

To the Graduate Council:

I am submitting herewith a dissertation written by Ann Dexter Howard entitled "The Elusive Father: His Role in the Family." I recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

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THE ELUSIVE FATHER: HIS
ROLE IN THE FAMILY

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To Tom, in gratitude for his encouragement and support.

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ABSTRACT

The existing literature on the role of the father in the family is extraordinarily conflicted, inconclusive, and incomplete. Thus, the intent of this study was to take a look at the father's impact upon the family. His direct influence upon the children was investigated by observing the aversive behavior of both fathers and children when they were interacting alone with one another in the home. Mother-child interactions were assessed in the same manner for comparison purposes.

The population for the present study was comprised of 24 mostly low-income intact families with problem school-age children referred to a university affiliated clinic. This study of "direct effects" of fathers and children in the home depended upon home observation using a standardized coding system. The data were analyzed statistically, and the results showed a rather unexpected finding in terms of any previous literature. A behavioral contrast effect was seen for children's aversive behavior. In the observation condition of children alone with their mothers, child aversive levels significantly decreased from baseline to treatment as expected ($p < .0003$). Quite the opposite phenomenon occurred in the father-child condition, however. Children's coercive behavior actually increased significantly

in treatment ($p < .01$). Although the behavioral contrast phenomenon was well-known in both animal and human research, it had never been observed either inside the family or in this particular configuration.

Child opposition decreasing in treatment with mothers and increasing with fathers was a finding which led to several logical inferences. First, it appeared that intrafamily behavior was an even more complex phenomenon than had originally been thought. Yet another implication of the contrast effect pertained to the lack of maintenance of treatment effects over time; a persistent problem in this high-risk population. The present research found that although child opposition was reduced in the mother setting, it never really left the family interactional system because of its reappearance in the father setting. The persistence of child coercives in the family system may make its resurgence more likely in follow-up, once a active family therapeutic intervention ceased. The implication was that there may be a hitherto-unknown additional risk factor for maintenance of treatment gains in a population already at risk for such problems. At the very least, accelerated levels of child opposition with father seemed to indicate a need to include him as an equal partner with mothers in family treatment programs (most programs have been essentially matrifocal in approach). The inclusion of fathers in

treatment programs may prove to be difficult, given the fact that this study showed that he was much less involved in or affected by children's behavior than was the mother.

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CHAPTER I

INTRODUCTION

The mother's impact upon children in troubled families is certainly well known. The literature is voluminous. Almost without exception most theorists' underlying assumption has been that the mother-child relationship is unique and more important than any other contemporaneous or subsequent relationship (Lamb, 1976). For example, Freud and his followers saw the mother-child relationship as the prototype for all others. In another sphere, Bowlby's ethologically-based theory, which again placed the mother in the central position for child rearing, was derived from the critical period of infant attachment in animals and humans, and the evolutionary advantage inherent in this for the child (Bowlby, 1965, 1967, 1969).

Too, learning theorists dealing with troubled families most often chose the mother-child dyad for intervention, especially during the sixties and early seventies (c.f., review by Forehand and Atkeson, 1977). For the most part, targeting the mother was probably based upon convenience and her proximity to the child; but one wonders if these researchers also might have been responding in some way to the cultural, historical, and theoretical tradition of the mother as the primary architect of relationships.

On the other hand, systems-oriented researchers have opened up for consideration the interrelationships of the entire family, which is an interactive organism embedded in a larger social and cultural network. The oscillations of the larger network resonate into the family itself, and vice-versa. The emphasis in the ecological approach is therefore not tied to a particular person in the network as the central figure from which all other interactions flow.

An important departure from the matrifocal approach was that systems researchers abrogated the traditional concept of "blame." It was not the mother, the father, or the child who was at fault, because a problem which manifested itself in a given family member was merely an indication of a problem in the intra- or extrafamilial system.

Systems researchers are more concerned with family communication and interaction systems which are immediately observable in the present, than with imaginary and infantile matters of a psychodynamic orientation (Haley, 1971; Bowen, 1974; Whitaker, 1976; Cromwell and Keeney, 1979). Haley's work addressed communication systems at different levels of meaning (e.g., the "double bind" in schizophrenogenic families). As well, his work took into account the complexity of kinship systems impacting upon the family, much as did the work of Wahler; the difference being that Haley did not come from a learning theory point of view.

Minuchin (1974) was influenced by Haley, yet his focus was broader because he devised a more codified theory, "structural family therapy." Structural refers to the family as a system made up of various subsystems which can be defined, classified, and used as the basis of a treatment plan. Bowen, another family systems thinker, went further than either Haley or Minuchin in his theorizing. Along with his ideas regarding families and extended families, he added the idea of a multigenerational approach to looking at family problems. As well, Bowen (1974) attempted to apply his particular systems theory to the largest system, that of society as a whole. While this effort was perhaps less successful than his previous work, it did demonstrate his attempt to be a systems thinker at all levels.

Love and Kaswan (1974) combined clinical and empirical approaches to investigate and intervene in communicational intractional networks surrounding disturbed children in both the home and school setting. Thus, they shared an emphasis upon communication at different levels with Haley, Minuchin, and Bowen, yet their work was founded upon direct empirical observation in the expanded settings of home and school. Hetherington (1969, 1973) also looked at all parts of the family system empirically but went a step further in terms of analyzing complex family interactions as "behavioral clusters", which in turn defined particular familial styles of interaction.

This work rests squarely within the ecological approach to looking at troubled families, particularly in relation to what the father does within the intra- and extra-familial network. To open consideration of the father's role, one must first place him within the context of what is known about family ecological systems in general. With regard to the extrafamilial social network which in turn influences interactions inside the family, Wahler (1977) found that the frequency and nature of community contacts had a bearing on mothers' intrafamilial child-rearing skills. For example, a set of observation days with more "kinfolk" and "helping agency" contacts (rated as negative by the mothers) correlated with a higher number of aversive mother-child interchanges. Conversely, days with more "friend" contacts (rated as positive) correlated with a lower frequency of coercive interactions between mother and child. Further, mothers with mostly "kinfolk" and "agency" contacts could be classified as isolated or "insular," and therefore more at risk for sustained and severe family problems. As well, these families were low-income with limited educational and social resources. Presumably the same phenomena operating with insular mothers could also apply to fathers, but no studies have been done in this area.

In terms of the intrafamilial system, work has been done which showed each family member to be more or less equal partners in interactions with one another. Schaffer (1971)

noted, "the basic characteristic of all interpersonal behavior is reciprocity." Thus, within the family system are numerous reciprocal relationships, role demands, and expectations. In the case of the child, research has demonstrated that he or she is not simply a passive organism shaped by the social and physical environment (Bell, 1968). Rather, the child is an active contributor to interactions, and its characteristics modify parent's behavior. He or she can initiate and terminate interactions, and is capable, from infancy, of what might be considered remarkably sophisticated modes of relating to others (Bell, 1979; Lamb, 1976; Lewis and Rosenblum, 1974; Stern, 1975; Osofsky, 1979; Parke, 1979).

In troubled families, a recent observational study demonstrated the complementary roles of both mother and child in the chains of coercive interactions which characterize such families (Patterson, in press). In these families, the child often initiates these coercive, demanding interchanges with mother. The child would then continue to escalate his/her aversive demands, until the mother, in effect, must "give in" in order to terminate the interchange; thereby becoming a kind of victim.

Patterson also characterizes her as the "architect" of these types of interchanges, because she has lost control of the childrens' behavior, the proof of which is the fact that these long coercive chains occur at such frequency and

duration. Even in normal families mothers are under much stress from children (Patterson, 1976) and spouses (Fawl, 1965). The difficulties are there; but presumably mothers can successfully negotiate these to have a relatively calm family life within the context of their oft-cited traditional roles of caretaking and work (Lamb, 1976).

The father's role in the family is much less clear than is the mother's, although it is known that he is associated with children's academic skill development, appropriate sex role identity, and moral development. However, the nature of his reciprocal relationships with the children is less well-known than in the case of the mother. To complicate this matter, there is a dearth of literature on fathers; so much so that one researcher was moved to ask if the father was not indeed an irrelevant entity in the family (Lamb, 1976). What literature that exists is riddled with paradox and thereby inconclusive in nature; especially with regard to what fathers actually do in families to influence their children for good or for ill.

One body of research at a longitudinal, molar level of analysis showed that the father's behavioral characteristics played the largest role in predicting offspring's like deviancy later in life (Robins, 1966; McCord, 1963). Neither the mother's characteristics nor such factors as socioeconomic status had nearly the predictive value of the father's own level of antisocial behavior (Robins, 1966). Many

other researchers have found links between the father and delinquent behavior of offspring (Gleuck and Gleuck, 1950; Rosenthal, 1962; Jenkins, 1968).

In contrast to the father as an important determinant in the lives of his children, empirical observational studies at a day-to-day molecular level of analysis paradoxically show just the opposite; that the father has little or no immediate impact upon his children's behavior (Patterson, in press; Reid and Taplin, 1976, Burgess and Conger, 1977; Martin and Hetherington, 1976). Patterson (in press) found that in contrast to normal families where disciplinary duties were shared between both parents, in coercive child situations something very different occurred in observations of troubled families. The father dropped out of the conflict, leaving the mother to participate in the escalating level of mutual coercion alone, without benefit of his support or intervention. In aversive situations, the father reacted as if nothing out of the ordinary was happening. Reid and Taplin (1976) and Burgess and Conger (1977) found that in distressed families, fathers exhibited no significant differences in aversive behavior than did their normal controls; although there were significant differences for mothers and for children in distressed versus normal populations. These studies again suggest the idea that the father does very little in coercive child episodes; long, repeated series of which

presumably constitute principal child socialization patterns from a learning theory point of view.

When these day-to-day, molecular level findings of the father doing so little to affect the coercion level of his children are contrasted with the molar-level longitudinal studies which show him to be the largest single predictor of offspring's future deviance, the paradox becomes apparent. How is it possible for him to be a bystander in child aversive situations which are left to the mother to handle; yet it is he, not she, who has by far the greatest predictive value for the offsprings' future deviancy? Intuitively it appears that the father must be doing something, but perhaps that "something" has not been picked up in observational studies.

There are several possibilities for attempting to resolve the paradox. The first is that of modeling, or learning that takes place without overt reinforcement (Bandura, 1959, 1963). Children's covert learning or modeling of father's antisocial patterns of behavior over a long period of time in varied instances might not only account for some of the longitudinal similarity of offspring's to paternal behavior; it would also not necessarily be picked up in molecular level observation studies. However, the literature on children modeling father's behavior is extraordinarily conflicted and inconclusive (Lamb, 1976). Unfortunately, little has been done in the area most germane to this work,

that of socialization. Most studies have to do with the acquisition of sexual identity from fathers to sons, and even that research has failed to support its fundamental hypothesis that masculine fathers always have masculine sons (Maccoby and Jacklin, 1973).

In the small amount of research existing in the area of social adjustment, again there are difficulties in proving the connection between what the father models and what the child does in any immediate sense (Hoffman, 1970). In troubled families with aggressive boys, Bandura (1959) found that these fathers were especially unlikely to serve as important models for imitation, because of the criticism and hostility directed towards the sons. Modeling occurs within the context of a warm, nurturant, involved relationship (Bandura, 1959) and fathers of aggressive boys were, of course, the opposite. While it seems reasonable to say that children imitate many aspects of parents' behavior, researchers have had difficulty tapping into the process in the area of fathers and the socialization of offspring; however, it does seem to be true that little or no modeling takes place in troubled families with aggressive boys. Thus, as an answer to the aforementioned paradox, modeling must remain moot.

Another possibility for attempting to resolve the paradox of the father having no influence day-to-day versus him being the best predictor of eventual child deviance might

lie in the area of indirect influence. This line of reasoning suggests that his role in influencing the children is not as passive as observational studies might indicate; because his influence is there, but it is mediated through the mother. There is support in the literature for this position.

Pederson (1975) found that father's esteem for mother as "mother" correlated with such things as her feeding competence and the infant's alertness; and his presence was more likely to increase mother's touching and smiling at the infant (Parke and O'Leary, 1975). Studies by Hetherington, et al. (in Patterson, 1979), cite marked increases in older children's coercive behaviors immediately following a separation or divorce in which the father was no longer present. It is not clear, however, whether the effect was due to father's absence or due to the trauma of the divorce impairing the mother's child management skills. In a study by Patterson and Moore (1977), planned changes in a mother-daughter problem interaction were shown to be affected by the presence of the father. The aversive interaction was reduced by the father's presence in the room. This phenomenon could argue for an indirect function of treatment outcome because of the father's presence. On the other hand, it seems just as logical to speculate that the father's presence resulted in a direct effect of suppressing aversive behavior. As will be seen later, this example is a pivotal one for the explora-

tion of yet another line of reasoning, having to do with direct effects of fathers.

Returning to the notion of fathers' influence upon children being mediated indirectly through the mother, it is clear that the literature supports this idea. It can be seen then, as a piece of the puzzle in terms of resolving the paradox of father exerting no influence in all-important child disciplinary episodes versus him being the greatest predictor of offspring's later antisocial behavior. However, indirect effects cannot rest as the final answer to the paradox, simply because another very basic piece of research has yet to be performed, which is to take a look at what fathers and children do when alone with one another in the natural setting. The observation studies involving fathers have always included the mother's presence as well. It seems reasonable that in order to study the elements of the father's influence upon the children, one should excise it from the family network to observe it in its purest form; that of the father and children behaving together in the home.

My study involves investigating what the father and children do together in the home in terms of aversive behavior. In this way one can begin to look at reciprocal father-child aversive interactions in troubled families; long, repeated chains of which presumably contribute to a negative interactional "style" for children, from a learning theory point of view. An important question to be addressed by this

research has to do with father's direct negative influence upon his children. Conversely, one might wonder what kind of direct impact children's coercive behavior might have upon him. It is known from the literature that the father does influence the children, albeit indirectly. In addition, a small body of literature attests to the possibility of direct influence from father to child, and vice versa. In studies of infancy, amount of time spent together is a poor predictor of the quality of the infant's relationship with either mother or father (Feldman, 1974; Lamb, 1976). The assumed infant monotropy towards the mother is called into question when one considers Lamb's (1975) study which found that infants show no preference for either parent on attachment measures, and indeed they direct more affiliative type behaviors to fathers in the naturalistic setting. When separation protest is the dependent measure, there is no preference shown for either parent in the home or in laboratory settings (e.g., Kotelchuk, 1975). In general the recent findings summarized here not only challenge the long-assumed pre-eminence of the mother; they point towards the possibility that in the beginning of life father might have an equal chance of forming a strong bond with the child. By extension, the context of this strong bond might allow more possibilities later for direct influence from father to child, similar to what happens in the case of the mother and child.

If it is possible to set the stage in infancy for the father to be a significant direct influence in the child's life, what is the nature of this influence? What does father do to affect the behavior of children? As emphasized earlier, there is a dearth of literature which indicates that he does anything at all (c.f., Patterson, 1979). However, an unpublished study by Ready (1978) demonstrated a direct, overall suppressive effect on children's behavior in the father-present condition as compared to the mother-present condition. In the father's presence the children interacted less, both with him and with each other. Recalling Patterson and Moore's 1977 study, the same "dampening" effect was seen, in that coercive behavior between mother and daughter decreased when the father was in the room.

The present study, then, moves inside the family to take a molecular fine-grained look at what happens between fathers and children in terms of aversive/non-aversive behavior. The condition primary to this study, that of father and children interacting together, will be contrasted to the other setting combination of parents and children (mother and children together).

Recalling the central paradox in father literature of fathers having no direct influence on children versus being the largest predictor of future child deviance, it is clear that this study addresses itself to the first part of

the paradox. In other words, it belongs in the group of studies which looked at father's direct influence (or lack of it) in the day-to-day sense. Thus, the results of this study will in part either support or disprove those results. This molecular level study is not intended to address the other side of the paradox; where father, in a molar, longitudinal sense, was found to be the largest single predictor of later child deviance. However, learning more about the nature of father's influence (if indeed it exists) inside the family system at a molecular level may bring us a step closer to addressing the question of his powerful yet mysterious impact upon the long-term socialization of his children.

CHAPTER II

METHODS

I. SUBJECTS

The subjects were an all-inclusive sample of the 24 intact families which had been referred to a university-affiliated family treatment center for psychological help with child behavior problems. The subjects in each family were the father, the mother and a target child. Fifteen of the families fit socioeconomic criteria which Wahler, Leske, and Rogers (1979) found associated with parent insularity (see Chapter I). That is, they were subsisting on low incomes (below \$5000.00) parent education levels were low (less than high school graduation), and they resided in areas of the city (Knoxville, TN) known for high rates of crime. The remaining 9 families were middle class. All of the 24 families shared the same types of referral problems for children, and these divided themselves into two areas. The first area involved interactional problems and included the following child behaviors: crying, teasing, hitting, whining, screaming, and throwing objects. The second set of referral problems usually occurred outside of immediate parental attention, and these included fighting, stealing property, vandalism, and wandering away from home.

In most cases efforts to seek psychological help were initiated by the mother, but the process of seeking help was instigated by a source outside the family (Department of Human Services, public school, juvenile court, or a family friend, but only for middle class families would this latter option obtain). One child in each family was targeted for intervention and in 22 of the 24 families, this child was a male, whose mean age was about 8 years (range 4-11). There were two targeted girls in the sample; whose mean age was 8 years (range 4-11).

Certain aspects of this population sample bear further discussion. The population for this study represents all of the intact CBI families with fathers in the home. These intact families were drawn from five year's worth of data; from November, 1975, to October, 1980 (November, 1975, represented the beginning of the type of data appropriate to this study). Within this five-year period only 24 out of 102 (or 24%) had enough father data to be included. The CBI population of mostly low-income dysfunctional families, then, was comprised of mother-headed households with no fathers in the home. Thus any study of fathers, mothers and children in this population is restricted from the start by low numbers of families with fathers in the home.

II. APPARATUS

Standardized Observation Coding System (SOC)

SOC is a pre-packaged behavioral coding system developed by Wahler, House and Stambaugh (1976). The observer trained in this system can directly code 24 different defined child behaviors as well as 6 parent and sibling defined behaviors directed at the target child (See Appendix). The SOC system records behaviors that are appraised by parents on a valence scale rating of positive, negative, or neutral. In addition, episode reports for low-rate behaviors (e.g., stealing, lying, running away) which might have occurred during the previous 24 hour period are reported by parents. All observations were done in the home setting, and observation times were selected through parent reports of the time of day that oppositional behavior would most likely occur with both parents at home. Once a time period was chosen, a 30 minute segment of that time was used as the regular observation time, requiring the observer to watch the child in 10-second intervals and record the pre-selected codes in 5-second recording intervals. For the 30-minute observation, these coded behaviors were converted to percentage rates of occurrence for the behaviors.

III OBSERVERS

The observers were trained in the SOC system at the Child Behavior Institute. The observers were recruited from the student population of the University of Tennessee, and they received course credit from the Psychology Department for their work. Their reliability in the field setting was checked by a designated reliability observer. As well they were supervised at least once a week by advanced graduate students in psychology or licensed psychologists.

IV EXPERIMENTAL CONDITIONS

The baseline phase for most families encompassed four to six weeks. At the completion of baseline parents began intensive training under the tutelage of an advanced graduate student or licensed psychologist who was assigned responsibility for the family for the duration of treatment. The intervention phase had several components:

- a. Baseline data from SOC were discussed with the parents with the goal of elucidating the child's oppositional patterns of non-compliant behavior. Parental instructions were also a point of discussion, particularly in terms of parents' follow-through of these; and as well, their positive and aversive attention to the child was discussed,

and how these might be related to the maintenance of the child's aversive behavior. In addition, alternative child behaviors such as cooperative parent-child behavior, work or independent play were presented as the desired opposites to the deficits seen in the child's baseline behavior.

b. The baseline findings were then set within the conceptual framework of Patterson's "coercion trap hypothesis" (1972), a social learning explanation for how undesirable behaviors are maintained. Then, the staff supervisor emphasized the importance of helping the parent escape the coercion trap, at the conclusion of this portion of training.

c. Next, specific means of escaping the coercion trap were taught to the parents. These included a point reward system for incremental improvements of the child's baseline behavioral deficits, and some specific ways of handling certain aversive child episodes. If the parents were willing and able to institute other procedures such as ignoring and time out contingencies, this was planned with the parents as part of the program. In any case, the child was brought into the discussion at this point so that he/she could be informed of the chosen behavioral contract, as well as the specified ways of handling oppositional behavior.

The behavioral contract was to be put into action at least once per day. The parents were then instructed to explain and carry out an in vivo example of the point reward system with the child. If necessary the staff member modeled appropriate behaviors and assisted parental implementation procedures. The staff member might also model time out procedures if oppositional actions by the child occurred. It is important to note that the staff member and family were well-acquainted prior to treatment. Once weekly meetings during baseline had taken place for the purposes of establishing clinical rapport, monitoring the observations by the trained observer in the home, and listening to parent descriptions of ongoing behavior. The staff members also interacted with other family members, and was free to play with the target child. Following the treatment implementation, these once-weekly meetings continued for the purpose of follow-through and support. SOC observations did not occur during any home visits by staff members, nor did they occur during the time period in which the point contract was in force.

d. Although not directly relevant to this study, yet another facet of the therapeutic intervention process should be brought into focus. A goodly portion of the weekly meetings between

parents and staff members was devoted to "Mand Review," a clinical interview process with potential therapeutic effects upon family life. The two important goals of Mand Review are these: first, to promote friendship relationships between therapist and parents, and then to help parents clarify components of coercion traps between themselves and their children, spouses, kinfolk, helping agents and others in their social environment. It is hoped that the combination of friendship and intra-and extra-familial trap clarification will assist in the maintenance of therapeutic changes in parent child problems which hopefully are results of the parent-child training procedures discussed earlier.

V. DATA ANALYSIS

The statistical procedures employed in this study are an Analysis of Variance (ANOVA) on the percentage of selected behaviors outlined in the Appendix (SOC). This study of direct effects was intended to look at how parent presence (father's or mother's) might affect child Aversive Behavior (CHAB) in both the baseline and treatment phases. As well, it was important to investigate the mother's or father's aversive behavior (Parent Aversive Behavior-PAV) in baseline and treatment of these same observations. Accordingly, this look at direct

effects was assessed by means of the Standardized Observation Codes (SOC) (Wahler, House and Stambaugh, 1976).

The means for both Child Aversive Behavior (CHAB) and Parent Aversive Behavior (PAV) were computed on the percentage of occurrence of selected behaviors as measured by SOC. Not all SOC categories were considered germane to this study. Child Aversive Behavior (CHAB) was defined as the sum of oppositional categories O, O-, CP and RV. Parent aversives (PAV) were the sum of IA- and SA- (See Appendix A for definitions). These sets of behaviors were considered to be potentially important by Wahler and Moore (1975).

Each dependent variable (CHAB and PAV) was analyzed by means of a two-way ANOVA using the independent variables of "Phase" (Baseline, Treatment) and "Parent Presence" (Father present in the observation session at least 85 percent of the time, or mother present at least 85 percent). Thus, the "two-way" format consisted of Phase X Parent Presence for each of the two ANOVAs.

Reliability Analysis

Reliability analysis of SOC data entailed a comparison of session totals of each code for the standard observer and a master observer. Agreement percentages, thus, did not entail a moment-by-moment comparison of code scores. Since all code analyses were for session

scores more fine-grained reliability inspection was not necessary. For the families observed, code reliabilities ranged from 79 percent to 90 percent, with a mean agreement of 85 percent.

CHAPTER III

RESULTS

I. SUMMARY OF SOC POPULATION SAMPLE

Population Sample: Introductory Remarks

Before the results of the SOC analysis are stated, some preliminary remarks to clarify certain aspects of the population sample are in order. Thus the reader will be able to interpret the results in an informed and objective manner.

It will be recalled that, in essence, the point of this study was to make comparisons between the means of certain behaviors as measured by the SOC observations of children and parents in the home. (These comparisons will be explored specifically in the next section of this chapter). Similarly, the point of these prefatory remarks is to explain how the population of this naturalistic, five-year study distributed itself in the marking of these comparisons; and how this population distribution influenced the forthcoming analysis and results of the SOC data. Table 1 summarizes the distribution of the population for the SOC data. "Mother Present: and "Father Present" (under Conditions column) classifies sets of SOC observations as to which parent, mother or father, was in the physical setting interacting with the target child. The criterion level of a given parent's presence

was at least 85 percent of the 30 minute observation period. (See Methods).

TABLE 1
SOC POPULATION SAMPLE

Condition	Phase	Number of SOC Ob- serva- tions	Total Number of SOC Obser- vations	Number of Families with SOC Data	Total Number of Fam- ilies
Mother Present	Baseline	47	101	14	24
Mother Present	Treatment	54		10	
Father Present	Baseline	16	55	6	16
Father Present	Treatment	39		10	

It will be noted in Table 1 that the number of observations was unequal. This is apparent in both Father Present Baseline versus Treatment; as well as in the total number of Father Present observations (N=55) versus the total number of Mother Present observations (N=101). The total number of observations (156) seems relatively low for a comprehensive five-year sample of all intact CBI families, but this number represented all of SOC observations where a given parent was present at least 85 percent of the time.

Given the natural flow of behavior in the home, it is logical to assume that there would be many observational instances where a parent might not be in the physical vicinity of the target child for much of the observation time period (i.e., in and out of the room, away from home). This was often the case in these families, but such observations with a lower level of parent presence did not warrant inclusion into this study. This situation applied to fathers more than to mothers, as seen in Table 1 (55 "Father Present" observations versus 101 "Mother Present" observations).

Further, there were missing cells in the data for the 24 families. Table 1 shows that 16 of the 24 families had Father Present data extant. Although not indicated in Table 1, only 7 of the total of 24 families had data extant in both Baseline and Treatment (Mother Present N=5 Families with data in both Baseline and Treatment; for Father Present, N=2 Families). Further, no one family had Baseline and Treatment data across both the Mother Present and Father Present conditions, primarily due to the paucity of Father data (see Table 1).

Thus, the distribution of the SOC data did not lend itself to comparisons made family unit-by-family unit. Instead, the comparisons were made "cell-to-cell", yielding results which should be viewed: only as an overview of general trends of selected behaviors in the

clinical population of disturbed low-income families. By using the cell-to-cell comparisons, all the important comparisons can be made in sufficient numbers to warrant methodologically sound results.

II. RESULTS OF SOC DATA

Analysis

Two way ANOVAS were computed on the data. The results are summarized in Table 2.

TABLE 2

ANOVAS: CHILD AVERSIVE BEHAVIOR AND PARENT AVERSIVE BEHAVIOR

Source	DF	SS	MS	F
<u>Child Aversive Behavior (CHAB)</u>				
Parent Presence (FP, MP)	1	923.16	923.16	5.06*
Phase	1	22.02	22.02	0.12
Interaction	1	2559.71	2559.71	14.03**
Within (Error)	152	27728.13	182.41	
Total	155	30868.86	1043.91	
<u>Parent Aversive Behavior (PAV)</u>				
Parent Presence (FP, MP)	1	350.11	350.11	4.25*
Phase	1	92.0	92.00	1.12
Interaction	1	1.99	1.99	.02
Within (error)	152	12521.83	82.38	
Total	155	13108.92	84.57	

* $p < .05$

** $p < .001$

The summary table for the two-way ANOVAS shows that there are significant differences among the overall

means for the levels making up the factors. In the CHAB ANOVA, there was a significant main effect for Parent Presence (FP, MP) ($F_{1,153}=5.06p<.05$) meaning that there was a significant difference in Child Aversive Behavior (CHAB) according to which parent was present. There was no significant main effect for Phase (1=Baseline, 2=Treatment). As well, there was a significant interaction ($F_{1,153}=14.03 p <.001$) between Parent Presence (MP, FP) and Phase (1=Baseline, 2=Treatment). Figure 1 shows the graph of the interaction.

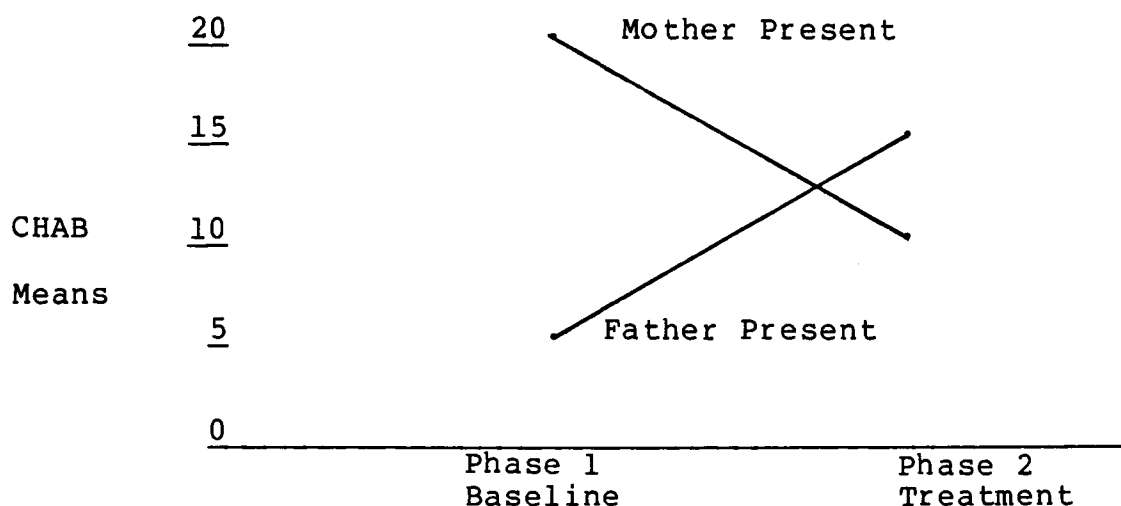


FIGURE 1. EFFECT OF PARENT PRESENT AND PHASE ON CHILD AVERSIVE BEHAVIOR (CHAB)

For the ANOVA of Parent Aversive Behavior (PAV), there was a significant main effect for Parent Presence (FP, MP). This means that the amount of Parent Aversive Behavior (PAV) was affected by which condition (MP or FP) was in force in observations.

Since each ANOVA had at least one significant effect, post-hoc analysis was called for. T-Tests for correlated means were performed for both dependent variables (Child Aversive Behavior and Parent Aversive Behavior). Table 3 presents significant levels for Child Aversive Behavior (CHAB). Column headings refer to condition and Phase, i.e., "FP1" is "Father Present Baseline", and so on.

Table 3 shows significant differences in the two comparisons of interest, even when the conservative Bonferroni statistic is used (see Note). In the Mother Present condition, CHAB levels decreased in Treatment relative to Baseline ($p < .03$). Quite the opposite phenomenon occurred in the Father Present condition, however. CHAB actually increased significantly in Treatment as compared to Baseline ($p < .01$).

T-Tests for correlated means were also computed for Parent Aversive Behavior (PAV). Table 4 shows significance levels for PAV. The same assumptions regarding statistical significance were operative (overall $p < .15$, individual comparisons $p < .025$).

Table 4 shows no significant difference in fathers' level of aversive behavior from Baseline to Treatment. Similarly, there was no difference in

TABLE 3
T-TEST SIGNIFICANCE LEVELS FOR
CHILD AVERSIVE BEHAVIOR

Condition	Phase		CHAB Mean	FP1	FP2	MP1	MP2
Father Present (FP)	Baseline	(1)	4.88	.	.01*	.0003*	.10
Father Present (FP)	Treatment	(2)	14.76		.	.10	.20
Mother Present (MP)	Baseline	(1)	19.36			.	.0003
Mother Present (MP)	Treatment	(2)	11.14				.

Note: Since means in Table 3 are dependent, the overall alpha level was expended a prior for this set of tests in order to compensate for buildup of Type I error. The overall error rate was set at $p < .15$. Since the sum of the alpha levels of each of the six individual comparisons must be less than or equal to the overall level ($p < .15$), each individual alpha is $p < .025$ (Bonferroni statistic = α /number of comparisons).

TABLE 4
T-TEST SIGNIFICANCE LEVELS FOR
PARENT AVERSIVE BEHAVIOR (PAV)

Condition	Phase		PAV Mean	FP1	FP2	MP1	MP2
Father Present (FP)	Baseline	(1)	4.96	.	.47	.24	.52
Father Present (FP)	Treatment	(2)	2.99		.	.01*	.06
Mother Present (MP)	Baseline	(1)	8.05			.	.42
Mother Present (MP)	Treatment	(2)	6.59				.

Note: Since means in Table 3 are dependent, the overall alpha level was expended a prior for this set of tests in order to compensate for buildup of Type I error. The overall error rate was set at $p < .15$. Since the sum of the alpha levels of each of the six individual comparisons must be less than or equal to the overall level ($p < .15$), each individual alpha is $p < .025$ (Bonferroni statistic = $\frac{\alpha}{\text{number of comparisons}}$).

mothers' aversive behavior in either Baseline or Treatment. However, mothers in Baseline were significantly more aversive than were fathers in Baseline ($p < .01$). There was also a non-significant trend ($p < .06$) for mothers in Treatment to be more aversive than fathers in Treatment. Thus, there was at least a suggestion that mothers were more aversive overall than were fathers.

Analysis with Families Held Constant

The preceding was intended to serve as a molar-level analysis of the entire SOC data set for intact families; a "birds-eye view." Thus the data were grouped without regard to the family unit involved. Comparisons were made "cell-to-cell" (not family-by-family") mainly because of missing cells of father data in either Baseline or Treatment across given family units. As a bird's eye view of trends in the data set the cell-to-cell" analysis was sufficient, but a problem remains: How can one be sure that these significant differences were not due simply to differences in the quantities found in the various cells? In other words, how can one be sure that the significant differences found in the overview analysis were actually representative of what went on in the real families? To answer this question, a more rigorous analysis was undertaken. Where there was enough data, the same type of T-Test comparisons were done as those in the

first overview/analysis, except that family units were held constant. Child Aversive Behavior was the dependent variable examined. Parent Aversive Behavior was not considered because the first analysis showed no differences from Baseline to Treatment for this variable.

Table 5 presents the results of the T-Test for correlated means of Child Aversive Behavior (CHAB) with family units held constant. Results are expressed in significance levels.

TABLE 5
T-TEST SIGNIFICANCE LEVELS FOR CHILD AVERSIVE
BEHAVIOR (FAMILIES HELD CONSTANT)

Condition	Phase	FP1	FP2	MP1	MP2
Father Present (FP)	Baseline (1)	.	x	x	x ¹
Father Present (FP)	Treatment (2)		.	x	n.s. ²
Mother Present (MP)	Baseline (1)			.	.05* ³
Mother Present (MP)	Treatment (2)				.

¹ x denotes too few data for comparison to be made

² 3 families, 38 SOC observations

³ 3 families, 51 SOC observations

Although in Table 5 there were enough data to perform only two comparisons, both of these were consistent with the initial overview analysis. Child Aversive

Behavior (CHAB) was reduced significantly in Mother Present Treatment relative to Baseline in both sets of results (here $p < .05$; first overview analysis $p < .0003$).

CHAPTER IV

DISCUSSION

This investigation took place inside the family, and it looked at what happened between fathers and children in terms of aversive/non-aversive behavior. The condition primary to the study, that of fathers and children interacting together, was contrasted to that of mothers and children. The question asked by this "direct effects" study was in itself very direct; what happened in terms of aversive behavior when fathers were alone with their children at home? The answer to such an open-ended question could be almost anything; and indeed, an unexpected finding emerged. The results of this study showed a contrast effect for children's aversive behavior. The specific conditions which contributed to such an effect were that child aversive behavior (CHAB) was significantly reduced in the Mother Present situation. However, the decrease of child aversives in the mother setting was associated with a significant increase of such behavior in the Father Present setting. Although behavioral contrast is a well-known entity in both animal and human research, the fact that it was an unexpected finding for this study necessitates a brief literature review.

The decrease of deviant behavior with the mother accompanied by the increase in such behavior with the father is a finding which has not been seen per se in the litera-

ture. However, it is well known in a general sense that management of a child's behavior in one setting will alter other aspects of that child's behavior elsewhere. In many studies, these additional alterations were not necessarily desirable or undesirable, nor were they easily predicted. Wahler, Sperling, Thomas, Teeter and Luper (1970) discovered that their intended reductions in two children's nonverbal behavior problems had some unintended effects in that the children's stuttered speech diminished markedly. Sajwaj, Twardoz and Burke (1972) taught teachers to ignore a child's excessively adult-oriented behavior. Not only did that behavior decline in frequency, but the child interacted more frequently with peers, played less often with girls' toys, and became more disruptive in groups. Wahler (1975) found it possible to predict some of these intervention-produced side effects through correlational analyses of children's baseline behaviors, as did Breiner, Forehand, McMahon and Davies (in press). The above investigators made efforts to assess stimulus control of these "side effect" behaviors, but the efforts proved unsuccessful.

There is a parallel to these behavior studies in operant laboratory research with animals. Positive behavioral contrast is a well-known phenomenon in that literature, and the term has a precise meaning. Behavioral contrast refers to an interaction which occurs when the reinforcement schedule correlated with one stimulus is a variable one,

while that correlated with a second stimulus is held constant. Positive contrast occurs when the response rate of the varied component decreases and that of the constant component increases (Catania and Brigham, 1978). In animal research positive behavioral contrast has been systematically replicated with pigeons (Reynolds, 1961) and rats (Gutman, 1977). A review of basic research involving contrast effects is found in Freeman (1971).

Behavioral contrast phenomena have also been found outside the laboratory setting in naturalistic research with human subjects. In these studies, positive behavioral contrast had a more general definition, and it referred to a decrease in the deviant behavior of one setting (i.e., the home) associated with an increase in like behavior in another untreated setting (i.e., the school). Wahler (1975) found just such an interaction in a single-case study, where decreased home opposition was accompanied by increased school opposition. Johnson, Bolstead and Lobitz (1976) and Forehand, et al (1979) found non-significant increases in school oppositional behavior when home behavior was treated. Within the classroom setting Simon, Ayllon and Milan (in press) showed evidence of positive behavioral contrast in a classroom experiment. Previously established token reinforcement was withdrawn from two learning centers in the classroom, but continued at a third center. Academic response rates went down at the two non-reinforced learning

centers, but response rates rose significantly at the center which continued the token reinforcement.

On the other hand, several studies failed to show evidence of behavioral contrast (Konstanterreas, 1974; Breiner and Forehand, 1981; Schwenn, 1976). In summary, then, an examination of the literature showed that positive behavioral contrast was a stable, predictable phenomenon in animal experimental research. However, research with humans in the naturalistic setting (e.g., home, school) presented more mixed results, indicating that behavioral contrast was less predictable outside of the controlled laboratory environment. Nevertheless, the literature strongly suggested the existence of such a phenomenon in applied naturalistic settings.

With regard to the central finding of this study, the literature review showed that the treatment contrast of child aversives decreasing in mothers' presence while increasing in father's presence had not been observed per se in other studies. However, this type of behavioral interaction was well-supported in analogous animal research, and at least strongly suggested by studies with human subjects in applied settings.

Returning to the discussion of the study, certain aspects of the mother's aversive behavior in relation to child opposition will be explored. Although children became less aversive in mother's presence from Baseline to Treatment, there was no corresponding reduction in mother's aver-

sive behavior. Her level of coercive behavior stayed the same from Baseline to Treatment.

Thus, one cannot argue a linear relationship between mother's treatment-reduced aversives and lowered child opposition. However, additional information may provide a larger perspective from which to view mothers in relation to the treatment program. Although the training was aimed at both parents, typically mothers were more involved than fathers (there was approximately twice as much mother data as father data, for example). As well, the parent training program included certain interventions which would not necessarily be monitored by the SOC observation system. A standard feature of parent training was the establishment of a superordinate set of rules for child behavior. In most families, transgressions against these rules were consequence by the "time out" procedure, while compliance was often rewarded by earning points toward a reward. Both "time out" and point systems have long been used to reduce child aversives, and a voluminous literature attests to their efficacy (e.g., Forehand and Atkeson, in press). Interventions such as the parental use of "time out" and point systems were not monitored per se by SOC behavior categories. The SOC codes for parental behavior were aimed at observing more immediate verbal/physical behavior within the flow of parent-child interactions (e.g., positive or negative instructions, comments to the child - see Appendix).

Summarizing, if mothers were typically more involved in parent training, and if, as such, they used proven interventions ("time out", points) which were not necessarily monitored by SOC, then one might wonder if mothers somehow contributed to the lowering of child aversives. After all, a treatment program was going on in which these mothers were taught to use such techniques as "time out" and point systems. Too, child aversive levels were reduced in treatment only in her presence (not the father's). This collection of circumstantial inferences must remain well within the realm of speculation, because they go beyond the findings of the study.

Turning now to fathers, the results of the study showed that their level of aversives also did not change from Baseline to Treatment. However, child opposition rose significantly in the Father Present Treatment phase. Intuitively, one might expect that if children emitted more aversive behavior in Treatment, the father's behavior would also change in some way (perhaps by becoming more aversive in response to elevated levels of child opposition). In addition, fathers showed uniformly lower levels of aversive behavior than did mothers in both Baseline and Treatment. Thus, fathers emitted relatively few aversives throughout, even in the face of a Treatment increase in child opposition. In another sense, there appeared to be no "reciprocity" (e.g., Bell, 1968) in a direct sense between the aversive

behavior of children and of fathers in the family system. Children's increased aversives left father relatively unaffected.

In essence then, fathers appeared to be uninvolved in child behavioral interactions, whether they be appropriate or inappropriate. In fact, the distribution of SOC data in this study provides a rough measure of fathers' uninvolved behavior with children. SOC observations were aimed at times of day when both parents would be home, yet there were about half as many Father Present observations with children as there were in the Mother Present condition. Other empirical observational studies support the idea of the fathers having little or no immediate involvement in children's behavior (Reid and Taplin, 1976; Burgess and Conger, 1977). These researchers found no treatment differences for fathers' aversive behavior (yet there were differences for mothers and for children). Patterson's 1979 observational study found that in child coercive situations, fathers reacted as if nothing out of the ordinary was happening. In contrast to normal families where disciplinary duties were shared, fathers in troubled families dropped out of highly aversive child-parent episodes, leaving the mother to negotiate the escalating level of mutual coercion alone. Patterson saw the mother as the more entrapped parent. The father was characterized as a kind of "resident guest" who engaged in some lightweight child management, but

who spent most of his time in such normative activities as reading the newspaper or watching television.

Patterson's findings are reason enough to justify a plea for increased father involvement in treatment programs; at the very least, to provide more support for beleaguered mothers enmeshed in coercion traps with their children. However, when the findings of the present study are added to the above, it becomes even more important to include the fathers in any family intervention program. This study showed that childhood opposition did not leave the family interactional system; it merely moved from one setting (mother's presence) to another (father's presence), as seen in the behavioral contrast effect. Even though fathers were not involved initially, they indirectly became a central, negative part of the treatment program.

There may be implications as well for generalization and maintenance of treatment gains. Some researchers have shown that post-intervention continuance of treatment effects were by no means guaranteed (Panyan, Boozer and Morris, 1970; Martin, 1972); especially for insular, low-income multiply problemmed mothers and children (Wahler and Afton, in press). Wahler's research found reason to hypothesize that these mothers were unable to retain their newly acquired child management techniques into follow-up for several reasons. Among these were the lack of continued familial and friend support ("insularity") in maintenance of

new skills. Also, the imprecision of their global, blaming style of perceiving all behavior prevented their being able to pinpoint objectively (and therefore consequate) specific problem child behaviors; once they were no longer being assisted to do so by the counselor in the treatment program. For reasons such as these, treatment gains were lost in follow-up for these families.

The present results may warrant the inclusion of the father's role in considering the question of maintenance of treatment gains. If child aversive behavior decreases with mothers in the treatment phase, yet increases with fathers, it means that child opposition is a much more persistent phenomenon than had been previously realized. One might hypothesize that yet another reason for post-treatment recurrence of child aversiveness could be that it never really left the family interactional system. Some families, especially insular, multiply problemmed ones, may, in effect, be in "double jeopardy" for maintenance; because of indirect factors operating both with the mother (e.g., Wahler and Afton, in press) and with the father. These remarks are, of course, hypotheses and should be viewed as such. Further research will determine their accuracy and applicability to the maintenance question.

Finally, the reader is reminded that all of the preceding results regarding the roles of mothers, fathers, and children in the behavioral contrast effect are subject to

a cautionary methodological note. In this study families were considered as a global group, not as individual families. Thus, the results seen therein were indicative only of general trends for the group, as opposed to showing what happened in individual families. However, one part of the analysis was able to be done so as to yield results showing specific trends in individual families. In this subsidiary analysis, child aversives in the Mother Present condition were significantly reduced from Baseline to Treatment; matching the results seen in the more global group analysis. Thus, there is minimal support for the notion that a future family-by-family study might show the same results as the group trends analysis performed in this study.

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APPENDIX

BRIEF DESCRIPTIONS OF CATEGORY CODES USED TO RECORD
DIRECT OBSERVATIONS (SOC)

Adult Instruction (Non-Aversive) (1A+). This category is scored for direct commands from an adult.

Adult Instruction (Aversive) (1A-). This category is scored for those direct commands from an adult that are judged to be aversive by an observer.

Adult Social Attention (Aversive) (Sa-). This category is scored for adult non-instructive contacts with the target child. The observer must also consider the contact to be aversive.

Adult Social Attention (Non-Aversive) (Sa+). This category is scored for adult non-instructional contacts with the target child.

Child Social Attention (Aversive) (Sc-). This category is scored for any peer behavior directed to the target child. The observer must also consider this behavior to be aversive.

Child Social Attention (Non-Aversive) (SC+). This category is defined in the same manner as Sc-. However, in this case the observer does not judge the behavior to be aversive.

Opposition (O). This category is scored for target child behavior that are non-compliances with adult instructions. The non-compliance must last the full interval.

Aversive Opposition (O-). This category is a qualifier to opposition (O) and also to rule violation (RV). The observer must consider this behavior to be aversive.

Rule Violation (RV). This category is scored for any instance of the target child's violating any standing or temporary rules of the setting.

Compliance (C). This category is scored for target child compliance with adult instructions.

Complaint (CP). This category is scored for any instance of verbal and non-verbal complaint by the target child.

Self Stimulation (S). This category is scored for any instance of the target child's manipulation of his body.

Object Play (Op). This category is scored for any instance of the target child's simple manipulation of objects.

Self Talk (T). This category is scored for any instance of recognizable language spoken by the target child to himself.

Sustained Non-Interaction (NI). This category is scored for a full 10 seconds of a child's non-interaction with people or objects.

Sustained Schoolwork (Ss). This category is scored for a full 10 seconds of schoolwork by the target child.

Sustained Toy Play (St). This category is scored for a full 10 seconds of target child's play with objects.

Sustained Work (SW). This category is scored for a full 10 seconds of work by the target child.

Sustained Attending (SA). This category is scored for a full 10 seconds of attention towards a person(s) or event by the target child.

Approach Child (Ac). This category is scored for any spontaneous approach to adults by the target child.

Approach Adult (Aa). This category is scored for any spontaneous approach to adults by the target child.

Social Interaction Child (SIc). This category is scored for any interaction between peers and the target child.

Social Interaction Adult (SIa). This category is scored for any interaction between adults and the target child.

Mand-Child (Mc). This category is scored for any instance of the target child commanding a peer.

Mand-Adult (Ma). This category is scored for any instance of the target child commanding an adult.

VITA

Ann Dexter Howard was born on May 13, 1946, in Oklahoma City, Oklahoma. She was educated there through high school, graduating in May, 1964. The following year she entered Hollins College, a woman's college in Virginia, and received a Bachelor of Arts degree in English in May of 1968. She then taught autistic children from September, 1968, to June, 1971, in a demonstration program at Peabody College in Nashville, Tennessee. She pursued her interest in working with disturbed children and families by receiving the Master of Arts in Special Education (Emotionally Disturbed Children) from the George Washington University in June, 1972. Later that summer she became principal of the Preschool Project in McLean, Virginia; a federally-funded program for families with disturbed preschoolers. In September, 1974, she left to become an instructor in Childhood and Special Education at Mount Vernon College, Washington, D.C., where she developed and implemented the teacher training program in special education there.

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