your point of view.

17. You have hung up your clothes, but someone knocks them to the floor and fails to pick them up.

18. Being stood-up for a date.

19. Noise and disorder at the dinner table.

20. You are driving to pick up a friend at the airport and are forced to wait for a long freight train.

21. You are driving along at 45 mph, and the guy behind you is right on your bumper.

22. You are talking to someone, and they don't answer you.

23. Hitting your finger with a hammer.

24. Newspapers slanting the news against persons in political office to make them look bad to the public.

25. You have made arrangements to go somewhere with a person, who backs off at the last minute and leaves you hanging.

26. Being joked about or teased.

27. Your car is stalled at a traffic light, and the guy behind you keeps blowing his horn.

28. Seeing somebody berate another person to excess.

29. Being pushed or shoved by someone in an argument.

30. You accidently make the wrong kind of turn in a parking lot. As you get out of your car someone yells at you, "Where did you learn to drive?"

31. Someone who pretends to be something that they are not.

32. You walk out to the parking lot, and you discover that your car has been towed away by the police.

33. Working hard on a project and getting a poor evaluation.

34. Someone makes a mistake and blames it on you.

35. You get in your car to drive to work, and the car won't start.

36. Being hounded by a salesperson from the moment that you walk into a store.

37. Being given an unnecessarily difficult exam when you need a good grade.

38. You are deprived of a promotion to which you are entitled because you haven't played up to the right people.

39. Someone who tries to make you feel guilty.

40. You are trying to concentrate, but a person near you is tapping their foot.

41. Getting punched in the mouth.

42. When you are criticized in front of others for something that you have done.

43. You lend someone an important book or tool, and they fail to return it.

44. In the parking lot, the person whose car is next to yours swings open his door, chipping the paint from your car.

45. Getting cold soup or vegetables in a restaurant.

46. Someone who is always trying to get "one-up" on you.

47. You have had a busy day, and the person you live with starts to complain about how you forgot to do something that you agreed to do.

48. People who constantly brag about themselves.

49. Being thrown into a swimming pool with your clothes on.

50. Banging your shins against a piece of furniture.

51. You are trying to discuss something important with your mate or partner who isn't giving you a chance to express your feelings.

52. Being forced to do something that you don't want to do.

53. You are in a discussion with someone who persists in arguing about a topic they know very little about.

54. Losing a game that you wanted to win.

55. Being told to "go to hell."

56. Someone making fun of the clothes that you are wearing.

57. Someone sticking their nose into an argument between you and someone else.

58. You are walking along on a rainy day, and a car drives past, splashing you with water from the street.

59. Acts of prejudice against a minority or ethnic group.

60. Someone spits at you.

61. You need to get somewhere quickly, but the car in front of you is going 25 mph in a 40 mph zone, and you can't pass.

62. Being talked about behind your back.

63. Stepping on a gob of chewing gum.

64. Hearing that a very wealthy person has paid zero income tax.

65. You have just cleaned up an area and organized the things in it, but someone comes along and messes it up.

66. Someone ripping off your automobile antenna.

67. You are involved in watching a TV program, and someone comes up and switches the channel.

68. Being told by an employer or teacher that you have done poor work.

69. You are in a ball game, and one of your opponents is unnecessarily rough.

70. Being mocked by a small group of people as you pass them.

71. Acts of economic exploitation whereby people in business make excessive profits by taking advantage of need and demand.

72. You are in a theater ticket line, and someone cuts in front of you.

73. Being forced to do something in a way that someone else thinks that it should be done.

74. You use your last 10¢ to make a phone call, but you are disconnected before you finish dialing.

75. In a hurry to get somewhere, you tear a good pair of slacks on a sharp object.

76. Being misled and deceived by someone holding political office.

77. You are out for an evening with someone who indirectly conveys to you that you just don't measure up to their standards.

78. While washing your favorite cup, you drop it, and it breaks.

79. Children leaving their toys and play items scattered about the house on the floor and furniture.

80. Discovering that you were deliberately sold defective merchandise.

Appendix G

Sample of Handout Given to Parents

Basic Types of Provocation -- categories and family-oriented examples.

1. Annoyances
   (a) Child gets into your makeup -- smears lipstick all over walls
   (b) Child spills a glass of milk all over the kitchen floor
2. Frustrations
   (a) Babysitter calls and says she can't watch the kids today, 5 minutes before you are ready to leave the house.
   (b) Mother-in-law pops in unexpectedly with four friends and your house is a mess
   (c) Telephone repair man is 6 hours late in arriving to fix phone
3. Ego Threats
   (a) Your husband criticizes your housekeeping/ cooking abilities
   (b) You overhear a conversation where your child is describing his/her mom as "the one that looks like a hippo"
4. Assaults
   (a) Child hits back or spits at you when you attempt to correct him/her

(b) Your husband gives you a black eye because dinner wasn't ready on time

5. Inequities

(a) Your husband calls from work at 4:30 pm and informs you that ten extra people will be coming for dinner at 6:00 pm

(b) Your sister drops off her children unexpectedly for you to babysit, without even asking if you have other plans

Functions of Anger

1. Energizing function - increases the vigor with which we act; raises response amplitude.
2. Disruptive function - interferes with efficient task performance.
3. Expressive function - communicates negative feelings to avoid smouldering anger.
4. Defensive function - directs conflict toward someone else; reduces self-blame.
5. Potentiating function - induces a sense of personal control over the situation.
6. Instigative function - serves as a stimulus for either aggressive or constructive behavior.
7. Discriminative function - awareness of anger may be used as a cue for beginning positive coping procedures.

Components of a Provocation Sequence

1. Setting events - experiences which prime a parent's reactions; circumstances which set the tempo for how you will be disposed to act.
2. Cognitive determinants - attitudes, recollections, appraisals, expectancies, and self-dialogue which precede and accompany a parent's response to provocation.
3. Situational cues - properties of behavior settings which act directly as anger elicitors; "straw that broke the camel's back."
4. Mode of response - the manner in which a parent reacts to provocation -- can serve either to escalate antagonism or short-circuit the sequence.
5. Consequences of encounter - positive consequences lead to constructive closure of the incident, whereas negative consequences lead to prolonged agitation and disruption of task performance.

Potential Symptoms of Anger Arousal (Physiological Cues)

rapid heart beat	shallow breathing
sweating	flushed skin
tense muscles/rigidity	trembling
agitation	stammering/stuttering

Goals of Anger Control Training Program

1. To teach parents to use anger in such a way as to

maximize its adaptive functions and minimize maladaptive ones.

2. To enable parents to recognize anger and its source in the environment and to communicate anger in a non-hostile manner.
3. To help parents control the accumulation of anger and prevent an aggressive over-reaction which may harm someone close to them.
4. To help parents set the stage for dealing constructively with the situations that caused their initial anger.

Appendix H

Samples of Anger Management Self-Instructions

Stage I: Preparing for Provocation

1. This could be an embarrassing situation, but I know how to handle it without violence.
2. I can work out a plan to handle this problem with my child calmly. Easy does it!
3. I must remember to stick to the problem at hand. I won't take the blame for my child's bad behavior.
4. There is no need for arguing or fighting. I can deal with my child reasonably without letting it get me mad.

Stage II: Impact and Confrontation

1. As long as I keep my cool, I know that I am in control of the situation.
2. I don't have to prove by yelling or hitting that I'm a good parent. No need to make a big deal of this problem.
3. Nothing is gained by my getting angry. I must follow through and deal with my child in a matter-of-fact manner.
4. I must remember to look for positives in this situation. Don't jump to the wrong conclusions about what has happened!

Stage III: Coping with Arousal

1. I'm getting tense. Time to take a deep breath and slow things down before I react.
2. Relax and handle the problem slowly, point by point, relax!
3. The anger I feel is a cue for me to begin using my coping skills.
4. My child may want me to get angry, but I'm going to surprise him/her and handle the situation calmly and constructively.

Stage IV: Subsequent Reflection

1. I handled that situation pretty well. I did good!
2. I could have gotten a lot more upset than I did. I'm really controlling my anger better now!
3. I'm getting better at being calm and "relaxing before reacting" when a problem arises.
4. I really got through that scene without exploding. I'm proud of myself!

Appendix I

Consumer Satisfaction Questionnaire

Please answer these questions as honestly as possible. Your answers will provide us with valuable assistance in improving our techniques for helping parents learn to manage their anger better in family situations.

1. What specific aspects of the Anger Control Training Program did you particularly like?

2. What aspects of the training program did you dislike? Be specific.

3. If you had to design a program for teaching people how to control their anger in family situations, what things would you do differently?

4. Did any particular aspect(s) of the program make you want to try harder than you normally might have done?

5. Overall, do you feel that completing this program has given you any new skills you previously did not possess? Explain.

6. Do you feel more "in control" of your emotions now that you have completed the training? If you like, provide an example to illustrate.

7. Please make any other comments regarding the training program here.