FAMILY INTERACTION PATTERNS RELATED TO DIFFERENCES IN SONS' SOCIAL MATURITY AND ACHIEVEMENT MOTIVATION

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ABSTRACT

FAMILY INTERACTION PATTERNS RELATED TO DIFFERENCES IN SONS' SOCIAL MATURITY AND ACHIEVEMENT MOTIVATION

BY

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This study was undertaken to determine whether families with a son rated by his teacher as either "high" or "low" on classroom adjustment (behaviors indicative of social maturity and achievement motivation) could be differentiated on the basis of their communicative patterns. Specifically, it was questioned whether there would be significant differences in the amount of positive or negative interaction displayed between or within such family groups.

The families participating in this study consisted of father, mother, and son triads from a middle-size generally lower middle-class community in Michigan. Sons in the study were all first or second grade students whose classroom adjustment was evaluated through teacher ratings on scales of self-sufficiency, self-control, and achievement motivation as well as behavior observations in the school. From these evaluations, assignment of families to the High Classroom Adjustment group (HCA, N=4) and Low Classroom Adjustment (LCA, N=12) were made.

Interaction sessions designed to involve the family members in social task behavior and family discussion were scheduled for each

family. Videotape recordings of these sessions were content analyzed by trained raters for positive (affection, non-specific smiling and laughing, praise, active interest, recognition, attentive observation, mutual participation) and negative behaviors (dependency, disruptive attention-seeking, provocation, resistance, criticism, exclusion, evasion).

Comparisons between the two groups revealed that HCA families displayed more positive and less negative interaction than LCA families. Comparisons between individual family members in the two groups revealed no differences between HCA and LCA parents in the display of positive interaction while HCA sons displayed more positive interaction than LCA sons. Differences were found between individual HCA and LCA family members in the display of negative interaction with HCA fathers, mothers, and sons each displaying less negative interaction than their LCA counterparts. HCA families were characterized by equal participation of all members in the display positive and negative interaction. In the LCA families, a parent-child inequality in participation existed such that LCA sons displayed less positive and more negative interaction than their parents.

Results of the study provided support for the conclusion that basic differences exist between these two family groups in their interaction patterns. It was concluded that dysfunctional communication was characteristic of all members of the LCA families. It was also concluded that HCA and LCA sons as differentially involved in the family with low-adjustment sons having to rely on disruptive methods for recognition in the course of family interaction.

Implications of the findings in this study for the possible relationship between specific childhood behavior problems and the interaction patterns of the family in which the child is raised were discussed along with practical considerations for diagnosis and intervention before such problems reach "clinic" proportions. In addition, directions for further research were presented, particularly studies which combine affective and structural measures of family interaction.

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By

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DEDICATION

To my family, without whose affection and support this endeavor might never have begun, and to my husband, Ernie, without whose love and refreshing perspective it might not have been completed.

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I would like to express my appreciation to my committee, Drs. Gary Stollak, Lucy Rau Ferguson, and Lawrence Messé. Special thanks, of course, are due to Dr. Stollak who served as chairman.

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INTRODUCTION

> "About a decade ago the question was raised whether a person who suffered some form of psychopathology was responding to a different family context from the average person. Since the possibility was raised that a "patient" differs only from a normal person in that he is responding to an "abnormal" social situation, a basic research problem was to find ways of determining reliably, whether there are differences in the organization of families containing an "abnormal" member with average families."
> (Haley, 1967, p. 31)

This statement by Jay Haley, a pioneer in communication and family interaction research, points to the possibilities and problems which clinicians, personality theorists, and child psychologists have come to focus on. Underlying their research efforts is a more general assumption about the nature of personality development (with its normal and abnormal manifestations) and the process of human socialization:

> "Except for the basic question of what constitutes the receptive and manipulative qualities of the infant, there are no facts about an individual that do not require reference to social factors for their conceptualization and subsequent incorporation into a set of principles that accounts for behavioral development.
> (Sears, 1966, p. 39)

The study of the family, in theory and research, is part of a larger trend in psychological research which has increasingly focused on the interpersonal dimensions of behavior. A corresponding interest has been on communicative behavior with a vew towards pathology as a disturbance of communication processes. In terms of individual development within the family, this ultimately leads to consideration of the

family as a unique social and psychological unit. It is a view that requires relatively new levels of analysis and empirical constructs in research.

Many authors, notably Riskin (1964), Haley (1962) and Jackson (1965), have described the family as a rule-governed, on-going system in which enduring patterns of interaction are developed over time as a means of regulating the equilibrium of the family. Numerous authors (Fisher, et al 1959; Farina & Dunham, 1963; Ferreira & Winter, 1968) have shown that normal and clinic families interact differently in essentially similar situations. Delineation of precise variables in family interaction, particularly the possible differences in these interaction patterns between normal and clinic families, would seem to hold important potential for increased understanding of personality development as well as for more effective diagnostic and therapeutic measures.

The question might be posed though--why the family and why family interaction? Traditionally, the family has received considerable attention as a transmitter for social values and cultural norms. This at least has been the case with the American nuclear family. Sociologists have preoccupied themselves with the structural and functional characteristics of the nuclear family which lends itself to the transmission of social, economic, political, etc. syndromes in the context of the larger society. Certain features of the family make it a unique phenomenon for psychological consideration:

> "It represents the most continuous and prolonged interactions between a set of individuals. It is a primary socializing agent. It is the locus of bond formation between individuals, giving the basic meanings to interpersonal relationships. It is the approved place for expression of the most intimate physical and emotional relationships between people. It is also the place for production of new individuals, and where the departure of old individuals tends to be felt most keenly. Finally, it consists of members who tend to be more like each other in many ways than are members of any other kind of social institution or group." (Troll, 1969, p. 222)

These features would certainly qualify the family as a meaningful unit of study. The significance of early childhood and parent-child relations was first discussed with an appropriate degree of importance in psychology by Freud. His theory of personality is largely dependent on concepts bounded by the experience of childhood. Interpersonal as well as social learning theorists have all proceeded to view what the child learns in the family as a basis for later behavior and learning in a variety of situations. Until the 1950's, research in this area had been explicitly cast within the framework of the simple cause--effect relationship of parent (or environment) influencing child. The relative lack of success of this model and the increasing dissatisfaction among many workers encouraged a significant shift in approach. Within the ranks of psychoanalytic theory, Ackerman (1954) prompted innovation. He and other workers came to view the family, and not the individual, as the primary locus of mental health or illness. Ackerman came to this conclusion primarily through his clinical practice. Improved family relationships was seen as a criterion of therapeutic success, but such progress could often be effected only if other family members were engaged in the therapy.

Handel (1965), in his review of family studies, begins his discussion with the formulation made by Burgess (1926) of the family as a unity of interacting personalities. Historically, this formulation seems to mark the origin of the contemporary perspective in family research. That is, one which calls into question the cause--effect model which locates independent variables exclusively in the parents and dependent variables exclusively in the child. This interpersonal perspective also attempts to move away from the research and empirical constructs which tend to summarize separately either the environmental events or the child's behavior.

The shift to family interaction as the level of analysis in research represents a serious attempt to respond more accurately to the need for a closer adaptation of the researcher's methods to his theory and purpose. Implicit in this statement is the notion of the family setting as involving sequences in which there is mutual stimulation and reinforcement between the participants--parents and children. It further implies recurring contingencies in interaction between family members and systematic constancies or changes in behavior that result from these contingencies. With family interaction as the level of analysis it seems possible to delineate behavioral measures of the important concept of communication patterns.

Theories of family interaction and the questions investigated by direct measures of family functioning have resulted in new developments in experimental procedure. The theoretical focus has been primarily on styles of communication and specific aspects of role-taking. This theoretical focus generally guides the design of family studies. Techniques have been developed which encourage a fairly free and involving family discussion and which are productive of the kinds of

interaction patterns predicted for the families involved. In studies involving comparisons between normal and clinic families, an essential feature is to provide a standard, clearly defined situation that is perceived in the same way by all families participating. The situation is designed to be as "real" as possible so that little inference is required in applying information from the experimental situation to the family's usual communication style. Theory and methodology are intimately related in family interaction research and progress in this field has been shaped by new conceptualizations in both domains.

Strodtbeck (1951) developed the Revealed Differences Technique for the study of husband-wife interaction. Initially the husband and wife were separately asked to rate or make choices on a series of neutral questions. The couple was then asked to compare and reach a joint decision on the ratings and choices. This technique provided an interaction stimuli from which ratings of the couple's communication patterns could be made. Strodtbeck applied the Bales' (1950) interaction categories in rating husband-wife interaction in this setting. He found that the partner who spoke the most tended to win more of the final decisions while the partner who spoke the least showed passive agreement with overt signs of aggression and frustration. In a study of father-mother-son triads, Strodtbeck (1954) used the Revealed Differences Technique to compare power relationships within the family to those of ad-hoc groups. Rating discussions of each members' response to possible solutions of parent-son conflicts, he found that families in obvious disagreement tried to give the impression that they never really disagreed.

Of particular interest and concern to family researcher's is consideration of those studies which attempt to differentiate the families

of normal and clinic groups in terms of interaction.

Fisher, Boyd, Walker and Sheer (1959) in one of the earliest studies using the interaction approach with families compared parents of 20 normal, 20 neurotic and 20 schizophrenic adult males using interaction as well as individual measures. Scoring the Rorschach with the Fisher Rigidity Scale, parents of neurotic and schizophrenic males were significantly more rigid than the parents of normals. In this study, the authors were able to differentiate the parents of neurotics and the parents of schizophrenics only through an interactional analysis. During family discussion, parents of neurotics disagreed less, talked more and communicated with more clarity than the parents of schizophrenics. The authors stressed the usefulness of direct measures in assessing family functioning and differentiating the patterns of behavior of different clinic groups.

Levinger (1959) presented normal and clinic families with problem tasks and joint TAT stories requiring their mutual participation in reaching agreements and solutions. Rating interaction patterns with the Bales' technique, he found that clinic mothers exhibited significantly more negative affect and participated more often in family discussion than clinic fathers or normal mothers. These findings were among the first experimental results supporting the dominant mother-passive father hypothesis thought to be operating in certain clinic groups. They also contributed to further research concern with the possible effects of parental role-reversal on child behavior.

The data on parental role-reversal and dominance has increased but has also been considerably less clear-cut than the results of the early Levinger study. Farina (1960) and Farina and Dunham (1963)

confirmed the dominance hypothesis with parents of schizophrenics. Using a modified Revealed Differences Technique they tested parents of 12 poor premorbid schizophrenics, 12 good premorbid schizophrenics and 12 parents of hospitalized tuberculosis patients (all adult males). Results indicated that paternal dominance was associated with good premorbid adjustment while maternal dominance was associated with poor premorbid adjustment. It was also found that parents of schizophrenics showed more conflict than the control group with the poor premorbid schizophrenics displaying the most conflict.

Caputo (1963) using a similar method tested families of schizophrenics and normals for dominance and role-reversal. The results of this study did not differentiate the two groups in terms of role dominance but did indicate that normal families shared authority more than the schizophrenic families.

Singer (1966) tested 24 families, each including both parents, a schizophrenic child (mean age, 19.8) and a normal sibling (mean age, 17.2). Patent-patient and parent-sibling triads were asked to solve questions from the Comprehension and Similarities subtests of the Wechsler-Bellevue Intelligence Scale. The major theoretical question investigated through this type of experimental design is that if pathological patterns of family functioning are operating in such families, are they specific to the parent-patient interaction in contrast to the parents' interaction with their non-patient child. A more basic question implied by this investigation is how does it happen that all siblings are not presenting the same symptoms as the diagnosed schizophrenic.

Recorded discussions under each condition were compared for problem-solving efficiency, mutual support patterns and parent-child sex-role alignments. Contrary to predictions, the two triads displayed equal efficiency, parents supported both children equally and parents were equally dominant under both conditions. The schizophrenic child was more supportive of parents than were the normal siblings while general discord was more prominent in the parent-patient triads than the parent-sibling triads.

These results indicate that there need not be a breakdown of traditional parental roles for the occurence of a severe pathology in a family member. The importance of the intraparental relationship in the study of the patients' family is also indicated.

More recently, Leighton, Stollak, and Ferguson (1970) studied the communicative and interactive styles of eight normal and seven clinic families (each containing a male child between the ages of eight and thirteen referred for underachievement and/or lack of behavior control in the school). Tape recordings were made for each family as they performed a series of social tasks designed to involve all family members as much as possible. The recordings were scored for the following behaviors: 1) total number of times each family member spoke, 2) total length of time each family member spoke, 3) average duration of speech for each family member, 4) total number of times any one family member was interrupted, 5) number of instances of simultaneous speech (two or more family members speaking at once). Analysis of these variables provided concrete measures of dominance patterns and clarity of communication in the family. Results showed that clinic mothers spoke more often, for a greater length of time, and for longer

duration than the clinic fathers. In the normal families, the father spoke more often and for a greater total length of time than the normal mother while their average duration of speech was approximately equal. The clinic child spoke more often and for a greater length of time than the normal child with instances of interrupting and being interrupted greater for the clinic child. As a whole, clinic family members showed more instances of simultaneous speech and total interruptions than normal family members. The variables analyzed in this study provide important indications of how the communication process falters in the clinic families studied. An unacceptable power hierarchy (mother-dominance) seems to lead to a high incidence of interruptions and simultaneous speech among clinic family members. It is as if individual family members must resort to disruptive techniques in order to gain a voice in family decisions. This cycle of disruptive interaction contributes to an eventual breakdown of communication within these families.

Ferreira, Winter and Poindexter (1966) used a group of quantitative variables to analyze the interaction of 50 normal and 76 clinic family triads (16 with a schizophrenic child, 16 with a delinquent child and 44 with a maladjusted child, (children were all at least 9-1/2 years old). This is the first of numerous studies to be cited which attempt to get at the question of whether different disturbance patterns in the children are related to different styles of interaction in the family. They required each of the families to reach agreement on Family TAT stories. The normal and clinic groups did not differ on measures of who talked the most or in overlap and equality of decision-making. Their data revealed that the clinic groups showed the greatest amount of silences (schizophrenic and delinquent families having the most),

clinic families required significantly more time to complete the task, and the schizophrenic child spoke significantly less than other family members.

In a similar study, Ferreira & Winter (1968) included the amount of explicit information exchanged along with the percentage of time spent in silence between normal and clinic families. Significant difference was found between normal and clinic families on both variables. The amount of explicit information exchanged among members of clinic families was significantly less for all family members. The fact that the decrease involved all family members equally was interpreted by the authors as a breakdown in communication characteristic of the whole family rather than any single member. They also interpret the greater use of silence among clinic families as an expression of the relatively lower efficiency of their decision-making process.

Ferreira & Winter (1968) summarize a large body of research on a group of quantitative variables in terms of the family pathology cycle which they indicate:

"In comparison with normal families, it has been observed that abnormal families have:

A) Less spontaneous agreement, which leads into, and in part causes less efficient family decisions, as expressed in the observations of (B) and (C) below.
B) Less choice-fulfillment of family decisions in part from (A) above, and in part from inadequate information exchange (H), and leading to lower individual satisfaction (D).
C) Longer decision time which again stems in part from (A), and in part from (F), longer relative silences, and (G) prolonged talking-time. It also leads to (D).
D) Lower individual satisfaction or happiness, resulting from the frustrations inherent in (B) and (C) above, and leading to (E).
E) More anger, hostility, fear, etc. in individual family members, leading to their expression in (F) of greater silences, and less self-revealing information exchanged, perhaps also to (G), longer talking times.
F) Longer silences, absolutely and relatively, possible result and expression of (E) greater negative feelings of anger, fear, etc. but as such leading to (C) longer decision time and possibly

facilitating (H), less exchange of information among family members.

G) Longer talking time, possibly with the same antecedents (reflecting the long-noticed silences), and with the same consequences as (F).

H) Less explicit information exchanged among family members resulting from (E), (F), and (G), and leading immediately to (B) less choice-fulfillment of family decisions, and, in the long course of family life to (A) lower spontaneous agreement."

Ferreira and Winter (1968) undertook another study to see if the findings of research derived from family triads where abnormal families were defined as those in which the child has been identified as a patient would hold for a much looser definition of family abnormality. Family tetrads were tested with abnormal families being those where simply emotional problems were acknowledged whether atributed to any individual member (identified as a patient) or to the family group. 36 normal and 49 abnormal family tetrads were tested with a Revealed Differences Technique as used by the researchers with family triads. The variables tested were also the same-spontaneous agreement, decision-time and choice-fulfillment. Normal families replicated the findings with triads showing significantly greater spontaneous-agreement and less decision-time than abnormal families. In the abnormal tetrads with one child identified as "patient", it was found that the "well" child has a greater amount of spontaneous agreement with parents than the child identified as "patient". The results of this study indicate that these variables can clearly distinguish normal from abnormal families using this broader criterion of family abnormality.

Schulman, Shoemaker and Moelis (1962) focused on one aspect of child behavior (aggression) and two aspects of parental behavior (frustration and model) in a study of family interaction in the playroom setting, children were all males between 8 and 12 years of age.

The authors tested two major hypothesis: 1) parents of conduct-problem children will exhibit significantly more control over the behavior of the child than will parents of non-conduct-problem children and, 2) the parents of conduct-problem children will exhibit significantly more aggression between themselves than will the parents of non-conduct-problem children. These hypothesis follow from the social-learning theory model of frustration and aggression and the modeling process. Five behavior-rating categories (parental domination, parental rejection, parent takes over, parent hostile to child, parent gives subtle direction) were used to assess the degree of parental control over the child. Another four categories were used to rate the frequency of aggression between parents (parents argue, dominance, hostility between parents, criticism). In addition, after each interaction session, raters scored families using six scales characterizing the families in terms of overall effectiveness, cooperation and hostility between parents, rejecting behavior by parents, a love-hostility dimension, and an autonomy-control dimension. The behavior-rating categories of parental hostility and rejection towards the child indicated that the parents of conduct-problem children were more hostile and rejecting of their children than the control group parents. These results were confirmed by significant differences on the rejecting continuum and the love-hostility continuum of the rating scales. The inter-correlations between these significant variables was quite high indicating that a single factor may be operating upon which hostility and rejection have high loadings. The authors present this hypothesis considering the findings of previous research (Becker, Peterson, Hellmer, Shoemaker, and Quay, 1959) that parents of conduct-problem children are themselves more maladjusted and more freely

exhibit their hostilities.

The two major hypothesis tested by the authors were not confirmed by the results of the study. The control and conduct-problem parents did not differ on controlling behavior over their children. The authors view this as an inhibiting effect of the experimental situation on the pattern of excessive control by conduct-problem parents indicated in previous research. The second hypothesis which predicted a greater amount of conflict and hostility between parents of conduct-problem children compared to controls also was not confirmed. The data indicated that interaction of any kind was very small between parents of either group. This seemed to reflect the nature of the playroom task which required the parents to keep the child interested in the job of completing imaginative stories. In this context it may be possible to view the hostility that might have been felt by the parents for one-another as directed toward the task and the child. This explanation is particularly meaningful in view of the significant amount of hostility-rejection towards the child in the conduct-problem group. The results of the dominance variable, though not significant, demonstrated a trend among the parents of conduct-problem children to attempt to dominate and control the behavior of one-another. Unfortunately, the authors do not report whether the frequency of the behavior is greater for the father or mother.

The outward expression of hostility has been a topic of particular interest to family researchers. An important finding in this area is that not only do clinic families express more hostility in their interaction than control families but that families with different types of clinical problems can be differentiated by the manner in which they

express hostility.

In a study of normal, maladjusted, schizophrenic and delinquent family triads by Winter et al (1966), Family TAT stories were scored for amount of weighted hostility and overt hostility. Weighted hostility scores were obtained by using the Hafner-Kaplan (1960) Scale for the analysis of hostile content and dividing the sum of these scores by the total number of words used in telling the story. The percent of overt hostility was derived from the Hafner-Kaplan Scale and in this case consisted of the number of overtly hostile themes divided by the total number of hostile themes. In terms of weighted hostility, the maladjusted and delinquent groups produced significantly greater scores than the normal and schizophrenic families. The schizophrenic family triads scored the lowest of all groups on weighted hostility although their score was not significantly different from that of the normal group.

On overt hostility, the only significant difference was between the normal and maladjusted families with the maladjusted families scoring significantly higher. Delinquent families scored almost the same as the normal families on overt hostility and both of these groups were intermediate between the high scoring maladjusted and lowest scoring schizophrenic families.

The results of this study are particularly interesting in terms of the differences indicated between clinic groups in expression of hostility. In this situation, maladjusted families performed in a manner indicating that their motivational systems and fantasies are heavily imbued with hostile preoccupations which are outward in nature. The delinquent families had the highest scores for weighted hostility

in this situation yet it is expressed in a much more covert manner. Findings for the schizophrenic families were the most surprising. The likelihood of these families being devoid of hostility seems to contradict clinical experience. Here, the authors hypothesize that hostility in schizophrenic families is either far removed from the level of explicit expression as measured by the Hafner-Kaplan Scale or that these families have a strong mechanism to disengage emotionally when negative feelings threaten to come forth. These findings lend support to further investigation of the possibility that schizophrenia is a unique syndrome apart from a continuum of pathology.

In a brief report of an extensive study of family interaction with normal and maladjusted family triads, Hutchinson (1969) discusses his findings on power position of family members and its relation to hostility. In triadic interaction, fathers of disturbed males (ages 14-17) have the highest power score of all family members with sons having the lowest power score in this situation. The mother of disturbed males are high in hostile and status deflating acts in discussion with the father alone and in the three person discussions. However, the verbal acts of the mother take on a different nature in discussions involving the son alone. Expressions of hostility are significantly less while she gains approximately three-fourths of the total power score available in the mother-son discussions. For the father in the father-child discussions hostility increases and the power score of the father remains high.

A general investigation of family interaction was undertaken by Stabenau, Tupin, Werner and Pollin (1965). Families with a schizophrenic, delinquent and normal child were tested with direct and indirect measures

of functioning including the Revealed Differences Technique, the Object Sorting Test and the Family TAT. A normal sibling was also present in the interaction situation for each group.

Results of the study tended to differentiate the functioning of these groups in three major areas: 1) family organization and roles, 2) communication patterns and thought disorder, 3) symptomatology and parent-child interaction. Delinquent families seemed to lack organization and clear role differentiation. There were no fixed roles and responsibility for carrying out those activities necessary for stability and continuity in these families was unclear. In the schizophrenic families, parents operated from a position of power and control which often resulted in role distortion, isolation and domination between the family members. Rigidity of the family structure was most characteristic of the schizophrenic families.

Compared to normal families, members of the delinquent and schizophrenic families exhibited individual disturbances in thought processes as well as impaired communication at the family level. Reduced conceptual clarity as measured by the Object Sorting Test was characteristic of members of both clinic groups. The authors indicated that impairment of communication on a family level seemed to be related to impairment of conceptual abstraction among individual family members.

Parent-child interaction in the delinquent families was generally superficial and impersonal. The demand was for expedient action with parental rejection occuring if the child failed to meet expected "standards". There was also a very poor control of affect and open conflict among family members. In contract, the schizophrenic families were characterized by overcontrol of affect in parent-child interaction.

Close adherence to external standards was also most frequent in the schizophrenic families.

Comparisons of differential parental behavior toward the abnormal and normal sibling in the clinic groups cannot be made in this case because the design of the study involved both children in the interaction setting with the parents.

In a continuation of the content analysis method of viewing interaction data, Winter and Ferreira (1967) report on a study of family interaction with normal, maladjusted, schizophrenic and delinquent triads (all children were at least 9-1/2 years old) using the Bales' Interaction Process Analysis categories. Family discussions towards making-up stories for three TAT cards were rated using the 12 IPA content categories. Four major areas of content were represented with the 12 categories: 1) social-emotional positive reactions, 2) task area attempted answers, 3) task area questions, 4) social-emotional positive reactions. On the total amount of interaction, normal and maladjusted families had the highest scores and were significantly differentiated from schizophrenic and delinquent families with the schizophrenic group having the lowest amount of total interaction. Of the four major content areas, only task area questions differentiated between groups with schizophrenic and delinquent families asking a greater percentage of questions than the normal and maladjusted families as a whole.

The authors also computed a series of deviation scores to measure the evenness of participation for family members in each group. Deviation from equal participation was greatest in the schizophrenic families. All of the deviation measures with significance involve an inequality between the child and parents with no significant inequality

between the parents.

Three other variables succeeded in differentiating schizophrenic families from the other groups. The schizophrenic families showed the greatest difficulty in control over the group process, a higher index of difficulty in evaluating the TAT stories and the highest index of dependency (asking for help more often than giving it).

It is noteworthy that no differentiation between groups could be made on the basis of either positive or negative social-emotional reactions. The authors maintain that the IPA categories are multi-dimensional in meaning requiring raters to classify behavior on the basis of high order inferences. This factor effects the consistency of results and possibly the inability to differentiate groups on variables such as social-emotional reactions, as might be predicted. This is particularly relevant considering a study cited earlier (Winter, Ferreira, and Olson, 1966) in which specification and scoring of a well-defined hostility content in TAT stories achieved a far better, though not complete differentiation between normal and clinic families on an affect variable. This analysis was also partially successful in distinguishing between the clinic groups involved. This points to the need for precise delineation of the behaviors in question and the use of instruments which allow ratings to be made with as little inference as possible. It also calls for a continual re-evaluation of clinical description of symptomatic behaviors into terms which are tangible in the experimental situation.

Goals of the Present Study:

The present research is not a study of "normal" and "clinic" families as such, but rather a study of interaction patterns of families with a child rated by his teacher as either high or low on behaviors indicative of social maturity and achievement motivation. Families with children rated low on these attributes had never asked for and were never referred for psychological help. In the case of families with children rated high on social maturity and achievement motivation, they were not only normal but positively deviated in the sense of having children who were also rated different from the "average" child.

In the most general sense, the present study questioned whether there would be significant differences in interaction patterns between such family groups. Applying the methodology of previous research, this research represents an exploratory study of the following questions:

Exploratory Question I: Is there a difference between families of children rated "high" and families of children rated "low" on classroom adjustment in the amount of positive or negative interaction displayed?

Exploratory Question II: Is there a difference between individual family members in the amount of positive or negative interaction displayed comparing families of children rated "high" and families of children rated "low" on classroom adjustment?

Exploratory Question III: Is there a difference in the display of positive or negative interaction between individual members of families with children rated "high" on classroom adjustment; and between individual members of families with children rated "low" on classroom adjustment?

METHOD

The families participating in this study consisted of father, mother, and son triads. All families participating in the study were contacted through the cooperation of the Holt School System. The Holt School System serves a middle-size generally lower middle-class community in Michigan. First and second grade teachers from four different elementary schools were asked to rate all of their male students on five scales; self-control, physical ability, self-sufficiency, achievement motivation, and sociability. Teachers were urged to rate the boys independently on each scale and to rate all boys on one scale at a time rather than rating each boy on all five scales at once. A forced distribution method was used for these ratings with teachers asked to place each of their boys along a four point continuum for each scale; low, medium-low, medium-high, high. Teachers were instructed to rate the highestand lowest boys first and then to rate the remaining boys on a normal distribution. See Appendix A for a description of the rating scale used by the teachers.

Three of the five rating scales were considered essential for evaluating classroom adjustment: self-sufficiency, self-control, and achievement motivation. A student rated in the highest category on two of these scales and above the mid-point on the third was considered high in classroom adjustment (HCA). A boy rated in the lowest category on at least two of the three scales and below the mid-point on the third was considered low in classroom adjustment (LCA).

Nine boys in the high-adjustment group and nineteen boys in the low-adjustment group were then observed in the school by trained observers for a total of 64 minutes each, in blocks of 16 minutes over a variety of activities and situations. The sociometric status of each of these boys was also evaluated. (For a complete description and evaluation of these procedures, the reader is referred to Schofield (1970) The behavior observations and sociometric data served as validation procedures for the final selection of boys for the high and low adjustment groups.

Parents of these boys were then contacted by either Dr. Lucy Ferguson or Dr. Gary Stollak and asked if they would be willing to participate in a study concerned with family communication. Assignment to the LCA group was made for families whose sons were first or second grade level in school and demonstrated the described pattern of low social maturity and achievement motivation. This group of families was part of a larger study on the effectiveness of short-term family therapy on increasing the interpersonal abilities of these families, particularly in dealing with the behavior patterns demonstrated by the child. The results of this larger study will be reported in a Doctoral Dissertation by Deidre Conway (1971). The LCA group consisted of 12 families who agreed to participate in the study. All families took part in the interaction sessions prior to the family therapy meetings. At the time of their participation in the interaction sessions, these families were not aware of the exact nature of the additional meetings (family therapy) they had agreed to, or of the criterion they satisfied in being assigned to the LCA group. These families were later divided into a Treatment and Control group for the family therapy study.

Assignment to the HCA group was made for families whose sons were first or second grade level in school and demonstrated a high degree of social maturity and achievement motivation. The HCA group consisted of four family triads who agreed to participate in the interaction sessions. These families were also unaware of the criterion they satisfied in being assigned to the HCA group and were told that the study was concerned with family interaction. All families received $5.00 for their participation.

Interaction Sessions

Families were individually scheduled and seated in a comfortable room arranged very much like a lounge for the interaction session. At the beginning of each session, the family was told that they would be videotape recorded by an experimenter in an adjacent room. The family was also instructed that information obtained from their participation was available only for purposes of data analysis.

Each member of the family was given a copy of the interaction questionnaire and a pencil. A copy of the questionnaire is presented in Appendix B. The experimenter then read the instructions as they appeared on the questionnaire:

> "Though each of you has been given a copy of the form, we would like for you to decide on just one of you to fill it out. We would like each member of the family to participate in the answering of each question, since we are interested in family interaction. Please try to complete the questionnaire in 30 minutes."

The experimenter once more reminded the family that the purpose of the study was to increase our understanding of family communication and

then instructed the family to begin.

Ratings

The questionnaire permitted the observation of the families in two major conditions: social task behavior and family discussion. Videotapes made for each family provided the basis for rating the positive and negative interaction in the setting described. The complete session for each family was content analyzed by trained raters[1] for the following interpersonal categories: 1) affection, 2) non-specific smiling and laughing, 3) praise, 4) active interest, 5) recognition, 6) attentive observation, 7) mutual participation, 8) dependency, 9) disruptive attention seeking, 10) provokes, 11) resistance, 12) criticism, 13) exclusion, 14) evasion. A more detailed description of each category is presented in Appendix C. The first seven categories could be seen to represent positive behaviors and categories 8 through 14 negative behaviors. Verbal and certain non-verbal interaction was examined with this rating system with frequency counts obtained in each of the fourteen categories. Raters used a combination of time and complete statement or action by the family member being rated to define a unit. Time intervals of 5 seconds served as a basic scoring period during which behaviors for each family member were rated. For most of the categories, frequency counts represent one occurence of the behavior. However, for categories 6 and 7, one frequency count was given if the behavior extended over at least half of the standard time interval.

[1]Undergraduates Bruce Laycock, Larry Lerman, and Dee Johnson served as raters.

Each family member was rated individually with family totals for each category obtained by summing across family members. Raters were not aware of the exact nature of the study or of the experimental group to which the family being rated belonged. A sample of the interaction rating sheet is presented in Appendix D.

Raters were trained on a sample of videotapes obtained from a pilot study with family triads using the same questionnaire and setting applied in the actual study. The inter-rater reliability was established during this training and assessed periodically as the actual study tapes were rated. The reader is referred to Conway, 1971, for a complete discussion of the raters' training and reliability measures.

RESULTS

Analysis of the data was initially made for the HCA and LCA families as a whole for each of the fourteen categories rated. For each behavior category scores were summed across family members to obtain family totals. The results of comparisons made in each category are presented in Table 1.

Table 1. Means and t-ratios comparing families as a whole, HCA versus LCA, for average amount of interaction in each category

Category	HCA	LCA	t	p
1. Affection*	.416	.861	-1.13	-
2. Non-specific* smiling and laughing	6.916	5.000	1.21	-
3. Praise	.583	.500	.22	-
4. Active* interest	.333	3.000	-3.64	.001
5. Recognition*	.416	3.750	-3.57	.001
6. Attentive observation	58.000	43.410	1.83	.05
7. Mutual participation	57.91	49.44	1.11	-
Total Positive	124.58	106.30		

*t-tests for non-homogeneous variances

Table 1. Continued

Category	HCA	LCA	t	p
8. Dependency*	1.16	1.91	-.63	-
9. Disruptive* attention seeking	1.00	2.94	-1.46	.10
10. Provokes	.00	.36	-1.71	.05
11. Resistance*	.16	2.16	-2.79	.005
12. Criticism*	.16	1.33	-3.21	.005
13. Exclusion*	.416	4.22	-3.55	.001
14. Evasion*	.583	6.02	-3.46	.001
Total Negative	3.49	18.93		
Total Interaction	128.07	125.23	1	-

The results show that for the first seven categories which reflect positive interaction, the HCA group displayed somewhat more non-specific smiling and laughing, praise, attentive observation and mutual participation than the LCA group. Of these four categories, only the amount of attentive observation was significantly greater (.05) for the HCA group as a whole compared to LCA group. In the remaining positive categories, the HCA group as a whole displayed significantly less (.001) active interest and recognition than LCA families and somewhat less affection.

For categories 8 through 14 which reflect negative interaction, differentiation between the HCA and LCA families as a whole is in the same direction for all categories and significant for six of the seven categories. Specifically, it was shown that HCA families displayed somewhat less dependency and disruptive attention seeking (.10),

and significantly less provocation (.05), resistance (.005), criticism (.005), exclusion (.001) and evasion (.001).

As noted in Table 2, the variances associated with comparisons in 10 of the 14 categories were not homogeneous. Inspection of Table 2 also indicates the extent to which positive interaction ratings are lumped in the categories attentive observation and mutual participation. These two categories account for 93% of the mean total positive interaction for HCA families and 87% of the mean total positive interaction for LCA families. In order to obtain a better estimate of error variance for comparisons suggested by the exploratory questions and to adjust for the distribution of ratings in the positive categories, summary scores for positive and negative interaction were computed. Thus, a total positive interaction score was computed for each family member by adding their ratings in the seven positive categories. Family totals were obtained by summing these scores across family members in each group. A total negative score was computed for each family member by adding their ratings in the negative categories, 8 through 14, and summing across these scores to obtain a family total for negative interaction in each group.

In the context of the analysis of variance this experiment represents a 2x3 factorial design. Numerical computations for the analysis of variance were carried out separately for the data on positive and negative interaction. Since the exploratory questions suggest specific comparisons to be made, these comparisons were made with two-tailed t-tests using the appropriate error variance from the analysis of variance.[2]

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[2]See B.J. Winer, Statistical Principles in Experimental Design p. 207-208.

Exploratory Question I asked: Is there a difference between families of children rated "high" and families of children rated "low" on classroom adjustment in the amount of positive or negative interaction displayed? Comparisons between the HCA and LCA families as a whole for the average amount of positive and negative interaction were made with the results presented in Table 2.

Table 2. Means and t-ratios for average amount of positive and negative interaction displayed by HCA versus LCA families as a whole.

Comparison	HCA	LCA	t
Positive Interaction	124.58	106.30	2.15*
Negative Interaction	3.49	18.93	-3.13**

*p .05 **p .01

The results show that as a whole, HCA families displayed significantly more (.05) positive interaction and significantly less (.01) negative interaction than the LCA families as a whole.

Exploratory Question II asked: Is there a difference between family members in the amount of positive or negative interaction displayed comparing families of children rated "high" and children rated "low" on classroom adjustment? Comparisons between individual family members in the HCA and LCA group for positive and negative interaction were made. The results of these comparisons for positive interaction are presented in Table 3, and the results for negative interaction in Table 4.

Table 3. Means and t-ratios for average amount of positive interaction displayed by family members, HCA versus LCA group.

Family Role	HCA	LCA	t	p
Father	125.25	117.66	1	-
Mother	125.25	119.66	1	-
Son	123.25	81.83	4.86	.002

For positive interaction, the results show that HCA fathers and LCA fathers as well as HCA and LCA mothers do not differ significantly from one another in the amount of positive interaction displayed. However, HCA sons displayed significantly more (.002) positive interaction than LCA sons in the course of family interaction.

Table 4. Means and t-ratios for average amount of negative interaction displayed by family members, HCA versus LCA group.

Family Role	HCA	LCA	t	p
Father	2.00	14.33	-2.50	.02
Mother	.75	9.75	-1.82	.10
Son	7.75	32.83	-5.09	.002

The results show that HCA fathers displayed significantly less (.02) negative interaction than LCA fathers, HCA mothers displayed significantly less (.10) negative interaction than LCA mothers and, HCA sons displayed significantly less (.002) negative interaction than LCA sons.

Exploratory Question III asked: Is there a difference in the display of positive or negative interaction between individual members of families with children rated "high" on classroom adjustment; and between individual members of families with children rated "low" on classroom adjustment? Analysis of the data for this question required a series of comparisons of individual family members within the HCA group and of family members within the LCA group. Results of these comparisons for positive interaction are presented in Table 5. and negative interaction in Table 6.

Table 5. Means and t-ratios for average amount of positive interaction comparing family members within the HCA group and family members within the LCA group.

Comparison		t	p
HCA: Father vs. Mother		No Difference	-
125.25	125.25		
HCA: Father vs. Son		1	-
125.25	123.25		
HCA: Mother vs. Son		1	-
125.25	123.25		
LCA: Father vs. Mother		1	-
117.66	119.42		
LCA: Father vs. Son		3.44	.002
117.66	81.83		
LCA: Mother vs. Son		3.61	.002
119.42	81.83		

For the HCA group, the results show that there are no differences between fathers, mothers and sons in the display of positive interaction. An equality is demonstrated between all three family members in contributing to the display of positive interaction. For the LCA

group, the results show no differences between fathers and mothers indicating that the LCA parents are essentially similar to one another in the display of positive interaction. However, LCA sons displayed significantly less (.002) positive interaction than their fathers and mothers.

Table 6. Means and t-ratios for average amount of negative interaction comparing family members within the HCA group and family members within the LCA group.

Comparison		t	p
HCA: Father vs. Mother		1	-
2.00	.75		
HCA: Father vs. Son		1	-
2.00	7.75		
HCA: Mother vs. Son		1	-
.75	7.75		
LCA: Father vs. Mother		1	-
14.33	9.75		
LCA: Father vs. Son		-3.07	.002
14.33	32.83		
LCA: Mother vs. Son		-3.83	.002
9.75	32.83		

Within the HCA families, these results show no significant differences between fathers, mothers, and sons in the display of negative interaction.

In the LCA families, no differences were found between fathers and mothers in the display of negative interaction. LCA sons did, however, display significantly more negative interaction (.002) than their fathers and mothers.

DISCUSSION

The Interaction Rating Scale

Inspection of the mean ratings for each of the 14 behavior categories (see Appendix E) indicates the differential effectiveness of each category. A major difficulty with the seven positive categories was the extent to which ratings were lumped in two of the categories, mutual participation and attentive observation. Whether or not the distribution of ratings in the positive categories is an adequate characterization of the interaction of the HCA or LCA families is unclear. It may be an artifact of the difficulty in ascribing behavior to the positive categories. It is possible that behavior which did not "fit" any of the first five categories was placed into attentive observation or mutual participation because of the relatively broad criterion for behavior rated in these two categories. Specifically, it is the descriptive validity of each of the positive categories which may be reflected in the distribution of these ratings. Accurate description and measurement of positive behaviors in the family situation has traditionally received far less research consideration than that given to pathology. The need for extensive research of the positive dimensions of family functioning is quite clear. It must be recognized that to describe a "healthy" family as one devoid of various negative behaviors is incomplete.

There are a number of possible explanations for the greater amount of affection, active interest and recognition displayed by the Experimental families in this study. A common explanation for similar results with "clinic" families is their motivation to appear normal despite being identified as a family with problems. This explanation is less applicable to the LCA families in the present study because they did not consider themselves abnormal or had never explicitly been identified as such. However, the effects of being observed for psychological research in a university community must be considered relevant, particularly since this group of families is from a relatively rural, non-academic background. If difficulty in communication is a more prominent aspect of life for the LCA families, it is reasonable to expect that they would be more sensitive to the experimental situation with a tendency to over-compensate for interpersonal difficulties between family members. Consideration must also be given to the possibility that greater expression of these particular behaviors may be indicative of the real efforts these families do make in trying to establish less threatening grounds for interaction with one-another and the extent to which they must engage in explicitly supportive behavior to establish these grounds. In this context, it seems as though the HCA families have a greater capacity for focusing on the task presented to them with confidence about positive support between family members and less need to express this support explicitly.

The results of comparisons for the seven negative categories indicates the superiority of this dimension in differentiating between the two groups of families studied. The consistency of the results for

each of the negative categories is quite clear. While these findings are consistent with research with "clinic" families, specific patterns are indicated for the difficulty the LCA families had in this situation. The similarity between the LCA families in this study and "clinic" families as previously researched (e.g., Ferreira and Winter, 1968; Leighton, Stollak, and Ferguson, 1969) is the general difficulty the families have in communicating with one-another on a positive level and the high degree of negative behaviors which are manifested by family members. The LCA families in the present study demonstrate negative behaviors which indicate that difficulties frequently come into the open (provocation, disruptive attention-seeking, criticism) but are actively defended against (resistance, exclusion, evasion). Like "clinic" families in previous research, the LCA families demonstrate a cycle of frequently arising conflict, poor control over negative affect, and reversion to defensive behaviors in dealing with these disturbances. In comparison to the HCA families, the role of these negative behaviors in communication patterns for the LCA families is quite clear. It is important to note that the two groups did not differ in the total amount of interaction of a social-emotional nature. What the data from each behavior category indicates, is the extent to which negative affect dominates the interpersonal involvement of LCA families compared to HCA families.

In terms of the research goals of experimentation with the family as a unit, the results of this study show that clear differentiation can be made between families of children rated "high" and families of children rated "low" on social maturity and achievement motivation. Each family triad was presented with the same situation and stimuli

for interaction. Through these experimental procedures, certain conclusions can be made about the differences between these two groups of families in their patterns of interaction. The rated verbal and non-verbal behavior, summarized along the positive and negative dimensions, was examined with respect to its bearing on two major questions: 1) The variables of family interaction associated with the functioning of families as a whole for the two groups and, 2) The variables of family interaction associated with a specific family role for the two groups.

Families as a Whole

The data on positive and negative interaction for families as a whole reveals the first level of differentiation between the HCA and LCA groups. It was shown that HCA families display more positive interaction in the course of communication with one another than the LCA families. It was also shown that Contrast families as a whole display less negative interaction than LCA families in this situation.

The patterns displayed by the HCA families indicate their similarity to "normal" families in interaction research. "Normal" family members have been shown to be more at ease with one another and the flow of communication characterized by a greater amount of spontaneous agreement, greater individual satisfaction with a greater exchange of information compared to "clinic" families (e.g. Ferreira and Winter, 1968). In addition, HCA families appear to be capable of focusing on the task presented to them with confidence about positive support from one another. The fact that HCA family triads displayed a greater amount of positive interaction and less negative interaction than LCA family triads in this study supports the conclusion that

familial communication is experienced more positively by HCA families.

The finding that LCA families as a whole displayed less positive and more negative interaction than HCA families indicates the dysfunctional characteristics of interaction at the family level for this group. In terms of the content of interaction, the LCA families display patterns similar to "clinic" families in previous research. "Clinic" families have been found to experience the interpersonal family situation more negatively and with less individual satisfaction (e.g. Ferreira and Winter, 1968). The present study indicates the difficulty among LCA families in controlling the expression of negative affect, a finding characteristic of "clinic" families.

The empirical findings on families as a whole reveal certain aspects of the relationship between positive and negative interaction for HCA families compared to LCA families. It seems clear that HCA families can relate to one another with greater ease and mutual involvement, minimizing the display of negative interaction in the course of communication. It may be that these families came into the experimental situation with basically positive expectations about one another and their ability to function as a family unit.

In the LCA families, a self-fulfilling prophecy of negative expectations seems to be operating. The interpersonal family situation may be essentially threatening, which makes normative patterns difficult to adopt or unsatisfactory to the needs of individual family members in this setting. The reversion to defensive patterns tends to perpetuate rather than resolve these conflicts. The exact nature of these relationships is an area for future research to investigate before a clear understanding can be reached of where the chain of communication

breakdown originates in the LCA families. A question also remains before family researchers as to the negative expectations based on past experience which possibly preclude the breakdown of communication in these families. That is, there may be highly negative apprehensions among LCA family members towards the prospect of dealing with one-another in a direct, interpersonal situation.

Family Role

There are two major differences to be viewed with respect to family role as it functions in HCA and LCA families. Since differences were found between these two groups in the display of both positive and negative interaction it is important to examine: 1) The manner in which family role operates between each of these groups and 2) the differences between individual members within the HCA and LCA groups according to family role.

Differences between individual family members in the HCA and LCA families according to family role revealed a number of patterns differentiating the two groups. The results of these comparisons for positive interaction showed that HCA and LCA fathers as well as HCA and LCA mothers did not differ from one another in the amount of positive interaction displayed. However, LCA sons were found to display less positive interaction than HCA sons in the family triad situation. This finding is the first indication of the differential involvement of HCA and LCA sons in the family situation.

Parents in the two groups were essentially similar to one another in the display of positive interaction. It is primarily the sons in the two groups who account for overall differences in positive

interaction at the family level. Specifically, it is the smaller amount of positive interaction displayed by LCA sons which amounts for the major differences between the HCA and LCA families as a whole. This analysis reveals the first major difference between HCA and LCA family members in their involvement in family interaction. Analysis of positive interaction alone, however, does not indicate the contribution of all family members in the dysfunctional cycle operating in the LCA families.

The data for negative interaction are quite explicit. Differences were found between the HCA and LCA family members for all three family roles. That is, LCA fathers, mothers and sons each displayed more negative interaction than their HCA counterparts in this situation. Although all three comparisons were significant, the HCA and LCA sons showed the greatest difference followed by HCA and LCA fathers and finally, HCA and LCA mothers. These findings are particularly relevant to understanding the nature of family involvement in the LCA families compared to the HCA families.

Data from these comparisons reveals the extent to which all family members in the LCA group contribute to the patterns of negative content behavior. They also indicate the extent to which individual needs are handled defensively by all members of the LCA family. Finally, the results of these comparisons support the conclusion that dysfunctional communication operates among all family members in the LCA group and is not specific to LCA sons alone, although it may be primarily "pulled" by them.

Data regarding the manner in which family role operates within the HCA and LCA groups provides useful information in explaining the

nature of individual involvement for the two groups. The basic question posed here is whether or not any one family member is responsible for more of the positive or negative interaction in these families. No differences were found between individual family members within the HCA families in the display of positive interaction. An equality existed such that each member contributed equally to the positive content of family interaction. This same pattern was found between HCA family members in the display of negative interaction.

In the LCA families, differences were found between family members in the expression of both positive and negative interaction. In both cases, the inequality involved a parent-child dichotomy. LCA fathers and mothers did not differ from one another in the display of positive or negative interaction. It was found that LCA parents displayed more positive and less negative interaction than their sons. The communication patterns of LCA sons in the family triad can thus be characterized as contributing the least amount of positive interaction and the most negative interaction compared to their fathers and mothers in this situation.

An important aspect of these findings on family role in the HCA and LCA families has to do with the opportunity for interaction on a positive level, particularly for the sons. The presence and behavior of sons seems to be handled quite differently in the two groups of families. HCA sons share equally the possibility of being involved in family interaction in a positive way. The direction in these families seems to be one of mutual involvement for all family members on a positive level as much as possible. The presence and involvement

of HCA sons in the family triad is clearly an important aspect of the equalitarian nature of functioning at the family level for this group.

In LCA families, the father and mother dominate in the display of positive interaction. The present findings indicate that LCA sons have much less of an opportunity to be involved in family interaction on a positive level. Whether this is a result of conscious efforts by LCA parents to control the child's behavior or a result of underlying attitudes about the child's role in the family is not clear. It is quite probable that LCA sons in the present study responded to minimal involvement with their parents on a positive level by attempting to break into the communication patterns through negative behaviors. It is as if their presence can be felt only if they assert themselves in a disruptive manner. These negative self-assertions by the LCA sons may be the starting point for an increase of negative interaction among all family members. Negative interaction was most often expressed by LCA sons. However, it may be that the negative behavior of LCA sons provides an indirect outlet for the negative feelings of LCA parents in this situation as well. The display of negative interaction may be the only way in which LCA family members can express their needs to one another, that is, in a defensive or indirect manner.

It should be noted that the pattern of inequality demonstrated in the LCA families does not fit the traditional definition of parental dominance or parental role-reversal. No patterns of this kind were indicated by the analysis. It can be concluded that mothers and fathers in both groups contributed equally to the positive and negative content of the interaction. The need for future research which applies content as well as quantitative variables in assessing these patterns is clear.

Such designs are necessary before we can clearly understand the nature of psychological involvement in the two groups of families studied.

The observed data of this study bring us back to the basic question posed by family interaction researchers. It has been shown that differentiations can be made between a sample of family triads with a son rated "high" on social maturity and achievement motivation and a sample of family triads with a son rated "low" on these attributes. Differentiations were not only demonstrated for the HCA and LCA sons but also between the interaction of parents in these two groups and for the two groups of families as a whole. In this context, a major theoretical contention of family research has been supported. That is, that the member of the family with an identified problem is not solely responsible for the display of dysfunctional communication in the family situation. Equally important is the support which this study lends to the view that the maladaptive behavior manifested by a family member is intimately related to unresolved needs and dysfunctional patterns operating in the family as a whole. Finally, the results of this study provide support for the view that a relationship exists between behavior problems in the school setting and the interactive style of the child's family.

At the family level, the nature and frequency of negative behaviors presented a more consistent pattern differentiating the two groups than did positive behaviors. It could be said that the difference between the HCA and LCA families in their interactive style is primarily a result of poor control over the display of negative behaviors and defensiveness by the LCA triads. This pattern was also the most

consistent in distinguishing the two groups at the level of individual family members. An important exception to this pattern is the conclusive difference between "high" and "low" rated sons in the display of positive interaction. A more precise understanding of these affective variables may be an essential factor in applying diagnostic and therapeutic techniques to families with children presenting problems in their classroom adjustment, before these difficulties reach "clinic" proportions.

It may be that the beginnings of a self-fulfilling prophecy of failure with these children could most effectively be interrupted and remedied within the family context.

Conclusive statments about the findings of this study must be considered with caution. The difficulty indicated with the rating scale and the small number of subjects involved in the study makes any generalization of these findings to similar populations of families tentative. The major contribution of the present study may lie in the direction provided for further research with much larger subject pools and more exhaustive time samples of their behavior. The subtleties of the interparent as well as the parent-child relationship have been indicated and point to further research for clarification. Finally, the results of this study provide encouraging prospects for the use of content variables in family research. It is clear that their use is necessary for a dynamic picture of the psychological involvement of family members in their interaction with one-another.

SUMMARY

This study was undertaken to determine whether families with a son rated by his teacher as either "high" or "low" on classroom adjustment (behaviors indicative of social maturity and, achievement motivation) could be differentiated on the basis of their communicative patterns. Specifically, it was questioned whether there would be significant differences in the amount of positive or negative interaction displayed between or within such family groups.

The families participating in this study consisted of father, mother, and son triads from a middle-size generally lower middle-class community in Michigan. Sons in the study were all first or second grade students whose classroom adjustment was evaluated through teacher ratings on scales of self-sufficiency, self-control, and achievement motivation as well as behavior observations in the school. From these evaluations, assignment of families to the High Classroom Adjustment group (HCA, N=4) and Low Classroom Adjustment group (LCA, N=12) were made.

Interaction sessions designed to involve the family members in social task behavior and family discussion were scheduled for each family. Videotape recordings of these sessions were content analyzed by trained raters for positive (affection, non-specific smiling and laughing, praise, active interest, recognition, attentive observation, mutual participation) and negative behaviors (dependency, disruptive attention-seeking, provocation, resistance, criticism, exclusion, evasion).

Comparisons between the two groups revealed that HCA families displayed more positive and less negative interaction than LCA families. Comparisons between individual family members in the two groups revealed no differences between HCA and LCA parents in the display of positive interaction while HCA sons displayed more positive interaction than LCA sons. Differences were found between individual HCA and LCA family members in the display of negative interaction with HCA fathers, mothers, and sons each displaying less negative interaction than their LCA counterparts. HCA families were characterized by equal participation of all members in the display positive and negative interaction. In the LCA families, a parent-child inequality in participation existed such that LCA sons displayed less positive and more negative interaction than their parents.

Results of the study provided support for the conclusion that basic differences exist between these two family groups in their interaction patterns. It was concluded that dysfunctional communication was characteristic of all members of the LCA families. It was also concluded that HCA and LCA sons are differentially involved in the family with low-adjustment sons having to rely on disruptive methods for recognition in the course of family interaction.

Implications of the findings in this study for the possible relationship between specific childhood behavior problems and the interaction patterns of the family in which the child is raised were discussed along with practical considerations for diagnosis and intervention before such problems reach "clinic" proportions. In addition, directions for further research were presented, particularly studies which combine affective and structural measures of family interaction.

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APPENDICES

APPENDIX A

Teacher Rating Scales

Instructions to teacher:

Please rate all of the boys in your class on the five scales for which definitions and rating sheets are provided. These are: self-control; physical ability; self-sufficiency; achievement motivation; and sociability. The majority of your boys should fall readily into one of the four boxes on each of the rating sheets. It is not expected that a boy will necessarily fall in the same square on all five scales. That is, a boy ma- be rated low on one scale, medium-high on another, etc. So that the ratings on each scale will be relatively independent of each other, please rate all your boys on self-control, then proceed to physical ability, etc. Although only the end groups are defined for each scale, the scales should be seen as more or less continuous dimensions ranging from "low" through "medium low" and "medium high" to "high". The definitions of the scales are:

1. Self-control

Poor self-control - This boy shows relatively little self-control. He has difficulty following rules, sitting still, and keeping his mind on his work. He may get out of his seat and move about the room, talk when he is supposed to be working, or bother others in the room. He may show angry outbursts, tantrums, or whining when he is displeased. Generally he appears to act on impulse, with little regard for the consequences of his acts.

Good self-control - This boy shows a relatively large degree of self-control, but he is not so controlled or rigid but what he can be socially outgoing with his peers and show aggressive behavior appropriate to boys. He respects rules, pays attention, concentrates on his work, and does not bother others. He shows restraint in his behavior, seems to think before acting. However, he can still be spontaneous and act or express himself when it appears appropriate to do so.

2. Physical ability

Poor physical ability - This boy tends to be awkward and clumsy. He seems to lack the physical coordination you would expect of a boy his age. He may be interested in sports, but is not good at those which require physical coordination. He does not seem to have the makings of an athlete.

Good physical ability - This boy is agile, graceful and well-coordinated in his movements. He does well at games which

require physical coordination; he will probably be a good athlete. He seems to enjoy physical activities and is often chosen for teams on the basis of his skill.

3. Self-sufficiency

In rating on this scale it should be kept in mind that some boys, because the content of the work is more difficult for them, need more help than others. Consideration of each boy's relative ability for doing school work should help on these ratings. For example, a boy of relatively low ability who asks for a moderate amount of help should be rated higher on self-sufficiency than a boy of high ability who asks for the same amount of help.

Low self-sufficiency - This boy does not generally do things on his own. He seeks an unusual amount of help from his teacher and/or peers, much more so than his abilities would suggest was necessary. Whenever things become difficult, he looks to others to tell him what to do or to do his work for him. He has difficulty starting things and carrying them through by himself. He may seek a lot of reassurance and affection from his teacher.

High self-sufficiency - This boy generally goes ahead on his own and does his work without seeking an unusual amount of help from his teacher and/or peers. He can fall back on himself when the going gets rough, and he tends to carry things through to their end. He does not seek a lot of reassurance or affection from others. But he can ask for help or information when it is appropriate to do so.

4. Achievement motivation - These ratings should take into consideraction the boy's relative ability for school work. A boy of lesser ability who aspires to the same heights as a more capable boy should be rated higher on achievement motivation.

Low achievement motivation - This boy shows little motivation to do well in his school work. He does not seem to be very concerned about his performance and does not put forth his best effort. He shows little persistence, giving up easily on a job when difficulties are encountered. His poor motivation does not, however, keep him from being active in class.

High achievement motivation - This boy is highly motivated to do well in his school work. He often shows concern about his performance and tries to do his best. He is persistent, sticking to a job until it is completed, even though he encounters difficulties. He does not appear to be afraid of failing, entering actively into competitive situations.

5. Sociability

Low sociability - This boy is not very interested in spending time with other children. He often chooses to be by himself, and

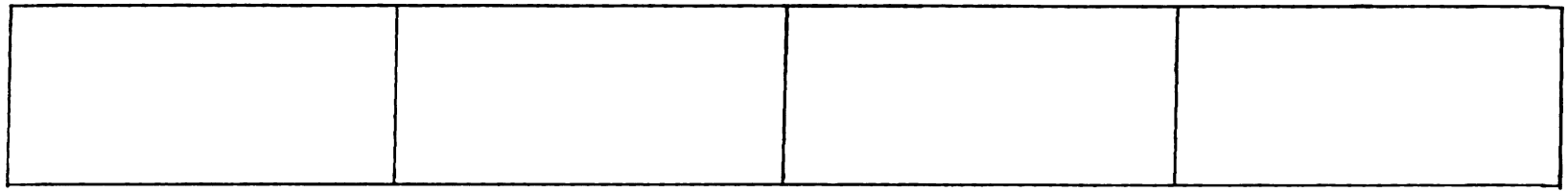
does not seem to have many friends. He may be shy and somewhat of a "loner" or just be interested in things he can do by himself.

High sociability - This boy is always doing things with other children and seems to have many friends. He will always choose to be with a group rather than by himself and always enters enthusiastically into group activities. He is socially out-going and gregarious.

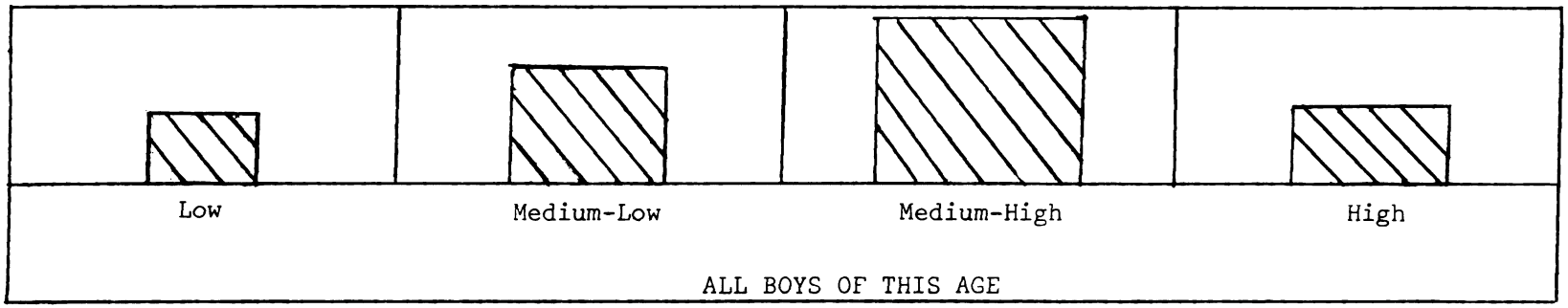
DISTRIBUTION OF RATINGS

Achievement Motivation*

Date_____
Grade_____
School_____
Teacher_____



BOYS OF YOUR CLASS



Your particular class may be different from this; it may be up or down on this scale. Think of your lowest boy and your highest boy; these will be the ends of your class scale. Put them on your scale, then place the rest of the children also in the 4 groups which are roughly the size of the "all boys" scale. For a class with 15 boys, this would be approximately 3 children in the High group, 5 in the Medium High, 4 in Medium Low, 3 in Low; however, your class may have slightly different members in these groups.

*Identical forms used for self-sufficiency, self-control, sociability, and physical ability.

APPENDIX B

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Family Questionnaire

Though each of you has been given a copy of the form, we would like for you to decide on just one of you to fill it out. We would like each member of the family to participate in the answering of each question, since we are interested in family interaction. Please try to complete the questionnaire in 30 minutes.

1. List the names and ages of members of the family who are present.

NAME	AGE
1.	
2.	
3.	

2. Individually, and as a family, what would you like to do if you had unlimited money and freedom?

3. As a family, decide on 2 pictures to draw and who is to draw them (use next two blank pages). Have everyone in the family help draw the pictures.

4. As a family, make up a story about each picture. Have everyone in the family help make up the stories.

5. Discuss the meaning of the proverb, "A rolling stone gathers no moss." Try by the end of 5 minutes of discussion to reach an agreement as to what it means. We would like each of you to have the opportunity to express his or her opinion of what the proverb means, before you reach agreement.

6. What are some of the things that members of the family disagree about? Talk in turn. Father please talk first about areas of disagreement, then mother, then son.

APPENDIX C

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Behavior Categories for Rating Family Interaction

1. Affection: physical or facial expressions of warmth for another family member.

2. Non-Specific Smiling and Laughing: smiling or laughing, not necessarily related to ongoing activity.

3. Praise: direct verbal expressions of praise for another family member's comments or behavior (e.g. "What a lovely picture you've drawn"): explicit physical gestures of approval .

4. Active Interest: involves genuine and active interest in and respect for the feelings, wishes and opinions of others. e.g. "How do you think we should do this Johnny?"

5. Recognition: verbal or non-verbal behavior which indicates a response to or recognition that another person has said or done something toward him. Also includes giving solicited information and help.

6. Attentive Observation: focus of attention (non-verbal) is directed to another's comments or activity. Is with the other both physically and psychologically.

7. Mutual Participation: takes part in an ongoing task or interaction with one or more other family members. May do this through non-verbal behavior,-through offering information (without directive intent) or seeking information which keeps the activity going.

8. Dependency: seeks evaluation, reassurance, help from another before initiating or proceeding with verbal or non-verbal activity. Expresses the need for another's involvement or approval before being able to complete a task or comment.

9. Disruptive Attention Seeking: Verbal or non-verbal behavior which interrupts an ongoing activity or diverts the focus of attention away from the ongoing activity to self.

10. Provokes: Indirect expression of hostility by trying to stir or confuse another as to whether one's intent is friendly or hostile (directly or indirectly implies that a response is sought).

11. Resistance: recognize another's attempt at interaction but actively opposes other's statements or behavior.

12. Criticism: explicitly berates or discredits another.

13. Exclusion: active disregarding of another family member's attempts at interaction in any form.

14. Evasion: avoids interactions with others by physical isolation, passive participation, or by being noncommital.

APPENDIX D

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Family Interaction Rating Sheet

Family Member ______ F______ M______ S

Raiter:
Date:

Affection																											
Non-Spec. Smiling & laugh.																											
Praise																											
Active Interest																											
Recognition																											
Att. Obsv.																											
Mut. Part.																											
Dependency																											
Disr. Attn. Seek																											
Provokes																											
Resistance																											
Criticism																											
Exclusion																											
Evasion																											

Comments:

APPENDIX E

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Summary of Mean Scores in Each Behavior Category for HCA and LCA Family Members

Category	FATHER		MOTHER		SON		TOTAL	
	HCA	LCA	HCA	LCA	HCA	LCA	HCA	LCA
1. Affection	.50	.50	.75	1.66	0.0	.41	.416	.861
2. Non-Specific Smiling, Laughing	6.50	4.58	6.25	8.33	8.0	2.08	6.916	5.00
3. Praise	1.00	.91	.75	.50	0.0	.08	.583	.50
4. Active Interest	.25	4.25	.75	4.08	0.0	.66	.333	3.00
5. Recognition	.25	5.66	.50	3.25	0.0	2.33	.416	3.75
6. Attentive Observation	70.00	48.08	57.25	50.50	46.75	31.66	58.00	43.41
7. Mutual Participation	46.25	52.83	59.00	51.08	68.50	44.41	57.91	49.44
TOTAL POSITIVE	125.25	117.66	125.25	119.42	123.25	81.83	124.58	106.30
8. Dependency	0.0	0.0	0.0	.16	2.5	5.58	1.16	1.91
9. Disruptive Attention Seeking	0.0	0.0	0.0	.58	3.0	8.25	1.00	2.94
10. Provokes	0.0	.50	0.0	.08	0.0	.50	0.0	.36
11. Resistance	0.0	1.08	0.0	1.75	.50	3.66	.16	2.16
12. Criticism	.50	1.83	0.0	1.41	0.0	.75	.16	1.33
13. Exclusion	.50	3.75	.75	2.50	0.0	6.41	.416	4.22
14. Evasion	1.00	7.16	0.0	3.25	.75	7.66	.583	6.02
TOTAL NEGATIVE	2.00	14.33	.75	9.75	7.75	32.83	3.49	18.93