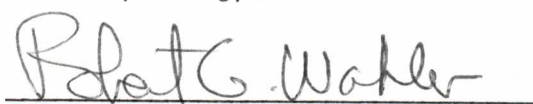
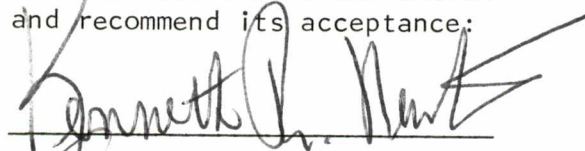


To the Graduate Council:

I am submitting herewith a dissertation written by Laurie Kay Thompson entitled "Families of Oppositional Children: A Study of Social Insularity Among Rural Populations." I have examined the final copy of this dissertation for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy, with a major in Psychology.

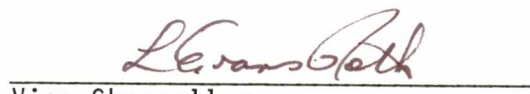

Robert G. Wahler, Major Professor

We have read this dissertation
and recommend its acceptance:






Accepted for the Council:


Vice Chancellor
Graduate Studies and Research

FAMILIES OF OPPOSITIONAL CHILDREN:
A STUDY OF SOCIAL INSULARITY
AMONG RURAL POPULATIONS

A Dissertation
Presented for the
Doctor of Philosophy
Degree
The University of Tennessee, Knoxville

Laurie Kay Thompson

August 1983

ACKNOWLEDGEMENTS

The completion of a doctoral dissertation marks the close of one's formal academic studies, and thus compels one to reflect on the many people who have been influential throughout the process. I would like to thank my mother and father for their strength and unflagging loyalty. Their love and confidence have helped me to find within myself the perseverance necessary to complete this doctoral study. To my sisters and brother go my sincere appreciation for their love, friendship, and encouragement. For their assistance with the dissertation, I wish to thank my doctoral committee members: Bob Wahler, Bill Verplanck, Dennis Freeman, Alice Moses, and Ken Newton. I am especially grateful to Bob Wahler, whose intellectual curiosity, personal integrity and generous support were invaluable to me through difficult years. I can only hope to reflect the warmth that he has shown me in my future work with patients and students. Thanks are due to Nancy Bible, whose typing skills are legendary in East Tennessee.

Finally, my appreciation to Joshua Williams cannot be adequately expressed. His steady presence and support have been a constant source of joy. Most of all, he has provided valued inspiration for personal growth, vitality, and possibility in life.

ABSTRACT

This study was a descriptive analysis of the social interactions of rural families with oppositional children. It was an attempt to determine if the concept of social insularity, found to exist among certain urban families with oppositional children, was applicable to rural families. Seven families seeking treatment at a rural mental health center for behavior problems with their children participated in the study. Twice weekly, for a period of 6-12 weeks, an interviewer conducted home-based, structured interviews aimed at eliciting detailed information about each individual's social contacts. An expanded, revised Community Interaction Checklist (CIC-R) was used to document the information.

Along the lines developed by Skinner (1954), the interactions were grouped into two categories, "mands" and "tacts." In over half the cases in which a family member reported a contact with another family member, the contact was not reported by the other party. However, once both parties agreed on a common interaction, their agreement on its nature and content was quite good. The results revealed a strong correlation between reported incidences of criticism and negative valence ratings, lending support to earlier operational definitions of manding.

All of the seven families presented at least one of the characteristics of insularity. Five were classified as insular along at least two dimensions of the concept. Two families were unusual in that

they reported no conflict, though they appeared to be socially isolated. CIC-R data generated by the mothers was found to be strongly indicative of their families' overall manding rate, and roughly characteristic of their families' average number of daily contacts.

An examination of the sources of manding interactions revealed few commonalities among family members or across families. Of special interest was the finding that mothers frequently viewed others as more aversive than their troubled children.

This study suggests that a family's social contacts alone are sufficient to disturb a family's equilibrium, even if other stressors are absent. It appears that therapeutic intervention with oppositional children must be aimed at multiple sources of conflict in the family system, as the mother/child dyad is frequently not the most significant source of frustration and coercion.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. METHOD	20
Subjects	20
Measurement Techniques	21
Observer Training and Measurement Reliability	26
Potential Impact of Treatment on a Naturalistic Picture of Family Functioning	27
III. RESULTS	30
Observer Reliability	30
A Look at the Concept of Mand	33
The Original Criteria of Insularity	34
Beyond the Mothers: A Look at the Family Unit	38
The Source of Manding Interactions: An Individualized Analysis	43
IV. DISCUSSION	50
LIST OF REFERENCES	56
APPENDICES	69
APPENDIX A. SIMULATED COMPLETED COMMUNITY INTERACTION CHECKLIST-REVISED	70
APPENDIX B. GENERAL GUIDELINES FOR UTILIZING CIC-R	72
APPENDIX C. INFORMED CONSENT FORM	73
VITA	74

LIST OF TABLES

TABLE	PAGE
1. Characteristics of the Seven Families Studied	22
2. Agreement Rates Between Family Members on the Occurrence of an Interaction, the Topics Discussed, and the Presence of Manding in the Interchange	31
3. Mother Reported Social Contacts With Persons Living Outside Her Home	35
4. Individuals', and Family Averages, Reported Social Contacts With Persons Living Outside Subjects' Homes	39

LIST OF FIGURES

FIGURE	PAGE
1. Relationship of Each Mother's Manding Rate to her Family's Overall Average Manding Rate	42
2. Individualized Analysis of Manding Occurrences With Each Individual in the Jones Family	44
3. Individualized Analysis of Manding Occurrences With Each Individual in the Williams Family	46
4. Individualized Analysis of Manding Occurrences With Each Individual in the Black Family	47
5. Individualized Analysis of Manding Occurrences With Each Individual in the Smith Family	48
6. Individualized Analysis of Manding Occurrences With Each Individual in the Wallace Family	49

CHAPTER I

INTRODUCTION

Oppositional children have received the increasing attention from behavioral researchers and therapists over the past two decades, and with good reason. Such behaviors as stealing, truancy, rule violation, and property destruction, broadly referred to as "oppositional," comprise today's most common referrals to community mental health centers (Taplin and Reid, 1977). Their patterns of noncompliance with school, home, or community rule systems frequently single them out as problems in the community before they reach puberty. But perhaps more troubling to society than their childhood behavior patterns is their conduct as adults. Several studies suggest that certain factors in both the child and his parents are associated with chronic deviant behavior.

Robins (1966) and Roff (1961) conducted post-hoc studies of adults who came to the attention of social authorities because of a variety of problems. They found that those adolescents whose behaviors were characterized by repeated rule violations (e.g., stealing, lying, noncompliance, vandalism) were apt to have severe adult problems such as criminal records, psychosis, or marginal employment histories. The chronicity of this childhood oppositional behavior has been suggested in other longitudinal studies of a thirty year time span (e.g., McCord, 1978).

Some oppositional behaviors seem to be more predictive of later problems than others. Several studies suggest that it is the

more extreme conduct-disordered children who do not "grow out of" their problems (Beach and Laird, 1968; Morris, 1956; Robins, 1966; Westman, Rice and Berman, 1967). A recent study by Moore, Chamberlain and Mukai (1979) found a strong positive relationship between children who steal and later court involvement. The strong correlations between childhood oppositionality and adult deviance are compelling reasons for therapeutic intervention during childhood.

In the early 1960's, behavioral researchers and clinicians began to use the concepts of operant learning theory in treating the deviant behaviors of oppositional children. A large number of studies emerged which demonstrated that systematic applied behavior analysis could be used by children's caretakers, especially their parents. They were taught to systematically apply the principles of reinforcement, punishment, and extinction in natural settings. Given that parents are often the most salient feature of a child's natural environment, the parent training approaches made a good deal of practical sense. Early outcome studies confirmed the effectiveness of the new parent-training approaches in altering deviant child behavior (e.g., Herbert and Baer, 1972; Wahler, 1969a; Wahler, 1969b; Zeilberger, Sampen and Sloane, 1968).

By 1973, the isolated technique of differential attention (ignoring undesirable behaviors and rewarding desirable ones with attention) was widely accepted as the most efficient behavior modification procedure. Unfortunately, the optimism was premature for several reasons. Important contradictory findings suggested that contingency shifting was not effective across-the-board (O'Leary, Becker, Evans and Saudargas,

1969; Wahler, 1968; Wahler, 1969a). The addition of a punishment (time-out) procedure was often necessary to produce stable, positive change. Other studies revealed that so-called "unintended effects" were obtained in non-targeted behaviors when contingency management was directed at a single response (Herbert, Pinkston, Hayden, Sajwaj, Pinkston, Cordua and Jackson, 1973; Sajwaj, Twardosz and Burke, 1972; Wahler, Sperling, Thomas, Teeter and Luper 1970). This suggested that it was difficult to alter one behavior without altering the others, as responses do not seem to operate independently of one another in a natural environment.

Researchers set out to predict, and then make use of, these "side-effects" and to deal with the negative ones. This necessitated a broader, more wide-ranging study of children's behaviors than had ever been conducted by operant researchers. In pursuing this task, behavioral scientists found themselves relying heavily on the pioneer work of the behavioral ecologists, who had been studying the behavior of children in natural environments for two decades (Barker, 1965; Barker and Wright, 1954; Willems, 1974). Their work had demonstrated that children's behaviors rarely occur in readily-definable stimulus-response units, a finding that was somewhat new to behavioral researchers. Though simple S-R units were rarely discernible, extensive baseline measures of children's behaviors revealed that certain behaviors seemed to covary. It was possible to document these through newly developed, ecologically-minded, measurement guides (e.g., Wahler, House and Stambaugh, 1976). Using these new methods of observation and measurement, some preliminary steps were made in predicting response class clusters (Wahler and Kara, 1977; Wahler and Moore, 1975).

Difficulties which were observed with generalization also called for a more detailed analysis of the environments in which problem behaviors occurred. Though most behavior modification researchers and clinicians acknowledged the importance of generalization, they often did not provide for it in the careful manner in which they devised their interventions. Frequently, generalization across settings, behaviors and time was a tacit assumption, and one which unfortunately was not borne out. Positive changes in one setting were sometimes counterbalanced by equally negative ones in another, or no change at all (e.g., Wahler, 1969b). The validity of the assumption of across behavior generalization was of course jeopardized by the disturbing "side-effects" data. Few studies included long-term follow-up data to permit an evaluation of generalization effects across time. In 1974, several review articles supported the notion that, to that date, there had been little evidence of post-termination maintenance effects (O'Dell, 1974; O'Leary and Kent, 1973; Tavormina, 1974). The early work of Roger Barker at the University of Kansas had clear implications which, if recognized earlier, could have predicted the generalization problems of behavioral interventions. His data suggested that the overall type of environmental setting was a good predictor of a child's behavior pattern. In essence, this anticipated the research findings that children's behavior patterns rarely generalize across settings.

Thus, parent training strategies appeared to grow more complex as they developed. They were not the simple, clear-cut procedures earlier presented with optimism. Some of the foremost researchers to

disseminate information about parent training strategies were Gerald R. Patterson and his colleagues at the Oregon Research Institute. They attempted to utilize the most current research findings in order to develop successful treatment packages. In response to the admonitions of the behavior ecologists, and keeping in mind the occasional dismal treatment failures, Patterson's studies were broad in scope and designed to investigate the effectiveness of treatment programs across many dimensions (Patterson, 1974a). As early as 1974, Patterson began to correlate certain family variables that were reliably associated with a negative treatment outcome. Among these, families with an absent father and families of low socioeconomic classes seemed to benefit less often than others.

At the same time, Robert G. Wahler and his colleagues at the Child Behavior Institute in Knoxville, Tennessee began to equate their adapted behavioral/systems views with the theories of the "family therapists" (Bateson, Jackson, Haley and Weakland, 1956; Minuchin, 1974). The new alternative models, necessarily descriptive at the onset, suggested that an individual's behavior is controlled by a complex interdependency of reinforcers and discriminative stimuli of various family members and significant others. The dyad was considered to be only a small element of a much more complex system. This focus on the family as an interacting system was also precipitated by researchers whose results pointed to obvious "gaps" in their parent training approaches. One such study (Ferber, Keeley and Shemberg, 1974) concluded that "at termination, all felt that the 'real' problems had been ignored. The marital and parent-child relationships were unchanged"

(p. 417). Such failures were felt to be more salient than any positive changes in the child's noncompliant behaviors.

Since the mid-1970's, there has been an increasing literature on those variables correlated with success (or failure) in parent training programs. Many explanations and potential strategies have been offered in the hope of keeping families in treatment and insuring that positive results will be maintained and generalized. These two goals are crucial in the light of recent gloomy statistics on therapy attendance, drop-out rate, and post-termination maintenance (see, for example, Forehand and Atkeson, 1977; Mash, 1976; Mira, 1970). One promising study by Alexander, Barton, Schiavo and Parsons (1976) addressed a crucial treatment variable often recognized but rarely empirically examined: the therapists' relationship skills. This preliminary examination of particular therapist skills, broadly referred to as "structuring" and "relationship" skills, indicated that these identified therapist characteristics may account for as much as 60% of the outcome variance in a parent training study! Unfortunately, to date, there has been sparse follow-up data on this treatment variable and it remains a truly unknown quantity.

A multiplicity of studies has emerged correlating certain family variables with the chronic oppositionality of a child and/or a low probability of treatment success. Marital satisfaction (Johnson and Lobitz, 1974; Oltmanns, Broderick and O'Leary, 1977; Reisinger, Frangia and Hoffman, 1976); vague, unspecific "Beta" commands issued by the mother or a sheer frequency of commands (Forehand, King, Peed and Yoder, 1975; Forehand, Wells and Sturgis, 1978; Johnson and Lobitz,

1974); depression (Griest, Wells and Forehand, 1979; Patterson, 1976); general family discord (Rutter, 1971; Tait and Hodges, 1962); and parental perceptions of their child's deviance (Forehand, King, Peed and Yoder, 1975; Green, Forehand and McMahon, 1979; Johnson and Lobitz, 1974; Ross, 1974) have all been shown to be variables of relevance.

Systematic observations, conducted in the homes of normal families and those families referred for treatment, revealed some general facts about family interactions, and led to the formation of the "coercion hypothesis," (Patterson and Reid, 1970). This hypothesis accounts in part for several of the family variables, cited above, which are associated with treatment failure.

Patterson determined that, with the exception of fathers, all members of a family in which there are aggressive children are significantly more coercive in their interchanges than are their equivalents in non-problem families (Patterson, 1976). Such coercive behavior on the part of these children frequently seems to be a counterattack to a similar stimulus. Patterson and his colleagues further demonstrated that a referred child's aversive behaviors greatly increase the chances that his parents will react in some way to his actions, in either a positive or negative manner (Patterson and Moore, 1978). In non-referred children, punishment from a parent has a well-known suppressive effect on the undesirable behavior (Snyder, 1977). In families of oppositional children, punishment seems to produce the opposite result: the children are more apt to continue in their coercive, oppositional behaviors (Patterson, 1976; Snyder, 1977). Thus, these

aversive interchanges seem to take place in large sequences or "chunks." A single case study by Patterson and Moore (1978) suggests that these continued coercive interchanges usually continue until someone (usually an exasperated parent) gives in.

These findings were the origin of the "coercion-trap" hypothesis: children, in the course of growing up, ask for many things they desire (staying up late, extra candy, etc.). These requests are termed "mands," in line with Skinner's (1954) functional concept to describe a behavior which demands or specifies its own reinforcer: in this case, compliance. If a parent gives in to the request, the manding produces positive reinforcement for the young child. The parent, on the other hand, is negatively reinforced in that the child finally terminates the aversive manding behavior. In families with oppositional children, these sorts of interchanges become "locked in," so that the family members are unable to interact with one another without manding. Thus, in these families, manding is frequently the exclusive mode of communication.

Given the permanence and rigidity of such interaction styles, one would doubt that any intervention would be helpful in reducing the mutual attacks and coercions. However, parent re-education, emphasizing a systematic application of reinforcement and punishment procedures, has been shown to effectively reduce the coercive processes in some families (Patterson and Fleishman, 1979). In the course of their training, parents attempt to reduce their attacks, and those of other children, directed towards the problem child. They also reduce the child's attacks towards them through the systematic use of punishment. This

decrease in the reinforcement for aversive behavior is accompanied by parent-administered positive reinforcement for prosocial behaviors, independent toy play, and other desirable activities (see Wahler and Fox, 1980b).

These drastic, positive changes on the part of the parents are usually achieved by training parents to recognize those particular coercive processes operating within their family. In these sequences, a mother must be able to "spot" a coercion-trap before she will be successful in altering her own behavior and that of her children. A key aspect of this parent re-education model is that the positive changes in the parent's management skills will be maintained by negative reinforcement: her child will no longer demonstrate as much aversive or oppositional behavior.

Unfortunately, the success of parent training of this type has not been evidenced across-the-board with a wide variety of families. Several parent training attempts have been dismal failures, and of course have equally poor follow-up results (e.g., Ferber, Keeley and Shembert, 1974; Johnson and Christensen, 1975). Patterson reported in 1974 that several of his successfully treated families required on the average of 1.9 hours in "booster" follow-up sessions.

Patterson and Fleishman (1979) observed that the use of punishment is the sole behavior modification technique that most parents use consistently during parent training. Parents quickly learn that such contingencies as time-out, withdrawal of privileges, etc., reduce the undesirable behaviors effectively. However, maintaining the use of prosocial, positively reinforcing behaviors seems to be too difficult

a task. Apparently, there is no positive reinforcement available to parents for their use of positive reinforcement within the family, and thus it is rarely used. This appears to be especially true once parent training has been terminated. Even the use of contingency-based punishment is often not maintained at follow-up. Wahler demonstrated in an important study that even parents who are successful in treatment may not demonstrate maintenance of treatment gains (1980a). This is especially disturbing evidence that positive treatment gains are not always "intrinsically rewarding."

The many factors cited above--depression, poverty, single-parent households, family discord, coercion traps--contribute to an overall picture of a family beset with a flood of aversive factors which seem much more salient to the beleaguered parent than the behavior of her oppositional child. Such disruptions as divorce, loss of job, financial problems, confusion over therapy appointments, and disorganization almost routinely characterize those families who are the most difficult cases to treat (Patterson and Fleishman, 1979). Along a similar line, Giovannoni and Billingsley (1970) reported that neglectful parents were characterized by multiple stressors from many sources, and few supports in coping with these. Such mothers were likely to have more children, marital strife, and poor, impoverished social relationships than their non-neglectful counterparts.

It is thus hypothesized that the more severe are the family's living conditions, the less is the probability of treatment effectiveness. Given this assumption, certain family characteristics would be the key determinants of treatment success and generalization. Wahler

and his colleagues have produced a body of promising research based on these particular assumptions. It is this research that is the focus of the present study.

The first study to isolate specific community status factors as they related to the probability of success in a parent training program was conducted by Wahler and Moore (1975). The effectiveness of their treatment procedures was investigated among families living in vastly different parts of the city, designated "high risk" and "low risk." The former were characterized by poverty, non-intact families, a low educational level of the primary caretaker, a high crime rate, and crowded living conditions. The low risk neighborhood was a characteristic middle and upper-middle class area. Comparisons of the two areas are troublesome because of the many differences between them. The two areas of the city seemed to be differentiated by the source of referral to treatment; high risk families were more apt to be referred by community agencies, while parents were the initiators of treatment in low risk families. The presenting problems also differed among the two groups, as children of high risk families were found to exhibit more problems out of the sight of parents. The low risk children exhibited three times the amount of noncompliance and temper outbursts with their parents than did the high risk children.

Those families living in the high risk area exhibited a significantly higher drop-out rate. Even when treatment was judged to be successful with a high risk parent, these gains were not maintained at follow-up. It was hypothesized that these generalization failures were due to specific factors in the social systems networks of these high risk neighborhoods (see also Garbarino and Sherman, 1980).

This hypothesis found early support in the research of Berland (1976), who observed sets of within-family interactions as a matrix of correlations. In line with Patterson's work, he discovered that families of violent children exhibit more stereotypical behavior in their interactions than non-problem families. Notably, he demonstrated that some of the behaviors of the oppositional children could be reliably predicted based on the interactions of other family members (see also Minuchin, 1974). These two related areas of research led to the development of a social systems analysis based on three levels of interaction: the response classes of the child, "response clusters"; the interactional system of the family; and the family as an interacting unit in the community system (Wahler, Berland, Coe and Leske, 1977).

The researchers at the Child Behavior Institute developed a means of describing these hypothetical social networks among family members and in the community. This consisted of a simple questionnaire, the Community Interaction Checklist (CIC) which was designed to provide a weekly measure of a variety of parental social contacts. Specific data pertaining to the interactions were obtained, including the number of social contacts with persons living outside the home, their duration, the location of the interactions, and the interactions' perceived valence (on a scale from -3 to +3). This information was gathered from the mother, who was almost invariably the principle caretaker.

The data from the CIC's were in no way "objective," in that they were the reports of single individuals. However, they proved to be valuable sources of information as "observers' summary reports," (Wahler, Berland, and Leske, 1977). The data were of great significance

as phenomenological reports, based on the client's unique perceptions of her day-to-day interactions. This sort of "subjective" measurement has been reconsidered of late, and behavioral researchers have begun to rely on it as a primary means of data collection (see Wolf, 1978).

The data from the CIC yielded interesting results about the social contacts of high risk mothers which led to the "insularity hypothesis." These families appear to be insulated from their social context, and those interactions they do have in the community seem to be nonfunctional in terms of their family's day-to-day interactions. The family process seems to be independent of social input from the community at large--sort of an aversive, mutually coercive microcosm. Such high risk, insular mothers reported an average of only three extra-family contacts per day, the greatest proportion of which were with helping agency representatives and extended kinfolk. Most importantly, these insular mothers rated a high proportion of their social contacts as aversive in nature. In contrast, non-insular mothers averaged ten social contacts per day, with the greatest proportion of these occurring with friends. They tended to be better educated, to have higher incomes, and were much more likely to sustain therapeutic gains (Wahler, Leske and Rogers, 1979).

Low risk, non-insular mothers appear to be more spontaneous in the planning of social interactions and more in tune with the tried and true support networks well known by most families. The high risk, insular mother frequently views such friendship or community networks as intrusive or bothersome, or may not be familiar with them at all. What interchanges she does have with community resources are not self-

initiated, and usually involve coercive, "manding" episodes. (This isolation from community support systems and the troubled relationships that exist between these families and helping agencies have been linked to child abuse: see Giovannoni, 1971; Parke and Collmer, 1975).

The CIC enables one to derive a valence rating of an individual's interactions, based on a scale of +3 to -3. This may be viewed as a subjective appraisal of the pleasurable-ness of an interpersonal interaction. The aversive valence ratings obtained from the insular mothers described above are not surprising, given Patterson's extensive work on the coercive nature of within-family interactions. What emerges is a picture of coercive interchanges duplicated in kind throughout the insular family's community interactions. Just as the insular mother views her child as a demanding, whining, noncompliant source of frustration, she views her neighbors, acquaintances, child welfare worker and therapist as similarly coercive. Each person with whom she interacts has his own set of demands, to further beleaguer the already-harassed mother. These multiple coercion-traps lead to a gradual decrease in the reinforcement value of both parties, and thus diminished contact whenever possible. (Evidence in support of this hypothetical process may be found in studies by Wahler, 1969a and Wahler, 1968. These analyses indicate that oppositional, coercive children are not likely to find parental approval reinforcing.)

Thus the coercive nature of most of the social interchanges in which the oppositional child's family is involved leads to a gradual, but pervasive, social isolation, or a "narrowing of family interaction style" (Wahler, 1979). Such pervasively coercive interactional styles

are presumably key determinants of treatment success, especially given the fact that the mother is frequently the sole behavior change agent! This hypothetical generalized insularity has been evidenced in other coercion-traps in which the mother is locked (Wahler, 1979). Perhaps the most important source of coercion for the insular mother is her own immediate family--especially her husband, boyfriend or mother. One study investigating parent-parent coercion reported that parents of oppositional children reported greater than two aversive interchanges with each other per day (Wills, Weiss and Patterson, 1974). Though no causal explanations may be drawn from such data, numerous studies have shown positive correlations between parent-child problems and marital dissatisfaction (e.g., Lobitz and Johnson, 1974).

This hypothetical relationship between multiple sources of coercion and childhood oppositionality was further explored in an ingenious study by Wahler (1980a). Operating under the assumption that a mother's daily social interchanges might have an indirect effect on her child-rearing efforts, he gathered CIC data from insular mothers on two types of days. On those days when the mother dealt primarily with kinfolk and various helping agency representatives ("low friendship days"), home observations revealed that parent-child problems were at their worst. On those days when the mother interacted primarily with friends ("high friendship days"), parent-child problems were significantly reduced. This study provides compelling evidence that a mother's community interactions may influence her parenting, as has also been the case with marital strife.

The eighteen mothers who participated in the above study each experienced at least one coercive relationship with an adult in the community, typically a relative. Wahler postulates that the inability of these families to maintain treatment gains at a one year follow-up was directly linked to these coercive relationships. While the parent trainer had been busy reducing the coercive nature of the parent-child dyad, these other (perhaps more salient) sources of coercion had flourished. Especially after formal treatment was terminated, the insular mother had few supports and encouragement for maintaining a non-coercive relationship with her child, especially given the myriad of everyday crises with which she had to cope.

The implications for the relationship of the patient with the therapist are clear: the parent trainer or therapist is also construed as a source of coercion, and one which should be placated as long as necessary. Any changes accomplished during parent training are thus the result of the ever-present therapist, rather than a product of a mutually reinforcing relationship. Once parent training is terminated, the therapist's mands stop, and the only source of reinforcement is the better-behaved child, and it is negative reinforcement, at that. It is no wonder that extraneous, coercive variables outweigh the impetus for treatment maintenance.

Since the early formulations of the hypothetical concept of insularity (Wahler, Leske and Rogers, 1979), additional research has begun to broaden and clarify its characteristics. In response to subsequent CIC data indicating that the sheer number of social contacts per day is not predictive of an insular life-style, new definitions of insularity

use the type of social contact as the sole criteria. Now, Wahler and his colleagues refer to a mother as insular if two-thirds of her social contacts are with helping agencies and kinfolk (Wahler, Hughey and Gordon, 1981). Such social contacts almost invariably involve a high proportion of negative valence ratings.

A most promising area of new research involves the careful examination of characteristics of the insular mother which may influence, indirectly, her child-rearing attempts. In partial replication of an earlier study (Wahler, 1979), Wahler and Afton (1980) noted significant differences between insular and non-insular mothers in their use of clear, concise speech and in their attribution of blame. The non-insular mothers seem to benefit from parent training in that they learn to provide more detailed summary reports, seem to be better "trackers" of their children's behavior, and show less blame attribution than at the onset of treatment. On the other hand, their insular counterparts seem to continue in their global, blame-oriented response styles, even after extensive training. Such blame-oriented summary reports have been shown to maintain even after the child's target problems have been reduced (Wahler and Leske, 1973). The question emerges once again: what perpetuates such a blame-oriented, coercive, global attitude? The current research suggests that the multiple stressors mentioned above all contribute to the coercive cycle.

Dumas and Wahler (1981) have further clarified the picture of an insular family through correlational analyses linking insularity with four key socio-demographic variables: low income; lack of education; high crime areas; and outside pressure to enter therapy. While all of

these factors are associated with a diminished probability of treatment success, insularity is the best predictor of treatment failure. The chances of treatment success decrease to one in five if the variable of insularity is combined with any of the above-mentioned socioeconomic disadvantages. Insularity and disadvantage seem to routinely appear together. It appears that once a certain level of stress emerges in the family--from whatever sources, whether they be economic, marital, environmental--the family can no longer function productively (see Rutter, 1978).

The dimension of insularity has also begun to be linked to specific problems manifested by referred children. Parents of children who steal have been shown to have a far greater number of kinfolk social contacts than parents of non-stealers, and their overall contacts are more aversive in nature (Hughey and Wahler, 1981). Parent-child dyads in insular families also engage in longer episodes of mutually-coercive interchanges, as if they "just can't stop" (Wahler, Hughey and Gordon, 1981). This is predictable in the light of Patterson's earlier findings regarding "punishment acceleration" (Patterson, 1976).

To date, the study of the insular mother and her family has been confined to urban settings. It is not known whether or not the concept of insularity is applicable to families who live in rural areas. The stereotype of a helpful, large extended family network in country surroundings suggests that the term is not appropriate. Much sociological literature to date has supported the notion that a large family in rural settings serves as a stable support system:

. . . the rural populations of America center their lives and find their satisfactions in the home to a greater degree than urban peoples. This is necessarily the case because of the paucity of near-by countervailing attractions. . . . The daily occupations are on the homestead and bring the members of the family into constant or frequent intercourse . . . the home stands out as the most important rural institution, when measured by standards of use and dependency; and family ties hold the chief place in the mesh of social relationships (Rural Sociology, John M. Gillette, 1936, pp. 429-430).

The present study will attempt to determine whether or not mothers of troubled children in rural settings approximate the characteristics of insularity found in urban areas. More detailed information will be gathered about the nature of the social interactions to gain a fuller understanding of their pleasant and aversive qualities. Attempts will be made to interview entire families to supplement previous studies which have focused only on the mother. Given this broad and in-depth information about rural families' social contacts, it should be possible to generate hypotheses about the major sources of behavioral influence.

CHAPTER 11

METHOD

Subjects

Subjects were seven families seeking treatment at a rural mental health center for behavior problems with one or more children in the family. The families were preselected on the basis of certain family and parent characteristics. The study was carried out under the auspices of the mental health center, and it was a precondition that the targeted children in the families to be studied be actively involved in treatment there during the course of the study. Involvement in the study was also contingent upon the families' therapists' determination that participation in the study would not undermine therapeutic work.

According to earlier work by Wahler, Leske, and Rogers (1979), insular mothers tend to have an average of three social contacts per day, the greatest proportion of these occurring with family members or helping agency representatives. They reported high proportions of aversive interchanges with their contact sources. Additionally, non-insular mothers tend to be better educated and to have higher incomes than their non-insular counterparts. Referral source was another discriminating factor among insular and non-insular mothers; the latter customarily initiated contact as a result of a self-referral or the recommendation of a physician or friend. The group of insular mothers was usually referred by a helping agency representative (e.g., Juvenile Court or the Department of Human Services).

In an attempt to preselect a group of families which would represent both insular and non-insular mothers, subjects were chosen with a variety of socioeconomic levels, educational attainment, and referral source. They held the common characteristics of residing in a uniformly rural community and the fact that all of the families had sought treatment for the oppositional behaviors of their children. In all of the families, the helping efforts were focused on the children, and the most common treatment modality was individual therapy (in 6 of 7 families). However, in all of the families, the parent(s) were seen in collateral sessions and one mother was involved in family therapy. The children's referral problems were similar to those detailed at length in the literature on oppositional children (e.g., Wahler, 1976) and included behaviors occurring in interaction with a parent as well as those more inaccessible to detection and correction. Table 1 describes the problems of the targeted children as well as demographic information about their families. Though the referral source differed greatly (as well as did the eventual consequences of terminating treatment), all of the mothers had indicated a desire for their children to remain involved in therapy and to reduce the occurrence of oppositional behaviors.

Measurement Techniques

An initial interview with each family in their own home allowed the researcher to explain the purpose of the study and its descriptive nature. At that time, twice weekly, prearranged interview times were scheduled. These periods, usually one-half hour in duration, were² selected as being that time of the day and week when most individuals

TABLE 1

CHARACTERISTICS OF THE SEVEN FAMILIES STUDIED

Family	Target Children	Others in Home	Referral Problems	Family Characteristics	Referral Source
Smith	Male, age 10	Mother, father, brother, age 8, sister, age 1	Whining, unwilling to perform tasks alone, arguing with parents, "pushy" with mother, poor school performance	Family lives in attractive home in rural area. Father is a high school teacher with Master's degree. Mother is housewife with high school diploma. Target child is in individual therapy though mother insists his problem is school-related.	Family physician
Wallace	Female, age 17	Mother, father	Truancy, threatening to leave home, non-compliance, shouting and arguing with mother; parents committed to local youth shelter as being "unruly"	Family lives in attractive home in rural subdivision. Father is a truck driver and completed one year college. Mother completed high school and works in a factory. Target child works part-time after school. Father is often out of home due to work and mother and daughter are involved in family therapy.	Juvenile Court Judge
Stevens	Female, age 14	Mother, father, sister, age 16	Truancy, twice running away across country, arguing with father	Family lives in very secluded rural farmhouse approachable only by foot. Four older children live out of state. Father is retired minister and mother is a housewife. They completed 8th and 7th grades, respectively. Target child seen in individual sessions.	Juvenile Court Judge

TABLE 1 (Continued)

Family	Target Children	Others in Home	Referral Problems	Family Characteristics	Referral Source
Davis	Female, age 11	Mother, sister, age 19	Truancy, temper tantrums, non-compliance	Family lives in large trailer in rural farming area. Two married children live in trailers adjacent to subjects' trailer; maternal grandmother's home also nearby. Mother is a widow and supports family on small factory wages. She completed 8th grade. Target child in individual therapy.	Juvenile Court Judge
Jones	Male, age 15	Mother	Noncompliance, truancy	Mother lives with children in trailer. Father occasionally returns home but mother often brings other men home. Mother unemployed, receiving welfare benefits; father employed as bartender but does not support family. Father completed two years college; mother completed 12th grade. All four children involved in individual therapy.	Aunt, mother
	Male, age 14		Noncompliance, truancy, poor hygiene, "can no longer control," "lazy"		
	Male, age 10		threatening to kill with knife, fighting, bossing siblings, enuresis, fighting, clinging to mother		
	Male, age 8		fighting, violent to siblings, property destruction, cursing, sexually inappropriate behaviors, enuresis		

TABLE 1 (Continued)

Family	Target Children	Others in Home	Referral Problems	Family Characteristics	Referral Source
Williams	Female, age 11	Mother	Whining, noncompliance, clinging to mother. First seen at age 5 for non-compliance, temper outbursts, clinging to mother	Mother lives with daughters in large rural home. Parents are divorced and mother often leaves children with her mother during the day. Mother unemployed, receiving welfare benefits. Mother completed one year college; father completed 3rd grade. Family members are all involved in individual therapies; children are also involved in group therapy.	Department of Human Services
	Female, age 10		"Stubbornness," non-compliance, temper tantrums, crying, "attention-getting" behaviors. First seen at age 4 for similar problems		
Black	Male, age 9	Mother, brother, age 6	Whining, acting younger than his age, overly anxious about separations from mother, anxiety in cars, social withdrawal. First seen at age 7 for similar problems following parents' divorce	Mother lives with sons in apartment in rural town. Father has no contact with family since divorce. Mother completed 12th grade and attends local community college. Family receives welfare benefits. Mother is former patient of Center; son in individual treatment.	"Second Start" Program

in the family were likely to be at home and available for interview. Twice weekly, an interviewer visited the family's home and interviewed, individually, each member of the family. (In all families, all family members customarily living in the home agreed to be interviewed. The researcher eliminated from participation only those children too young to answer the interview questions adequately.) During the individual interactions, the interviewer conducted a structured interview aimed at eliciting the following information: number of social contacts that particular day; who initiated their contacts; their duration; a listing of the general topics discussed; whether or not there was criticality (stemming from either party) in the interaction. An expanded, revised Community Interaction Checklist (CIC-R) was used to document the above information. The CIC-R, based on the original CIC used by Wahler et al. (1979) permits an accurate description of the full range of social contacts experienced by all family members--not just the mothers, as in previous studies--both inside and outside the family home.

Appendix A illustrates a sample completed CIC-R, taken from an actual interview with a targeted child. This measure permits quick documentation of all social interactions both within the family and outside the family context occurring that day for a given individual. A separate data sheet of the CIC-R is completed for each individual contact on a given day. Thus, if a subject reported five social contacts on a particular day, the interviewer would leave the subject's home with five completed data sheets of the CIC-R for that individual. It is important to bear in mind that, in keeping with previous studies utilizing the CIC, this measurement is admittedly, and by design,

considered to be a subjective summary report. It is, of course, not an objective record of an individual's social interactions, and is not interpreted as such.

Observer Training and Measurement Reliability

The CIC-R measurement system cannot be tested for observer reliability in the usual way. However, previous studies (Dumas and Wahler, 1981) have demonstrated that the data generated by the Community Interaction Checklist may be tested for reliability using a cross-check procedure. This involves a brief telephone interview of the parties contacted by the subject, based upon the information obtained from the CIC. Such a check allows one to test for agreement among the two parties. Dumas and Wahler found substantial support for the assumption that an individual is accurate in reporting that an interaction did, in fact, occur (agreement $\bar{X} = .98$). There was also moderate agreement on the valence (positive or negative) of the contact (agreement $\bar{X} = .76$).

The cross-checking procedure described above was not possible in the current study due to the limitations imposed by the confidential relationship between the mental health center and the families. Based on the findings of Dumas and Wahler, it may be assumed that the self-reported contacts documented in the CIC-R are consistent, and generally accurate along the dimensions previously studied. In this study, this assumption could be explored with the limits of confidentiality by examining the CIC-R data generated by two members of the same household reporting a common interaction.

All measures were taken by undergraduate observers who were trained and supervised by staff members of the rural mental health center. A consultative/liaison relationship was also maintained with the professional staff of the Child Behavior Institute in Knoxville, Tennessee. Training of the observers consisted of a three-week training seminar which focused on the use of the CIC-R, role playing of interview situations, and practice completing the CIC-R during the course of simulated interviews. The observers' completed CIC-R data sheets, collected during many simulated interviews, were subjected to reliability checks to determine their agreement with the 'master' observer. Observers were assigned to families only after a personal interview with the researchers to determine if they were appropriate interviewers, and after they had obtained 95% agreement with the 'master' observer in the class. Following their assignment to families, the observers met in once weekly seminars to discuss any problems encountered in interviewing or completing the CIC-R form accurately.

Potential Impact of Treatment on a Naturalistic Picture of Family Functioning

The study reported here may be viewed as a compromise between a purely descriptive study and the difficulties in obtaining a stable population sample of isolated, rural families with oppositional children. By nature, an isolated family rarely seeks help voluntarily from a local mental health center and would seldom volunteer to participate in a descriptive study entailing visitors into their home! These difficulties were mediated by selecting families who already were involved in treatment at the mental health center. Though this may indicate a large

"pre-selection" factor in choosing families to be studied, it should be remembered that many of the families were referred for treatment with imposing repercussions should they have failed to participate in therapy (e.g., juvenile detention centers, etc.). These families were, for the most part, not those one would normally expect to volunteer for such a study. Most had come to the mental health center under duress, and were willing to participate in the study insofar as it was separate from their treatment program. Thus, although some members of all of the families were involved in treatment, there was no intention to study its functional impact on the family. Therapy was viewed as a common, though potentially confounding, variable across all families. There is some tentative support in the literature which gave us our impetus for ignoring the functional impact of treatment on CIC self-report. Wahler and his colleagues at the Child Behavior Institute (1980) noted that "there is little to suggest that the mother child treatment program altered the mothers' extra-family interaction patterns--and, of course, there is little to expect that it would" (p. 15).

The principal intent of the study is to describe as clearly as possible the intra-family and extra-family community interaction network experienced by the rural family with troubled children. Given the strong support in the literature for the notion that this network has strong, though indirect, effects on child rearing, such a descriptive study appears called for prior to further experimental work with the rural family.

One final note is mentioned pertaining to the characteristics of the families and those who interviewed them. The undergraduate

interviewers were students at a local, rural community college--for the most part natives of the geographic region to be studied, and not dissimilar to the family members they interviewed. This element was included in order to minimize the notable differences between the subjects and those whose task it was to describe them. The effects of the interviewers on their families will be discussed in the Results section.

CHAPTER III

RESULTS

Observer Reliability

As the CIC-R was the only measurement system utilized in this study, and it is by nature a self-report measure, no objective reliability checks were obtained other than the 95% or better documentation accuracy evidenced by the observers in the training program.

The assumption that subjects' CIC-R reports are generally accurate was examined by comparing the reports of two members of the same household reporting a common interaction on a particular day. A "rate of agreement" was attained by examining three categories of the CIC-R: whether or not an interaction was reported; the topics reportedly discussed; and finally, the affective valence of the interaction. Along the lines originally devised by Skinner (1954), the interactions were grouped into two categories, "mands" and "tacts." (The specific method of defining these terms is described in the passage below.)

As is evident from Table 2, there is considerable variability among the seven families in each of the three categories. The average agreement across all families on whether or not an interaction occurred was .44. In other words, in over half of the cases in which one family member reported contact with another family member, the contact was not reported by the other party. This generally poor agreement rate is sharply discrepant from the .98 agreement rate found by Dumas and Wahler (1981). It should be noted, however, that the rate of agreement found

TABLE 2

AGREEMENT RATES BETWEEN FAMILY MEMBERS ON THE OCCURRENCE
OF AN INTERACTION, THE TOPICS DISCUSSED, AND THE
PRESENCE OF MANDING IN THE INTERCHANGE

Family	Agreement on Interaction	Agreement on Topic	Agreement on Manding
Jones	.42	1.0	1.0
Williams	.33	1.0	0
Black	0	0	0
Smith	.167	0	0
Wallace	.5	1.0	1.0
Stevens	.81	.76	1.0
Davis	.69	.67	.67
Overall Medians	.42	.76	.67

in the current study is a reflection of a "recall" task (the CIC-R). The cross-checking method utilized by Dumas and Wahler more closely approximated a "recognition" task, as they were implicitly reminding their subjects of a contact merely by inquiring about their interactions that day. Due to the restraints imposed by confidentiality, the parties contacted in the Dumas and Wahler study were aware of the nature of the project, and the families who were involved as subjects. This knowledge probably served as a strong "prompt" to recall interactions with that particular family.

As may be seen from Table 2, once both parties have reported a common interaction, their agreement on its nature and content is surprisingly good. In 86.7% of the common interactions, family members agreed on the nature of the exchange (was it a mand or a tact?). There was also moderate agreement on the topics discussed.

The effects of choosing college student interviewers from the same geographic region as those of the subjects seemed to provide positive, though subtle, changes in the data collection process. Most interviewers reported that, within several visits, their subject/families had grown to enjoy their visits and looked forward to their arrival. Many commented on the apparent social isolation of their subject/families, and their appraisal that a non-threatening, non-intrusive visitor from outside the home was a welcome change. It appeared that the cultural similarity of the interviewers to their subjects enhanced their ability to create this non-threatening, mutually pleasant relationship. Of course, these pleasant relationships may be viewed as additional sources of social reinforcement for the subjects, which may have been operating to somewhat distort the data.

A Look at the Concept of Mand

Skinner (1954) originally introduced the functional concept of "mand" to refer to a behavior which demands or specifies compliance from another party. Conversely, a "tact" is a non-instructive, non-critical comment which does not demand action but rather serves to promote further positive interaction. The concept of manding was critical to the development of Patterson's "coercion trap" theory (Patterson, 1976) and has been utilized as an operational construct in many studies examining the complexities of family interaction. Wahler et al. (1979) derived a means of defining a manding interchange by selecting critical categories of the CIC as indicative of mutual coercion.

They asserted that manding is said to have occurred when the valence rating of an interaction is negative and/or when the subject reports that someone in the interaction was critical of the other. Given the usefulness of such an easily-specified definition, we set out to examine whether or not such a definition is in fact "operational." Does the incidence of criticism, as documented in the "critical" category of the CIC, occur frequently in conjunction with a negative rating? Is such an "and/or" pairing of criticism and negative rating justified in our attempts to create an operational definition of manding? A correlational analysis of the occurrence of reported criticism with ratings indicates that the pairing is indeed justified. The mean correlation of criticism and negative ratings across all families is .73, while the mean correlation of criticism and neutral ratings is .22. Apparently, when a subject reports that an interaction involved a critical exchange, he is also quite likely to assign it a negative valence rating. The

median correlation across all families of criticism and negative ratings is .86; the median correlation across all families of criticism and neutral ratings is .36. This second measure of central tendency similarly supports the definition of manding originally presented by Wahler and his colleagues (1979).

The Original Criteria of Insularity

The definition of insularity originally offered by Wahler et al. (1979) encompassed three general factors found to be associated with an isolated, harassed, insular mother. They determined that the insular mother reported on the average three or fewer social contacts outside the home per day, a large percentage of which were with helping agency representatives or kinfolk. Further, these mothers reported that a high percentage of these interchanges with others were aversive in nature, involving some degree of criticism as documented by the CIC. We will now turn to the profiles of the seven mothers to determine if they warrant a description of insular, according to the original criteria.

Table 3 reveals that all of the seven mothers studied appear to present at least one of the characteristics originally associated with the criteria for the term insular. Four of the mothers (the first four listed) appear to warrant the classification of insular on all three grounds. They reported an average of three or fewer social contacts per day, a large proportion of their contacts were with kinfolk or helping agency representatives, and they tended to describe at least 15% of their social interactions as aversive. These aversive interchanges varied considerably among the four mothers, ranging from .16 to a high

TABLE 3
MOTHER REPORTED SOCIAL CONTACTS WITH PERSONS LIVING OUTSIDE HER HOME

Family	Manding Rate	Mean Daily Contacts	Mean Daily Contacts, % of Total Contacts			
			Friend/% Aversive	Kinfolk/% Aversive	Helper/% Aversive	
Jones	.76	3.0	1.4 (46.7%)/57.1%	1.4 (46.7%)/71.4%	.2 (6.6%)/100%	
Williams	.26	2.8	.6 (21.4%)/100%	1.2 (42.9%)/33.3%	.2 (7.1%)/100%	
Black	.27	3.0	.7 (23.3%)/57.1%	1.7 (56.7%)/94.1%	.4 (13.3%)/100%	
Smith	.16	2.4	.2 (8.3%)/0	1.6 (66.7%)/0	.4 (16.6%)/0	
Wallace	.22	3.2	.5 (15.8%)/0	0/0	.33 (10.5%)/0	
Stevens	0	4.7	.71 (17.2%)/0	3.0 (72.4%)/0	0/0	
Davis	.0075	3.5	.66 (17.8%)/0	.83 (22.2%)/0	0/0	

The manding rate reflects her overall rate, including interactions with persons in her home. The source of her contacts is broken down into three categories, with the percentage of these contacts which are aversive in nature.

of .76. As may be seen, the largest proportion of aversive interchanges among these four mothers occurred with kinfolk and helping agency representatives. The fifth mother, Mrs. Wallace, is unusual in that she evidences two of the three original criteria but has absolutely no contacts with family members living outside her home. Not surprisingly, Mrs. Wallace is also the only mother in the sample who does not have relatives living in her geographic area. It may be noted that Mrs. Smith and Mrs. Wallace reported no aversive interchanges with friends, kinfolk, or helping agency representatives. As will be seen shortly in the graphs to follow, their manding interchanges stem from other sources, and combine to form an overall rate of manding which is similar to those presented by the other mothers.

The final two mothers depicted in Table 3 stand out as uniquely different from those described above. First, the mothers reported essentially no manding interchanges and their subjective valence ratings showed almost no variance. Mrs. Stevens, for example, rated every single interaction "+1" on a scale of -3 to +3. Unlike the other mothers who reported high percentages of contacts with kinfolk and helping agency representatives, this extensive contact with her relatives did not seem to influence her report of aversive interactions. This extensive contact with her relatives was also reflected in a higher number of mean daily contacts. Like Mrs. Stevens, Mrs. Davis reported no aversive interchanges in spite of considerable contact with her kinfolk. The unusual situation which presents itself here is two mothers who seem to be insular, judging from the number of social contacts they maintain and the amount of time allocated to

kinfolk. Yet, they report no conflict, no aversive interchanges. In further support of a preliminary classification of insular was the fact that these families are geographically more isolated than any of the other five families studied. The Davis family lives in a rural farm area surrounded by the house trailers of kinfolk; the Stevens live in a large, run-down farm house approachable only by foot. It seems that these two families present a notable "case in point" which calls for further examination beyond a mere insular/non-insular classification. Thus, they will be discussed separately in the coming pages.

We now have four of our seven mothers classified as insular along the three dimensions of the concept. A fifth mother, Mrs. Wallace, may also be classified in this category on the basis of her limited social contacts outside the home and her manding rate. The original criteria listed by Wahler et al. (1979) generally appear to occur concurrently in these five mothers. One additional question may be posed. Is there a correlation between the number of average daily contacts a mother reports and her manding base rate? Or, is there a correlation between the percentage of kinfolk and helping agency representatives she sees and her manding base rate? Based on Wahler's portrayal of an isolated, beleaguered mother whose aversive interchanges increase with her social isolation and immersion in her family system, one would expect that the first correlation would be negative, and the second, positive. The answer to both of these questions is a simple "no." Though these characteristics seem to occur together in most of the mothers, they do not increase or decrease proportionately in this sample. Of course, such a strong correlation would not be expected in

a sample size of such limited number and with such limited variance in the numbers of daily contacts and the percentages of kinfolk/helping agency interactions.

Beyond the Mothers: A Look at the Family Unit

Previous studies utilizing the CIC have focused on the mothers' social interactions as the crucial demographic variable. This undoubtedly has been fruitful in predicting and describing families' responses to treatment interventions. Prior to this study, however, it has been necessary to assume certain family characteristics based on the mothers' reports. For example, it has been generally assumed that a mother's high rate of manding is suggestive of an overall high rate of aversive interchange within the family context. The expanded CIC-R permits us to test these assumptions by examining the self-reports of siblings, target children, and when present, a spouse.

Table 4 summarizes the social contacts of the remainder of the family members. A comparison of the overall family averages, with the mothers' reports, of the three criteria for insularity, may give us an indication of whether or not a mother is truly "speaking for her family" when she provides self-report data. Let us turn first to the mean number of daily contacts. In four of the families, the overall family average of daily contacts was lower than that of the mother; in three families it was higher. An attempt to demonstrate a correlation between the family averages and the mothers' rate of daily contact revealed no significant relationship. Once again, a larger sample size may have demonstrated a proportionate relationship. What is noteworthy,

TABLE 4

INDIVIDUALS', AND FAMILY AVERAGES, REPORTED SOCIAL CONTACTS WITH PERSONS LIVING OUTSIDE SUBJECTS' HOMES

Family	Manding Rate	Mean Daily Contacts	Mean Daily Contacts, % of Total Contacts			
			Friend/% Aversive	Kinfolk/% Aversive	Helper/% Aversive	
Jones Mother	.76	3.0	1.4 (46.7%)/57.1%	1.4 (46.7%)/71.4%	.2 (6.6%)/100%	
Family Average	.72	2.6				
Son #1*	.85	3.0	2.6 (87.5%)/85.7%	.13 (4.2%)/0	.25 (8.3%)/50%	
Son #2*	.66	2.6	1.4 (53.8%)/71.4%	1.0 (38.5%)/40%	.2 (7.7%)/100%	
Son #3*	.51	2.6	1.6 (61.1%)/36.4%	.43 (16.6%)/66.7%	.57 (22.2%)/50%	
Son #4*	.83	1.8	1.2 (63.6%)/42.9%	.33 (18.2%)/100%	.33 (18.2%)/50%	
Williams Mother	.26	2.8	.6 (21.4%)/100%	1.2 (42.9%)/33.3%	.2 (7.1%)/100%	
Family Average	.19	2.6				
Daughter #1*	.17	2.6	1.2 (37.5%)/33.3%	.6 (18.8%)/0	.4 (12.5%)/0	
Daughter #2*	.13	2.5	1.5 (60%)/0	.25 (10%)/0	.5 (20%)/0	
Black Mother	.27	3.0	.7 (23.3%)/57.1%	1.7 (56.7%)/94.1%	.4 (13.3%)/100%	
Family Average	.2	3.2				
Son #1*	.12	3.4	1.6 (50%)/38.5%	0/0	1.6 (50%)/0	
Smith Mother	.16	2.4	.2 (8.3%)/0	1.6 (66.7%)/0	.4 (16.6%)/0	
Family Average	.13	2.7				
Son #1*	0	2.0	1.8 (87.5%)/0	0/0	.25 (12.5%)/0	
Son #2	.67	1.4	1.4 (100%)/14.3%	0/0	0/0	

TABLE 4 (Continued)

Family	Manding Rate	Mean Daily Contacts	Mean Daily Contacts, % of Total Contacts		
			Friend/% Aversive	Kinfolk/% Aversive	Helper/% Aversive
Wallace Mother	.22	3.2	.5 (15.8%)/0	0/0	.33 (10.5%)/0
Family Average	.32	3.0			
Father	.34	2.2	.8 (36.4%)/25%	0/0	0/0
Daughter #1*	.41	3.7	3.0 (81.8%)/88.9%	0/0	.67 (18.2%)/0
Stevens Mother	0	4.7	.71 (17.2%)/0	3.0 (72.4%)/0	0/0
Family Average	.02	6.7			
Daughter #1	.01	7.6	6.4 (89.5%)/2%	.63 (8.8%)/0	.13 (1.8%)/0
Daughter #2*	.04	7.7	7.3 (93.5%)/5%	.13 (1.6%)/0	.38 (4.8%)/0
Davis Mother	.0075	3.5	.66 (17.8%)/0	.83 (22.2%)/0	0/0
Family Average	.0072	2.5			
Daughter #1	0	1.6	0/0	1.0 (60%)/0	0/0
Daughter #2*	.014	2.5	1.3 (52.9%)/0	.86 (35.3%)/0	.29 (11.8%)/0

The manding rate reflects an overall rate, including interactions with persons living in the home. The source of the contacts is broken down into three categories, with the percentage of these contacts which are aversive in nature. Asterisks denote target children.

however, is that the family averages are uniformly "in the same ballpark" as those reported by the mothers. The only mother reporting significantly greater than three contacts per day (Mrs. Stevens, $\bar{X} = 4.7$) has daughters reporting the highest rates of daily contacts in the sample (7.7 and 7.6).

A correlational analysis of the percentage of each mother's contacts outside the home occurring with kinfolk, and her own family's overall average percentage of contact with kinfolk, once again reveals no significant relationship. However, in five of the seven families, the family's average percentage of contact with kinfolk is strikingly lower than that of the mother. The average is the same (0) in the family with no kinfolk living in their geographic area. Only the Davis family average is higher than the individual average of the mother. The reader may recall that the Davis family home is surrounded by numerous trailers and homes, and each is inhabited by kinfolk.

Finally, individual comparisons were made of a family's overall average manding rate and the manding rate of the mother in that particular family. This comparison yielded a significant relationship (.86), using the Spearman test for rank order correlation. This is evidenced most clearly in figure form (see Figure 1).

In summary, it appears justifiable to state that the CIC-R data generated by a mother is strongly indicative of her family's overall manding rate, and roughly characteristic of her family's overall average number of daily contacts. On the other hand, one would not be safe in generating hypotheses about the percentage of a whole family's contacts with kinfolk based upon the mother's report alone.

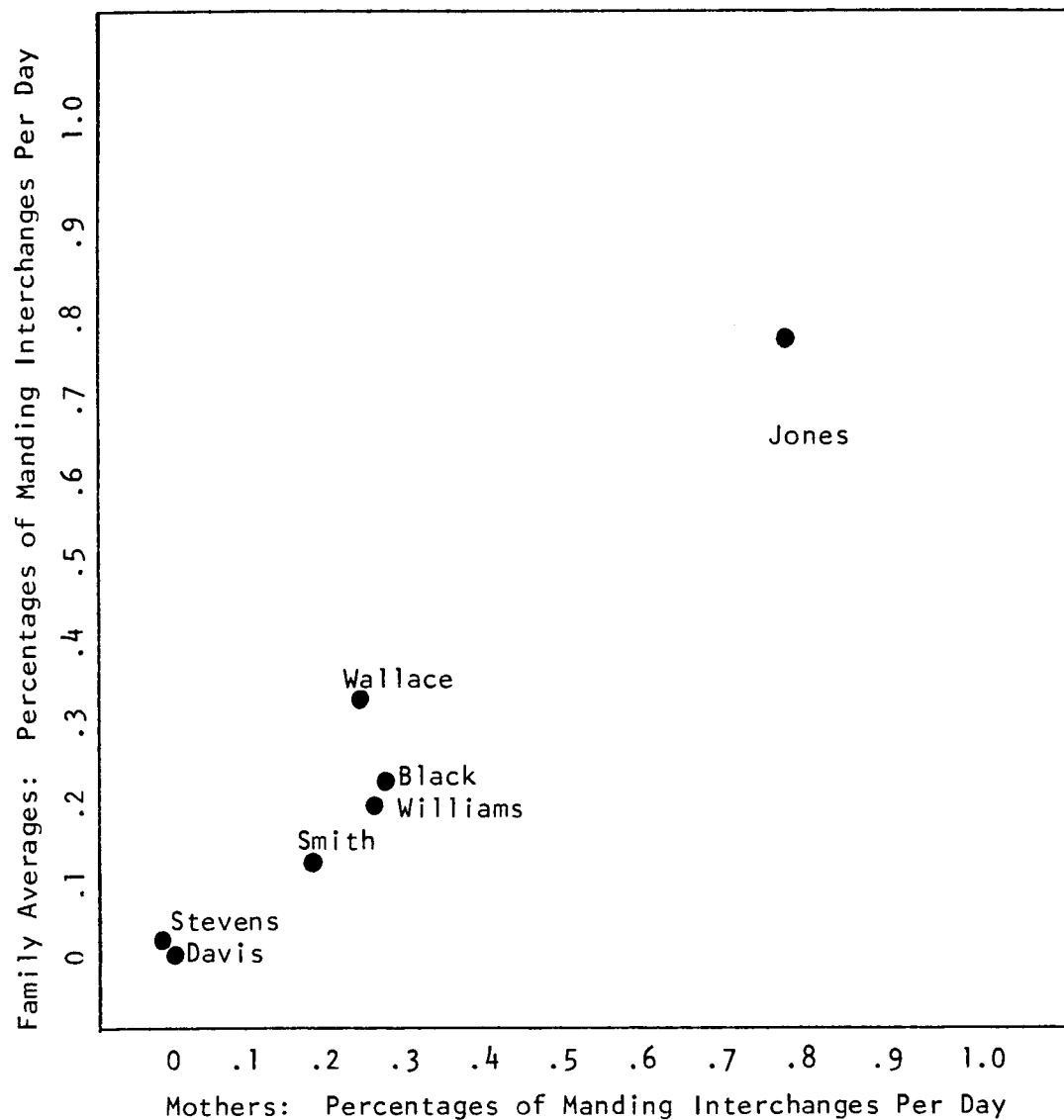


Figure 1. Relationship of each mother's manding rate to her family's overall average manding rate.

The Source of Manding Interactions: An Individualized Analysis

Given our knowledge that five of the seven families studied reported that a considerable percentage of their interactions were aversive in nature, our next step was to examine more closely the source of the problem. Did the insular mothers all have problems with their own mothers?, husbands?, boyfriends? We would have expected the above, as well as salient conflictual interchanges between the targeted "problem" child and his parent(s).

Such global analyses revealed a surprising result: there were few, if any, commonalities among the families, thereby making group statistics an inaccurate reflection of the conflict experienced by individual family members. While one mother appeared to view contact with her own mother as never aversive, another viewed such contacts as always aversive. An individualized analysis of each family member, and the manding rate associated with each significant person in his social circle, was called for. This analysis is summarized in Figures 2 through 6. (Similar graphs of the Stevens and Davis families are not depicted here, as the extremely low rate of reported manding interchanges reveals few notable differences among social contacts.)

Turn for a moment to Figure 2 summarizing the level of manding associated with each contact source of the five persons in the Jones family. The Jones mother apparently experiences the majority of her aversive interchanges with her own mother, her children, her sisters, and her friends. Conversely, she reports no manding interchanges at all with her male kinfolk and boyfriend. The source of manding also differs greatly among the four Jones children. For example, Sons #2

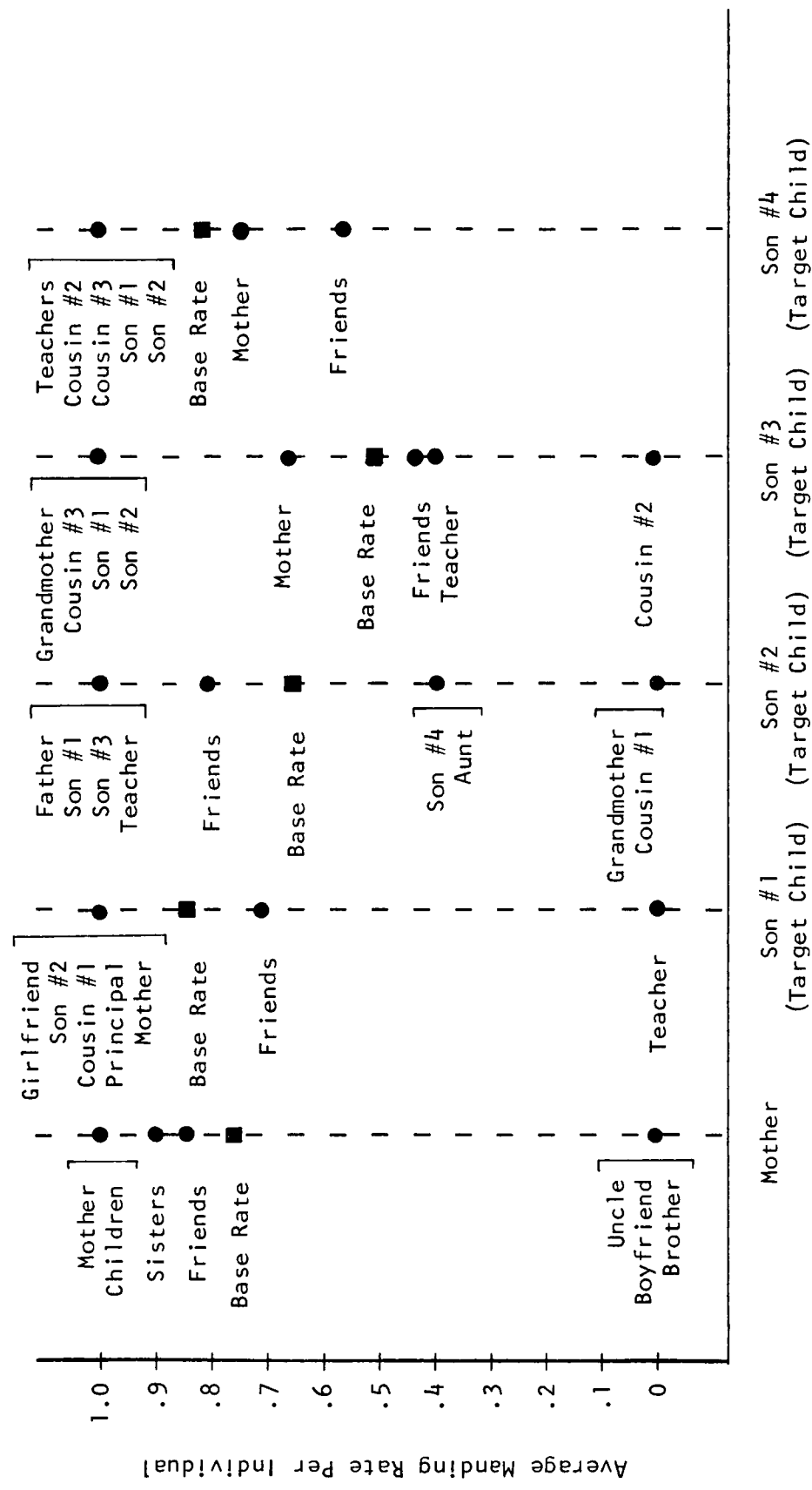


Figure 2. Individualized analysis of manding occurrences with each individual in the Jones family. Plotted points indicate average percentage of manding interchanges with each individual contact.

and #4 describe every interaction with a teacher as aversive, while for Son #1, his teachers seem to carry the most positive valence ratings of all of his many contacts. Mrs. Jones' mother also has a very different stimulus value for each individual. Of note is the fact that no single person known to the Jones family appears to impact the family in a uniform way. Only the family members' contacts with their friends appear to approximate one another: every family member describes his interactions with "friends" as aversive at least 42% of the time!

Figure 3 depicts the variability in manding rates experienced by the Williams family. Though Mrs. Williams sought treatment at the mental health center for her two "oppositional" girls, they are absent from her CIC-R reports. Her sister, job counselor, and friends apparently comprise the bulk of her manding interchanges. The two daughters seem to describe their mother in opposite ways: one views exchanges with her as always critical, while the other reports the converse. Daughter #2, referred for "stubbornness, crying spells, and temper tantrums," seems to designate her friends as the source of much conflict.

A similar visual inspection of Figures 4, 5, and 6 will reveal once again that sources of manding are unique to each of the many family members. Each family member has a particular pattern of manding which is not predictable by family membership, sex, or age.

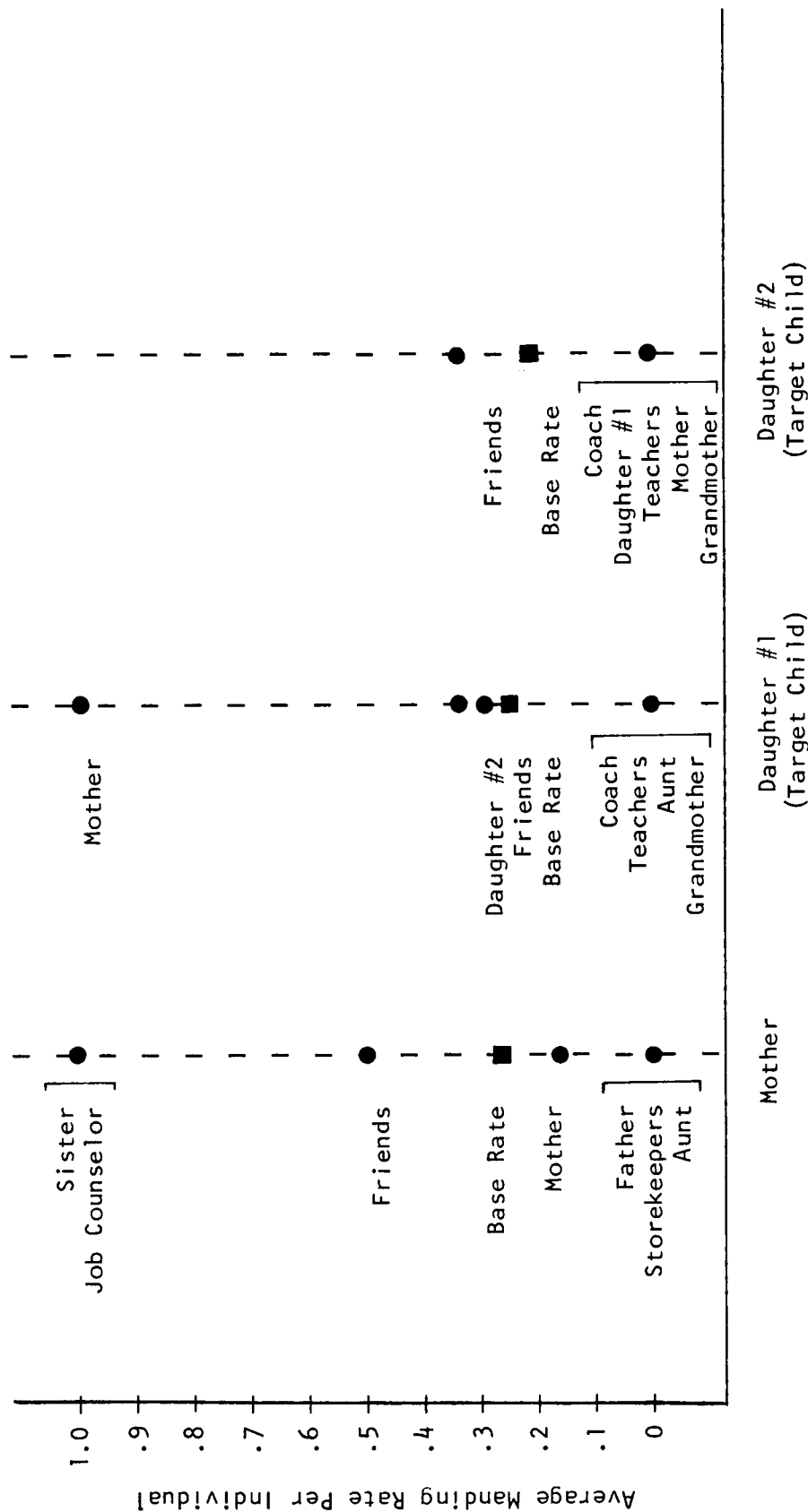


Figure 3. Individualized analysis of manding occurrences with each individual in the Williams family. Plotted points indicate average percentage of manding interchanges with each individual contact

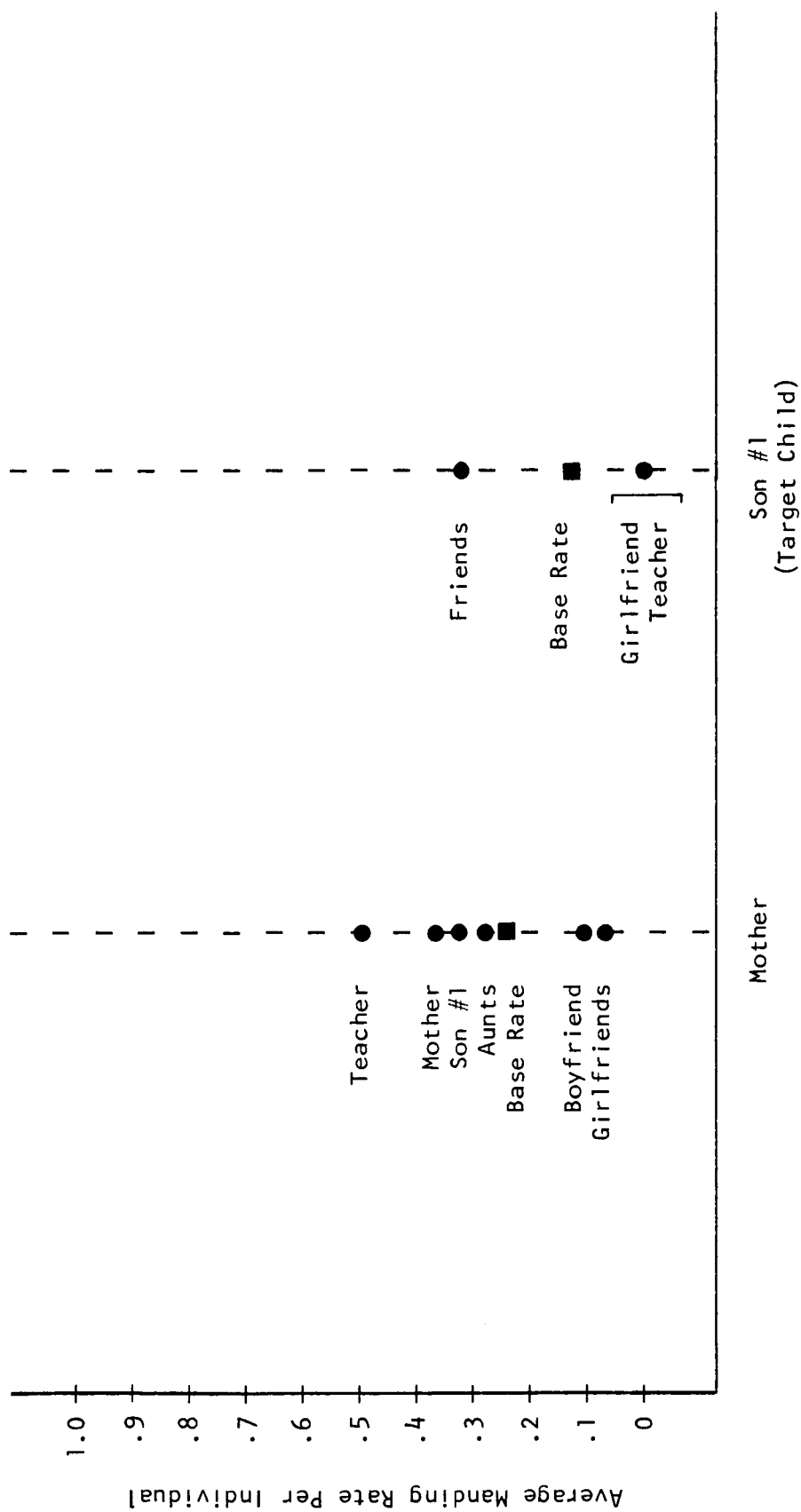


Figure 4. Individualized analysis of manding occurrences with each individual in the Black family. Plotted points indicate average percentage of manding interchanges with each individual contact.

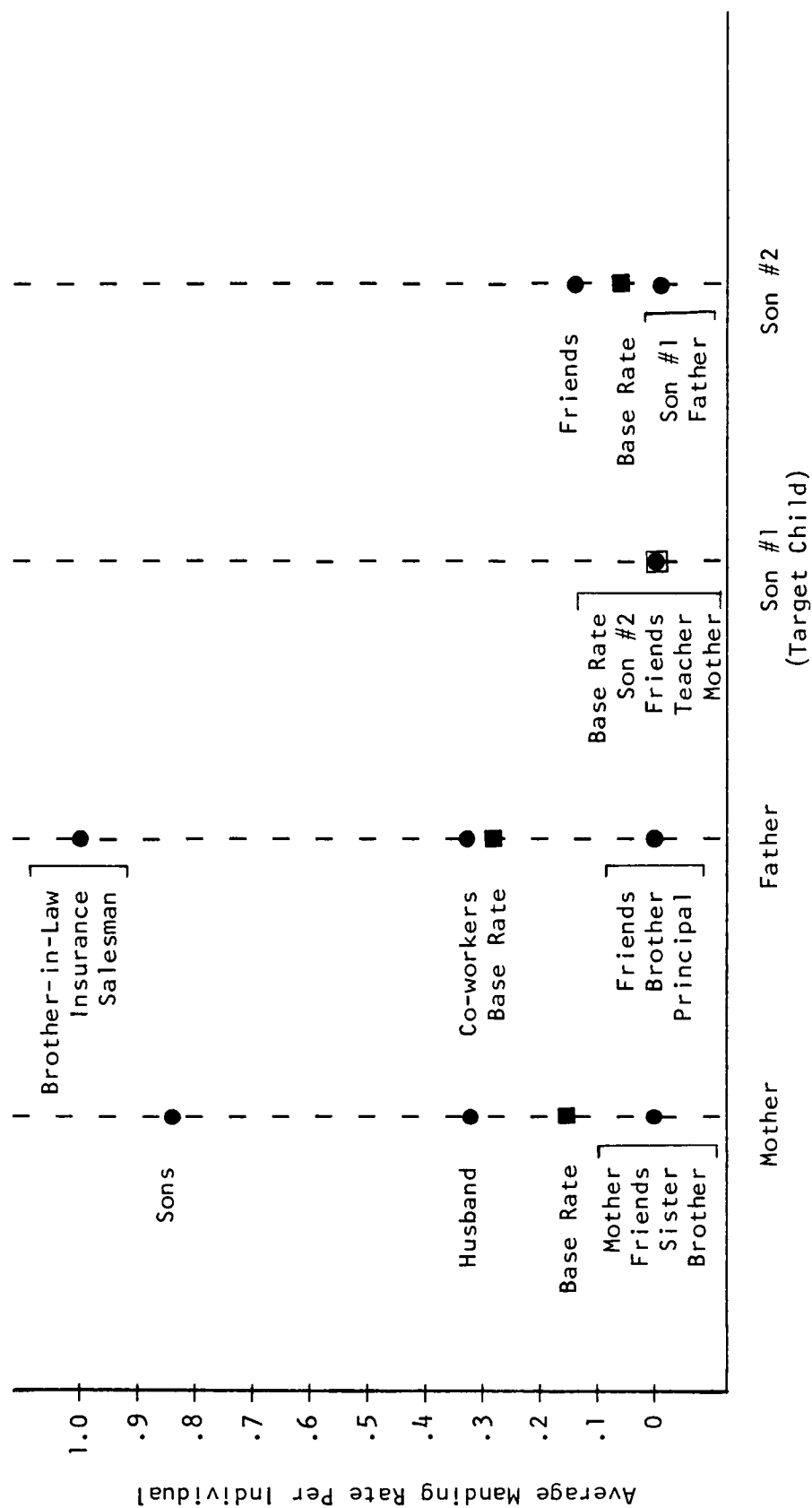


Figure 5. Individualized analysis of manding occurrences with each individual in the Smith family. Plotted points indicate average percentage of manding interactions with each individual contact

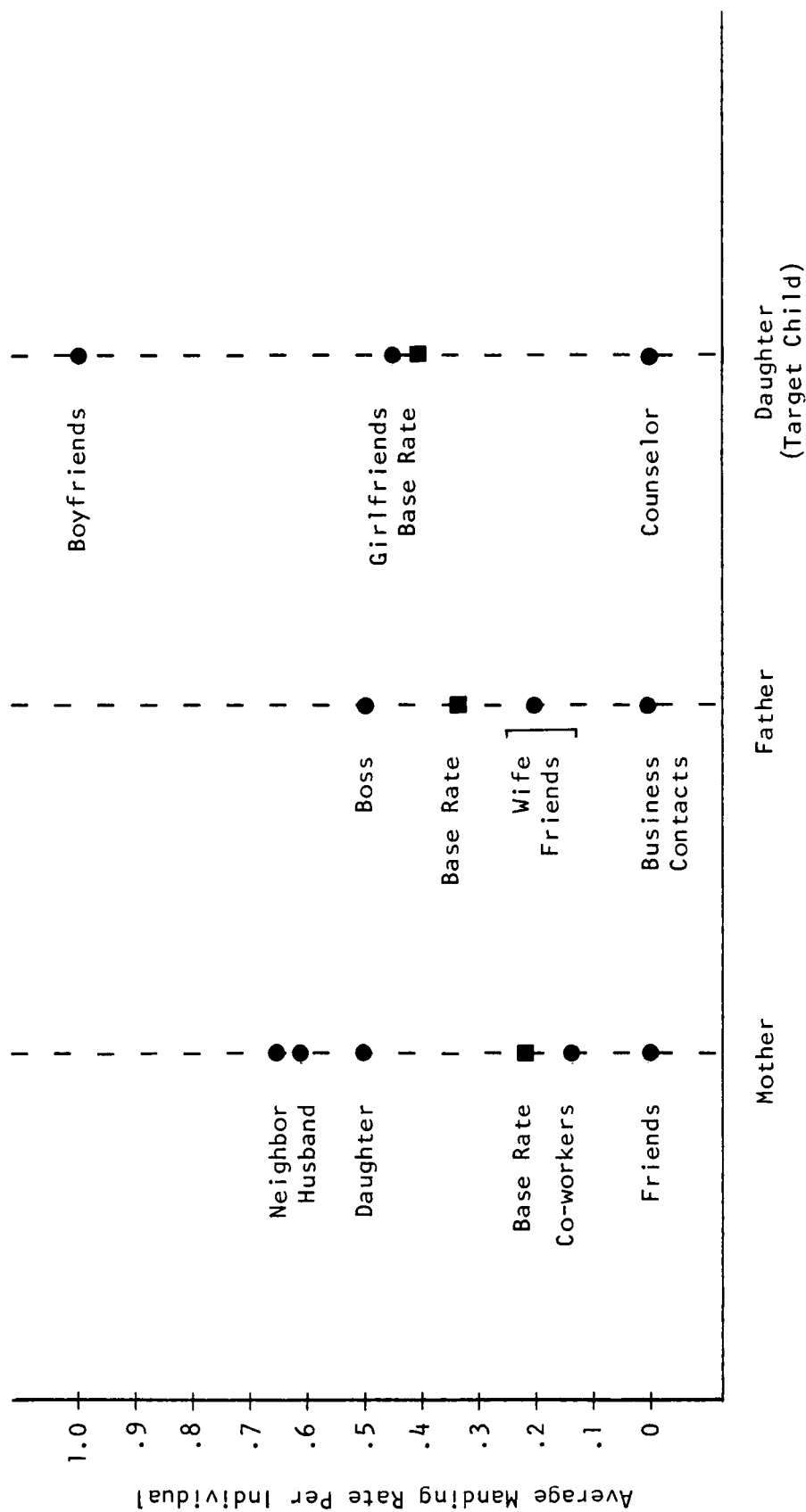


Figure 6. Individualized analysis of manding occurrences with each individual in the Wallace family. Plotted points indicate average percentage of manding interchanges with each individual contact.

CHAPTER IV

DISCUSSION

One of the original questions which prompted the current study was whether or not the phenomenon of "insularity" occurs in rural areas, as it has been found to exist in the urban populations previously studied. Commonly held notions of the rural family as a tightly-knit, mutually supportive system tended to indicate that the term based upon urban populations was not generalizable to a rural culture. Rural folks might be isolated from those outside their extended family networks, but the coercive nature of an insular mother's contacts would not fit the stereotype of a mutually supportive, tranquil, rural existence.

Certainly this selected group of families is discrepant from those families described above. The current research does not lend support to this pleasant stereotype of the rural family. Rather, the social networks of five of the seven families in our rural sample are surprisingly similar to those urban families previously described in the literature on insularity. The reader will recall that the researchers sought to find a balance of families along the "insular continuum" by selecting subjects from a variety of referral sources, incomes, educational levels, and referral problems. This attempt did not produce widely discrepant families. The Jones and Smith families, whose referrals to the mental health center were not as compelling as those referred by the welfare office or juvenile court, were apparently

no more sequestered in comfortable community relationships than the families required to seek treatment by the court. Similarly, income and the educational level of the parents in our sample were not predictive of insularity, though other studies in urban areas have found covariations in these factors (Dumas and Wahler, 1981).

The compelling exception to the rule is the Stevens and Davis families. As mentioned, of all of the seven families interviewed, these two were certainly the most geographically isolated. The mothers in these families reported their average number of daily contacts to be 4.7 and 3.5, respectively: averages which are not substantially higher than those reported by the other five mothers in the sample. What does differ dramatically from the remainder of the mothers is the Davis and Stevens families' extremely low rate of reported manding interchanges. These families generally reported no interpersonal conflict within or without the home, though the behaviors of the targeted children clearly indicate otherwise. Both sets of children's behaviors were of sufficient concern to warrant intervention by the local juvenile court: in both cases; truancy and noncompliance. The Stevens child ran away from home across the country . . . twice! It appears reasonable to assume on the basis of these presenting referral problems that there are, indeed, many manding interchanges within these homes. Though the differences in reported manding rates could be due to a confounding variable such as discrepancies in interviewer styles, we offer another tentative explanation, in the language of Freudian psychology. These families seem to be actively "denying" the presence of manding interchanges, or they may not see them at all. Judging from the problem behaviors, the

children in these homes react to the stressors in the family, rather than express them. As therapists are well aware, such secrecy and/or denial of problems within the home tend to further exacerbate their presence.

One is left with the question, "are all rural families with oppositional children similar to these?" One would assume not, yet one would also wonder why we did not find a broader range of characteristics among those chosen to study. One is also left without information about a "normal population" of rural folks, with whom we could compare our current sample. It is not possible to draw conclusions about rural life as a whole on the basis of our description of these families. It is possible that the families depicted here are representatives of a large majority of rural families, or that they are truly unusual in the midst of their rural neighbors. What is known, however, is that the phenomenon of insularity does exist to some degree in this rural culture.

Several findings are presented which will prove useful in further investigations of the insular family. Most importantly, the data indicate that a mother's rate of manding is strongly indicative of her family's as a whole. Whether or not the mother "sets the pace" for her family is not clear; but it is safe to assume that if a mother reports much coercion and criticism, her family's experience is much the same. Similarly, a mother's social contacts are usually quite similar in number to her family. These comparisons are not true of a mother and her kinfolk. The trends in these families suggest that mothers carry on the bulk of contact and interaction with family members outside

the home, while their children and husbands are apparently freer to interact with school friends or co-workers.

Of some concern is the poor agreement rate in the reporting of common interactions within one household. It seems that, once a contact is recalled, the specifics of the interaction are readily remembered by the reporter. However, frequently it seems, family members are poor subjective reporters of their own contacts, especially in terms of reporting each contact made. We are presented with a well known problem in utilizing self-report data: one must not assume that it is objectively reliable. If the CIC-R is to be used in further research paradigms, this methodological issue will need to be addressed.

The current findings do little to simplify the development of appropriate treatment interventions for families with oppositional children. The simple strategy of teaching a mother to alter the reinforcement and punishment schedules of her child is sorely lacking, as these mothers appear to have many concerns more pressing than the behaviors of their children. What emerges is a picture of a family whose members are all harassed, as is the mother. One is reminded of Minuchin's (1974) concept of the "identified patient"--that family member singled out as the troubled one, though the entire family is clearly dysfunctional. In four of the five families admitting to aversive interchanges, the mother reported others in her life as more aversive than her child. One wonders if the children would have become a focus for intervention had their behaviors not become disruptive in places outside the home (school, juvenile court, etc.).

The literature on child abuse and neglect refers to 'multiply entrapped' families whose many economic and social concerns make effective child-rearing too taxing. This study would suggest that the family's social contacts alone are sufficient to disturb the family's equilibrium. In fact, in several of the middle-income families studied, this seems to be the case. Though apparently economically secure, the Smith and Wallace families report many aversive interchanges. For Mrs. Smith, all of her reported manding interchanges occurred with her sons and husband. Mrs. Wallace also reported her highest rates of manding with her husband. One is led to the conclusion, reached many times before, that a therapeutic intervention which ignores conflict in the family interactional system is doomed for failure.

Preliminary findings in earlier studies have suggested that friends may provide much welcome relief from the demands of a coercive household. It has been suggested that therapy with these mothers should include support and encouragement for activities with friends outside the home. Unfortunately, many of these mothers find contact with those they describe as "friends" to be highly aversive. It is possible that these family members lack the skills necessary to form a stable, non-coercive relationship with those outside the realm of their family.

What are the specific implications of these findings for the treatment of families with oppositional children? Simply, it seems that therapy approaches must be de-simplified. The sources of interpersonal coercion in a family seem to be multiple, and are not focused specifically on the parent/child dyad. And, to make matters more complex, the sources of coercion differ from family to family, and among

individuals within a family. The therapist attempting to help a parent deal with her coercive relationship with her child would do well to explore similar, perhaps more salient relationships, experienced by the parent with other individuals. The question so often used by psychodynamic psychotherapists attempting to utilize the phenomena of transference is certainly called for: "Where else have you felt this way, and with whom . . . where else do these problems occur?" Given the nature of these families, one is bound to find conflict beyond that experienced by mother and child. And plainly, without examining those important sources of coercion, the therapist will certainly miss the point.

LIST OF REFERENCES

LIST OF REFERENCES

- Alexander, J. F., C. Barton, R. S. Schiavo, and B. V. Parsons. Systems-behavioral intervention with families of delinquents: Therapist characteristics, family behavior, and outcome. Journal of Consulting and Clinical Psychology, 1976, 44, 656-664.
- Alexander, J. F., and B. V. Parsons. Short-term behavioral intervention with delinquent families: Impact on family process and recidivism. Journal of Abnormal Psychology, 1973, 81, 219-225.
- Anderson, F. N., and H. C. Dean. Some aspects of child guidance clinic intake policy and practices. Public Health Monograph, No. 42, 1956.
- Baer, D. M. A note on the absence of a Santa Claus in any known ecosystem: A rejoinder to Willems. Journal of Applied Behavior Analysis, 1974, 7, 167-170.
- Baer, D. M., M. M. Wolf, and T. R. Risley. Some current dimensions of applied behavior analysis. Journal of Applied Behavior Analysis, 1968, 1, 91-97.
- Bandura, A. Principles of Behavior Modification. New York: Holt, Rinehart & Winston, Inc., 1969.
- Barker, R. G. Ecological Psychology. Stanford: Stanford University Press, 1968.
- Barker, R. G. Explorations in ecological psychology. American Psychologist, 1965, 20, 1-14.
- Barker, R. G., and H. F. Wright. Midwest and Its Children: The Psychological Study of an American Town. Evanston, Illinois: Row, Peterson Publishers, 1954.
- Bateson, G., D. D. Jackson, J. Haley, and J. Weakland. Toward a theory of schizophrenia. Behavioral Science, 1956, 1, 251-264.
- Beach, C. F., and J. D. Laird. Follow-up study of children identified early as emotionally disturbed. Journal of Consulting and Clinical Psychology, 1968, 32, 369-374.
- Berkowitz, B. P., and A. M. Graziano. Training parents as behavior therapists: A review. Behavior Research and Therapy, 1972 10, 297-317.

- Berland, R. M. The family social system and child deviance: A comparison of deviant and non-deviant families. Unpublished dissertation, University of Tennessee, Knoxville, 1976.
- Berland, R. M., E. E. Resch, and R. G. Wahler. Independent toy play: A keystone behavior in the treatment of oppositional children. Summary of an APA Symposium presentation. San Francisco, 1977.
- Bijou, S. W., and D. M. Baer. Editor's comments to Wahler, R. G., G. D. Winkel, F. F. Peterson, and D. C. Morrison. Mothers as behavior therapists for their own children. Child Development: Readings in Experimental Analysis. New York: Appleton-Century-Crofts, 1967.
- Bijou, S. W., and D. M. Baer. Child Development: Volume II. New York: Appleton-Century-Crofts, 1965.
- Bijou, S. W., and D. M. Baer. Child Development: Volume I. New York: Appleton-Century-Crofts, 1961.
- Bijou, S. W., R. F. Peterson, and M. H. Ault. A method to integrate descriptive and experimental field studies at the level of data and empirical concepts. Journal of Applied Behavior Analysis, 1968, 1, 175-191.
- Budd, K. S., D. R. Green, and D. M. Baer. An analysis of multiple misplaced parental social contingencies. Journal of Applied Behavior Analysis, 1976, 9, 459-470.
- Burgess, R., and R. Conger. Family interaction in abusive, neglectful and normal families. Child Development, 1978, 49, 1163-1173.
- Delfini, L. F., M. Bernal, and P. Rosen. Comparison of deviant and normal boys in home settings. In Mash, E. J., L. A. Hamerlynck, and L. C. Handy (Eds.), Behavior Modification and Families. New York: Bruner-Mazel, 1976.
- Dumas, J. E., and R. G. Wahler. Predictors of treatment outcome in parent training: Mother insularity and socioeconomic disadvantage. Manuscript submitted for publication, Child Behavior Institute, University of Tennessee, Knoxville, 1981.
- Eyberg, S. M., and S. M. Johnson. Multiple assessment of behavior modification with families. Journal of Consulting and Clinical Psychology, 1974, 42, 594-606.
- Ferber, H., S. M. Keeley, and D. M. Shemberg. Training parents in behavior modification: Outcome of and problems encountered in a program after Patterson's work. Behavior Therapy, 1974, 5, 415-419.
- Ferster, C. B., and J. B. Appel. Punishment of S- responding in matching to sample by time-out from positive reinforcement. Journal of the Experimental Analysis of Behavior, 1961, 4, 45-56.

- Fleishman, M. Using parenting salaries to control attrition and cooperation in therapy. Behavior Therapy, 1979, 10, 111-116.
- Forehand, R., and B. M. Atkeson. Generalization of treatment effects with parents as therapists: A review of assessment and implementation procedures. Behavior Therapy, 1977, 8, 575-593.
- Forehand, R., and H. E. King. Pre-school children's noncompliance: Effects of short-term therapy. Journal of Community Psychology, 1974, 2, 42-44.
- Forehand, R., H. King, S. Peed, and P. Yoder. Mother-child interactions: Comparisons of a noncompliant clinic group and a non-clinic group. Behavior Research and Therapy, 1975, 13, 79-84.
- Forehand, R., E. Sturgis, R. McMahon, D. Aguar, K. Green, and J. Breiner. Parent behavioral training to modify child noncompliance: Treatment generalization across time and from home to school. Behavior Modification, 1979, 3, 3-25.
- Forehand, R., K. C. Wells, and E. T. Sturgis. Predictors of noncompliant behavior in the home. Journal of Consulting and Clinical Psychology, 1978, 46, 179.
- Garbarino, J. The price of privacy in the social dynamics of child abuse. Child Welfare, 1977, 56, 565-575.
- Garbarino, J., and D. Sherman. High-risk neighborhoods and high-risk families: The human ecology of child maltreatment. Child Development, 1980, 51, 188-198.
- Gillette, J. M. Rural Sociology. New York: The Macmillan Company, 1936.
- Giovannoni, J. M. Parental mistreatment: Perpetrators and victims. Journal of Marriage and the Family, 1971, November, 649-657.
- Giovannoni, J. M., and A. Billingsley. Child neglect among the poor: A study of parental adequacy in three ethnic groups. Child Welfare, 1970, 49, 196-204.
- Green, K. D., R. Forehand, and R. J. McMahon. Parental manipulation of compliance and noncompliance in normal and deviant children. Behavior Modification, 1979, 3, 245-266.
- Griest, D. L., K. C. Wells, and R. Forehand. An examination of predictors of maternal perceptions of maladjustment in clinic-referred children. Journal of Abnormal Psychology, 1979, 88, 277-281.
- Harris, F. R., M. M. Wolf, and D. M. Baer. Effects of adult social reinforcement on child behavior. Young Children, 1964, 20, 8-17.

- Hawkins, R. P., R. F. Peterson, E. L. Schweid, and S. W. Bijou. Behavior therapy in the home: Amelioration of problem parent-child relations with the parent in a therapeutic role. Journal of Experimental Child Psychology, 1966, 4, 99-107.
- Herbert, E. W., and D. M. Baer. Training parents as behavior modifiers: Self recording of contingent attention. Journal of Applied Behavior Analysis, 1972, 5, 139-149.
- Herbert, E. W., E. M. Pinkston, M. Hayden, T. E. Sajwaj, S. Pinkston, G. Cordua, and C. Jackson. Adverse effects of differential parental attention. Journal of Applied Behavior Analysis, 1973, 6, 15-30.
- Hobbs, N. Helping disturbed children: Psychological and ecological strategies. American Psychologist, 1966, 21, 1105-1115.
- Hughey, J. B., and R. G. Wahler. Parent insularity and child stealing problems: Some obtained relationships. Unpublished manuscript, Child Behavior Institute, University of Tennessee, Knoxville, 1981.
- Johnson, S. M., and A. Christensen. Multiple criteria follow-up of behavior modification with families. Journal of Abnormal Child Psychology, 1975, 3, 135-154.
- Johnson, S. M., and C. K. Lobitz. The personal and marital adjustment of parents as related to observed child deviance and parenting behaviors. Journal of Abnormal Child Psychology, 1974, 2, 193-208.
- Johnson, S. M., G. Wahl, S. Martin, and S. Johanssen. How deviant is the normal child: A behavioral analysis of the preschool child and his family. In Rubin, R. D., J. P. Brady, and J. R. Henderson (Eds.), Advances in Behavior Therapy. New York: Academic Press, 1974.
- Kantor, J. R. Interbehavioral Psychology. Granville, Ohio: Principia Press, 1979.
- Kara, A., and R. G. Wahler. Some organizational properties of a young child's behavior. Journal of Experimental Child Psychology, 1977, 24, 24-39.
- Keeley, S. M., K. M. Shemberg, and J. Carbonell. Operant clinical intervention: Behavior management of beyond? Where are the data? Behavior Therapy, 1976, 7, 292-305.
- Kent, R. N. A methodological critique of "Interventions for boys with conduct problems." Journal of Consulting and Clinical Psychology, 1976, 44, 297-299.
- Kent, R. N., and K. D. O'Leary. A controlled evaluation of behavior modification with conduct problem children. Journal of Consulting and Clinical Psychology, 1976, 44, 586-596.

- Koegel, R. L., and W. Rincover. Research on the difference between generalization and maintenance in extra-therapy responding. Journal of Applied Behavior Analysis, 1977, 10, 1-12.
- Leske, G., A. Afton, E. S. Rogers, and R. G. Wahler. The interpersonal functioning of insular and non-insular families: Factors related to treatment success and failure. Unpublished manuscript, Child Behavior Institute, University of Tennessee, Knoxville, 1978.
- Levitt, E. E. Research on psychotherapy with children. In Garfield, S., and A. Bergin (Eds.), Handbook of Psychotherapy and Behavior Change. New York: Wiley, 1971.
- Levitt, E. E. A comparative judgemental study of "defection" from treatment at a child guidance clinic. Journal of Clinical Psychology, 1958, 14, 429-432.
- Lindsley, O. R. Direct measurement and prosthesis of retarded behavior. Journal of Education, 1964, 147, 62-81.
- Mash, E. J. Behavior modification and methodology: A developmental perspective. Journal of Educational Thought, 1976, 10, 5-21.
- Mash, E. J., and L. Terdal. Modification of mother-child interactions: Playing with children. Mental Retardation, 1973, 11, 44-49.
- McCord, J. A thirty-year follow-up of treatment effects. American Psychologist, 1978, 33, 284-289.
- Miller, J. J., and H. N. Sloane. The generalization effects of parent training across stimulus settings. Journal of Applied Behavior Analysis, 1976, 9, 355-370.
- Minton, C., J. Kogan, and J. Levine. Maternal control and obedience in the two-year-old. Child Development, 1971, 42, 1873-1894.
- Minuchin, S. Families and Family Therapy. Cambridge, Massachusetts: Harvard University Press, 1974.
- Mira, M. Results of a behavior modification training program for parents and teachers. Behavior Research and Therapy, 1970, 8, 309-312.
- Moore, D. R. Determinants of deviancy: A behavioral comparison of normal and deviant children in multiple settings. Unpublished dissertation, University of Tennessee, Knoxville, 1975.
- Moore, D. R., P. Chamberlain, and L. H. Mukai. Children at risk for delinquency: A follow-up comparison of aggressive children who steal. Journal of Abnormal Child Psychology, 1979, 7, 345-355.

- Moore, D. R., and G. R. Patterson. Behavior structure in deviant family systems. Summary of an APA Symposium presentation, San Francisco, 1977.
- Morris, H. H. Aggressive behavior disorders in children: A follow-up study. American Journal of Psychiatry, 1956, 112, 991-997.
- Murphy, D. C., and L. A. Mendelson. Communication and adjustment in marriage: Investigating the relationship. Family Process, 1973, 12, 317-326.
- Nordquist, V. M. The modification of a child's enuresis: Some response-response relationships. Journal of Applied Behavior Analysis, 1971, 4, 241-247.
- O'Dell, S. Training parents in behavior modification. Psychological Bulletin, 1974, 81, 418-433.
- O'Leary, K. D., W. C. Becker, M. B. Evans, and R. A. Saudargas. A token reinforcement program in a public school: A replication and systematic analysis. Journal of Applied Behavior Analysis, 1969, 2, 3.
- O'Leary, K. D., and R. Kent. Behavior modification for social action: Research tactics and problems. In Hamerlynck, L. A., L. C. Handy, and E. J. Mash (Eds.), Behavior Change: Methodology, Concepts, and Practice. Champaign, Illinois: Research Press, 1973.
- Oltmanns, T. F., J. E. Broderick, and K. D. O'Leary. Marital adjustment and the efficacy of behavior therapy with children. Journal of Consulting and Clinical Psychology, 1977, 45, 724-729.
- Olweus, D. Stability of aggressive reaction patterns in moles: A review. Psychological Bulletin, 1979, 86, 852-875.
- Paolino, T. J., and B. S. McCrady (Eds.). Marriage and Marital Therapy. New York: Bruner/Mazel, 1978.
- Parke, R., and M. Collmer. Child abuse: An interdisciplinary analysis. In Hetherington, M. (Ed.), Review of Child Development Research. Chicago: University of Chicago Press, 1975.
- Patterson, G. R. A three-stage functional analysis for children's coercive behaviors: A tactic for developing a performance theory. In Etzel, B., J. LeBlanc, and D. M. Baer (Eds.), New Developments in Behavioral Research: Theory, Method and Application. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977.
- Patterson, G. R. The aggressive child: Victim and architect of a coercive system. In Mash, E., L. Hamerlynck, and L. Handy (Eds.), Behavior Modification and Families. I. Theory and Research. New York: Bruner/Mazel, 1976.

- Patterson, G. R. Intervention for boys with conduct problems: Multiple settings, treatments, and criteria. Journal of Consulting and Clinical Psychology, 1974(a), 42, 471-481.
- Patterson, G. R. Retraining of aggressive boys by their parents: Review of recent literature and follow-up evaluation. In Lowy, F. (Ed.), Symposium on the seriously disturbed child. Canadian Psychiatric Association Journal, 1974(b), 19, 142-161.
- Patterson, G. R. Behavioral intervention procedures in the classroom and in the home. In Bergin, A. E., and S. L. Garfield (Eds.), Handbook of Psychotherapy and Behavior Change. New York: Wiley, 1969.
- Patterson, G. R. An empirical approach to the classification of disturbed children. Journal of Clinical Psychology, 1964, 20, 326-337.
- Patterson, G. R., and J. A. Cobb. A dyadic analysis of aggressive behaviors. In Hill, J. P. (Ed.), Minnesota Symposium on Child Psychology, Volume 5. Minneapolis: University of Minnesota Press, 1970.
- Patterson, G. R., J. A. Cobb, and R. S. Ray. A social engineering technology for retraining the families of aggressive boys. In Adams, H. E., and I. P. Unikel (Eds.), Issues and Trends in Behavior Therapy. Springfield, Illinois: Charles C. Thomas, 1973.
- Patterson, G. R., and M. J. Fleishman. Maintenance of treatment effects: Some considerations concerning family systems and follow-up data. Behavior Therapy, 1979, 10, 168-185.
- Patterson, G. R., and D. R. Moore. Interactional patterns in dyadic units. In Suomi, S., M. Lamb, and G. Stevenson (Eds.), The Study of Social Interaction: Methodological Issues. Madison, Wisconsin: University of Wisconsin Press, 1978.
- Patterson, G. R., R. S. Ray, D. A. Shaw, and J. A. Cobb. A Manual for Coding Family Interactions, sixth revision, 1969. Available from ASIS National Auxiliary Publications Service, CCM Information Service, Inc., 90 Third Avenue, New York, New York, 10022. Document #01234.
- Patterson, G. R., and J. B. Reid. Intervention for families of aggressive boys: A replication study. Behavior Research and Therapy, 1973, 11, 383-394.
- Patterson, G. R., and J. B. Reid. Reciprocity and coercion: Two facets of social systems. In Neuringer, C., and J. Michael (Eds.), Behavior Modification in Clinical Psychology. New York: Appleton-Century-Crofts, 1970.

- Prince, G. S. A clinical approach to parent-child interaction. Journal of Child Psychology and Psychiatry, 1961, 2, 169-184.
- Reid, J. B., and G. R. Patterson. Follow-up analyses of a behavioral treatment program for boys with conduct problems: A reply to Kent. Journal of Consulting and Clinical Psychology, 1976, 44, 297-302.
- Reisinger, J. J., G. W. Frangia, and E. H. Hoffman. Toddler management training: Generalization and marital status. Journal of Behavior Therapy and Experimental Psychology, 1976, 7, 335-340.
- Robins, L. N. Deviant Children Grown Up: A Sociological Study of Sociopathic Personality. Baltimore: Williams and Wilkins, 1966.
- Roff, M. Childhood social interaction and young adult bad conduct. Journal of Abnormal and Social Psychology, 1961, 65, 333-337.
- Ross, A. O. Psychological Disorders of Children: A Behavioral Approach to Theory, Research and Therapy. New York: McGraw-Hill, 1974.
- Rutter, M. Family, area, and school influences in the genesis of conduct disorders. In Hersov, L. A., M. Berger, and D. Shaffer (Eds.), Aggression and Anti-social Behavior in Childhood and Adolescence. Oxford: Pergamon Press, 1978.
- Rutter, M. Parent-child separation: Psychological effects on the children. Journal of Child Psychology and Psychiatry, 1971, 12, 233-260.
- Sajwaj, T., S. Twardosz, and M. Burke. Side effects of extinction procedures in a remedial preschool. Journal of Applied Behavior Analysis, 1972, 5, 163-175.
- Shaw, C. R., and H. D. McKay. Juvenile Delinquency and Urban Areas. Chicago: The University of Chicago Press, 1969.
- Skinner, B. F. Science and Human Behavior. New York: Appleton-Century-Crofts, 1954.
- Snyder, J. J. A reinforcement analysis of interaction in problem and non-problem families. Journal of Abnormal Psychology, 1977, 86, 528-535.
- Solomon, R. W., and R. G. Wahler. Peer reinforcement control of classroom problem behavior. Journal of Experimental Child Psychology, 1973, 5, 278-293.
- Stokes, T. F., and D. M. Baer. An implicit technology of generalization. Journal of Applied Behavior Analysis, 1977, 10, 349-367.

- Strain, P. S., R. E. Shores, and M. M. Kerr. An experimental analysis of "spill-over" effects on the social interaction of behaviorally handicapped pre-school children. Journal of Applied Behavior Analysis, 1976, 9, 31-40.
- Straughan, J. H. Treatment with child and mother in the playroom. Behavior Research and Therapy, 1964, 2, 37-41.
- Tait, D. C., and E. F. Hodges. Delinquents, Their Families and the Community. Springfield, Illinois: Charles C. Thomas, 1962.
- Taplin, P. S., and J. B. Reid. Changes in parent consequence as a function of family intervention. Journal of Consulting and Clinical Psychology, 1975, 45, 973-981.
- Tavormina, J. B. Basic models of parent counseling: A critical review. Psychological Bulletin, 1974, 81, 827-835.
- Wahl, G., S. M. Johnson, S. Johansson, and S. Martin. An operant analysis of child family interaction. Behavior Therapy, 1974, 5, 64-78.
- Wahler, R. G. The insular mother: Her problems in parent-child treatment. Journal of Applied Behavior Analysis, 1980(a), 13, 207-219.
- Wahler, R. G. Parent insularity as a determinant of generalization success in family treatment. In The Ecosystem of the Sick Kid: Implications for Classification and Intervention. New York: Academic Press, 1980(b).
- Wahler, R. G. The multiply entrapped parent: Obstacles to change in parent-child problems. In Vincent, J. (Ed.), Advances in Family Intervention, Assessment and Theory. Volume I. Greenwich, Connecticut: JAI Press, 1979.
- Wahler, R. G. Helping procedures for violent children: Contributions of behavioral ecology and technology. Paper presented to conference entitled The Violent Child, New York University Medical Center, New York City, 1976.
- Wahler, R. G. Some structural aspects of deviant child behavior. Journal of Applied Behavior Analysis, 1975, 8, 27-42.
- Wahler, R. G. Deviant child behavior within the family: Developmental speculations and behavior change strategies. In Leitenberg, H. (Ed.), Handbook of Behavior Modification. New York: Appleton-Century-Crofts, 1974.
- Wahler, R. G. Some ecological problems in child behavior modification. In Behavior Modification: Issues and Extensions. New York: Academic Press, 1972.

- Wahler, R. G. Oppositional children: A quest for reinforcement control. Journal of Applied Behavior Analysis, 1969(a), 2, 159-170.
- Wahler, R. G. Setting generality: Some specific and general effects of child behavior therapy. Journal of Applied Behavior Analysis, 1969(b), 2, 239-246.
- Wahler, R. G. Behavior therapy for oppositional children: Love is not enough. Paper presented at the Eastern Psychological Association Convention, Washington, D. C., 1968.
- Wahler, R. G. Child-child interactions in free field settings: Some experimental analyses. Journal of Experimental Child Psychology, 1967, 5, 278-293.
- Wahler, R. G., and A. D. Afton. Attentional processes in insular and noninsular mothers. Child Behavior Therapy, 1980, 2, 25-41.
- Wahler, R. G., R. M. Berland, and T. D. Coe. Generalization processes in child behavior change. National Institute of Mental Health progress report to Crime and Delinquency Section, 1979.
- Wahler, R. G., R. M. Berland, T. D. Coe, and G. Leske. Social systems analysis: Implementing an alternative behavioral model. In Warren, A. R., and S. F. Warren (Eds.), Ecological Perspectives in Behavior Analysis. Baltimore: University Park Press, 1977.
- Wahler, R. G., R. M. Berland, and G. Leske. Phenomenological reports: An empirical model. In Etzel, B., J. LeBlanc, and D. M. Baer (Eds.), New Developments in Behavioral Research: Theory, Method and Application. Hillsdale, New Jersey: Lawrence Erlbaum Associates, 1977.
- Wahler, R. G., and W. H. Cormier. The ecological interview: A first step in outpatient child behavior therapy. Journal of Behavior Therapy and Experimental Psychiatry, 1970, 1, 293-303.
- Wahler, R. G., and J. E. Dumas. On the social ecology of troubled mothers: Discriminative and environmental restructuring. Paper presented to the Banff International Conference on Behavior Modification, Banff, 1981.
- Wahler, R. G., and M. Erickson. Child behavior therapy: A community program in Appalachia. Behavior Research and Therapy, 1968, 7, 71-78.
- Wahler, R. G., and J. J. Fox. Setting events in applied behavior analysis: Toward a conceptual and methodological expansion. Manuscript submitted for publication, Child Behavior Institute, University of Tennessee, Knoxville, 1981.

- Wahler, R. G., and J. J. Fox. Response structure in deviant child-parent relationships: Implications for family therapy. Paper presented to the Nebraska Symposium on Motivation, University of Nebraska, Lincoln, 1980(a).
- Wahler, R. G., and J. J. Fox. Solitary toy play and time-out: A family treatment package for children with aggressive and oppositional behavior. Journal of Applied Behavior Analysis, 1980(b), 1, 23-29.
- Wahler, R. G., A. E. House, and E. E. Stambaugh. Ecological Assessment of Child Problem Behavior. New York: Pergamon Press, 1976.
- Wahler, R. G., J. B. Hughey, and J. S. Gordon. Chronic patterns of mother-child coercion: Some differences between insular and non-insular families. Analysis and Intervention in Developmental Disabilities, in press.
- Wahler, R. G., and A. Kara. Organizational features of a young child's behaviors. Journal of Experimental Child Psychology, 1977, 24, 24-39.
- Wahler, R. G., and G. Leske. Accurate and inaccurate observer summary reports. Journal of Nervous and Mental Disease, 1973, 156, 386-394.
- Wahler, R. G., G. Leske, and E. S. Rogers. The insular family: A deviance support for oppositional children. In Hamerlynck, L. A. (Ed.), Behavioral Systems for the Developmentally Disabled: I. School and Family Environments. New York: Bruner/Mazel, 1979.
- Wahler, R. G., and D. M. Moore. School-home behavior change procedures for oppositional children. Paper presented at the Association for the Advancement of Behavior Therapy, San Francisco, 1975.
- Wahler, R. G., K. A. Sperling, M. R. Thomas, N. C. Teeter, and H. L. Luper. The modification of childhood stuttering: Some response-response relationships. Journal of Experimental Child Psychology, 1970, 9, 411-428.
- Wahler, R. G., G. H. Winkel, R. F. Peterson, and D. C. Morrison. Mothers as behavior therapists for their own children. Behavior Research and Therapy, 1965, 3, 113-124.
- Walker, H. M., and N. K. Buckley. Programming generalization and maintenance of treatment effects across time and across settings. Journal of Applied Behavior Analysis, 1972, 5, 209-224.
- Weiss, R. L., G. R. Birchler, and J. P. Vincent. Contractual models for negotiating training in marital dyads. Journal of Marriage and the Family, 1974, 36, 321-331.

- Westman, J. C., D. L. Rice, and E. Bermann. Nursery school behavior and later school adjustment. American Journal of Orthopsychiatry, 1967, 37, 725-731.
- Willem's, E. P. Behavioral technology and behavioral ecology. Journal of Applied Behavior Analysis, 1974, 7, 151-160.
- Willem's, E. P. An ecological orientation in psychology. Merritt-Palmer Quarterly, 1968, 11, 317-343.
- Williams, C. D. The elimination of tantrum behavior by extinction procedures. Journal of Abnormal and Social Psychology, 1959, 59, 269.
- Wills, T. A., R. L. Weiss, and G. R. Patterson. A behavioral analysis of the determinants of marital satisfaction. Journal of Consulting and Clinical Psychology, 1974, 42, 802-811.
- Wolf, M. M. Social validity: The case for subjective measurement or how applied behavior analysis is finding its heart. Journal of Applied Behavior Analysis, 1978, 11, 203-214.
- Wolf, M. M., T. Risley, and H. Mees. Application of operant conditioning procedures to the behavior problems of an autistic child. Behavior Research and Therapy, 1964, 1, 305-312.
- Zeilberger, J., S. E. Sampen, and H. N. Sloane, Jr. Modification of a child's problem behaviors in the home with the mother as therapist. Journal of Applied Behavior Analysis, 1968, 1, 47-53.

APPENDICES

APPENDIX A

SIMULATED COMPLETED COMMUNITY INTERACTION CHECKLIST-REVISED

FAMILY JONES

PERSON GIVING INFORMATION (REPORTER) SON #1

OBSERVER CATHY ROBERTS DATE 6-10

How much time did the reporter and MOTHER spend together today? 30 MINUTES

Who initiated the contact? MOTHER

Was the contact by phone or in person? IN PERSON

Where was the contact? HOME

<u>NATURE OF INTERACTION</u>	WAS REPORTER CRITICAL?	WAS OTHER CRITICAL?	RATING
The Reporter talked about:			
1. The way I get along with my husband			
2. How I raise the kids			
3. A problem with the kids			
4. A problem with my spouse			
5. The other person's relationship with spouse			
6. My work around the house		✓	-1
7. Getting together to do something			0
8. What my brother or sister is doing			
9. What our friends are doing			

APPENDIX A (Continued)

<u>NATURE OF INTERACTION</u>	WAS REPORTER CRITICAL?	WAS OTHER CRITICAL?	RATING
The Reporter talked about:			
10. Our friends' problems or a fight with them		✓	-3
11. The people we know from church			
12. My work on the job			
13. Physical ailments			
14. "Nerves" or emotional problems			
15. Borrowing something			
16. Television shows	✓	✓	-2
17. Politics or the economy			
18. Gossip			
19. The weather			
20. My boyfriend/girlfriend			
21. Trouble at school or my schoolwork			
22. Things I do for recreation			1
23. Other			
24. Other			
25. Other			

GOOD +3
 +2
 +1
NEUTRAL 0
 -1
 -2
BAD -3

What rating would you give the day as a whole? -1

APPENDIX B

GENERAL GUIDELINES FOR UTILIZING CIC-R

1. Use one interaction checklist sheet for each person spoken to that day. However, if the reporter has spoken to a friend more than once that day, you will still use only one interaction checklist sheet. The different times can be indicated on the space provided. Do not use two sheets for the same "other person" in one day.
2. As you know, when you interview a person, you will be asking him to mention all of the people he came into contact with that day. This includes family members living in the home with the reporter. But family members frequently have many conversations a day. It would be impossible to document them all. Therefore, when a family member is reporting on contacts with a person in his own home, ask him to select the most important conversation of the day. Only record the topics discussed in that conversation. In the space for "time spent together" you can report the total time they estimate that they spent together.
3. Drop off your interaction checklist sheets at the mental health center as soon as possible after visiting the home. Leave them at the front receptionist's desk for Laurie Thompson. Under no circumstances should you leave them in your car or around your home where they might be visible to others.
4. If you are sick, you should make up the interview for that week or day. Make sure you have your family's phone number so you can call them to tell them you will not be coming out that evening. When you call them to cancel, you should also reschedule a suitable time. If you are scheduled to be at the Center to analyze data and are ill, you should call Laurie Thompson and let her know or leave a message. That time should also be made up.
5. If you are analyzing data, it must be done at the mental health center. You must not take any data sheets home with you. This is important to allow others to look at and work with the data as we go along.
6. If, at any time, you are not sure of what you should do, please call and let us know! If you are interviewing families and a problem arises, please let us know immediately. You may reach Laurie Thompson or Dr. Rogers by calling 586-5031. You may reach Laurie Thompson in the evenings by calling (1) 577-5092.

APPENDIX C

INFORMED CONSENT FORM

SOCIAL NETWORK PROJECT

The purpose of this project is to find out how people make use of the support systems in their community. We think that there are a variety of formal and informal sources of information and assistance available in this community that families could use. We plan to use what we learn from this project to better help families with problems.

You have the right not to participate in this study. However, should you choose to participate, it would involve a series of interviews over a seven week period. The interviews will take place twice a week and will usually last about half an hour. When I visit your home, we will arrange a mutually-agreeable time for the interviews. You would be free to change scheduled interview times, or cancel them. For your convenience, all of the scheduled interviews would be conducted in your home.

During the interviews, we would ask you about the social contacts you have now--especially the contacts that would be useful if someone in your family had a problem. We would not ask for names of your friends or contacts. Your participation will be kept strictly confidential.

This is only an information-gathering project. It is not connected with your therapy at the Cherokee Mental Health Center, and there will probably be no direct benefits to you as a result of your participation. There are also no anticipated risks to you as a participant. We hope that the knowledge gained from this project can be used to design better programs in the near future.

If you have any questions concerning this project, please feel free to ask them at any time. You may reach the coordinator of the project by calling Ms. Laurie Thompson at 586-5031. Of course, you can discontinue participation in the project at any time with no penalty. Should you decide not to participate in the project, there is also no penalty.

I have read and understand the above information concerning the SOCIAL NETWORKS PROJECT. I agree to participate in the project.

Signed

Witnessed

Parental Consent (if necessary)

Date

VITA

Laurie Kay Thompson was born in Toledo, Ohio on March 10, 1955 to Fletcher and Ruth Thompson. Her family moved several times during the course of her childhood. As a result, she attended schools in Savannah, Georgia, Silver Spring, Maryland and Mobile, Alabama before graduating from high school in Omaha, Nebraska.

In September, 1973, she entered Denison University in Granville, Ohio, where she studied theatre and psychology. As an undergraduate student, she developed an interest in clinical psychology through a semester's internship at the Philadelphia Child Guidance Clinic. She was graduated cum laude in 1977 with a Bachelor of Science degree, and was awarded academic distinction in psychology.

She entered the Doctoral Program in Clinical Psychology at The University of Tennessee, Knoxville in September, 1977. The present work represents the culmination of her efforts in that program. After completing a clinical internship at the National Institute of Mental Health's Overholser Division of Training at Saint Elizabeths Hospital in Washington, D.C., she received the Doctor of Philosophy Degree in August, 1983.