

PERCEPTIONS OF FAMILY MEMBERS AND A FRIEND  
BY DISTURBED AND NORMAL CHILDREN  
AND ONE OF THEIR NORMAL SIBLINGS

by

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## ABSTRACT

In the present study, the Bene Anthony Family Relations Test was used to measure children's perceptions of their family members and a friend. Comparisons were made between the perceptions of: a) a group of disturbed children and one of their normal siblings (clinic pair), b) a group of normal children and one of their normal siblings (normal pair), and c) the clinic and normal pairs of children. No differences were found between the perceptions of disturbed children and their normal siblings or between the perceptions of the two normal siblings. The clinic pair differed from the normal pair in two respects: 1) the clinic pair expressed more negative feelings toward their siblings, and 2) the clinic pair indicated more reliance on their friend. All groups perceived their parents similarly. It was concluded that more attention ought to be paid to the role of siblings and extrafamilial members.

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One of the assumptions in the treatment and understanding of the disturbed child is that the family plays an important part in the etiology and maintenance of the disturbance. A review of the relevant research will show the changes that have taken place in attempting to delineate the relevant variables, resulting in a greater appreciation of the complexity of the child's family environment. It will be seen that three areas which deserve further study are: 1) the perceptions of disturbed children compared to those of normal children; 2) the role of siblings; and, 3) the role of extafamilial members.

The present study used the Bene-Anthony Test of Family Relations to investigate children's perceptions of their feelings toward, and feelings they receive from, their mother, father, siblings and a friend. The test was administered to two sets of pairs of siblings: the clinic pair which consisted of a disturbed child and his normal sibling, and the normal pair in which both siblings were normal. The objective was to explore the differences in perceptions between siblings from the same family (normal as well as disturbed), and between the pairs of siblings from different families.

### General Background

Early attempts to explain emotional disturbance in children were in terms of the effects of various personality and behavioral characteristics of the mother on the child. The methods used were perusal of case histories, information from psychiatric interviews, or psychological testing. Frank (1965) summarized forty years of earlier research that focused on the mother-child relationship, and concluded that there was no sufficient evidence for anyone factor which could distinguish between mothers of

schizophrenics or neurotics and mothers of normals. Though intuitively appealing, the whole question of familial causation of psychopathology had remained no more than a hypothesis (Frank, 1965).

A natural progression from a focus on the dyad of the mother-child was to the triad of mother-father-child. Instead of speaking about a pathogenic mother, the "clinic" family became the unit of discussion. Two theoretical approaches seemed to emerge: 1) that there is unresolved psychological tension between the parents and the disturbed child is used as a scapegoat to reduce the tension, and 2) in more behavioral terms, that the parents present themselves as contradictory models and thus provide a confusing learning experience to the child (Lidz, 1966). One problem with the first approach is that, to substantiate the existence of psychological problems, one has to rely on the validity of psychological tests. For example, Fisher and Mendell (1956) administered the Rorschach, Thematic Apperception Test, and a psychiatric interview to two or three generations of six families and found that, "there seems to be a fairly specific core neurotic pattern which pervades the projective expressions of members of each given family (p.42)". For example, some families shared themes of exhibitionism, some of death, and others were concerned with body image. Opposite results were reported by Murray, Seagull, and Geisinger (1968). In a review of the literature and a study using the Thematic Apperception Test, Murray et al. (1968) found little direct evidence for a core problem revolving around some basic motive when comparing parents or normal and maladjusted children. Vogel and Bell (1960) describe at length the process of scapegoating against the child. Recent evidence comes from Alexander (1973) who found that "normal parents while behaving with their child in supportiveness, did so less

with each other. In contrast, abnormal parents did not behave reciprocally with their child in supportiveness but were strongly reciprocal with each other (p. 227)." On the other hand, Cheek (1970) found the agreement between mother and child highest in the clinic families and agreement between mother and father highest in normal families.

Recently, instead of reliance on psychological assessments to describe parental functioning, the emphasis has been on assessing patterns of communication, verbal and/or nonverbal, observed during actual interaction in the laboratory or in the home (e.g., Alkire, 1969; Donnelly, 1960; and Leighton, Stollek & Ferguson, 1971). Similarly, instead of psychological tensions and core problems the notion of conflict has gained acceptance, especially after the introduction of the double-bind hypothesis as formulated by Bateson, Jackson, Haley and Weakland (1956). Unfortunately, the double-bind hypothesis has received little empirical support (Shuhan, 1967), and furthermore, Kafka (1971) has proposed that double-bind communications may be a normal, supportive mechanism as well as a pathogenic one. A direction suggested by Bugental, Love, Kaswan and April (1971) was to investigate nonverbal as well as verbal messages. Bugental, for example, found that there is more conflict between verbal content and verbal expression, as well as between verbal content and tone of voice in clinic families than in normal families. Another approach is to regard the mother-father-child triad as a unit or system rather than comparing each member individually to the corresponding member of the control triad. Alexander (1973) applied the concepts of systems theory and found support for the notion that the abnormal triad does function as a system and that it operates differently from the normal triad in terms of verbal and nonverbal communication patterns. The abnormal triad generated more communications that tended to destroy the

system, although supportive behavior of the parents toward the child did not differ for the two groups. Leighton, Stollek and Ferguson (1971) reached a similar conclusion; they measured various characteristics of verbal communication, such as the number of interruptions, amount spoken, etc., and found differences between the normal and clinic families which suggested that the communication patterns of the members in the clinic family were less satisfactory than those in the normal family. However, Waxler and Mishler (1971) studying schizophrenic children, concluded that "schizophrenic and normal family climates differ from each other, but primarily when the patient child is present. There are fewer differences between types of families for well sibling comparisons (p. 227)".

Looking at members of the triads individually, a popular hypothesis has been that of role reversal -- i.e., the clinic mother behaves like the normal father, and vice versa, especially in terms of maternal dominance and paternal passivity. Frank (1965) lists thirteen studies that support this view, but notes that, when controls are employed, the differences disappear; both normals and schizophrenics, for example, recall their mothers as having been dominant and overprotective. More recent evidence is provided by Alkire (1969). Measuring the accuracy of verbal messages between members of the triad via telephone, --thus eliminating any nonverbal messages, -- he found that, overall, there were similarities between the clinic mothers and normal fathers, and between clinic fathers and normal mothers. Bugental et al. (1971), concerned with conflicts between verbal messages and nonverbal accompaniments (such as facial expression), observed that clinic mothers produce more conflicting messages than normal

mothers, but found no difference between clinic and normal fathers.

It seems that clear differences between the normal and abnormal triads have not been established. One additional possibility that has been explored is that the parental interaction varies depending on the nature of the child's disturbance.

#### Relationship between Aspects of Parental Behavior and Nature of Disturbance in the Child

In order to investigate this relationship, it is necessary to first describe attempts to define the various categories of disturbance.

A number of checklists have been developed: e.g., Achenbach (1966), Schaefer and Bell (1958), and Sines and Paulker (1969). Indications are, however, that no one scale adequately distinguishes between normal and disturbed children. Schechtman (1970) for example, concludes that "the presence of symptoms themselves is not necessarily indicative of pathology. Rather, the characteristics of the child's parents, his own history of past problems, and the severity of the symptoms displayed might be used as indicators of behavior disorders (p.40)". Zax, Carmen, Rapport, Bleach and Laird (1968) employed such a global approach and found that they could reliably identify the same child four years later. Patterson (1964) made a similar plea stating, "any given group of aggressive children are extremely heterogeneous regarding other aspects of their behavior... combining all aggressive children in a single category would confound any relationship which might exist between parental practises and aggressive behavior (p.336)". In other words, too much information is omitted if classification is determined by the highest factor score only. Furthermore, Dielman, Cattell and Lepper (1971) point out the problem of assuming orthogonality of factors for statistical ease, and state the need for

oblique rotational procedures instead. Evidence of the difficulty of assuming independent categories is supplied by Armentrout (1971) who tried to separate subjects into those with high externalization scores and those with high internalization scores but found that those high on one score were also high on the other.

Other factors influencing classification are social class, sex, and age (Alkire, 1971; Armentrout, 1971; Speer, 1971). The biases of the persons classifying the behavior must also be taken into account: e.g.; Novick, Rosenfeld and Bloch (1966) compared their observations and ratings of a child's behavior with the ratings of the child's parents and found that the parents did not agree with each other's ratings and that little of the disagreement was due to the actual situational variation in the child's behavior. Speer (1971) found a similar effect and suggested that "Perceptions and reactions of several adults in different relationships to and situations with a child must be assessed in order to achieve a comprehensive view of his social and personal adjustment (p.228)." .

Attempts to delineate behavioral categories for the sake of searching for corresponding parental traits have usually relied on four broad categories of child behavior: aggressive, hyperactive, fearful-withdrawn, and poor attention span. Alkire (1969), for example, found that when the school problem was interpersonal in nature (i.e., aggressive or fearful) then verbal communications from mother to father were more effective than those from father to mother, and that the reverse was true if the problem was intrapersonal in nature (i.e., poor attention span or hyperactive). These patterns were reversed for normal children who displayed normal amounts of the various behaviors.

Similarly, Alkire (1971) found that the overtness or assertiveness used in exerting parental social influence and the focus of power in one or the other parent were related to the form of adolescent psychopathology -- e.g., the mother was the focus of parental power in families of aggressive-antisocial and of withdrawn adolescents. Armentrout (1971), in reviewing the research concerned with childrens' reports of parental attributes and internalization (e.g., fearful) or externalization-like (e.g., aggressive) behavior of children, concluded that the results were inconsistent. In his own study, Armentrout found that the degree of maladjustment varied inversely with reports of parental acceptance. Bugental et al. (1971), measuring conflict in parental messages, found a trend for children rated as aggressive to have mothers who produce more conflicting messages, but found no other relationships between referral categories and presence of conflict in parental messages. When studying videotapes of spontaneous interactions, Bugental, Love and Kaswan (1972) found no difference between mothers, but did find a correlation between the behavior of fathers in the waiting room and the aggressive or socially withdrawn behavior of their child in school. A further complication is introduced by Bronfenbrenner (in Becker, 1964), who suggests that optimal levels of parental behavior may vary depending on the sex of the child regardless of other behavioral characteristics.

#### Effect of Clinic Family on Siblings of the Disturbed Child

If the parental interaction in disturbed families can be assumed to be pathogenic, then it becomes necessary to explain why other siblings in the family are not similarly affected. A prominent explanation has been in terms of scapegoating -- i.e., that

there is pathology in the parental interaction and that the resulting tension is relieved by loading negative qualities onto one of the children (Bell & Vogel, 1968). Maxwell Jones (1968) speaks in terms of maintaining family equilibrium at the expense of rejecting one individual and explains that families may resist intervention on behalf of the disturbed child because curing that member would upset the equilibrium. Some scapegoating probably does take place in normal families, but when it does, it is less severe and it does not become stabilized with one child as a continued scapegoat (Bell, 1971).

Few studies have included investigation of the normal sibling of the disturbed child. Waxler and Mishler (1971) in a review of the literature concerning schizophrenic children, stated that:

direct and objective measures of interaction patterns between parents and patient and parents and well siblings exist in only four experimental studies of families with schizophrenic children. In only one of these (Sharan, 1966) is the theoretical hypothesis directly tested by comparing parental interaction toward the patient with the same parents' interaction toward a sibling. (p. 224)

It must be noted, however, that there was no control group of normal families in Sharan's study. In Waxler and Mishler's experiment, which measured aspects of verbal communications, siblings were included, and it was found that parents generally do not act differently toward the patient and the well sibling. Their subjects were all over age fifteen, and some were institutionalized. Haley (1967) with younger subjects, did show that intra-familial speech sequences differ when parents are speaking to the disturbed child as opposed to the normal siblings. Kaplan (1970) found that both the relative age of the disturbed sibling and the stressfulness of the situation were important. The problem child tended to be treated like a younger sibling and, under high stress conditions, the mother



interfered with the problem child by preventing independent responses. In an unusually informative study, Donnelly (1960), after extensive observation in the homes, listed a number of ways in which the disturbed child is treated differently. Like Kaplan (1970), he found more infantilizing of the disturbed child as well as more rejection, distance, less affection, decreased sensitivity to the child's needs, more severe disciplining, less democratic regulations and more reliance on emotion and impulse in dealing with the child; interaction with others was kept at a minimum. He also found differences between the parents, with the father being more ready to satisfy the child's curiosity and to reason with the child, while the mother was more emotionally oriented and impulsive toward the disturbed child.

The above studies suggest that the behavior of the clinic child may at least partially be attributed to differential treatment by the parent. Another possibility is that the well siblings are also affected by the pathogenic environment but respond with different defense mechanisms. Meissner (1970), in his review of sibling relations in the schizophrenic family, lists evidence by Lidz and others which suggests that the well sibling compensates by detaching himself emotionally from the family: "their personalities showed a considerable degree of constraint and constriction (p.2)". Du Hamel and Jarmon (1971) (see also below), found that well siblings placed greater distance between themselves and their parents than either their own disturbed sibling or a corresponding sibling from a normal family.

In order to compensate for the lack of emotional involvement with the family, the well sibling may stress satisfaction from accomplishment rather than intimacy.

Novak and Van der Veen (1970) conclude that:

disturbed children as a group stress the importance of their families, what the family members think of one another and their dependence on each other... . In contrast, the nondisturbed siblings see the family as strong, competent and task-oriented. (p.164)

Another possibility is that the well siblings may seek emotional satisfaction outside the home (Leighton et al., 1971). In general, however, the whole area of the importance of the extrafamilial environment in shaping behavior has largely been ignored. Hess (1969), for example, states:

It seems that we have underestimated the extent to which direct (though diffuse) experience with the environment through interaction with peers, T.C., newspapers, popular music, awareness of social and economic inequality, and other points of contact, directly shape the child's cognition and behavioral strategies and resources. (p.24)

Both Reiss (1971) and Bell (1971) have found differences between the responses of normal and clinic families to the extrafamilial environment in terms of the ability to use cues from the nonfamilial environment and in terms of relationships with the extended family.

### Importance of Perception

Recently, interest has developed in a somewhat less observable but possibly more crucial variable, that of the perceptions of the child. According to Ausubel, Balthazar, Rosenthal, Blackman, Schpoont and Welkowitz (1954):

Although parent behavior is an objective event in the real world, it affects the child's ego development only to the extent and in the form in which he perceives it. Hence, perceived parent behavior is in reality a more direct, relevant and proximate determinant of personality development than the actual stimulus content to which it refers. (p.173)

Similarly, Barwick and Arbuckle (1962) state, "A child's perception of whether his parents accept him is a better indicator of the child's performance than his parents' statements about their acceptance of him (p.50)". Frank (1965) ends his forty year review by proposing that the important dimension "might be the perception of the family members and this might often have little or no relation to the people as they really are (p. 201)".

Goldin (1969) reviewed the literature concerning childrens' reports of their parents' behaviors especially with regard to three factors adopted from Seigelman (1965): acceptance-rejection, psychological control, and punishment. Conclusions with regard to maladjusted normals indicate less feeling of acceptance in eleven out of twelve studies, more feeling of being psychologically controlled, and a view of parents as being more punitive. Methods used were mostly questionnaires and projective tests. None of the studies provided comparisons with well siblings. Du Hamel and Jarmon (1971) used a different technique in which figures representing family members are placed on felt, two at a time, and the amount of figure separation is recorded. Well siblings participated in addition to the disturbed subjects. The normal siblings of the disturbed child placed greater distance between child and parents than the disturbed sibling or the normal child from a normal family. Also, the disturbed child more often placed the child between the parents, whereas their normal siblings more often placed the child figure apart from the parental figures. The disturbed group placed greater distance between the self and another child than the normals. In general, "the disturbed boys did schematize human relationships as more distant than the normal boys, but disturbed boys were not different from their siblings (p.284)".

Recently, Gerber (1973) used the same technique, again with disturbed children, their well siblings and normal controls, but required placements according to themes such as "loving family" or "worried family". Results show no difference for happy themes between the groups, but for negative themes, the mother-child relationship was schematized as significantly more distant by the disturbed group, and, siblings of the disturbed indicated more distance in father-sibling placement than did normal controls.

Novak and Van der Veen (1970) also included siblings in a study of perception. They used the Family Q-Sort technique to test the hypothesis that "the degree of disturbance shown by the child is a function of the family, especially of the degree of family adjustment and satisfaction shown by his view of his family (p.159)". They found that the normal siblings of the disturbed children were somewhat, but not significantly, lower than the non-clinic children, and that both the normal siblings of the disturbed children and the non-clinic children perceived more family satisfaction and adjustment than the disturbed children.

#### The Bene-Anthony Family Relations Test (FRT)

A novel instrument, designed specifically for investigating perceptions of family feelings, the FRT was developed in 1957 by Eva Bene and James Anthony. It will be described in detail because it was the instrument chosen for the present study. The FRT consists of a set of twenty red boxes attached to the back of ambiguously drawn cardboard figures, which are male and female, adults or children, and from which the subject selects figures to represent his family. The boxes look like mailboxes with a slot at the top. There are 86 cards containing statements which are either read by the

experimenter or by the subjects and are then placed by the subject in the box behind the person they describe best. An extra figure, "Mr. Nobody", is included along with the family to receive rejected items which are not seen to apply to anyone in the family. The statements are designed to express feelings which are mild or strong, positive or negative, and either incoming or outgoing (i.e., feelings directed toward the subject or feelings the subject has towards someone else). For example, a mild incoming positive statement is, "This person is kind to me". (See Appendix I for a complete list of statements.)

The advantages of the test are that the format is appealing to children, the scoring is objective and hence interpretation is less speculative, and, because the items disappear into boxes, there is likely to be less of an attempt at even distribution to all members. However, the authors have provided little empirical data and the test has not received the attention in clinical research that it probably merits (Buros, 1959).

The authors gave no results for normal children, but Frost (1969) has made an attempt to provide such normative data. He administered the FRT to 190 eleven-year-old, sixth grade children. The results showed an equal distribution of cards to all members of the family with almost twice as many assigned to the "Mr. Nobody" figure. Siblings were given more negative than positive choices, especially outgoing negative ones. Parents on the other hand, received more outgoing positive choices than outgoing negative ones. Incoming negative choices were mostly given to "Mr. Nobody". Frost also compared the responses of the normal group to those of a small group of delinquents and non-readers. Some clear differences emerged: the delinquent group had less positive references to "father", less negative statements to "mother" and more outgoing

negative statements to "Mr. Nobody" than any other group; the non-reader group dispersed their positive statements throughout the family more so than the other groups and attributed fewer statements to "Mr. Nobody".

Additional comparative data are provided by Kauffman, Weaver and Weaver (1972) and Kauffman (1971). Kauffman (1971) administered the test to twenty normal, twenty-seven school-disordered, and to ten institutionalized emotionally disturbed preadolescent boys. The school-disordered boys were further subdivided into those who had received counselling and those who had not. With regard to responses to parental figures, the only difference was that the school-disordered subjects who had not received counselling indicated less positive feelings coming to them from "mother" than the other three groups. Otherwise, all groups tended to perceive "mother" and "father" similarly. With regard to siblings, the school-disordered boys who had received counselling expressed fewer incoming positive feelings than either the normal group or the group without counselling towards the oldest sibling, and more negative feelings towards the youngest sibling than the group without counselling (but not more than the normal group). The institutionalized emotionally disturbed group gave more negative feelings generally to all members, but were more positive to the oldest sibling than any other group. Unfortunately, Kauffman's results are not directly comparable to Frost's (1969) because Kauffman differentially weighted strong and mild feelings.

Kauffman, Weaver and Weaver (1972) conducted a reliability study with forty-six retarded readers and concluded that the FRT's stability over short intervals is good. The response patterns of the group were similar to Frost's (1969) group of normals: "Mr. Nobody" received the most items, especially the negative ones; other members each

received approximately the same number of items; feelings towards parents were mostly positive and towards siblings, negative.

In summary, although there are little data to date, and those that exist are not directly comparable, there are indications that normal and clinic subjects respond differently to the FRT. Kauffman et al. (1972) suggest that the lack of clear differences may not be "a result of insensitivity or irrelevance of the FRT as an instrument of measuring family relationships" but rather indicates:

the necessity of considering the child's perception of his family relationships in the context of parent and sibling data. Alone, data from either parents or children may be of relatively little value in assessing family variables which influence personality development. It may be, for example, that the child's perception versus the parents' or siblings' perceptions of emotional relationships in the family is a factor more directly related to pathology than the child's perception per se. (p.359)

### The Present Study

The present study follows Kauffman's suggestion (see above) and compares the perceptions of two children from the same family. The FRT was administered to two sets of siblings, one set consisting of a disturbed child and one of his normal siblings (clinic pair), the other set consisting of two normal siblings from a normal family (normal pair). Comparisons were then made between the average number of responses and the type of item (i.e., positive or negative, outgoing or incoming) attributed to "mother", "father", siblings, "friend" and "Mr. Nobody" by the disturbed child and his normal sibling, by the two normal siblings, and by the clinic pair and the normal pair.

It was hypothesized that:

1. Family relationships are perceived differently by the disturbed child than by his normal sibling.
2. There are no differences between the perceptions of the two normal siblings.
3. There are differences between the perceptions of the normal pair and the clinic pair.
4. The normal sibling of the disturbed child shows more emotional dependence on the nonfamilial member, the "friend", than either the disturbed child or the normal siblings.



## Method

### Subjects

Subjects were two sets of ten pairs of siblings, one pair being the disturbed child and his normal sibling (clinic pair), and the other pair being two normal siblings (normal pair), who attended the same school and were matched to the first pair in terms of age and sex. All subjects were between eight and twelve years old (mean age - 10.5 years), of average intelligence, residing in the same general area of the city, and attending local public schools in Vancouver, Canada. Thirty subjects were girls, and ten were boys. Children from broken homes were excluded.

In order to obtain the subjects, the experimenter relied on her affiliation with the Vancouver Health Department, particularly the Public Health Nurses and the mental health consultants. The Public Health Nurses are situated in the schools and regularly visit the families in the surrounding district, and hence have information about a child's behavior both at school and at home. The mental health personnel provide consultation to school staff and families regarding children with behavior problems.

The clinic pairs were selected first. Disturbed subjects had been referred to the mental health consultant for a variety of conduct or personality disorders. In five of the cases, the major complaint concerned the degree of aggression, in two of the cases, hyperactivity, and in three fearfulness and withdrawn behavior. None could be classified as schizophrenic; all were in regular class placement; and none had been removed from the family home because of their disruptive behavior. The first ten disturbed subjects who also had siblings in the same age range, who had not presented

any problems, were chosen to participate in the study.

The normal pairs of control siblings were obtained by asking the Public Health Nurses of the schools from which the disturbed subjects had been chosen to provide names of families whose children had not presented any problems, and were of the same age and sex as the clinic pairs.

### Procedure

The experimenter telephoned each family to explain the nature of the experiment and to ask for their cooperation in the study. Mothers were asked to bring their two children to the experimenter's office. None of the clinic families refused. Only one of the normal families refused, although it took much longer to arrange a suitable time with them because they always seemed to be busy with other family activities.

On arrival, the mother and both children were briefed on the nature of the task, and were shown the cardboard figures and a few of the statements. The children decided between themselves who would go first, and the experimenter then individually administered the Family Relations Test while the other sibling and mother waited in an adjacent room. Introductory remarks were as outlined in the manual (Bene & Anthony, 1957, p. 9-10 Appendix 2), except for the inclusion of instructions to also select a friend, described as "a friend of yours, someone you know well and someone you see often". The positioning of the cardboard figures was always from left to right in the order of: "Mr. Nobody", "mother", "father", "self", other sibling participating in the experiment, remaining siblings, decreasing in age, and the "friend". Subjects were not given the choice of reading the items; instead, the experimenter read each item

(omitting the phrase "in the family"), passed it to the subject (who sometimes also read it), and the subject then dropped it into the appropriate slot. Subjects were allowed to attribute one item to two or more figures, but were discouraged from doing so frequently. Subjects were also discouraged from placing too many items into the "Mr. Nobody" slot.

On completion of the test, the subjects stayed and chatted with the experimenter, while the experimenter emptied the boxes and recorded the items, thereby avoiding communication with the other sibling before that sibling was tested in the same manner. Total time of administering the test to one pair of siblings was approximately one hour.

The number and type of items (positive or negative, incoming or outgoing) attributed to each family member were recorded for each subject. In cases of more than one sibling, the number recorded was the average number of items.

An analysis of variance was performed for each of the family members, and the probability level for rejection of the null hypothesis was set at .05.

### Results

The average number of positive incoming positive outgoing, negative incoming, and negative outgoing items, attributed to each of the test figures, by the four groups of subjects is shown graphically in Figure 1. The four quadrants represent the four types of items; height on the ordinate reflects the average number of responses; and positions along the abscissa indicate the various test figures (mother", "father", etc.).

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 Insert Figure 1 about here  
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### Figure Caption

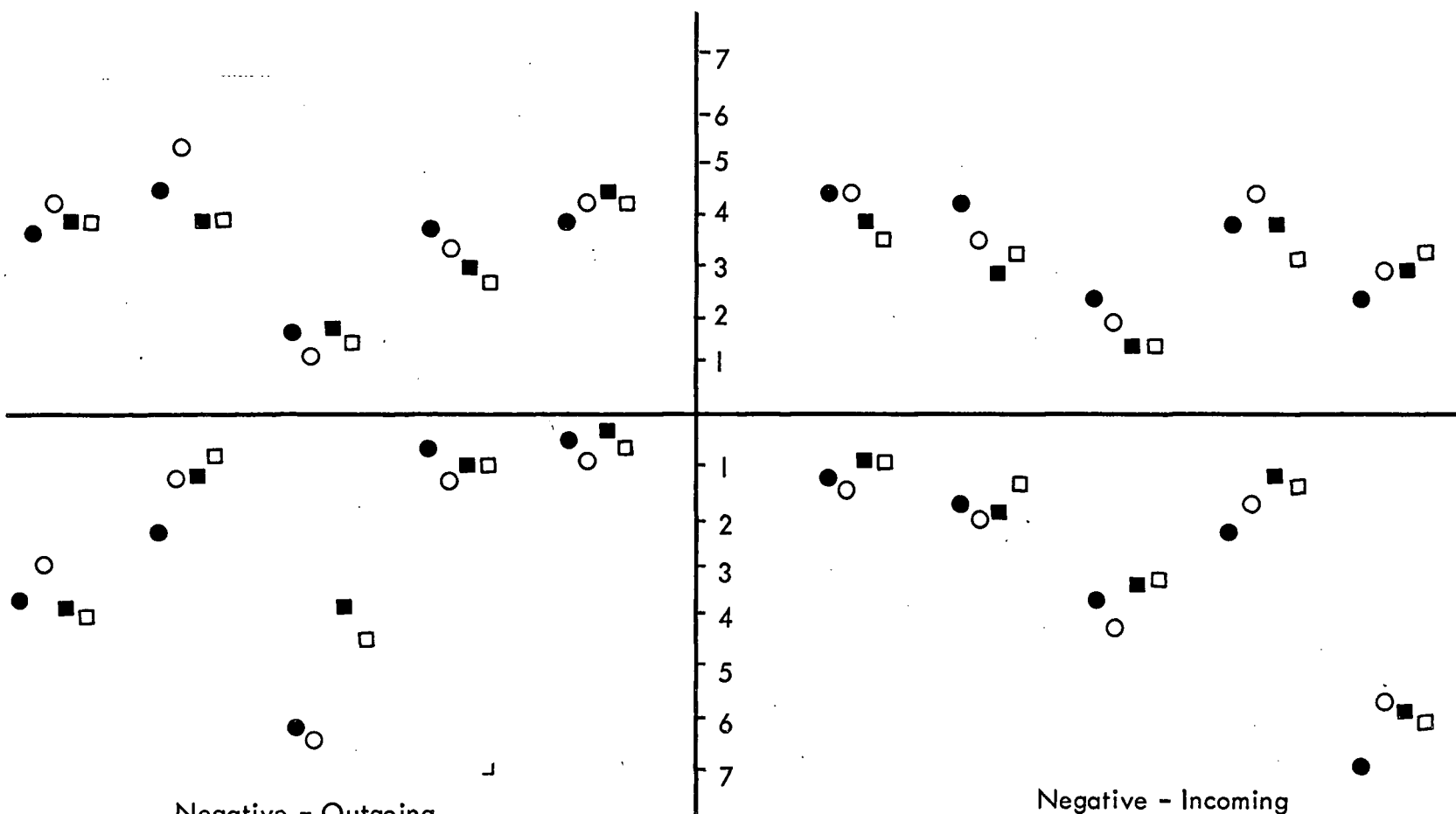
Figure 1. Average Number of Items Attributed to each Test Figure.

Nobody Friend Sibling Father Mother

Mother Father Sibling Friend Nobody

Positive - Outgoing

Positive - Incoming



● Disturbed Children  
○ Normal Siblings of Disturbed Children

■ Normal Children  
□ Normal Siblings of Normal Children

Means not directly observable from Figure 1, - i.e., the number of positive items and negative items (regardless of whether they are incoming or outgoing), and similarly the number of outgoing and incoming items (regardless of whether they are positive or negative), as well as the total number of items, are listed in Tables 1, 3, 5, 7, and 9 (for "mother", "father", "siblings", "friend", and "Mr. Nobody" respectively). Columns 1 and 2 show the responses of the disturbed child and his normal sibling; columns 3 and 4, the responses of the normal child and his normal sibling; and, column 5 and 6, the combined responses of the clinic pair and the normal pair. Each of the tables of mean scores is followed by a summary table of the relevant analyses of variance: Tables 2, 4, 6, 8, and 10.

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 Insert Tables 1 to 10 about here  
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Hypothesis #1 predicted that the perceptions of the disturbed child would differ from the perceptions of his normal sibling. The hypothesis was not confirmed. The disturbed subjects and their normal siblings attributed an equal number of items of the same type to each test figure (see columns 1 and 2 of Tables 1, 3, 5, 7, and 9; and the close clustering of means in Figure 1).

Hypothesis #2 stated that there would be no differences in perceptions between the normal child and his normal sibling. The hypothesis was confirmed; the pair of normal siblings responded similarly in all categories to each figure (see columns 3 and 4 of Tables 1, 3, 5, 7, and 9; and the similarity of means in Figure 1).

Hypothesis #3 expected some differences between the perceptions of the clinic

Table I

Average Number of Items Attributed to "Mother "

Item	Disturbed Siblings	Normal Siblings	Normal Siblings	Normal Siblings	Clinic Pair	Normal Pair
Positive	8.1	8.3	8.1	7.4	8.2	7.8
Negative	1.7	2.5	1.1	1.4	2.1	1.3
Outgoing	4.3	5.2	4.6	4.7	4.8	4.7
Incoming	5.5	5.6	4.6	4.1	5.6	4.4
Total	9.8	10.8	9.2	8.8	10.3	9.0

Table 2  
Summary of Analyses of Variance: "Mother"

Source	SS	df	MS	F
G	5.6	3	1.9	.3
Ss/G	194.2	36	5.4	
VxG	2.2	3	.7	.1
VxSs/G	305.9	36	8.5	
DxG	4.2	3	1.4	.8
DxSs/G	60.0	36	1.7	
VxDxG	2.0	3	.7	.3
VxDxSs/G	70.7	36	2.0	

G=Groups

V=Valence i.e. positive or negative

D=Direction i.e. outgoing or incoming



Table 3

Average Number of Items Attributed to "Father"

Item	Disturbed Siblings	Normal Siblings	Normal Siblings	Normal Siblings	Clinic Pair	Normal Pair
Positive	7.8	6.6	5.5	5.8	7.2	5.7
Negative	2.3	3.3	2.7	2.2	2.8	2.5
Outgoing	4.2	4.7	3.8	3.5	4.5	3.7
Incoming	5.9	5.2	4.4	4.5	5.7	4.5
Total	10.1	9.9	8.2	8.0	10.0	8.1

Table 4  
Summary of Analyses of Variance: "Father"

Source	SS	df	MS	F
G	9.2	3	3.1	.5
S/G	224.8	36	6.2	
VxG	10.4	3	3.5	.5
VxSs/G	264.4	36	7.3	
DxG	2.1	3	.7	.3
DxSs/G	68.8	36	1.9	
VxDxG	2.5	3	.8	.7
VxDxSs/G	44.1	36	1.2	

G=Groups

V=Valence i.e. positive or negative

D=Direction i.e. outgoing or incoming

Table 5

Average Number of Items Attributed to "Sibling"\*

Item	Disturbed Siblings	Normal Siblings	Normal Siblings	Normal Siblings	Clinic Pair	Normal Pair
Positive	3.5	2.8	3.3	2.7	3.2	3.0
Negative	9.3	10.5	6.7	7.4	9.9	7.1
Outgoing	7.3	7.5	5.6	5.7	7.4	5.7
Incoming	5.5	5.8	4.4	4.3	5.7	4.3
Total	12.8	13.7	10.0	10.0	13.3	10.0

\* If the subject has more than one sibling, the average of the responses to the siblings is given.

Table 6  
Summary of Analyses of Variance: "Sibling"

Source	SS	df	MS	F
G	23.2	3	7.7	.9
Ss/G	327.1	36	9.1	
VxG	24.7	3	8.2	.7
VxSs/G	478.5	36	13.3	
DxG	.7	3	.2	.6
DxSs/G	54.5	36	1.5	
VxDxG	14.9	3	5.0	2.8*
VxDxG <sub>1</sub> vs G <sub>2</sub>	.2	1	.2	.1
VxDxG <sub>3</sub> vs G <sub>4</sub>	1.7	1	1.7	.1
VxDxG <sub>1&amp;2</sub> vs G <sub>3&amp;4</sub>	13.0	1	13.0	7.2*
VxDxSs/G	65.1	36	1.8	

\* $p < .05$

G=Groups

V=Valence i.e. positive or negative

D=Direction i.e. outgoing or incoming

G<sub>1</sub>=Disturbed children

G<sub>2</sub>=Normal siblings of disturbed children

G<sub>3</sub>=Normal children

G<sub>4</sub>=Normal siblings of normal children

Table 7

Average Number of Items Attributed to "Friend"

Item	Disturbed Siblings	Normal Siblings	Normal Siblings	Normal Siblings	Clinic Pair	Normal Pair
Positive	8.2	10.0	7.3	6.8	9.1	7.1
Negative	4.6	2.9	2.1	2.0	3.8	2.1
Outgoing	6.9	6.7	4.9	4.7	6.8	4.8
Incoming	5.9	6.2	4.5	4.1	6.1	4.3
Total	12.8	12.9	9.4	8.8	12.9	9.1

Table 8  
Summary of Analyses of Variance: "Friend"

Source	SS	df	MS	F
G <sub>1</sub> vs G <sub>2</sub>	.0	1	.0	.0
G <sub>3</sub> vs G <sub>4</sub>	.4	1	.4	.0
G <sub>1&amp;2</sub> vs G <sub>3&amp;4</sub>	35.2	1	35.2	6.8 *
S/G	189.2	36	5.2	
VxG	15.9	3	5.3	.4
VxSs/G	477.5	36	13.2	
DxG	.6	3	.2	.1
DxSs/G	49.7	36	1.4	
VxDxG	6.0	3	2.0	.8
VxDxSs/G	99.5	36	2.8	

\*p < .01

G=Groups

V=Valence i.e. positive or negative

D=Direction i.e. outgoing or incoming

G<sub>1</sub>=Disturbed children

G<sub>2</sub>= Normal siblings of disturbed children

G<sub>3</sub>=Normal children

G<sub>4</sub>=Normal siblings of normal children

Table 9

Average Number of Items Attributed to "Mr. Nobody"

Item	Disturbed Siblings	Normal Siblings	Normal Siblings	Normal Siblings	Clinic Pair	Normal Pair
Positive	7.7	7.3	6.6	7.0	7.5	6.8
Negative	10.8	8.1	9.3	9.2	9.5	9.3
Outgoing	7.3	7.2	7.4	7.6	7.3	7.5
Incoming	9.3	8.2	8.5	8.6	8.6	8.6
Total	16.3	15.4	15.9	16.2	15.9	16.1

Table 10

Summary of Analyses of Variance: "Mr. Nobody"

Source	SS	df	MS	F
G	1.3	3	.4	.1
SxG	593.2	36	16.5	
VxG	21.5	3	7.2	.4
VxS <sub>s</sub> /G	621.7	36	17.3	
DxG	.8	3	.3	.3
DxS <sub>s</sub> /G	92.3	36	2.6	
VxDxG	8.3	3	2.8	.7
VxDxS <sub>s</sub> /G	150.1	36	4.2	

G=Groups

V=Valence i.e. positive or negative

D=Direction i.e. outgoing or incoming



pair and the normal pair. Two differences emerged: the clinic pair attributed more negative outgoing items (6.3) to their siblings than did the normal pair (4.2) ( $p < .05$ ) (see Table 6 and lower left quadrant of Figure 1); also, the clinic pair gave a significantly greater total number of items (12.1) to their "friend" than did the normal pair (9.1) ( $p < .05$ ) (see columns 5 and 6 of Table 7).

Hypothesis #4 predicted that the normal sibling of the disturbed child would indicate greater reliance on his friend (by attributing more items) than either his disturbed sibling or the normal pair of siblings. The hypothesis was partially confirmed in that the normal siblings did attribute significantly more items to their "friend" (12.9) than the normal siblings of the normal pair (9.4 and 8.8) ( $p < .05$ ), but their disturbed siblings gave an equal number of responses (12.8) to their "friend" (see columns 1, 2, 3, and 4 of Table 7).

### Discussion

Contrary to expectations, the perceptions of the disturbed subjects did not differ significantly from the perceptions of their normal siblings; similarly, there was no difference between the perceptions of the two siblings in the normal family. All subjects responded similarly to the "mother", "father", siblings and "friend" and placed the same kind of items into the "Mr. Nobody" category. There were however, significant differences in some of the responses of the clinic pair compared to the normal pair of children; the former expressed more negative feelings toward their siblings than the latter, and they also attributed more items to the "friend".

A post hoc analysis (see Appendix 4) was conducted comparing the observed differences between the mean number of items attributed to each test figure in each

category, with critical differences computed according to the Tukey HSD Test (Kirk, 1968). The analysis provided essentially the same information regarding significant differences between means as the analyses of variance, but in addition, allowed for calculation of the relative sums of differences of the three planned comparisons (disturbed children versus normal siblings, normal children versus normal siblings, and clinic pairs versus normal pairs). For each test figure, the greatest difference appeared either between the means of the clinic and normal pair, or between the means of the disturbed children and their normal siblings; except for the "Mother" figure, the least difference always existed between the means of the two normal siblings. Hence, although there were no significant differences found between the perceptions of disturbed children and their normal siblings or between the perceptions of the two normal siblings, it appears that there is more variation between the responses of the former pair than the latter.

As discussed in the introduction, most of the research to date has focused on the role of the parents and their effect on the disturbed child. The findings of the present study indicate that the disturbed child and his normal sibling have similar perceptions, and that their perceptions differ from those of normal siblings with regard to their feelings toward their siblings and reliance on peers. Consequently, the results lend support to the importance of considering the role of the siblings and extrafamilial members, as well as investigating the effect of the family on the well sibling of the disturbed child.

At the same time, certain general limitations of the approach used in the present study must be noted. In the first place, perceptions were measured by means

of a particular instrument, the FRT, whose validity is still not firmly established. Thus, negative (as well as positive) findings may, to an unknown extent, reflect idiosyncracies and, perhaps weaknesses of the instrument. The measurement of interpersonal perceptions is, in general, still a difficult and chancy enterprise. In addition, a further limitation of the present study concerns the particular nature of the subjects. It is not known if the present findings are applicable to other children who differ from the present sample in terms of, e.g., age or extent of disturbance. With these cautions in mind, the findings of the present study will be discussed with reference to perceptions of parents by the clinic pair, perceptions of extrafamilial members, and reaction to siblings, followed by some suggestions for future research and further comments on the FRT.

#### Perceptions of Parents in the Clinic Pair

It had been expected that there would be some differences between the perceptions of the disturbed child and those of his well sibling, especially with regards to the categories "mother" and "father". This expectation was based on a) other studies using the FRT, where differences were found between the responses of delinquent, disturbed, and normal children (e.g. Frost, 1969), b) evidence that the disturbed and well siblings are treated differently by their parents (e.g. Donnelly, 1960), and c) the speculation that the differing perceptions may themselves be part of the disturbed behavior (e.g. DuHamel & Jarmon, 1971). At the same time, studies have also shown that the disturbed and the well sibling are treated differently only in specific situations (Kaplan, 1970), and that the behavior of the children towards

the parents does not differ as much as is generally assumed: Misher and Waxler (1968) with reference to schizophrenic subjects, conclude that "there are evidently many ways in which schizophrenic patients can behave in interaction with their parents that are indistinguishable from the behavior either of children with no known psychiatric pathology or of their own well siblings (p.288)". With regard to previous studies using the FRT, although the present study did not find the differences between the responses of disturbed and well siblings to their parents, in all other respects, the distribution of responses closely resembled that reported by other researchers: the range of items attributed to each family member was approximately the same;; "mother" and "father" were perceived similarly by all subjects; parents generally received positive items while siblings received negative items (especially outgoing negative ones); and more incoming negative items were attributed to "Mr. Nobody" than to anyone else. (See Appendix 3 for summaries of analyses of variance.) As already stated, the present data are not always directly comparable to the data of previous studies because of variations in scoring procedures.

### Perception of Extrafamilial Members

A further prediction was that the well sibling of the disturbed child would indicate more reliance on an extrafamilial member; this was based on the assumption that the disturbed child is psychologically involved with his parents, and that in response to the pathology in the family, the well sibling seeks satisfaction outside the home to a greater extent than his disturbed sibling or other normal children. The well sibling of the disturbed child did attribute significantly more items to the "friend" than

did the normal siblings, but this was also true of the disturbed child. A similar finding has been reported by DuHamel and Jarmon (1971); using the technique of measuring the distance between figures placed on felt, they found that "disturbed boys did schematize human relationships (including those with peers) as more distant than the normal boys, but disturbed boys were not different from their siblings (p.284)".

DuHamel and Jarmon's finding seems to indicate greater psychological distance from peers, while the present study's finding seems to indicate more reliance, and therefore, possibly less distance. It is difficult, however, to draw clear conclusions from either study because of the lack of knowledge of the correspondence between the two measures, and also between the correspondence of the measures and the actual patterns of interaction and emotional relationships. The findings do indicate that reaction of clinic and normal children to peers is worthy of further study.

### Reaction to Siblings

The other finding, that the clinic pair attribute more outgoing negative items to their siblings than do the normal pair, seems more easily interpretable. If one assumes that there are unresolved conflicts and tensions in the family, then it follows that there will be more frustrations and negative feelings generally, and that it would be safer for the children to express these towards their siblings than towards the parents. It is interesting to note that negative feelings are not felt as much in return: instead, most incoming negative items are rejected by all groups and placed into the "Mr. Nobody" category. The greater number of outgoing negative items attributed to siblings may also be interpreted as reflecting a greater degree of sibling rivalry, particularly in

view of other studies (e.g., Kaplan, 1970) which have shown more infantilizing of the disturbed child. The existence of greater sibling rivalry may in turn explain the greater reliance on peers. Again, there is no information regarding the correspondence between negative test scores and negative feelings actually expressed. It should be noted however, that according to Kauffman's (1970) review, negative items on the FRT correlate highly with other measurements of perception of feelings toward parents.

### Family Size

If the role of the sibling in the clinic family is to provide an outlet for negative feelings, then future research could compare the direction of feelings in large and small families. It may be that the children from small families need to rely more on parents or peers than the children of large families. The number of subjects in the current study was too small to permit valid comparisons (four of the disturbed subjects had only one sibling, six had more than one sibling), but trends were in the expected direction. (See Appendix 4) It appears that the disturbed children of the small families attributed almost twice as many items to "mother" and "father" than the disturbed children from the larger families, who gave twice as many items to the "friend" than to "mother" or "father". There was also a difference in the responses of the normal siblings from large and small clinic families. Those from the small families expressed more reliance on the "friend" than on "mother" or "father", while those from large families responded in a similar fashion to "friend", "mother" and "father".

It is interesting to note that some of the differences that have emerged when

the responses of the clinic subjects are analyzed separately according to size of family support the original hypotheses in small families only; the disturbed sibling relies more on the parents and the normal sibling relies more on friends (hypotheses #1 and #4). The trend in large families is in the opposite direction, with less reliance on parents by the disturbed children. Pooling of the findings from large and small families cancels out the difference.

Eight of the ten normal families contained more than one sibling; therefore, no meaningful comparisons could be drawn between large and small normal families. The average responses of the children from the large families were more similar to the responses of the clinic children from large families.

#### Some Comments on the FRT

The FRT is constructed in such a way that items deal only with feelings toward and from the subject. It would be of interest to obtain additional information about how the subject perceives the flow of feeling between the other members of the family; an example of an item of this sort would be, "My sister often feels angry towards this person". Another way to obtain similar information would be to administer the test to all members of the family, and compare protocols, but this might be too time-consuming a procedure. On the other hand, there is danger in further expansion of the test by the inclusion of more items because the test already yields a plethora of scores which can result in confusion and consequent difficulty in comparing data. As suggested by Kauffman (1970), the present items need to be "reevaluated for their content validity, including linguistic content and structure (p.189)", and scoring

procedures need to be unified.

Apart from the need for further item analysis, it is not clear why there is so much confusion. The categories of positive and negative, incoming and outgoing seem to represent relevant dimensions of feelings. The mild and strong categories are ignored (as was the case in the present study), or they are incorporated by means of differential weighting (as in Kauffman's research). One of the problems may be that in the FRT, both the positive and negative, as well as the incoming and outgoing categories are independent of each other. Ordinarily, one expects, e.g., "more positive" to imply also "less negative", but in the FRT, a subject can give many positive as well as many negative items to the same person. Hence, if one study reports more positive feeling toward a particular person, this does not necessarily replicate less negative feelings reported in another study. For clinical interpretation however, the independence of categories is useful in that an equal number of negative and positive feelings towards one person, for example, can be understood as feelings of ambivalence. Nevertheless, the test is not popular with clinicians, partly because it does not provide as wide a range of information as other projective tests, but possibly also because it seems intuitively incongruent for a projective test to appear as concrete and quantitative as the FRT protocol appears.

In summary, the results of the present study support the view that, in investigation of disturbed children, insufficient attention has been paid to the role of siblings and extrafamilial members. Henceforth, siblings and others should be considered in addition to the parents.



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Appendix I  
List of Statements

Positive outgoing feelings

This person is very nice.

This person is very jolly.

This person always helps the others.

This person has the nicest ways.

This person never lets you down.

This person is lots of fun.

This person deserves a nice present.

This person is a good sport.

This person is very nice to play with.

This person is very kind-hearted.

I like to cuddle this person.

I like to be kissed by this person.

I sometimes wish I could sleep in the same bed with this person.

I wish I could keep this person near me always.

I wish this person would care for me more than for anyone else.

When I get married I want to marry somebody who is just like this person.

I like this person to tickle me.

I like to hug this person.

Negative outgoing feelings

This person is sometimes a bit too fussy.

This person nags sometimes.

This person sometimes spoils other people's fun.

This person is sometimes quick-tempered.

This person sometimes complains too much.

This person is sometimes annoyed without good reason.

This person sometimes grumbles too much.

This person is sometimes not very patient.

This person sometimes gets too angry.

Sometimes I would like to kill this person.

Sometimes I wish this person would go away.

Sometimes I hate his person.

Sometimes I feel like hitting this person.

Sometimes I think I would be happier if this person was not in our family.

Sometimes I am fed-up with this person.

Sometimes I want to do things just to annoy this person.

This person can make me feel very angry.

Positive incoming feelings

This person is kind to me.

This person is very nice to me.

This person likes me very much.

This person pays attention to me.

This person likes to help me.

This person likes to play with me .

This person really understands me .

This person listens to what I have to say .

This person likes to kiss me .

This person likes to cuddle me .

This person likes to help me with my bath .

This person likes to tickle me .

This person likes to be in bed with me .

This person always wants to be with me .

This person cares more for me than for anyone else .

#### Negative incoming feelings

This person sometimes frowns at me .

This person likes to tease me .

This person sometimes tells me off .

This person won't play with me when I like it .

This person won't always help me when I am in trouble .

This person sometimes nags at me .

This person sometimes gets angry with me .

This person is too busy to have time for me .

This person hits me a lot .

This person punishes me too often .

This person makes me feel silly .

This person makes me feel afraid.

This person is mean to me.

This person makes me feel unhappy.

This person is always complaining about me.

This person does not love me enough.



## Appendix 2

Setting up the child's family circle\*

After the examiner has found out who the people are in the child's family and has listed them on the scoring sheet, he says to the child: We are going to play a game of pretence. Do you see all those figures standing there? We are going to pretend that some of them are the people in your family."

He then takes the child closer to the figures, points at the four female figures and asks: "Which one of these do you think would make the best mommy?"

He lets the child make his choice and hands him the chosen figure, then asks him to put it on the desk or table where the testing is to take place. He then points to the group of male figures and asks the child: "Now which one do you think would be the best one for daddy?"

He again has the chosen figure taken by the child to the other table. He then points to the boy or girl figures, as the case may be, and asks: "Now which one would you like to be yourself?" and has that figure carried to the table.

He continues in this manner until the child has a figure at the testing table for every member of his family. If the child wants to make any changes he is permitted to do so.

When the family circle is complete, the examiner says: "Now we have all the members of the family together, but we are also going to have someone else in the game." He brings over "Mr. Nobody", puts it next to the family members, and says: "The name of this person is Mr. Nobody. He will also be in the game. I shall tell you in a minute what he will be doing."

The child is now seated at the table with his figures in easy reach. The examiner shows the stack of items and says:

See here are a lot of little cards with messages written on them. I shall read you what they say and you put each card into the person whom you think it fits best. If the message in a card doesn't fit anybody, you put it into Mr. Nobody. See what I mean? Sometimes you may find that a message fits several people. If it does then tell me about it and give the card to me. Now remember. If what a card says fits one person best, you put the card into that person. If it doesn't fit anybody you put it into Mr. Nobody. If it fits several people, you give the card to me.

\* Adopted from Bene & Anthony (1957, p.9-10)

## Appendix 3

Table A

Average number of items attributed  
to test figures by each subject (N=40)

Item	Mother	Father	Sibling	Friend	Mr. Nobody
Positive	4.0	3.2	1.5	4.0	3.3
Negative	.8	1.3	4.2	1.5	4.6
Outgoing	2.3	2.0	3.3	2.9	3.7
Incoming	2.5	2.5	2.5	2.6	4.3
Positive Outgoing	4.1	3.0	1.3	4.4	3.7
Positive Incoming	3.8	3.4	1.7	3.8	2.9
Negative Outgoing	.6	1.1	5.2	1.5	3.7
Negative Incoming	1.1	1.6	4.3	1.4	5.6

Table B

Analysis of Variance of mean responses  
of all subjects to "Mother" (N=40)

Source	SS	df	MS	F
V	369.9	1	369.9	46.7*(more positive)
VxSx/G	305.9	36	8.5	
D	.8	1	.8	.5
DxSs/G	60.0	36	1.7	
VxD	6.3	1	6.3	3.2
VxDxSs/G	70.7	36	2.0	

\* $p < .01$

Table C

Analysis of Variance of mean responses  
of all subjects to "Father" (N=40)

Source	SS	df	MS	F
V	144.4	1	144.4	19.8**(more positive)
VxSs/G	264.4	36	7.3	
D	9.1	1	9.1	4.8*(more incoming)
DxSs/G	68.8	36	1.9	
VxD	.1	1	.1	.1
VxDxSs/G	44.1	36	1.2	

\* $p < .05$

\*\* $p < .01$

Table D

Analysis of Variance of mean responses  
of all subjects to "Sibling" (N=40)

Source	SS	df	MS	F
V	292.4	1	292.4	21.9*(more negative)
VxSs/G	478.5	36	13.3	
D	23.6	1	23.6	15.7*(more outgoing)
DxSs/G	54.5	36	1.5	
VxD	54.9	1	54.9	30.5*(more outgoing negative than ingoing negative)
VxDxSs/G	65.1	36	1.8	

\* $p < .01$

Table E

Analysis of Variance of mean responses  
of all subjects to "Friend" (N=40)

Source	SS	df	MS	F
V	267.8	1	267.8	20.3*(more positive)
VxSs/G	477.5	36	13.2	
D	3.9	1	3.9	2.8
DxSs/G	49.7	36	1.4	
VxD	2.8	1	2.8	1.0
VxDxSs/G	99.5	36	2.8	

\* $p < .01$

Table F

Analysis of Variance of mean responses  
of all subjects to "Mr.Nobody" (N=40)

Source	SS	df	MS	F
V	70.3	1	70.3	4.1*(more negative)
VxSs/G	621.7	36	17.3	
D	14.4	1	14.4	5.5*(more incoming)
DxSs/G	92.3	36	2.6	
VxD	67.6	1	67.6	16**(more negative incoming than positive incoming)
VxDxSs/G	150.1	36	4.2	

\*p < .05

\*\*p < .01

## Appendix 4

Average number of items attributed to "Mother"  
 "Father" and "Friend" by clinic children from  
 large and small families

Size of family	"Mother"		"Father"		"Friend"	
	Disturbed Child	Normal Sibling	Disturbed Child	Normal Sibling	Disturbed Child	Normal Sibling
Small	13.8	11.3	15.8	11.0	11.3	15.8
Large	7.2	10.5	6.3	9.2	13.8	11.0

## Appendix 5

Table A

Differences between observed mean  
scores for "Mother" and Tukey HSD

Item	Disturbed child versus Normal sibling	Normal child versus Normal sibling	Clinic pair versus Normal pair	HSD
Positive outgoing	.2	.3	.3	1.7
Positive incoming	0	.4	.7	1.7
Negative outgoing	.7	.4	.4	1.7
Negative incoming	.1	.1	.5	1.7
Sum of differences	1.0	1.2	1.9	

Table B

Differences between observed mean  
scores for "Father" and Tukey HSD

Item	Disturbed child versus Normal sibling	Normal child versus Normal sibling	Clinic pair versus Normal pair	HSD
Positive outgoing	.3	.3	.7	1.3
Positive incoming	.9	.6	.9	1.3
Negative outgoing	.8	0	.1	1.3
Negative incoming	.2	.5	.2	1.3
Sum of differences	2.2	1.4	1.9	



Table C

Differences between observed mean  
scores for sibling and Tukey HSD

Item	Disturbed child versus Normal sibling	Normal child versus Normal sibling	Clinic pair versus Normal pair	HSD
Positive outgoing	.3	.5	.4	1.6
Positive incoming	.4	.1	.5	1.6
Negative outgoing	.5	.7	2.1*	1.6
Negative incoming	.7	0	.8	1.6
Sum of differences	1.9	1.3	3.8	

\* $p < .05$

Table D

Differences between observed mean  
scores for "Friend" and Tukey HSD

Item	Disturbed child versus Normal sibling	Normal child versus Normal sibling	Clinic pair versus Normal pair	HSD
Positive outgoing	1.0	.3	1.1	2.0
Positive incoming	.8	.8	.9	2.0
Negative outgoing	1.2	.5	.8	2.0
Negative incoming	.5	.4	.9	2.0
Sum of differences	3.5	2.0	3.7	

Table E

Differences between observed mean  
scores for "Mr. Nobody" and Tukey HSD

Item	Disturbed child versus Normal sibling	Normal child versus Normal sibling	Clinic pair versus Normal pair	HSD
Positive outgoing	.7	0	.2	2.4
Positive incoming	.9	.4	.4	2.4
Negative outgoing	.8	.2	.4	2.4
Negative incoming	1.7	.3	.5	2.4
Sum of differences	4.1	.9	1.5	