

A STUDY OF SELF-SELECTED GROUPS OF  
PRESCHOOL CHILDREN IN A LUNCH SITUATION

by

PHYLLIS FRAZIER KISBR

B. S., Kansas State College  
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TABLE OF CONTENTS

|                                   |    |
|-----------------------------------|----|
| REVIEW OF LITERATURE              | 1  |
| METHOD OF PROCEDURE               | 7  |
| INTERPRETATION OF DATA            | 18 |
| Situation I                       | 21 |
| Situation II                      | 29 |
| Comparison of Situations I and II | 34 |
| Individual Studies                | 40 |
| SUMMARY AND CONCLUSIONS           | 90 |
| ACKNOWLEDGMENTS                   | 98 |
| BIBLIOGRAPHY                      | 99 |

## REVIEW OF LITERATURE

Rose Cologne (7) has stated that "Sociometry is the science of all two-way relationships among individuals". In clarification of this statement she states that

Sociometric investigation generally reveals progressively (1) the extent of an individual's acquaintance; (2) his social contacts; (3) those to whom he is attracted and attracts, those he rejects and who reject him, and indifference; (4) his motivations; and finally (5) the interaction of his emotions and the roles he assumes or wants to assume.

Sociometry has concentrated on learning what is involved in the development of good interpersonal relations.

The above statements briefly could be called a definition of the science of sociometry. Its use and interpretation can be meaningful to one trained to see and work out social problems such as might arise within any group of people, large or small. Only during the past few years have teachers become aware of the values found in using sociometric studies to work out class room problems. Olson (13) states that the class room is a test tube for the study of a central problem of our times and that in a sociometric study the presence of persons who secure an inordinate number of choices or none or few may be taken to indicate the presence of disintegration. At the same time the presence of mutual choices or ties may be evidence for the existence of a good social feeling in the group. From these statements it may be concluded that there is more social "cement" when there are reciprocal relationships between children.

Helen Jennings (9) states that

When an individual is with others who respond to him and whom he wants to be with, he has greater security. The more secure he is as a person, the more released he feels and can behave in the group....A way of overcoming lacks in security is to bring the natural groupings into play, thus preventing lots of individuals and lots of potential leadership from being submerged.

Another important factor is brought out by Ellen Nelson (12). She finds that group "climates", the personal temperature in which learning will take place, are important. She finds the sociogram useful in noting (1) the mutual choices, (2) the individuals most in demand, (3) the individuals unchosen or rejected, (4) small groups or cliques, (5) expected choices, and (6) unexpected choices.

Merl Bonney has done extensive work on sociometric studies involving children in the second to fifth grades, inclusive, in schools in and around Denton, Texas. From his studies, he has concluded that for his subjects "on the whole, the socially strong stay strong, the average stay average, and the weak stay weak"(2). He added that except in unusual circumstances, there is not much hope that a child (or adult) who is maladjusted in one group will become much better adjusted by changing to another group. Bonney found that for his group of subjects, intelligence was the most constant factor in determining general social acceptability. Other criteria, in order of degree of constancy, were: academic achievement, general social acceptance, and mutual friendships. Another conclusion which may be drawn from Bonney's studies is that while there are relatively small differences between sexes in social success, girls have a slightly higher mean score than boys for both friends and leaders (3). Also there is a definite but small amount of relationship between the Intelligence Quotients and the socio-economic status of

children and their mutual friendships (4). He notes further that the only child is in a superior social position (1).

Bonney (2) states that

A practical implication of the data is that it is very difficult to change the total impression which a child makes upon his group.

Since the impression which one makes upon his fellows is due to the complex interrelationships of all aspects of his being, we cannot hope to make much difference in the quality of this impression by applying a technique here and a technique there in a haphazard fashion. We cannot hope to bring a socially inadequate child into social success with a device and a prayer.

One of the most common fallacies in the literature of popular psychology is that the improvement of one's social acceptance is a relatively simple matter. It can be done, so we are told, by reading a book on 'how to win friends', or 'how to improve your personality', or by taking ten easy lessons. The results of research on social development, while not discouraging to those interested in improving their group acceptance, is emphatic in saying that 'the way is hard and few there be that find it.' No doubt there would be more who would find 'the way' if they had better guidance in the attainment of social skills, particularly in early childhood.

Bonney points out that

The sociometric scores measure primarily preferences, rather than admiration, toleration, passive acceptance, or kindly and sympathetic attitudes. This is certainly the most important factor in social acceptance, because unless a person is a preferred companion of at least a few other people, he cannot have a close friend, he (or she) will not be selected as a marriage partner, and he will probably feel socially insecure all his life--even though nobody dislikes him or ever does anything against him. Adults most concerned with the social development of a child must set as their goal to make him or her a preferred individual.

Conclusions drawn from Bonney's data include the following points: (1) no child (and presumably no adult) needs to assume that because he has some personality difficulties he cannot be well accepted by others; (2)

Some doubt should be cast upon the validity of the conclusions reached from studies which deal with factors related to personality, or which are supposed to make for a good personality, when a 'good personality' is measured entirely by means of any one of the large variety of personality self-rating scales now on the market. The above statement is true unless personality be defined in such a way that it is not made to depend much upon social acceptance.

From the data of Bonney's studies the conclusion may be drawn that it is the total person that counts in social acceptance, not individual traits. A person may be successful in favorably impressing others and still believe he has some personal difficulties. For such a person apparently other assets predominate in his total personality.

Moreno (11) states "There has been an important gap in sociometric studies to date--the evaluation of the social status of children in a nursery school." She believes that the nursery school can well be called the first step toward the forming of a society by children of about the same age. So if one could determine the initial inter-personal patterns at the earliest period when the child enters a group of his own, it may lead to the recognition of the child's "sociometric status" at this period of his social growth. Sociometric status in Moreno's study means the position of a child in a group formed by children of about the same age level. The status is determined by the number of contacts which he initiates or which are initiated by the others toward him, and the acceptance or rejection pattern resulting from these contacts. If such information could be gained, it would be invaluable to nursery school teachers as well as to research workers. In order to have a better understanding and to get at the root of children's emotional problems of sympathy, aggression and submission, etc., one should know first of all

the basic structure of a group which binds and separates children.

If we could show that these attraction and repulsion patterns take a persistent form, then the sociometric status of the child would have a diagnostic value and could become a significant factor in a guidance program. If we could show how one interpersonal structure influences every other individual in the group, then hostility can be traced to its source.

Moreno's conclusions of her study are stated as follows:

1. Children of pre-school age develop a significant social status in groups of their own making, as, for instance, nursery school groups. It differs from the usual concept of social status determined by prestige-rating, I.Q., income, educational background and other factors in that it is primarily based on the earliest inter-personal relations as they emerge in spontaneous groupings. This new concept of social status is called sociometric status.

2. There are persistent patterns of attractions and repulsions characteristic for a child at different points in time. There are children of high and children of low sociometric status.

3. Children develop varying degrees of intensity of relationship for one another. The degrees of preferences are not visible or at least not demonstrable by observational methods only. By means of experimental devices which exclude certain children from the group, these various levels of preferences come to the fore.

Moreno adds that the main factor limiting sociometric procedures in the nursery school is the inability of the preschool age child to express choice, attraction, and repulsion by verbal means. Their first choice may be taken as reliable, but they are unable to understand the concept of second and third preferences.

The status of nursery school children differs from the usual concept of social status as determined by prestige as adults know it. Rather it is based on the earliest interpersonal relations as they emerge in spontaneous groupings.

For working out a sociometric study Jennings (9) has set forth

the following criteria: (a) the situation should be real for choosing; (b) the test is not an end in itself. The results must be put into effect; and (c) there should be an immediacy in choosing.

Bronfenbrenner (6) states that

Great care is necessary in the selection of sociometric criteria and the formulation of questions embodying these criteria. Unless the activity is familiar to the members of the group, unless all members are equally free to participate in the activity, unless preference is not influenced by extraneous environmental factors, and unless the nature of the choice is clearly conveyed by the question, the results of the sociometric analysis may easily be invalidated.....It is important to avoid ambiguous or 'heavily loaded' questions which may influence results in an undetermined but perhaps highly marked fashion.

After all the data in a sociometric study had been collected the construction of the sociogram began. This was a graphic presentation of the choices given and received by various members of the group.

Bronfenbrenner says that

The purpose of such a diagram is to provide a picture of the sociometric structure and thus to enable an observer quickly to determine the status of any member of the group, to identify the leaders and the unaccepted, and to obtain some indication of the combinations, cliques, and cleavages into which the social unit may be subdivided.

Originally J. L. Moreno developed the sociogram. On his diagram

All the children are identified by number; girls appear at the right side of the diagram, boys at the left. Mutually reciprocated choices are indicated by double-headed arrows with a short cross-bar at the middle of the shaft. The arrangement of subjects on the diagram, while haphazard in part, is determined largely by trial and error with the aim of minimizing the number of intersecting lines.

At first glance Moreno's sociogram is confusing. Bronfenbrenner states



It is hardly apparent at first glance just who chooses whom, who are the stars and isolates, and what are the mutual choices, cliques, and cleavages that may be present in the structure.

Many of the above inadequacies are remedied in an adaptation of the sociogram developed by Northway. This method, appropriately referred to as the 'target technique', is described by Northway as follows:

Four concentric circles, whose radii increase, are drawn by equal steps. The acceptability scores (based on the total number of choices received by each person) are divided into quartiles.....The lowest quartile is on the outside of the target and the highest in the middle. Each subject is placed on the target in the quartile to which his acceptability score belongs. The nearer he is to the center, the higher his score is.

Bronfenbrenner fully discusses

the principles and procedures involved in computing an index of sociometric status based on the concept of deviation from chance expectancy. For the most common types of sociometric situations tables have been prepared giving the approximate raw score values corresponding to the 50 per cent level and to the positive and negative limits of statistical significance. Through the use of these tables it is possible to read directly the raw score values to be assigned to each circular division on the target. Thus the amount of computation required for determining boundaries for a target sociogram of this type becomes even less than that involved in determining successive quartiles.

Though not suitable for detailed or carefully controlled study, within the indicated limits the raw status score affords a fairly reliable index of sociometric status.

#### METHOD OF PROCEDURE

Thirteen children, three to four years of age, attending the Kansas State College Nursery School during the summer session of 1949 were the subjects of the study. Over a period of seven weeks each child was given two opportunities to select three other child-

ren with whom he would eat lunch. These choices were recorded in order as the children named them--1, 2, and 3. The schedule set to obtain the data included Tuesday through Friday of each week for the seven weeks. On Mondays no child chose but on that day the last three of the choosers for that week ate lunch with the observer to help establish rapport. The children were selected to be choosers according to chronological age, starting with the oldest.

The word "chooser" is used herein to indicate the child who is making the choices of lunch companions. "Chosen" designates the child or children selected by the chooser. Situations I and II refer to the first and second times each child chose his lunch group.

The luncheon tables were set up according to the diagram (Fig. A) with the table for the study group set slightly apart from the others. No teacher sat at the table with the children, but the observer and other adults were seated nearby to provide assistance if needed. After the tables were partially set the observer brought the child who was chooser for that day from the resting room to the lunch room. The child was told before he went to rest that this was his day to help set the tables and to choose the children with whom he would like to eat lunch.

When the chooser entered the lunch room he was given the forks by the observer who again explained the situation to him. The observer directed the chooser to the different tables as he set the forks at the places and brought him to the special table last. After the forks were placed on that table the observer asked the

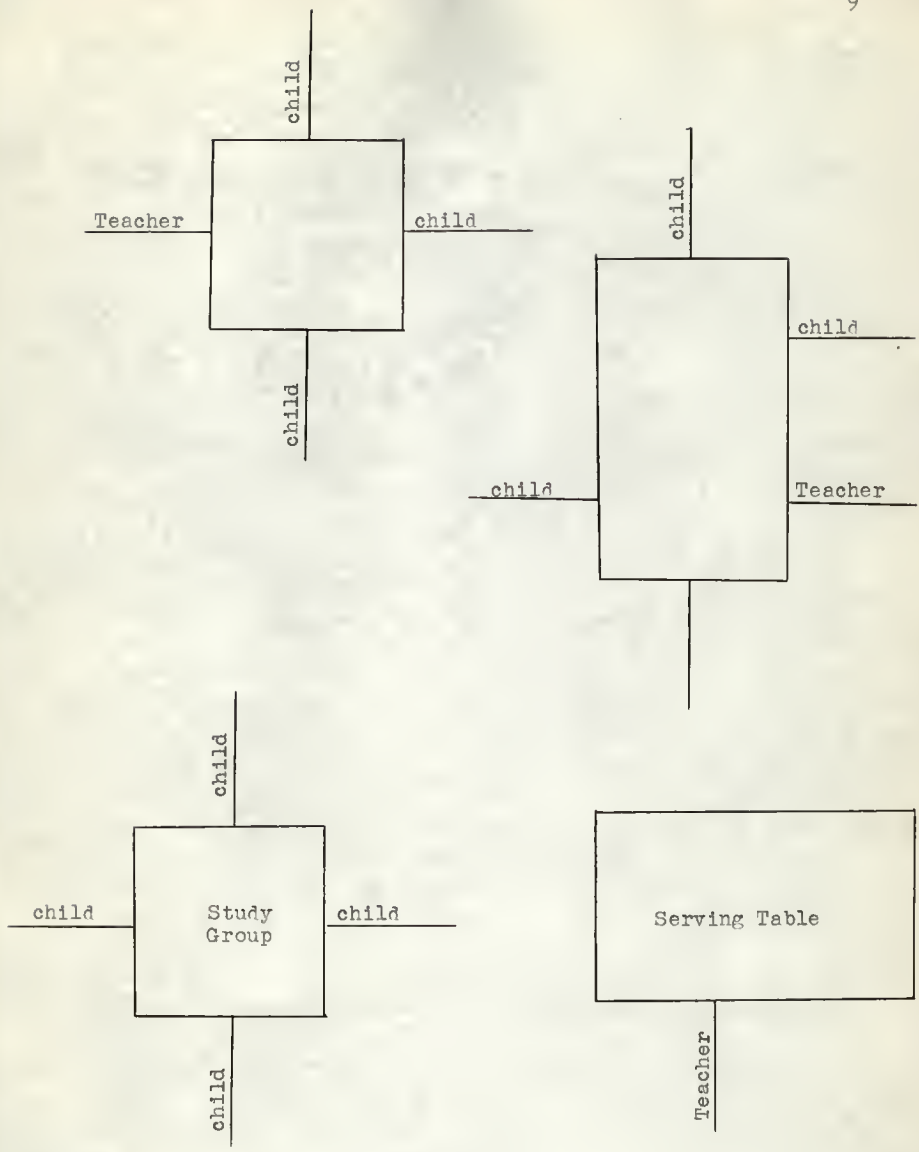


Fig. A. Table arrangement.

chooser to tell her the names of the children with whom he wanted to eat. The observer used questions such as "Which children would you like to eat with at your table?" "Whom would you like to be at this table with you?" "Which place is yours?" "And which child will eat here? And here?" A verbatim record of the conversation between the observer and chooser was made by another teacher seated in the room. After the choices were made the observer returned with the chooser to the resting room where he called the children who were to eat at the special table. The food was on the table and the children for the most part served themselves. The observer was seated near the table recording a verbatim record of the conversation, a diary of overt behavior, the number of servings of food eaten, and the time of eating for each child.

If a child chose only one or two companions then he ate only with those whom he selected. If he made no choices this was noted, and the teacher selected two or three other children to eat with him. If he had difficulty remembering names he was taken to the resting room to point out the child he desired, but only after he had given a definite indication that he had a specific child in mind. If the child choosing for that day was absent, the next child on the list was the chooser, and the former waited until the end of the list was reached before he made his choices.

During the school term two of the boys, Johnny and Eddy, were moved to a more permissive atmosphere for lunch when they were not choosing or chosen. A table was set apart in the hallway where they could be allowed greater freedom in eating behavior without interfering with, or interference from, the other children. A teacher

was seated with them. Only once when Eddy was chosen was the choice not followed through with the study group. The above arrangement apparently did not affect these boys' choosing or being chosen.

Near the end of the school session the nursery school was closed one week early. In order to have the record of choices as nearly complete as possible the observer took individually children Nos. 11 and 12 apart from the others during the free play period and asked which children they would choose to eat lunch with them at a later date. Number 13 was absent at that time and thus had only one opportunity to choose.

After the data of choices were recorded the writer constructed two sociograms--one for Situation I and one for Situation II. The construction was adapted from Northway's "target technique". The quartile scoring position which she used was omitted. The individual's position within each circle is based on Bronfenbrenner's Table of Critical Raw Mutual Choice Score Values for Diverse Sociometric Situations. The term "circle position" (CP) indicates each child's position within the four concentric circles (Fig. B). The innermost circle is designated as CP1; the second circle toward the outer edge is CP2; the third is CP3; and the fourth is CP4. A position within the inner circle shows that the individual received 7 or more choices. Individuals receiving 4, 5, or 6 choices are placed within the second circle. Those receiving 6 choices are nearest the inner circle; those receiving 5 choices are centered in the second circle; and those receiving 4 choices are near the outer edge of CP2. Individuals receiving 1, 2, or 3 choices are placed accordingly within CP3 while those who received no choices are within CP4.

Those children receiving the highest number of choices are termed "stars" while those who received no choices are called "isolates".

For the purposes of this study the sociogram is divided vertically in the center to denote choices by sex. The boys are on the right side and the girls are on the left of the division. Mutual choices are indicated by double headed arrows with heavier lines. Each child is indicated by a code number and name.

Upon completion of the two group sociograms smaller ones were constructed for each child. These smaller sociograms follow the same pattern as the larger ones with the exception of an added horizontal line through the center separating the upper and lower halves of the circles. In the upper half are shown the choices made by the individual in both Situations while the lower half depicts the choices he received in both Situations. The black color refers to data for Situation I, and the red color the data for Situation II.

These sociograms, with additional information from the nursery school records, form the basis for the study of the individual child in relation to his social group. Such information included a Food Preference Chart of each child as filled in by the parents, the mental ages based on intelligence tests, the previous time spent in nursery school, height and weight measurements, attendance records as well as other pertinent family data.

The descriptions of the children were taken from teacher ratings. Four teachers who had worked with this group of children were asked to rate the children on the Haggerty-Olson-Wickman Behavior Rating Schedules. The resulting ratings were used only for purposes of individual descriptions of the children, and no reliability was

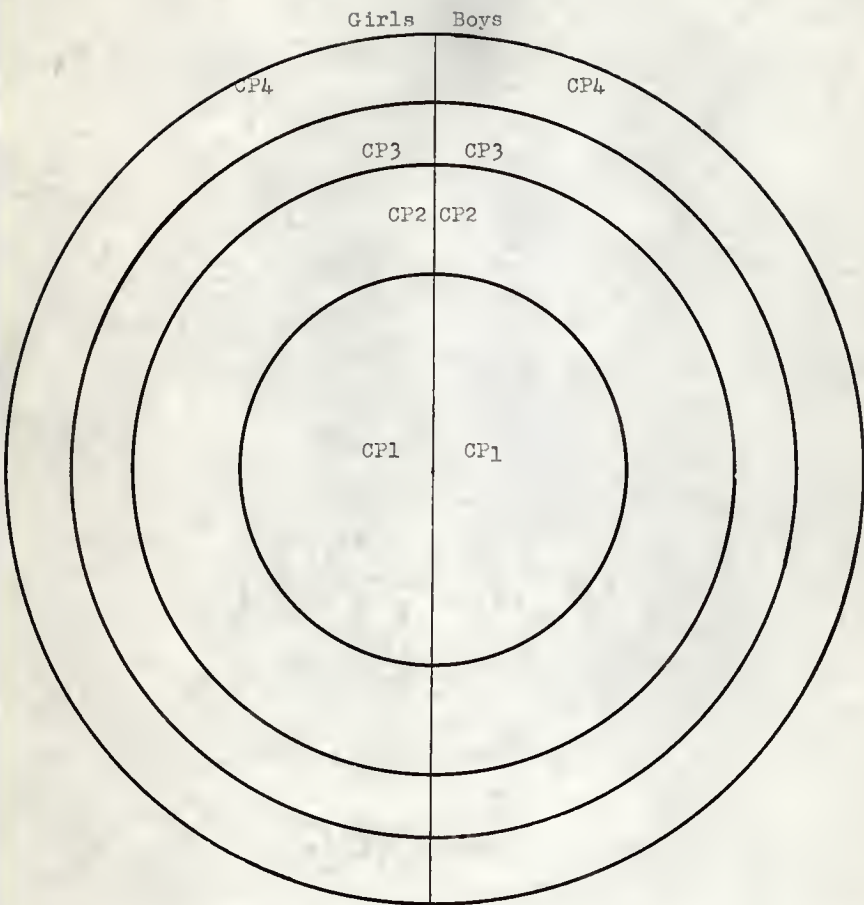


Fig. B. Sociogram showing circle positions.

established.

A record of the eating time of the children at the special table was kept during Situations I and II. The average time for each child appears in Table 1. During the following fall semester the eating time for seven of the children who had returned to school was recorded for 10 days. It was questioned if in a less restricted situation, as of the summer, the children would take a longer time to eat and to enjoy their chosen group, or if a teacher seated at the table with them would influence the eating time. During the summer the seating arrangement was flexible, varying each day with the choices made. In the fall the teacher arranged the table groups largely on the basis of her evaluation of the behavior characteristics of each child and the effect of one child upon another. The resulting figures as shown in Table 1, show that during the fall these seven children averaged 4.42 minutes longer in eating time than during the summer.

Table 1. Average eating time in minutes.

| Subjects   | Summer | Fall |
|------------|--------|------|
| 1. Johnny  | 20     |      |
| 2. Marian  | 17     |      |
| 3. Bobby   | 20     | 23   |
| 4. Nan     | 20     | 29   |
| 5. Jean    | 18     | 26   |
| 6. Tommy   | 18     |      |
| 7. Roger   | 19     | 24   |
| 8. Eddy    | 18     |      |
| 9. Kay     | 32     | 29   |
| 10. Betay  | 26     |      |
| 11. Jerry  | 19     | 24   |
| 12. George | 17     | 21   |
| 13. Carl   | 30     |      |



The subjects of this study were 13 children constituting the older group in the Kansas State College Nursery School. There were 5 girls and 8 boys in the group. The ages of the children ranged from 3 years 2 months (3-2) to 4 years 7 months (4-7) as shown in Table 2. The average age of the group was 3-10; the average age for the boys was a little less than 3-10 while that of the girls was nearly 4 years.

Table 2. Subjects by C. A.

| Subjects   | : | Age, June 1, 1949 |
|------------|---|-------------------|
| 1. Johnny  |   | 4-7               |
| 2. Marian  |   | 4-5               |
| 3. Bobby   |   | 4-5               |
| 4. Nan     |   | 4-3               |
| 5. Jean    |   | 4-2               |
| 6. Tommy   |   | 4-1               |
| 7. Roger   |   | 4-0               |
| 8. Eddy    |   | 3-9               |
| 9. Kay     |   | 3-8               |
| 10. Betsy  |   | 3-4               |
| 11. Jerry  |   | 3-3               |
| 12. George |   | 3-2               |
| 13. Carl   |   | 3-2               |

The physical status of the children is given in terms of height and weight percentile rank according to Merrill-Palmer standards (Table 3). Height ranges widely from the 5th to the 90th percentile with a mean of 49; weight varies from the 10th to the 96th percentile with a mean of 47. Subject No. 1, Johnny, rated the lowest in both height and weight while No. 7, Roger, rated the highest in both. For other children there existed wide variation between the group position in height and the group position in weight.

The nursery school records give the height and weight of the children in pounds and inches. For purposes of this study, these measurements were converted to percentile rankings in order to show individual and group relationships.

Table 3. Physical size of subjects.

| Subjects   | Weight |            | Height |            |
|------------|--------|------------|--------|------------|
|            | Pounds | Percentile | Inches | Percentile |
| 1. Johnny  | 33.6   | 10         | 40     | 5          |
| 2. Marian  | 33.12  | 10         | 40.88  | 35         |
| 3. Bobby   | 36.85  | 70         | 39.5   | 7          |
| 4. Nan     | 40.69  | 70         | 42.25  | 80         |
| 5. Jean    | 40.37  | 60         | 42.5   | 85         |
| 6. Tommy   | 39.06  | 60         | 41.75  | 70         |
| 7. Roger   | 44.93  | 96         | 42.5   | 90         |
| 8. Eddy    | 34.8   | 15         | 40.5   | 5          |
| 9. Kay     | 41.3   | 95         | 40.75  | 75         |
| 10. Betsy  | 31.3   | 45         | 37.5   | 28         |
| 11. Jerry  | 29.5   | 15         | 37     | 10         |
| 12. George | 33.85  | 35         | 38.75  | 60         |
| 13. Carl   | 34.3   | 35         | 39.25  | 80         |

The socio-economic status of the families of these children may be judged from the occupations of the father. These are as follows: two of the fathers were students, seven were business or professional men, one was a laborer, two were college professors, and one was an army officer.

The mental age (MA) of this group was determined by the Stanford-Binet Test, Form L or Form M, administered within a year of the time this study was begun. For this study the difference in months between the chronological age (CA) and mental age of each child is recorded as shown in Table 4. In all instances the mental

age was superior to the chronological age. These differences, shown as MA-CA, range from 2 to 15 months, with a median of mental age superiority of 7.5 months for the group.

Table 4. MA-CA of subjects.

| Subjects   | MA-CA (months) |
|------------|----------------|
| 1. Johnny  | 2              |
| 2. Marian  | 11             |
| 3. Bobby   | 13             |
| 4. Nan     | 15             |
| 5. Jean    | 7              |
| 6. Tommy   | 3              |
| 7. Roger   | 10             |
| 8. Eddy    | 7              |
| 9. Kay     | 6              |
| 10. Betsy  | 5              |
| 11. Jerry  | 15             |
| 12. George | 2              |
| 13. Carl   | 2              |

Table 5. Subjects semesters in school previous to summer, 1949.

| Subjects   | Semesters morning | Semesters afternoon |
|------------|-------------------|---------------------|
| 1. Johnny  | 7                 |                     |
| 2. Marian  | 6                 |                     |
| 3. Bobby   |                   | 1½                  |
| 4. Nan     |                   | 1                   |
| 5. Jean    | 5                 |                     |
| 6. Tommy   |                   | 1½                  |
| 7. Roger   | 2                 |                     |
| 8. Eddy    |                   | 2                   |
| 9. Kay     |                   | 2                   |
| 10. Betsy  | 2                 |                     |
| 11. Jerry  | 2½                |                     |
| 12. George | 2½                |                     |
| 13. Carl   | 2                 |                     |

Table 5 gives the length of time each child attended nursery school previous to this summer session. The summer terms are counted as  $\frac{1}{2}$  semesters. This summer was the first semester that George, Carl and Betsy were enrolled in the older group of children; this was also the first semester for Bobby, Nan, Eddy, Tommy, and Kay to be in the morning group and stay for lunch. Two of the children, Carl and Roger, had previously attended a veterans' cooperative nursery group. However, they met in the same nursery school building so that the environment was not new to them. They had been in the study group at least one semester before the time this study was made. The only neighborhood play group in this group of children consisted of George and Tommy. There were two groups of children who rode to school together. One group included Tommy, Betsy and George; in the other were Nan and Kay.

#### INTERPRETATION OF DATA

The purpose of this study was to observe this group of children in relation to their varying choices of lunch companions and their behavioral responses in a self-selected group involving a routine activity. Tables 6 and 7 present the choices each child made and received, and the record of absences during the period of study.

Table 6. Choices of subjects as recorded, Situation I.

| Subjects   | 1  | 2 | 3 | 4 | 5  | 6  | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|------------|----|---|---|---|----|----|---|---|---|----|----|----|----|
| 1. Johnny  |    |   |   |   | 2  |    | 1 |   |   | 3  |    |    |    |
| 2. Marian  | A  |   |   |   | 1  |    |   |   |   |    |    |    |    |
| 3. Bobby   | A  |   |   |   |    | 3A |   |   |   |    |    | 2  | 1  |
| 4. Nan     | 2A |   |   |   |    |    |   |   | 1 | A  |    | 3  |    |
| 5. Jean    |    | 1 | 3 |   |    |    |   | A | 2 |    |    |    |    |
| 6. Tommy   |    |   | 2 |   |    |    |   | A |   |    |    | 1  |    |
| 7. Roger   | 3  | 2 |   |   | 1  |    |   |   |   |    |    |    |    |
| 8. Eddy    |    |   | 3 | 1 |    | 2  |   |   |   |    |    |    |    |
| 9. Kay     | A  |   | 1 |   | 2A | A  |   |   |   |    |    |    |    |
| 10. Betsy  |    | 1 |   |   | A  |    |   |   |   |    | 2  |    |    |
| 11. Jerry  |    | 1 |   |   | 2  |    |   |   |   |    |    |    | 3  |
| 12. George |    | 1 | 2 |   |    | A  |   |   |   |    |    |    |    |
| 13. Carl   |    |   | A |   |    |    |   | A |   | A  |    |    |    |

Table 7. Choices of subjects as recorded, Situation II.

| Subjects   | 1 | 2 | 3 | 4 | 5 | 6  | 7 | 8 | 9  | 10 | 11 | 12 | 13 |
|------------|---|---|---|---|---|----|---|---|----|----|----|----|----|
| 1. Johnny  |   |   |   |   | 2 | 3  | 1 |   |    | A  |    |    |    |
| 2. Marian  |   |   | 1 |   | 3 | 2  |   |   |    |    |    |    |    |
| 3. Bobby   |   |   |   |   | 3 | 1  |   |   |    |    |    | 2  |    |
| 4. Nan     |   | 1 |   |   | A |    |   |   |    | 3  |    | 2  |    |
| 5. Jean    |   | 1 | 2 |   |   |    | 3 |   |    |    |    |    |    |
| 6. Tommy   |   |   |   |   |   |    | 3 |   |    | 2  |    | 1  |    |
| 7. Roger   | 3 | 2 | A |   | 1 |    |   |   |    |    |    |    |    |
| 8. Eddy    | A |   | A | 2 |   | 1  | A |   |    |    |    | 3  | A  |
| 9. Kay     | 3 |   | 1 |   | A | A  | A |   |    | 2  |    |    | A  |
| 10. Betsy  |   | 2 |   |   | A | A  |   | 1 | A  |    |    | 3  | A  |
| 11. Jerry  |   |   | 1 |   | A | A  |   |   | 3A |    |    | 2  | A  |
| 12. George |   | 1 |   |   | A | 2A |   |   | A  |    |    |    | A  |
| 13. Carl   |   |   |   |   |   |    |   |   |    |    |    |    | A  |

In the table, A indicates that the child was absent that day. A number before the A means the child was chosen although absent. The information in the tables is the basis of the construction of the sociograms. No distinction is shown on the sociograms among first, second and third choices; however all choices are totaled in

Table 8 showing the number of times each child received a first, second or third choice in each Situation. For instance in Situation I Eddy received no first choices, no second choices and no third choices while Marian received 4 firsts, 1 second and no third. In Situation II Eddy received one first, no second and no third while Marian received 3 first, 2 second and no third choices. These represent two extremes in the choices received by the children. The highest number of choices received by any one child in one situation was 6 which was received by George in Situation II. Three children, Eddy, Jerry, and Carl, received no choices in one of the two situations. Five of the group each received one to three more choices, and five each received 1 less between Situations I and II. The trend of the group as a whole appears to be toward a fairly constant social status while the positions of a few individuals vary slightly.

Table 8. Number of times subjects were designated as 1st, 2nd, or 3rd choices.

| Subjects   | : Situation I |     |     |       | : Situation II |     |     |       |
|------------|---------------|-----|-----|-------|----------------|-----|-----|-------|
|            | 1st           | 2nd | 3rd | Total | 1st            | 2nd | 3rd | Total |
| 1. Johnny  | 0             | 1   | 1   | 2     | 0              | 0   | 2   | 2     |
| 2. Marian  | 4             | 1   | 0   | 5     | 3              | 2   | 0   | 5     |
| 3. Bobby   | 1             | 2   | 2   | 5     | 3              | 1   | 0   | 4     |
| 4. Nan     | 1             | 0   | 0   | 1     | 0              | 1   | 0   | 1     |
| 5. Jean    | 2             | 3   | 0   | 5     | 1              | 1   | 2   | 4     |
| 6. Tommy   | 0             | 1   | 1   | 2     | 2              | 2   | 1   | 5     |
| 7. Roger   | 1             | 0   | 0   | 1     | 1              | 0   | 2   | 3     |
| 8. Eddy    | 0             | 0   | 0   | 0     | 1              | 0   | 0   | 1     |
| 9. Kay     | 1             | 1   | 0   | 2     | 0              | 0   | 1   | 1     |
| 10. Betsy  | 0             | 0   | 1   | 1     | 0              | 2   | 1   | 3     |
| 11. Jerry  | 0             | 1   | 1   | 1     | 0              | 0   | 0   | 0     |
| 12. George | 1             | 1   | 2   | 4     | 1              | 3   | 2   | 6     |
| 13. Carl   | 1             | 0   | 0   | 1     | 0              | 0   | 0   | 0     |

The experiences of the children in choosing illustrate the problems which the preschool child has in making choices. As yet his abstract thinking does not seem to have developed to the point where he can easily meet a situation as complex as choosing. Hence, as Moreno (11) has pointed out, the validity of his third, and even his second, choice is held in question. The ease and willingness with which some of the children made second and third choices, however, suggest some value to including these data in this study. The following sociograms present in graphic form the choices of the children in the two Situations.

#### Situation I

Table 9. Total choices, Situation I.

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|                   |    |
|-------------------|----|
| Total no. choices | 30 |
| Mutual choices    | 5  |
| Boy-girl choices  | 8  |
| Girl-boy choices  | 5  |
| Girl-girl choices | 6  |
| Boy-boy choices   | 11 |

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The sociogram of Situation I (Fig. C) pictures a total number of 30 choices made by the group of 13 children (Table 9). This is an average of 2.3 choices made by each child out of a possible 3.0. One girl and four boys made 3 choices, three girls and boys made 2 choices each, one girl made one choice, and one boy made no choices (Table 10).

A mutual choice is one in which child A chooses child B and B chooses A. Reciprocal is used interchangeably with mutual. In Situation I there were five mutual choices, two among the five girls of the study and three among the eight boys of the study. These

mutual choices show an interesting pattern. The trend in this group seems to be toward the more popular children. There were no mutual choices between girls and boys. It is interesting to note that one boy and one girl (Nos. 3 and 5) each were recipients of two of the five mutual choices. In each case one of the choices was from a child in the same CP2 that the recipients are in and the other is from a child in one position lower. The fifth mutual was between two boys (Nos. 1 and 7) in a near-isolated position.

Table 10. Number of choices made by sex, Situation I.

| Choices each | No. of children |       |       |
|--------------|-----------------|-------|-------|
|              | Boys            | Girls | Total |
| 3            | 4               | 1     | 5     |
| 2            | 3               | 3     | 6     |
| 1            | 0               | 1     | 1     |
| 0            | 1               | 0     | 1     |

Table 11. Subject's choices by sex, Situation I.

| Subjects      | Chose |       |       | Chosen by |       |       |
|---------------|-------|-------|-------|-----------|-------|-------|
|               | Boys  | Girls | Total | Boys      | Girls | Total |
| <b>Girls:</b> |       |       |       |           |       |       |
| 2. Marian     | 0     | 1     | 1     | 3         | 2     | 5     |
| 4. Nan        | 2     | 1     | 3     | 1         | 0     | 1     |
| 5. Jean       | 1     | 2     | 3     | 3         | 2     | 5     |
| 9. Kay        | 1     | 1     | 2     | 0         | 2     | 2     |
| 10. Betsy     | 1     | 1     | 2     | 1         | 0     | 1     |
| <b>Boys:</b>  |       |       |       |           |       |       |
| 1. Johnny     | 1     | 2     | 3     | 1         | 1     | 2     |
| 3. Bobby      | 3     | 0     | 3     | 3         | 2     | 5     |
| 6. Tommy      | 2     | 0     | 2     | 2         | 0     | 2     |
| 7. Roger      | 1     | 2     | 3     | 1         | 0     | 1     |
| 8. Eddy       | 2     | 1     | 3     | 0         | 0     | 0     |
| 11. Jerry     | 1     | 2     | 3     | 0         | 1     | 1     |
| 12. George    | 1     | 1     | 2     | 3         | 1     | 4     |
| 13. Carl      | 0     | 0     | 0     | 1         | 0     | 1     |



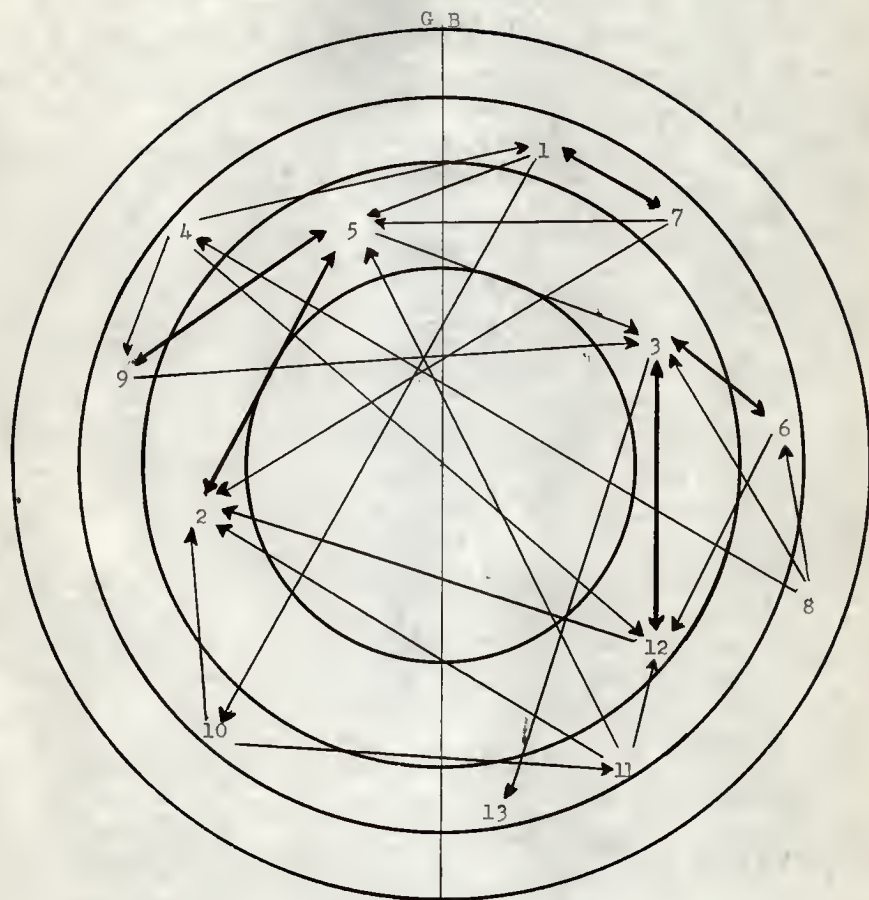


Fig. C. Sociogram of Situation I.

A boy-girl choice means that a boy chose a girl while a girl-boy choice means that a girl chose a boy. These are also known as inter-sex choices. Girl-girl and boy-boy choices indicate choices made between girls only and boys only, respectively. Within this group there is a slight difference in sex cleavage as shown in the choices by sex in Table 11. There were 11 boy-boy and 6 girl-girl choices. There were 8 boy-girl choices while the girl-boy choices totaled 5. Two (Nos. 2 and 5) of the three girls receiving the boy-girl choices are in CP2, or a higher CP than the other girls; they each were recipients of 3 boy-girl choices but only No. 5 chose a boy. They were also the most popular of the five girls. Of the four boys receiving girl-boy choices, two are in CP2 and two in CP3. No. 3 was the recipient of 2 of the 5 choices and was one of the most popular boys, but he chose no girls.

Table 12. Circle positions of subjects, Situation I.

| Circle positions | Girls | Percentage | Boys | Percentage |
|------------------|-------|------------|------|------------|
| 1                | 0     | 0          | 0    | 0          |
| 2                | 2     | 40         | 2    | 25         |
| 3                | 3     | 60         | 5    | 62.5       |
| 4                | 0     | 0          | 1    | 12.5       |

For the purposes of this study the circle position (CP) of the child on the sociogram may be considered as denoting his popularity. To be placed within CP1 the child must have received seven or more choices. No child in this group achieved this position. This is understandable when the small size of the group, the ages of the children and their difficulties in choosing are considered.

The child who received four, five or six choices achieves a position in CP2. There are two girls and one boy in this position with 5 choices each, and one boy with 4. In relation to the total group, the first 3 may be considered as "stars". The child is in CP3 when he receives one, two or three choices. In this position are two children receiving two choices each and six receiving one choice each. Two of the latter group of children, Nos. 1 and 7, represent the fifth mutual choice within this group. One child, in CP4, received no choices but made his full quota of three choices. He is referred to as an "isolate". Table 12 shows that 60 percent of the girls and 62.5 percent of the boys are within CP3.

Of the four children receiving 4 or 5 choices, three were more than four years of age. The fourth child was one of the youngest. Those receiving 1 or 2 choices were evenly divided between the older and the younger groups. No. 8, the only child receiving no choices, is one of the younger children of the group.

Table 13. Choices made according to age, Situation I.

| Subjects      | Chose |         |       | Chosen by |         |       |
|---------------|-------|---------|-------|-----------|---------|-------|
|               | Older | Younger | Total | Older     | Younger | Total |
| <b>Girls:</b> |       |         |       |           |         |       |
| 2. Merian     | 0     | 1       | 1     | 0         | 5       | 5     |
| 4. Nan        | 1     | 2       | 3     | 0         | 1       | 1     |
| 5. Jean       | 2     | 1       | 3     | 2         | 3       | 5     |
| 9. Kay        | 2     | 0       | 2     | 0         | 2       | 2     |
| 10. Betsy     | 1     | 1       | 2     | 1         | 0       | 1     |
| <b>Boys:</b>  |       |         |       |           |         |       |
| 1. Johnny     | 0     | 3       | 3     | 0         | 2       | 2     |
| 3. Bobby      | 0     | 3       | 3     | 0         | 5       | 5     |
| 6. Tommy      | 1     | 1       | 2     | 1         | 1       | 2     |
| 7. Roger      | 3     | 0       | 3     | 1         | 0       | 1     |
| 8. Eddy       | 3     | 0       | 3     | 0         | 0       | 0     |
| 11. Jerry     | 2     | 1       | 3     | 0         | 1       | 1     |
| 12. George    | 2     | 0       | 2     | 0         | 4       | 4     |
| 13. Carl      | 0     | 0       | 0     | 1         | 0       | 1     |

The ages of the choosers as compared with the ages of the children whom they chose (Table 13) show a slight trend within this narrow age range. With one exception (No. 8) all of the five children who made their three choices were four years of age or over. The child who made no choices was the youngest in the group; but the child who made only one choice was the oldest girl. Also, for the most part the older children chose those younger than themselves and the younger chose older ones. Seventeen children chose older as compared with 6 who were chosen by older children. This would indicate a trend toward preference of the younger children for the older.

The relationship of circle position to mental age of the children (Table 4) shows little consistency. Of the four most popular children in Situation I, Marian, No. 2, and Bobby, No. 3, were among the superior group in MA-CA while Jean, No. 5, and George, No. 12, were in a lower range. On the other hand, Nan, No. 4, Roger, No. 7, and Jerry, No. 11, who rated high in MA-CA superiority were in the same lower CP with other children who showed a lesser difference in MA-CA. However, these three children each made 3 choices.

The behavior characteristics of Nos. 2, 3, 5 and 12, the four children in CP2, tend to be similar in many ways. All were children with few food dislikes who seemed to enjoy the food as well as the social aspect of the eating situation. Their overt behavior was similar in that they showed no behavior difficulties while eating; they were friendly and readily followed adult guidance. Verbal behavior was also similar. None of the four were extremely verbal, as were Nos. 9 and 11, but they did enjoy some spirited conversation and quiet play while eating. All except two of the total choices

those four made were among themselves. Number 3 chose Nos. 6 and 13 whose behavioral characteristics were similar in many ways to his own. The behavior of the other 9 children in the lower CP3 varied greatly in all ways. That of No. 8 in CP4 was almost completely opposite from that of the more popular group of children. However, a comparison of the choices of the group as a whole shows no consistent trend toward the type of behavior exhibited by the 4 most popular children.

The four children in CP2 may also be compared in the length of time of their previous attendance in the nursery school. Number 2 had 6 semesters, No. 3 had  $1\frac{1}{2}$ , No. 5 had 5 and No. 12 had  $2\frac{1}{2}$ . These figures show no consistency in comparison with the number of choices they received or made. Number 3, for instance, who had attended for the shortest length of time, made 3 choices while No. 2 had been there 6 semesters but made only one choice.

As to the effect of absences on popularity during this summer semester, no definite conclusion can be drawn. Seven of the children had no absences during Situation I, and each of the others missed at least one day but none more than four (Table 7).

Physical size in this group did not seem to exert any definite influence in the pattern of selection as made by the children. The percentile ranks of the more popular children varied inconsistently from a low of 10 to a high of 70 in weight and a low of 7 to a high of 65 in height. The two children (Nos. 1 and 7) representing the high and low of the group in both height and weight were among the less popular children while the isolate, No. 8, had one of the lowest percentiles in both height and weight.

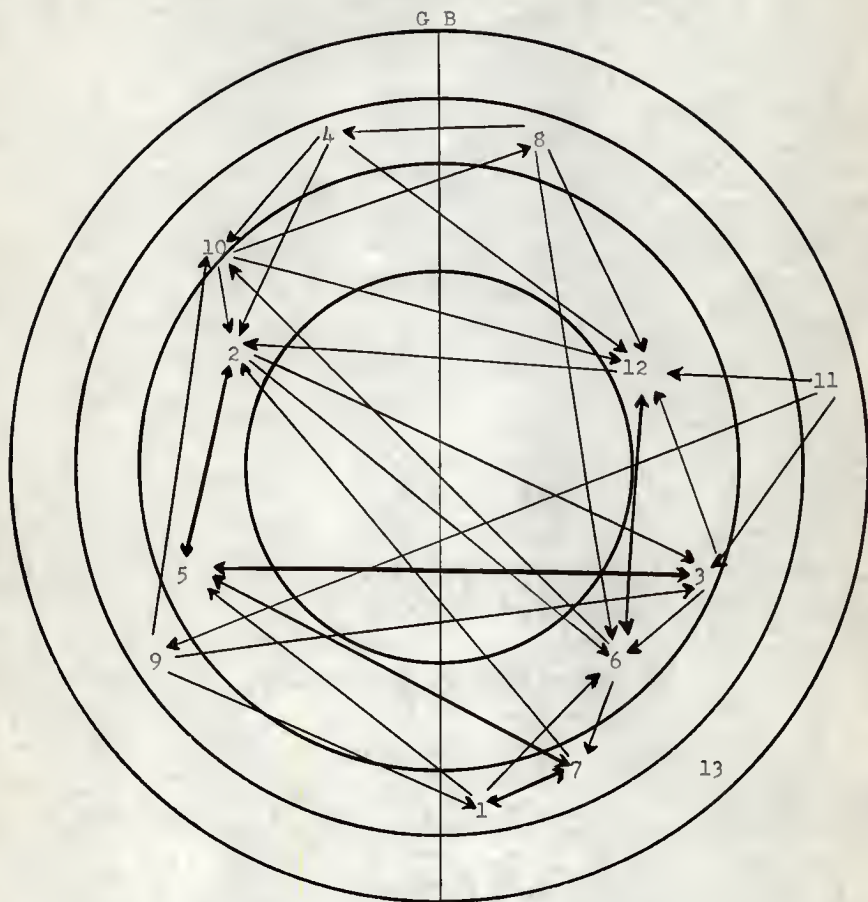


Fig. D. Sociogram of Situation II.

### Situation II

The first choice in Situation II (Fig. D) was made 22 days after the initial choice in Situation I. Johnny, No. 1, the oldest child in the group again began the series of choices.

Table 14. Total choices, Situation II.

|                   |    |
|-------------------|----|
| Total no. choices | 35 |
| Mutual choices    | 5  |
| Boy-girl choices  | 8  |
| Girl-boy choices  | 9  |
| Girl-girl choices | 6  |
| Boy-boy choices   | 12 |

Table 15. Number of choices made by sex, Situation II.

| Choices each | No. Children |       |       |
|--------------|--------------|-------|-------|
|              | Boys         | Girls | Total |
| 3            | 6            | 5     | 11    |
| 2            | 1            | 0     | 1     |
| 1            | 0            | 0     | 0     |
| 0            | 1            | 0     | 1     |

The number of choices made by the children in this group in Situation II (Table 14) totaled 35. This is an average of 2.7 choices per child out of a possible 3.0. With two exceptions all of the children in the group made three choices each (Table 15). One boy (No. 12) made two, and one boy (No. 13) made no choices. Number 12 was the most popular child in the group while No. 13 was an isolate. Number 13, however, did not have an opportunity to choose in Situation II, so no definite conclusions can be made con-

cerning his choices.

As may be seen in Table 14, there were five mutual choices in Situation II--one girl-girl, two boy-boy, and two among boys and girls. The girl-girl and one boy-boy mutual choices were among children all of whom are in CP2. The second boy-boy mutual was between two boys in CP3. The children of one boy-girl mutual both are in CP2 while in the second the girl is in CP2 and the boy is in CP3, a position below her. This same girl, No. 5, was the recipient of three of the five mutual choices in the group--the one girl-girl and two boy-girl. The trend of mutual choices seems to be toward the more popular children. However No. 7, in a less popular position was the recipient of 2 mutuals, one from a more popular girl and one from a less popular boy.

Table 16. Subjects' choices by sex, Situation II.

| Subjects      | Chose |       |       | Chosen by |       |       |
|---------------|-------|-------|-------|-----------|-------|-------|
|               | Boys  | Girls | Total | Boys      | Girls | Total |
| <b>Girls:</b> |       |       |       |           |       |       |
| 2. Marian     | 2     | 1     | 3     | 2         | 3     | 5     |
| 4. Nan        | 1     | 2     | 3     | 1         | 0     | 1     |
| 5. Jean       | 2     | 1     | 3     | 3         | 1     | 4     |
| 9. Kay        | 2     | 1     | 3     | 1         | 0     | 1     |
| 10. Betsy     | 2     | 1     | 3     | 1         | 2     | 3     |
| <b>Boys:</b>  |       |       |       |           |       |       |
| 1. Johnny     | 2     | 1     | 3     | 1         | 1     | 2     |
| 3. Bobby      | 2     | 1     | 3     | 1         | 3     | 4     |
| 6. Tommy      | 2     | 1     | 3     | 4         | 1     | 5     |
| 7. Roger      | 1     | 2     | 3     | 2         | 1     | 3     |
| 8. Eddy       | 2     | 1     | 3     | 0         | 1     | 1     |
| 11. Jerry     | 2     | 1     | 3     | 0         | 0     | 0     |
| 12. George    | 1     | 1     | 2     | 4         | 2     | 6     |
| 13. Carl      | 0     | 0     | 0     | 0         | 0     | 0     |



In regard to the choices by sex there were 12 boy-boy choices, 6 girl-girl, 8 boy-girl, and 9 girl-boy choices (Tables 14 and 16). All five of the girls and six of the boys were recipients of at least one choice from a child of the opposite sex. One girl (No. 5) and one boy (No. 3) each received three inter-sex choices, one girl and one boy each received two, and 3 girls and 4 boys each received one. The two boys (Nos. 11 and 13) who received no girl-boy choices were "isolates" in CP1. However 2 of the 3 choices made by No. 11 were to girls. Hence in this group the inter-sex choices ranged more toward the popular members of the group with the less popular children receiving a smaller number of them.

Table 17. Circle positions of subjects, Situation II.

| Circle position | Girls | Percentage | Boys | Percentage |
|-----------------|-------|------------|------|------------|
| 1               | 0     | 0          | 0    | 0          |
| 2               | 2     | 40         | 3    | 37.5       |
| 3               | 3     | 60         | 3    | 37.5       |
| 4               | 0     | 0          | 2    | 25         |

An analysis of the relative circle positions of the group in Situation II (Table 17) shows that even with the increase in the total number of choices and the seemingly increased ability to choose, again no children achieved a position in CP1. In CP2 there is one boy (No. 12--a "star") who is the recipient of six choices but only made two, one boy and one girl with five choices each, and one boy and one girl with four choices each. In CP3 there is one boy receiving three choices, one boy and girl with two choices each and two girls and one boy receiving one choice each. In CP4

are two boys (Nos. 11 and 13) classified as "isolates", who received no choices. Number 11 made his full quota of choices while No. 13 made no choices. Both boys are two of the youngest children in the group. Sixty percent of the girls are in CP3 while 75 percent of the boys are evenly divided between CP2 and CP3.

Table 18. Choices made according to age, Situation II.

| Subjects      | Chose |         |       | Chosen by |         |       |
|---------------|-------|---------|-------|-----------|---------|-------|
|               | Older | Younger | Total | Older     | Younger | Total |
| <b>Girls:</b> |       |         |       |           |         |       |
| 2. Marian     | 0     | 3       | 3     | 0         | 5       | 5     |
| 4. Nan        | 1     | 2       | 3     | 0         | 1       | 1     |
| 5. Jean       | 2     | 1       | 3     | 3         | 1       | 4     |
| 9. Kay        | 2     | 1       | 3     | 0         | 1       | 1     |
| 10. Betsy     | 2     | 1       | 3     | 3         | 0       | 3     |
| <b>Boys:</b>  |       |         |       |           |         |       |
| 1. Johnny     | 0     | 3       | 3     | 0         | 2       | 2     |
| 3. Bobby      | 0     | 3       | 3     | 1         | 3       | 4     |
| 6. Tommy      | 0     | 3       | 3     | 3         | 2       | 5     |
| 7. Roger      | 3     | 0       | 3     | 3         | 0       | 3     |
| 8. Eddy       | 2     | 1       | 3     | 0         | 1       | 1     |
| 11. Jerry     | 2     | 1       | 3     | 0         | 0       | 0     |
| 12. George    | 2     | 0       | 2     | 6         | 0       | 6     |
| 13. Carl      | 0     | 0       | 0     | 0         | 0       | 0     |

The choices made according to age in this group show a difference between the children who chose and those who were chosen. Although the age differences of the children in this study are narrow, there is a tendency for the older children to be chosen more often. However, when considering the 3 choices made by each child in turn, a slight preference is seen in favor of the younger children. There were 3 more children who chose younger children than older ones; however the older ones were more often chosen. All

except the two youngest children in the group made their full quota of three choices. Four of the five children receiving 4, 5, or 6 choices were over four years of age. The child who received 6 choices was one of the youngest (No. 12). The other choices were divided between the older and younger children in the group.

Little consistency was shown in this group between the factors of MA-CA and the selection of children. Of the five more popular children in the group, Nos. 2 and 3 showed a superior rating in mental age to that of the other three. Of the two "isolates" No. 11 showed one of the highest differences in the group while No. 13 showed one of the smallest differences in MA-CA. The other children showed no consistent pattern of relationship. The only children not making 3 choices (Nos. 12 and 13) were in the lower range in both MA-CA and CA. However, No. 13 did not have an opportunity to choose in Situation II so no definite conclusions can be drawn concerning his status.

The behavior characteristics as described in Situation I again hold true in Situation II for Nos. 2, 3, 5 and 12. Subject No. 6, who was added to this group in Situation II, was similar in the described characteristics, but his Food Preference Chart showed a higher number of food dislikes and his behavior while eating occasionally was less controlled. The general trend in choosing in this group seemed to be toward the children who exhibited more controlled behavior, but this was not a consistent factor throughout the entire group.

No definite trend is apparent between the physical size and choices in Situation II. Five children in GP2 varied in percentile

rank from a low of 10 and a high of 70 in weight, and a low of 7 to a high of 85 in height. Subject No. 2, a star, and No. 11, an isolate, were among the lower ranking children in both height and weight. Subject No. 13, the other isolate, was near the median of the group while the other children varied widely from the highest to the lowest in percentile rank.

Previous attendance in school of the subjects showed no consistency with the choices made. That of the popular group ranged individually from  $1\frac{1}{2}$  to 6 semesters while the attendance of the two isolates was 2 and  $2\frac{1}{2}$  semesters, respectively. The other children varied from 1 to 7 semesters.

During Situation II 6 of the 13 children were never absent. They were Nos. 2, 4, 8, 10, 11, and 12, as shown in Table 7, ranging in popularity from stars to isolates. The number of absences of the other children ranged from 1 to 6 per child. For this group daily absences did not seem to have any effect on the popularity of individual children.

#### Comparison of Situations I and II

It is recognized by the writer that the repetition of the choosing situation and the factor of time for growth during the 22 days of Situation I may have had some influence on the choices made in Situation II. However, the comparison of the two situations shows a few outstanding changes.

Table 19. Number of choices made, by sex.

| Choices each | Number of Children |       |       |              |       |       |
|--------------|--------------------|-------|-------|--------------|-------|-------|
|              | Situation I        |       |       | Situation II |       |       |
|              | Boys               | Girls | Total | Boys         | Girls | Total |
| 3            | 4                  | 1     | 5     | 6            | 5     | 11    |
| 2            | 3                  | 3     | 6     | 1            | 0     | 1     |
| 1            | 0                  | 1     | 1     | 0            | 0     | 0     |
| 0            | 1                  | 0     | 1     | 1            | 0     | 1     |

A comparison of the two group sociograms shows a small change in the children's choices in the 22 days between the choosing situations. The total number of choices was increased by five. After Situation I the children seemed to realize to a certain extent the significance of their choices to the lunch situation and chose more readily. The number of children making three choices changed from 5 in Situation I to 11 in Situation II. Two boys and four girls were responsible for this increase as shown in Table 19. Only two children did not make three choices; subject No. 12 made two choices and No. 13 made none in both situations. Number 13, however, had no opportunity to choose in Situation II so no conclusions can be drawn in his case. The other children all made their three choices in Situation II.

The number of mutual choices remained constant, but they changed in coherence from girl-girl and boy-boy choices to one girl-girl, two boy-boy, and two inter-sex choices. A trend was shown in this group in that the majority of mutual choices was among the children in the higher social position. One isolated mutual was noted in both situations between Nos. 1 and 7. But in Situation II No. 7

was the recipient of a second mutual choice with a more popular child.

Table 20. Total sex choices.

| Choices   | : | Situation I | : | Situation II |
|-----------|---|-------------|---|--------------|
| Girl-girl |   | 6           |   | 6            |
| Boy-boy   |   | 11          |   | 12           |
| Boy-girl  |   | 8           |   | 8            |
| Girl-boy  |   | 5           |   | 9            |

The sex cleavage of the entire group differed slightly between the two situations. The girl-girl and boy-girl choices remained constant in number, but the boy-boy choices were increased by one while the girl-boy choices increased by four as shown in Table 20. The recipients of most of the inter-sex choices tended to rank in a more popular social position while the isolates received no girl-boy choices. All of the children in the group, with the exception of No. 13, made and received inter-sex choices. Consequently no definite conclusion concerning the relationship between sex cleavage and choosing in this group can be made.

Table 21. Total choices received.

| Subjects      | Situation I | Situation II |
|---------------|-------------|--------------|
| <b>Girls:</b> |             |              |
| 2. Marian     | 5           | 5            |
| 4. Nan        | 1           | 1            |
| 5. Jean       | 5           | 4            |
| 9. Kay        | 2           | 1            |
| 10. Betsy     | 1           | 3            |
| <b>Boys:</b>  |             |              |
| 1. Johnny     | 2           | 2            |
| 3. Bobby      | 5           | 4            |
| 6. Tommy      | 2           | 5            |
| 7. Roger      | 1           | 3            |
| 8. Eddy       | 0           | 1            |
| 11. Jerry     | 1           | 0            |
| 12. George    | 4           | 6            |
| 13. Carl      | 1           | 0            |

The status of the entire group was very flexible as shown by the totals given in Table 21. In Situation I three children received 5 choices each, one received 4, three received 2, five received one each, and one received none. In Situation II one child was the recipient of 6 choices, two received 5, two received 4, two received 3, one received 2, three received 1, and two received no choices. With the increase in total choices from 30 in Situation I to 35 in Situation II, five children received one or more choices more in the second than in the first situation. The choices received by five other children decreased by one or more while only three, one boy and two girls, remained constant in the number of choices received in the two situations. The greatest increase in the number of choices received was shown by No. 6 with an increase of 3 choices between the two situations. Three other children received increases of two choices each while all other variations were by one choice each.

Table 22. Circle positions of subjects.

| Circle<br>position | Situation I |      |       | Situation II |      |       |
|--------------------|-------------|------|-------|--------------|------|-------|
|                    | Girls       | Boys | Total | Girls        | Boys | Total |
| 1                  | 0           | 0    | 0     | 0            | 0    | 0     |
| 2                  | 2           | 2    | 2     | 2            | 3    | 5     |
| 3                  | 3           | 5    | 8     | 3            | 3    | 6     |
| 4                  | 0           | 1    | 1     | 0            | 2    | 2     |

By virtue of the fluctuations in the number of choices received, six of the children moved within their own circle positions between situations, but the differences were not enough to move them to a new CP. Two of them, Nos. 6 and 8, moved ahead in CP's--No. 6 from CP3 to CP2 and No. 8 from CP4 to CP3. Two others, Nos. 11 and 13, showed a decrease in the number of choices received, moving backwards from CP3 to isolated positions in CP4. Table 22 shows that in this small group no child achieved a position in CP1. The number of children in CP's 2 and 4 was increased by one each while the number in CP3 decreased by two. Thus, as shown above, there was one more star and one more isolate in Situation I than in Situation II and two less children in a median position.

The age cleavage of the entire group in this narrow age range shows a strong tendency in both situations toward greater preferences of the younger children for older ones in contrast to older children choosing the younger. However, the children of ages between the oldest and youngest extremes indiscriminately chose older, or younger, or children of their own ages. Some inconsistency is apparent in the ages of the more popular children, ranging from one of the youngest (No. 12) to one of the oldest (No. 2). The isolates



were among the younger children in the group, thus further confirming the trend in this group for choosing the older children more often.

The MA-CA factor in both choosing situations showed no definite trend; two stars and one isolate alike had a superior MA-CA difference. The other children in the group ranged inconsistently between the high and low differences. Thus the conclusion may be drawn that in this group the MA-CA factor had little bearing on the choices made. This conclusion disagrees with Bonney's (2) findings for school age children.

In regard to general behavior characteristics, certain trends may be noted. In both situations the children in the more popular social position (Nos. 2, 3, 5, 6 and 12) showed some similarities in behavior. All seemed to enjoy the lunch situation and had relatively few food dislikes. In overt behavior they exhibited a very small degree of aggressiveness, were friendly and were amenable to adult guidance. The verbal ability of the more popular group was well developed but not extreme. They enjoyed some quiet conversation and a little play while eating but presented few behavior difficulties. The characteristics of the isolates and other children differed widely in all ways from those of the popular group. From the above statements a conclusion may be that for this group of children those most often chosen were children exhibiting a friendly, controlled type of behavior.

The areas where less relationship was observed are in physical size and time at nursery school. The data given show that in both situations the "populans" and the "isolates" varied as much in

height and weight percentiles and attendance at school as did the other children in the group. Hence, the factors of physical size and daily absences show no definite trends in relation to the choices of this group.

### Individual Studies

For each of the 13 children a brief individual study is presented. Small sociograms show the child's position in the group, both as regards choosing and being chosen in Situation I and II. In the accompanying case studies the influence of such factors as age, mental test reports, physical size, time of eating and behavior characteristics are discussed.

Table 23. Data of choices.

|           |               |      |         | : Percentile: |       |                 |   |
|-----------|---------------|------|---------|---------------|-------|-----------------|---|
|           |               | : CA | MA-CA   | : Ht.         | Wt. : | Av. eating time |   |
| Subject:  |               |      |         |               |       | 20 minutes      |   |
|           | No. 1. Johnny | 4-7  | 2 mos.  | 5             | 10    |                 |   |
| Chosen:   | No. 5. Jean   | 4-2  | 7 mos.  | 85            | 60    | 18              | " |
|           | No. 10. Betsy | 3-4  | 5 mos.  | 28            | 45    | 26              | " |
|           | No. 7. Roger  | 4-0  | 10 mos. | 90            | 96    | 19              | " |
| Choosers: | No. 7. Roger  |      |         |               |       |                 |   |
|           | No. 6. Tommy  | 4-1  | 3 mos.  | 70            | 60    | 18              | " |
|           | No. 4. Nan    | 4-3  | 15 mos. | 80            | 70    | 20              | " |
|           | No. 9. Kay    | 3-8  | 6 mos.  | 75            | 95    | 32              | " |

Subject No. 1, Johnny. Johnny is the only child of a local business man. From ratings accorded him by his teachers he is described as a boy of fairly good physique and pleasing appearance.

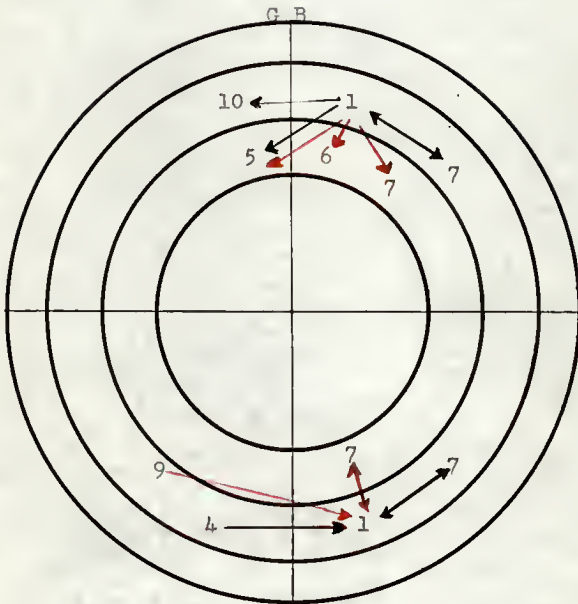


Fig. E. Sociogram 1.  
 No. 1 - Johnny  
 Sex - Male  
 Age - 4-7  
 Semesters in N.S. - 7

He is self-conscious at times but usually friendly toward those about him. However, he is not too active in social groupings. He has strong and frequent changes of mood resulting in a pleasant companionship with others one moment and a strong reaction against them in the next.

Mentally he is active, but his activities did not usually evidence strong inner control. He is very energetic in physical activities but tires easily. In social relationships he is described as often being defiant of routine and impatient with restrictions. Emotionally he is easily aroused and impulsive in his actions.

Johnny is a very spasmodic eater. This is indicated by his low percentile ratings in height and weight. He usually plays with his food and sometimes shows his disinterest, or boredom, in the eating situation by knocking over his milk, leaving the table, kicking, or being generally noisy. His manner of handling his food is consistently "messy". He has over 40 food dislikes as listed on his Food Preference Chart. On those two days when he was chooser the menus included carrots and green pepper, two of his strong dislikes. In Situation I when Johnny was the chooser he ate a very small amount of food; but in Situation II he had second helpings of almost all foods. Of the children he chose, Jean was a "good", steady eater; Roger ate ample servings but played a lot; Betsy was a light eater and had difficulty remaining in her seat; Tommy was an average eater, a good conversationalist, and played some with his food.

During the choosing situation Johnny readily named his first and second choices. It seemed to be difficult for him to make a third choice. He acted embarrassed and stamped on the floor or

asked a question such as, "How will I get my milk?" After one or two further questions from the observer he would name his third choice.

In both Situation I and II, Johnny's two mutual choices were with Roger. Johnny's other choices were Jean and Betsy in Situation I and Jean and Tommy in Situation II. He chose two of the same children, Jean and Roger, in both Situations. Betsy was absent when he chose in Situation II.

For the purpose of this study the circle position (CP) of each child is an indication of his popularity. Johnny is in CP3 in both Situations. In the first Situation two of his choices, Roger and Betsy, are in the same CP as Johnny while Jean, his third choice is in CP2, a higher position in relation to the group. In the second situation Roger's popularity has increased and he has changed from CP3 to CP2; thus all three of Johnny's choices are in CP2, a position ahead of him.

Roger, his mutual choice, was the only boy choosing Johnny in both Situations. In Situation I Nan, and in Situation II Kay, chose him. Both girls are in CP3 with Johnny.

Johnny was the lowest in percentile rank in height and weight in this group. All his choices and choosers were also more popular.

The choices were fairly evenly distributed according to sex; he chose two girls and two boys and was chosen by two different girls and one boy. The behavior characteristics of one choice, Betsy, tend to parallel Johnny's in overt and eating behavior while those of the other choices indicate a higher social and emotional rating. Of his choosers Tommy seems to have a more controlled type of behavior than

either Nan or Kay. Nan had some behavior problems while Kay had some difficulty in eating. Betsy is also the youngest of his choices, the others being nearer his age. Of his choosers, Tommy and Nan were near his own age and Kay was much younger.

Table 24. Data of choices.

|           |                | CA : | MA-CA : | : Percentile : |      | Av. eating  |
|-----------|----------------|------|---------|----------------|------|-------------|
|           |                |      |         | Ht.:           | Wt.: | time (min.) |
| Subject:  | No. 2. Marian  | 4-5  | 11 mos. | 35             | 10   | 17          |
| Choices:  | No. 3. Bobby   | 4-5  | 13 mos. | 7              | 70   | 20          |
|           | No. 6. Tommy   | 4-1  | 3 mos.  | 70             | 60   | 18          |
|           | No. 5. Jean    | 4-2  | 7 mos.  | 85             | 60   | 18          |
| Choosers: | No. 5. Jean    |      |         |                |      |             |
|           | No. 7. Roger   | 4-0  | 10 mos. | 90             | 96   | 19          |
|           | No. 12. George | 3-2  | 2 mos.  | 60             | 35   | 17          |
|           | No. 11. Jerry  | 3-3  | 15 mos. | 10             | 15   | 19          |
|           | No. 10. Betsy  | 3-4  | 5 mos.  | 28             | 45   | 26          |
|           | No. 4. Nan     | 4-3  | 15 mos. | 80             | 70   | 20          |

Subject No. 2, Marian. Marian, whose father is a local business man, has one older brother. She has been described by the teachers as being keenly alive and alert to her surroundings. Her interest is easily aroused and she eagerly seeks social activities. She possesses confidence in herself and has a colorful personality while her even temper and affectionate nature are real assets to her popularity. She is an energetic child and can assert her own position when necessary.

All of the children whom Marian chose were "good" eaters and conversationalists. The average eating time for this entire group, with one exception, varied no more than three minutes. Marian, herself, has very few food dislikes and seems to enjoy eating. In.

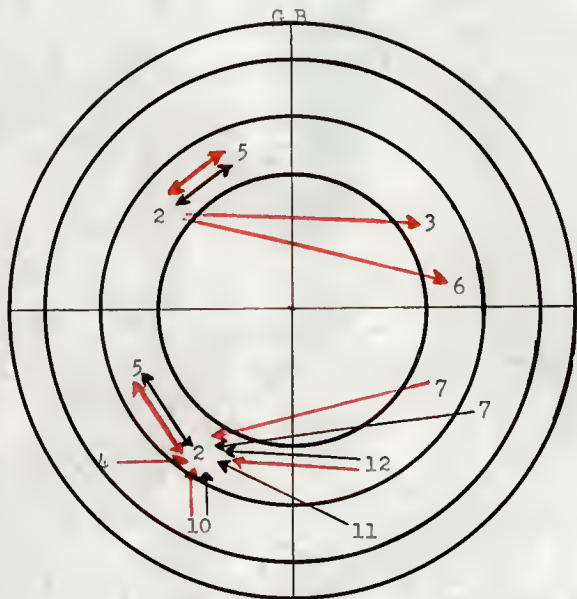


Fig. F. Sociogram.2.

No. 2 - Marian  
 Sex - Female  
 Age - 4-5  
 Semesters in N.S. - 6

Situation I some of the conversation was centered on the choosing situation. For instance:

Jean: Did you choose me?

Marian: Yes,---I like this table with just us two

Jean: Why did you choose me?

Marian: I wanted to. Why didn't you choose me?

Jean: The teacher didn't wake me up early.

-----

Why didn't you choose a teacher?

Marian: I did, didn't I?

Jean: Teacher, next time choose me.

In Situation II with more children at the table the conversation centered more around the food and there was some quiet, mutually enjoyed play.

The first time that Marian chose she did not seem to be certain of what the situation was. When asked which children she would like at the table with her she first indicated the writer. When it was explained to her that only children would be at that table she chose Jean. When asked for two other choices she asked, "Who would Jean like to eat with?" She made no other choices and ended the conversation with, "Nobody else." In Situation II she very readily named her three choices.

In each Situation Marian had one mutual choice with the same child, Jean. This was her only choice in Situation I but in Situation II, she also chose Bobby and Tommy. Marian's choices are all within CP2, the same CP in which she is placed.

With two exceptions Marian was chosen by the same children in both Situations. Jean, Betsy, Roger, George and Jerry chose her in Situation I while Jean, Betsy, Nan, Roger and George chose her in Situation II. Of her choosers in Situation I, one boy and one



girl are in CP2 with Marian while one girl and two boys are in a CP behind her. In Situation II Roger moved ahead to CP2 so that one girl and two boys are in CP2 with Marian and two girls are in CP3.

Marian's popularity is noted particularly by the number of first choices she received. In Situation I she received 4 first choices and 1 second while in Situation II she received 3 firsts and 2 seconds. This is significant in view of the fact that one other child received 3 first choices in Situation II and two others received 2 firsts. All others received either one or no first choices.

Marian's choices were almost evenly divided according to sex. She chose one girl, twice, and two boys. She was chosen by three girls and three boys. All of her choices and two of her choosers were four years of age and over. A wide range was shown in the MA-CA and the physical status of both choosers and chosen.

The behavior characteristics of Marian's choices are all similar to her own. They evidenced few behavior or eating problems and were usually ready to accept adult guidance.

Some relationship is shown in Marian's previous 6 semesters in the school to her high degree of popularity in the group. The child who was her reciprocal choice had been in nursery school approximately the same length of time.

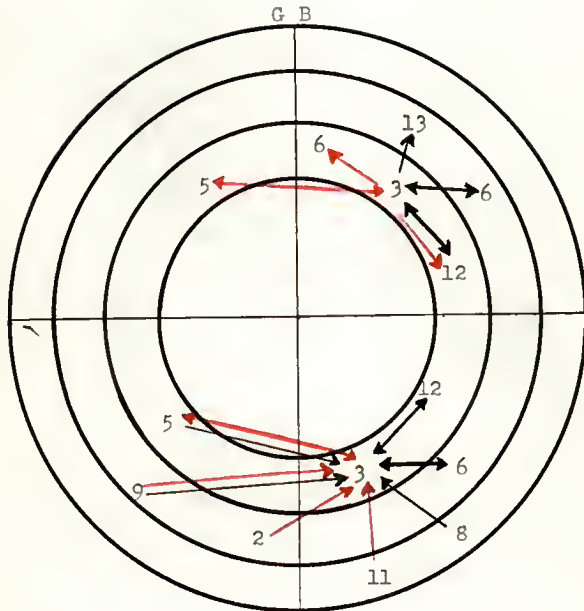


Fig. G. Sociogram 3.

No. 3 - Bobby  
 Sex - Male  
 Age - 4-5  
 Semesters in N.S. -  $1\frac{1}{2}$

Table 25. Data of choices.

|           |                | CA. : | MA-CA : | : Percentile : |    | Av. eating  |
|-----------|----------------|-------|---------|----------------|----|-------------|
|           |                | Mt. : | Wt. :   |                |    | time (min.) |
| Subject:  | No. 3. Bobby   | 4-5   | 13 mos. | 7              | 70 | 20          |
| Chosen:   | No. 13. Carl   | 3-2   | 2 mos.  | 60             | 35 | 30          |
|           | No. 12. George | 3-2   | 2 mos.  | 60             | 35 | 17          |
|           | No. 6. Tommy   | 4-1   | 3 mos.  | 70             | 60 | 18          |
| Choosers: | No. 5. Jean    | 4-2   | 7 mos.  | 85             | 60 | 18          |
|           | No. 5. Jean    |       |         |                |    |             |
|           | No. 6. Tommy   |       |         |                |    |             |
|           | No. 12. George |       |         |                |    |             |
|           | No. 9. Kay     | 3-6   | 6 mos.  | 75             | 95 | 32          |
|           | No. 8. Eddy    | 3-9   | 7 mos.  | 5              | 13 | 18          |
|           | No. 11. Jerry  | 3-3   | 15 mos. | 10             | 8  | 19          |
|           | No. 2. Marian  | 4-5   | 11 mos. | 35             | 10 | 17          |

Subject No. 3, Bobby. Bobby has one younger brother. His father is a college professor. Bobby has been described by the staff as a strong, energetic little boy with an excellent physique. He has a colorful personality and usually demonstrates a quiet confidence in himself. He is keenly alive and alert to his environment. His agile mind, interest in activities, and sympathetic manner all are combined in the quiet leadership which he holds within the group. He usually follows adult guidance and responds in a usual manner to frustrating situations. He can assert his own ideas but yields to others when it is necessary.

With the exception of George, the children whom Bobby chose demonstrated healthy appetites and enjoyed the eating situation. Carl took little part in any conversation which centered around cowboys and food. The average eating time of the chosen, excepting Carl's, was very close, varying no more than three minutes.

Bobby was reticent about choosing in the first situation. He

had been sleeping when the observer went to the resting room for him, which may account for a part of his reticence. After some urging on the part of the observer, he made his three choices. Tommy, his third choice was absent that day and Bobby was asked to choose another child. He indicated that he couldn't think of the names of any other children and he ended with, "Just bring in one more." In Situation II he chose more readily.

Eating lunch at the Nursery School was a new experience for Bobby. His previous 1½ semesters of enrollment had been in the afternoon groups. However he accepted the situation and seemed to be at ease.

In both situations Bobby made three mutual choices. In Situation I two boys, Tommy and George, were mutual choices while in the second situation a girl, Jean, was a mutual choice. Carl was his other choice in Situation I. This was the only choice Carl received in either situation. In Situation II Bobby chose Tommy and George again, but the choices were not reciprocated.

Only one of Bobby's choices, George, is in CP2 with him in Situation I. Carl and Tommy are in a CP behind him. In Situation II, all three of Bobby's choices are in CP2 with him. Tommy has moved ahead from CP3 to CP2 and Jean's CP is the same.

Two children, Jean and Kay, chose Bobby twice while five other children each chose him once. Two of the choices in Situation I were reciprocated. In Situation II Jean's choice only was reciprocated.

The CP's of Bobby's choosers are varied. They range from CP2 to CP4. Within Bobby's CP2 are Jean and George. In the CP3, behind

him, are Kay, Tommy and Marian. Eddy and Jerry are in the isolated CP4.

While the social position of Bobby's choices within the group remained much around his own position, the positions of his choosers fluctuated over the group from two isolates to two of the most popular children within the group. This seems to show some relationship to his previously mentioned leadership qualifications and his ease in getting along with children.

Bobby's choices were not evenly distributed according to sex. In both Situations he chose three boys and one girl and was chosen by four boys and three girls. He chose two boys twice each and was chosen twice each by two girls.

The ages of Bobby's choices were very similar. All were younger than Bobby; two were three-year olds and two were four-year olds. He was chosen by three three-year olds and one of his own age. As to the differences between mental age and chronological age, Bobby is superior to his choices by 6 to 11 months while two of his choosers are 2 months above and below him respectively.

The physical status of Bobby's choices is interesting in that all are in a higher height but a lower weight percentile group than he. With one exception the average eating time of the group is also very close, varying by only three minutes. This is true also of his choosers.

Bobby's previous attendance of  $1\frac{1}{2}$  semesters in school seems to bear little relationship to his choosing. He was one of the most popular children and made three choices in each Situation. In Situation I he was the only child in CP2 who chose children other

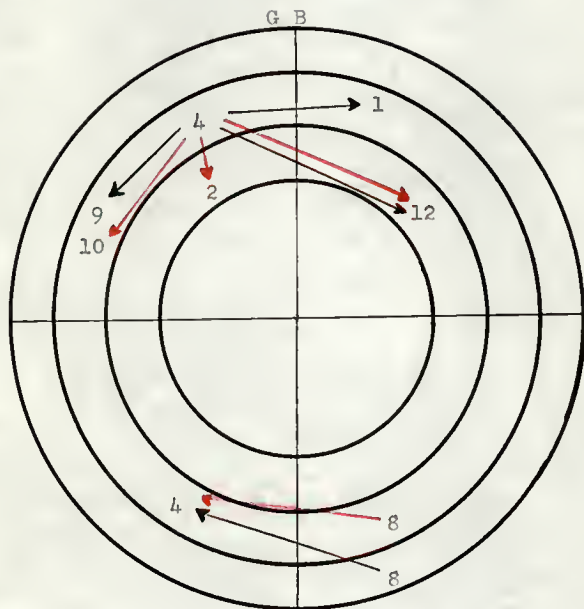


Fig. H. Sociogram 4.

No. 4 - Nan  
 Sex - Female  
 Age - 4-3  
 Semesters in N.S. - 1

than those in his own CP.

Table 26. Data of choices.

|          | Name           | CA  | MA-CA   | Percentile |     | Av. eating<br>time (min.) |
|----------|----------------|-----|---------|------------|-----|---------------------------|
|          |                |     |         | Ht.        | Wt. |                           |
| Subject: | No. 4. Nan     | 4-3 | 15 mos. | 80         | 70  | 20                        |
| Chosen:  | No. 9. Kay     | 3-8 | 6 mos.  | 75         | 95  | 32                        |
|          | No. 1. Johnny  | 4-7 | 2 mos.  | 10         | 5   | 20                        |
|          | No. 12. George | 3-2 | 2 mos.  | 60         | 35  | 17                        |
|          | No. 2. Marian  | 4-5 | 11 mos. | 35         | 10  | 17                        |
|          | No. 10. Betsy  | 3-4 | 5 mos.  | 38         | 45  | 26                        |
| Chooser: | No. 8. Eddy    | 3-9 | 7 mos.  | 5          | 15  | 18                        |

Subject No. 4, Nan. Nan has one baby sister. She is described as a wide-awake, energetic little girl. She has a colorful personality, talks a great deal, and centers most of her activities around group play. She has an excellent physique and seems to be stronger than most of the children in her group, but she tires rather easily. She is subject to strong and frequent changes of mood and is demanding of her own rights. She demonstrates a critical attitude toward adult authority and seems rather slow to accept new customs or routines. Nan is ordinarily a very friendly, warm-hearted child but during the period of this study seemed easily excited and cried often.

There are 48 food dislikes listed on Nan's Food Preference Chart. However, only one, cooked carrots, was served at the two meals of her choosing situations. She played with her food as did the other children at her table but ate average sized portions, usually asking for a second dessert.

With the exception of Marian, the children chosen by Nan were all restless eaters. They enjoyed the relative freedom of the eating situation although there seemed to be a general disinterest in the food itself. There was much silly play and talk while they were at the table. For example:

Nan: Teacher, what is that brown thing?

Teacher: Chocolate custard.

Nan: Chocolate custard! I just love it.

Key: Ow! You stepped on my toes.

George sticks out his tongue at Nan and Kay.

Nan: Oh, the teacher said, "I want some more salad."

All laugh.

Key: (To George) Don't take as biggy bites. You'll choke yourself. Look, teacher, I have a rubber band on top of my hair and my mommy don't want you to pick it off cause she wants it in to keep the hair out of my face.

George: My hair don't come in my face. I have to get a haircut Saturday.

Nan makes squealing noises and then all the children hum and nod their heads.

It seemed difficult for Nan to make her choices of children in the first situation. She didn't seem to know the names of the children and after a brief interrogation by the writer, Nan was taken to the sleeping room to point out her third choice. Johnny, who was her second choice, was absent. In the second situation she seemed to be embarrassed and giggled several times but made her choices quite readily. Nan had been in the Nursery School only one afternoon semester previous to this summer. Consequently the lunch situation was new to her. Kay and Nan rode to school together. The influence of this arrangement was reflected in Nan's choosing Kay in Situation I.

In both situations Nan chose only one child, George, twice. Johnny and Kay were her other choices in Situation I and Marian and Betsy in Situation II.



In regard to the circle position of Nan's choices, Kay, Johnny and Betsy are in CP3 with her. Marian and George are in a position ahead of her.

Only one child, Eddy, chose Nan in both situations. Due to an increase in the number of choices received in Situation II, Eddy moved ahead from his isolated position in CP4 to the same CP with Nan.

Nan's choices were fairly evenly divided as to sex. In the two situations she chose three girls and two boys. She was chosen by one boy but by no girls. None of the children whom she chose, chose her. Some similarity to Nan in overt and eating behavioral characteristics was demonstrated in varying degrees by two of Nan's choices, Betsy and Johnny. The other three were less like her in their behavior. The ages and average eating times of the group varied widely. In MA-CA and in physical status Nan was definitely superior to her choices and choosers.

Nan had previously been in the school only one semester. This factor may have some relationship to the fact that she was chosen only once in each situation by a much less popular boy who was also new in this group, but had been in her afternoon group. However, she made three choices in each situation.

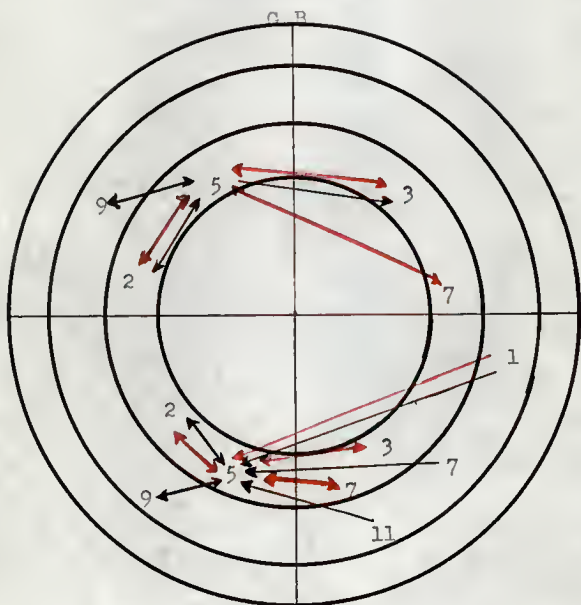


Fig. F. Sociogram 5.

No. 5 - Jean  
 Sex - Female  
 Age - 4-2  
 Semesters in N.S. - 5

Table 27. Data of choices.

|          | Name          | CA  | MA-CA   | Percentile |     | Av. eating<br>time (min.) |
|----------|---------------|-----|---------|------------|-----|---------------------------|
|          |               |     |         | Ht.        | Wt. |                           |
| Subject: | No. 5. Jean   | 4-2 | 7 mos.  | 85         | 60  | 18                        |
| Chosen:  | No. 2. Marian | 4-5 | 11 mos. | 35         | 10  | 17                        |
| Mutuals: | No. 9. Kay    | 3-8 | 6 mos.  | 75         | 95  | 32                        |
|          | No. 3. Bobby  | 4-5 | 13 mos. | 7          | 70  | 20                        |
| Chooser: | No. 7. Roger  | 4-0 | 10 mos. | 90         | 96  | 19                        |
|          | No. 1. Johnny | 4-7 | 2 mos.  | 5          | 16  | 20                        |
|          | No. 11. Jerry | 3-3 | 15 mos. | 10         | 15  | 19                        |

Subject No. 5, Jean. Jean has one older sister. Her father is a local business man. Staff ratings describe Jean as an even-tempered, warm-hearted child. She is rather timid. Physically she is rather slow in action and prefers indoor over outdoor activities. Her physique is not generally outstanding. For most quiet activities she has a remarkably long attention span. She seems to want to enter into many social activities with other children but her lack of self-confidence seems to hold her back. She usually gives in to those more assertive than she.

With the exception of Kay, the children whom Jean chose were children who, as Jean, thoroughly enjoyed their food. She has few food dislikes, none of which were served on the days that she was choosing. During the meal there was much conversation and quiet play. The conversation centered for the most part around foods.

For instance:

Roger: Some days I don't like spinach--some days I do.

Jean: Some days I do the same thing.

Roger: Yeah! Some days I like spinach and some days I don't.  
Oh look over there! Cake! Cake! I like cake.

Marian: That isn't cake. That's gingerbread.

Jean: Gingercake.  
 Marian: Gingerbread.  
 Roger: Gingercake, isn't it?  
 Jean: Gingerbread.  
 Roger: It tastes just like cake.

There was no hesitation in Jean's manner when she made her choices in both situations. When asked which children she wanted, she readily named them. Marian, her first choice in both situations, was Jean's special friend in the school.

Jean's choices are unique in the fact that in each of Situations I and II all of her choices except one were reciprocated. In Situation I she chose Marian, Kay and Bobby--the first two being mutual. In Situation II she chose Marian, Bobby, and Roger, again all mutual choices. Furthermore, she chose two of the same children, Marian and Bobby, twice.

In regard to the relative circle positions, all of Jean's choices, except Kay in Situation I, are in CP2 with Jean. Kay is in a CP behind her.

Of the children choosing Jean, three, Johnny, Roger and Marian, chose her twice. Roger's choice was reciprocated the second time but not the first. Johnny and Jerry were the only children choosing Jean whose choices were not reciprocated.

The only chooser in Jean's CP in Situation I is Marian. Johnny, Roger, Jerry, and Kay are all in CP3, one position behind Jean. In Situation II Marian and Bobby are in CP2 with Jean. Roger has moved up from CP3 to Jean's position. Jean's other chooser, Johnny, is in a CP behind her.

Three of Jean's choices are in her CP while her other choice is in CP3 behind her. Three of her choosers are with her in CP2 and four

of her choosers are in a position behind her. In regard to the choices by sex, in both situations Jean chose a total of three boys and three girls. She was chosen by three girls and six boys. This is interesting in view of the fact that the boys in this group played very boisterously. Jean's main play interest was in the quieter indoor activities.

With the exception of Jerry and Johnny, the only children in the group not chosen by Jean, the children displayed some like behavioral characteristics. Although they were more active in social situations than Jean they mutually enjoyed the food and conversation in the eating situation.

All except one of Jean's choosers and one of her choices were in the same age range with Jean. The other two, Kay and Jerry, were younger. An interesting fact is noted in that all except one choice, Kay, and one chooser, Johnny, were in a superior MA-CA range. Those two were below her own position.

In height and weight percentiles only one of Jean's choices, Roger, rates higher than she. All others in this group have lower percentile ranks in height, and all but one is lower in weight.

Five of the six children who chose Jean and half of her mutuals had been in the nursery school approximately the same length of time as Jean. It would appear, therefore, that time in nursery school in Jean's case bears some relationship to her social acceptability.

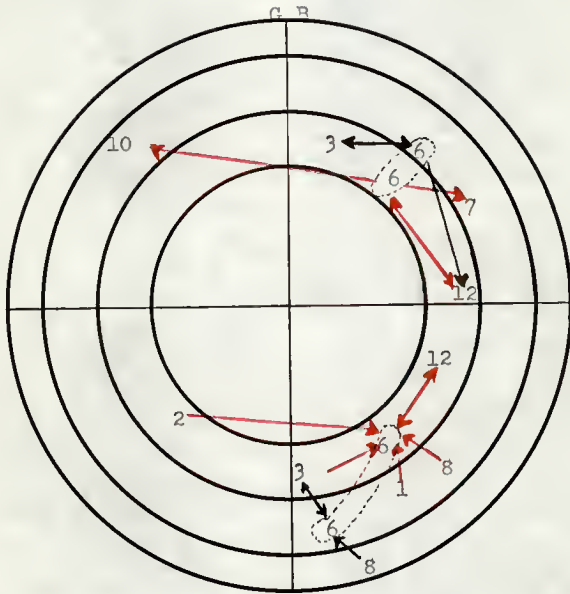


Fig. J. Sociogram 6.

No. 6 - Tommy  
 Sex - Male  
 Age - 4-1  
 Semesters in N.S. -  $1\frac{1}{2}$

Table 28. Data of choices.

|           |         | Name   | CA  | MA-CA   | Percentile |     | Av. eating<br>time (min.) |
|-----------|---------|--------|-----|---------|------------|-----|---------------------------|
|           |         |        |     |         | Ht.        | Wt. |                           |
| Subject:  | No. 6.  | Tommy  | 4-1 | 3 mos.  | 70         | 60  | 17                        |
| Chose:    | No. 12. | George | 3-2 | 2 mos.  | 60         | 35  | 17                        |
| Mutuals:  | No. 3.  | Bobby  | 4-5 | 13 mos. | 7          | 70  | 20                        |
| "         | No. 10. | Betsy  | 3-4 | 5 mos.  | 28         | 45  | 26                        |
| "         | No. 7.  | Roger  | 4-0 | 10 mos. | 90         | 96  | 19                        |
| Chosen by | No. 8.  | Eddy   | 3-9 | 7 mos.  | 5          | 15  | 18                        |
| "         | No. 2.  | Marian | 4-5 | 11 mos. | 35         | 10  | 17                        |
| "         | No. 1.  | Johnny | 4-7 | 2 mos.  | 10         | 5   | 20                        |

Subject No. 6, Tommy. Tommy has one younger sister. His father is an officer in the Regular Army Air Corps. Tommy's teachers described him as a wide-awake, energetic, socially active child. He seems to be quick thinking and his interest in new things is easily aroused. His physical appearance leaves a very favorable impression. He is strong and rarely shows fatigue. He exhibits confidence in himself and possesses a colorful personality. He usually follows adult guidance readily, is even-tempered and friendly but can be very assertive when the need arises.

Tommy's Food Preference Chart lists about 40 dislikes. The menus, on the days when he was choosing, included five of his dislikes: jello, Corn Kix, asparagus, peas and pineapple. However, he ate an average sized serving of all foods. During the meals the conversation centered around food, and there was some "silliness" and play. For example:

Tommy: Get out of here, bug.  
 George: Get out of here, bug.  
 Roger: Get out of here, bug.  
 Betay: Get out of here, bug.

George chants some unintelligible sounds. Roger tells him to turn around and eat.

Tommy scoots his chair away from the table and back again.

Tommy: I want to get some meat. Where's the spoon for it?

(Serves himself) Do you want any? (To each child)

Betsy scoots her chair back from the table, runs to the piano and is brought back to the table by a teacher. She leans over from her chair to put her head on the floor. She is given her choice of either eating or playing. She leaves the room.

Tommy's previous 1½ semesters in Nursery School had been in an afternoon group so that the morning group and lunch experience were new to him. He seemed rather hesitant about making his choices when given the opportunity. In Situation I he made only two choices, ending the conversation with "I don't know." In Situation II he made his three choices with a little help from the teacher.

Two of Tommy's choices were reciprocated. In Situation I he chose George and Bobby, the latter representing a mutual choice. In Situation II he chose Betsy, Roger and George. Here George was the mutual choice. George and Betsy were in a riding group with Tommy, and George was also a home playmate.

Tommy is one of the four children whose circle position changed between Situations I and II. In Situation I Tommy is in CP3 while both of his choices are in CP2 ahead of him. In Situation II Tommy has moved ahead to CP2 with one of his choices, George. Betsy and Roger are in the CP behind him.

Only two children chose Tommy in Situation I: Bobby, who was the mutual choice, and Eddy. In Situation II five children chose him: Bobby and Eddy; George, a mutual choice; and Marien and Johnny.

Neither of Tommy's choices in Situation I is in CP3 with him.



Bobby is in CP2 ahead of him while Eddy is in CP4 behind Tommy. In Situation II as Tommy moved ahead to CP2, from CP3, Eddy moved from CP4 to CP3. Three of Tommy's choosers, Marian, George and Bobby, are in CP2 with him while Eddy and Johnny are in e position behind him.

The sex distribution of Tommy's choices in both situations was very unbalanced. He chose one girl and four boys. He was chosen by one girl and six boys. The behavioral characteristics and eating habits of two of the children whom Tommy chose, Betsy and Roger, were somewhat similar to his own. George and Bobby were less eggressive in behavior and seemed to have a little more interest in the food.

This same inconsistent pattern of choices is shown in the variations in ages and the MA-CA factor. Two of his choices and two of his choosers were within Tommy's age range while three choices and one chooser were younger. Two children whom he chose and one who chose him were in the group showing greatest superiority of mental age over chronological age. The difference in this characteristic between Tommy and the others of his group is slight.

Of the children whom Tommy chose and who chose him there was a wide variation in the length of time that Tommy had been in their social group. Therefore it would seem that his position within the group was not dependent upon his previous attendance in nursery school.

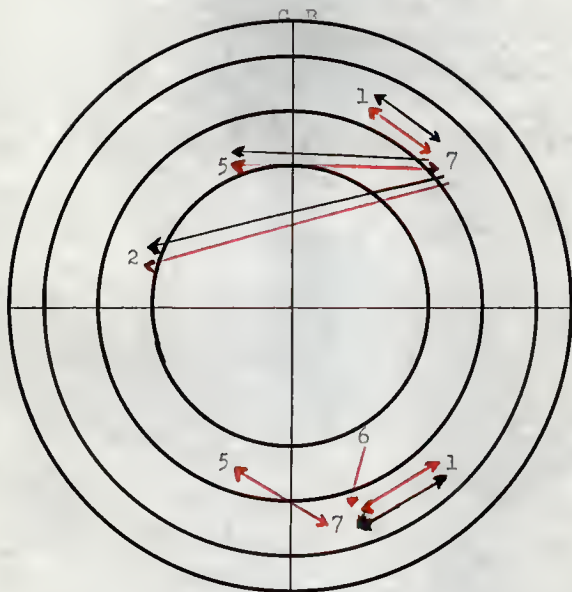


Fig. K. Sociogram 7.

No. 7 - Roger  
 Sex - Male  
 Age - 4-0  
 Semesters in N.S. - 4

Table 29. Data of choices.

|          | Name           | CA  | MA-CA   | Percentile |     | Av. eating time (min.) |
|----------|----------------|-----|---------|------------|-----|------------------------|
|          |                |     |         | Ht.        | Wt. |                        |
| Subject: | No. 7. Roger   | 4-0 | 10 mos. | 90         | 96  | 19                     |
| Chosen:  | No. 5.* Jean   | 4-2 | 7 mos.  | 85         | 60  | 18                     |
|          | No. 2. Marian  | 4-5 | 11 mos. | 35         | 10  | 17                     |
|          | No. 1.* Johnny | 4-7 | 2 mos.  | 5          | 10  | 20                     |
| Chooser: | No. 6. Tommy   | 4-1 | 3 mos.  | 70         | 60  | 17                     |

\* Mutuals

Subject No. 7, Roger. Roger is an only child. His father is a college student and his mother works to supplement the family income. Roger has been described by his teachers as being very socially minded and confident, and as possessing a colorful personality. He is alert to his environment and eager to enter social groups. He has a fine physique, is strong, energetic and rarely shows fatigue. Roger is inclined to be slightly critical of adult authority and assertive of his own rights. But he is usually happy and friendly with the adults and children about him.

Roger is a hearty, but sometimes messy, eater. There are only two dislikes, chicken and turkey, listed on his Food Preference Chart. Neither of these foods was served when he was chooser. The eating habits of the children whom he chose were varied. Jean was a hearty eater; Marian ate very small servings; Johnny was disinterested and messy in handling his food. In behavioral characteristics the children were just as varied as they were in eating behavior. The conversation and play at the lunch table became rather boisterous and adult interference was necessary several times. For instance:

Jean: You're the Mother Bear (Marian) and I'm the Daddy, and you're (Roger) the Baby Bear.

Roger: I'm the Daddy Bear.

Jean: No, I'm the Daddy Bear so you're the Father Bear.

Johnny: No, you're the Baby Bear (Roger).

Jaen: I'm the Mother Bear and you're the other Mother Bear (Marian).

Roger and Johnny continue in a brief argument, ending when Roger pushes over Johnny in his chair.

This incident is rather typical of the behavior of this group in both situations.

There was little hesitation in Roger's manner when he chose in either situation. In Situation I he indicated that he could not think of a child for his third choice. When he was taken to the resting room by the teacher he pointed to Johnny as his third choice.

Roger's choices are unusual in the fact that he is the only child in the study who chooses the same three children, in the same order, in both situations. Johnny was a mutual choice in both situation; Jaen was reciprocal in Situation II.

Johnny is Roger's only choice who is in CP3 with him. Jean and Marian are one CP ahead of him. This is true in both situations.

Johnny, a mutual choice, was the only child who chose Roger in Situation I. In Situation II Johnny and Jean were mutual choices. Tommy was the third child choosing Roger. Johnny is Roger's only chooser in CP3 with him; Jean and Tommy are in CP2 ahead of him.

The sex distribution of Roger's choices is evenly balanced. He chose two girls and one boy: he was chosen by one girl and two boys. There was a chronological age range of seven months-- a smaller range than in any other group. There was also a shorter span in the average time of eating than in any other group. In the physical status of the group there was a wider range shown. Roger

had the highest percentile rating in height and weight in the group while Johnny, who was one of his choices, had the lowest. The others ranged between.

Only one of his choices was superior to Roger in MA-CA. The others were several months below him.

With the exception of Johnny, the eating behavior of Roger's choices and choosers were similar, presenting few problems. In overt behavior Roger, Tommy and Johnny showed more tendencies toward aggressiveness than did Jean or Marian.

Table 30. Data of choices.

| Name :   |                | CA : | MA-CA : | Percentile : |       | Av. eating  |
|----------|----------------|------|---------|--------------|-------|-------------|
|          |                |      |         | Ht. :        | Wt. : | time (min.) |
| Subject: | No. 8. Eddy    | 3-9  | 7 mos.  | 5            | 15    | 18          |
| Chosen:  | No. 4. Nan     | 4-3  | 15 mos. | 80           | 70    | 20          |
|          | No. 6. Tommy   | 4-2  | 3 mos.  | 70           | 60    | 18          |
|          | No. 3. Bobby   | 4-5  | 13 mos. | 7            | 70    | 20          |
|          | No. 12. George | 3-3  | 2 mos.  | 60           | 35    | 17          |
| Chooser: | No. 10. Betsy  | 3-4  | 5 mos.  | 28           | 45    | 26          |

Subject No. 8, Eddy. Eddy's father is a local business man. He has one younger brother. In staff ratings Eddy is described as a very thin, easily exhausted child. He is usually quiet and self-conscious, but in some situations he can be impatient, impulsive in actions, and assertive of his own position. He has a colorless personality and demonstrates some negativistic characteristics.

Eddy's behavior in the eating situation was indicative of a lack of interest in food. He engaged in much "silly" and boisterous play while at the table. For example:

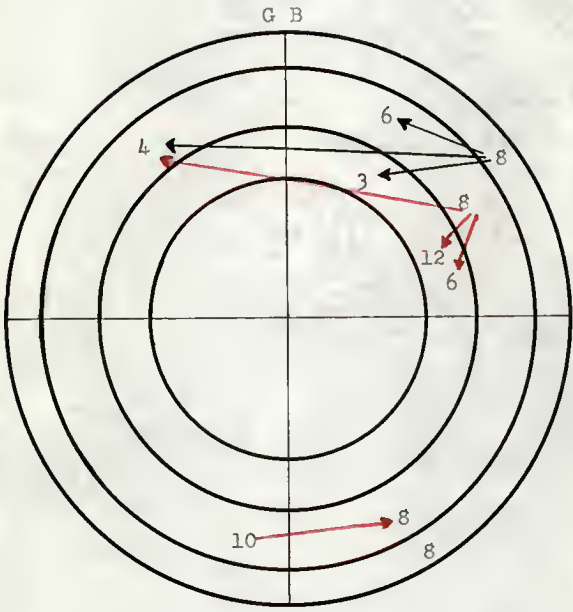


Fig. L. Sociogram 8.

No. 8 - Eddy  
Sex - Male  
Age - 3-10  
Semesters in N.S. - 2

Tommy and Eddy put their feet on the table until directed by the teacher to keep them on the floor.

-----

Eddy stamped his feet, stood up, sat down, placed his feet on the table and was again redirected by the teacher.

-----

Eddy took a carrot strip from Tommy's plate and threw it across the table.

Tommy: Bad boy, Eddy. (Reached for a bean on Eddy's plate, saw the teacher watching him, and withdrew.)

Eddy tried to tip milk from the small pitcher but a teacher removed it. Nan's pitcher was also removed.

Nan: That's mine. Whose is this? Hey, that's mine.

Eddy: Hi, hi, mine.

Nan: You can't see my eye.

Eddy: You can't see my eye.

Nan: Hey, I couldn't see your eye then.

This play continuee for a short time.

-----

Eddy threw a carrot strip at Bobby but the latter makes no response to it.

Tommy and Eddy engage in hitting each other until Eddy and his food are removed from the table.

These incidents were typical of Eddy's behavior at the lunch table. During the last part of the semester Eddy was moved to a more permissive but less stimulating atmosphere during the lunch period as described in the procedures. Of the four different children whom Eddy chose, three also played at the table but in lesser degrees of "silliness" than Eddy. However, they showed a greater interest in the food and ate more heartily. Eddy's Food Preference Chart listed 33 foods which he disliked, but none of these was served at the two meals for which he was chooser. A great amount of Eddy's disinterest in food may be accounted for by the fact that previously his diet, for physical reasons, had been greatly restricted. Also the lunch experience was new to him because his former two semesters in Nursery School had been in an afternoon group. During those two semesters he was absent much of the time so that his group experience also was limited.

Eddy showed no hesitation in making his choices. His speech was difficult for the writer to understand which made it necessary for Eddy to repeat the names. In Situation I he indicated that he could not think of the name of the third child so he was taken to the resting room to point out his third choice.

Eddy had no mutual choices. In Situation I he chose Nan, Tommy, and Bobby; in Situation II he chose Nan, Tommy, and George. Nan is the only girl he chose in either situation.

Eddy's CP in Situation I is that of an isolate in CP4. Nan and Tommy, two of his choices, are in CP3, one position ahead of him, and Bobby is in CP2. In Situation II Eddy and Tommy moved one CP respectively. Hence Eddy is in CP3 with Nan while Tommy and George are in CP2, one position ahead of them.

There were no children choosing Eddy in Situation I. Thus he is in an isolated position in CP4. In Situation II he was chosen by one child, Betsy. With this one choice Eddy moved ahead to CP3 with Betsy.

Totaling his choices, Eddy chose one boy and one girl twice each in addition to two other boys. He was chosen by one girl. The overt and eating behavior characteristics of Betsy tend to parallel Eddy's. Those of the other four children vary from his in lesser degrees of aggressiveness and impulsiveness and in food attitudes. Eddy was never chosen by any of the children whom he chose. The one girl who chose him was not reciprocal. He was in a socially isolated position; yet he made his full quota of choices. With one exception, all of Eddy's choices were older than he and two of them were definitely superior to him in MA-CA and physical status.



His only chooser was younger and was the only variation in the otherwise 3-minute range in average eating time of the group.

Table 30. Data of choices.

|           |         | Name   | CA  | MA-CA   | Percentile |     | Av. eating time (min.) |
|-----------|---------|--------|-----|---------|------------|-----|------------------------|
|           |         |        |     |         | Ht.        | Wt. |                        |
| Subject:  | No. 9.  | Kay    | 3-9 | 6 mos.  | 75         | 95  | 32                     |
| Chosen:   | No. 3.  | Bobby  | 4-6 | 13 mos. | 7          | 70  | 20                     |
|           | No. 5.* | Jean   | 4-3 | 7 mos.  | 85         | 60  | 18                     |
|           | No. 10. | Betsy  | 3-5 | 5 mos.  | 28         | 45  | 26                     |
|           | No. 1.  | Johnny | 4-7 | 2 mos.  | 5          | 10  | 20                     |
| Choosers: | No. 4.  | Nan    | 4-4 | 15 mos. | 80         | 70  | 20                     |
|           | No. 11. | Jerry  | 3-4 | 15 mos. | 10         | 15  | 19                     |

\* Mutual

Subject No. 9, Kay. Kay is the only child of a local business man. Her parents are older than are the average parents of children her age. Teachers' ratings describe her as a wide-awake, agile-minded child. She possesses more than the usual curiosity about new things and seems eager to learn. She has a good physique and endures vigorous activities satisfactorily. She has a colorful personality, possesses rare self-confidence, seeks social activities and groupings and is highly verbal, usually doing more than her share of talking. She can be assertive of her own ways and has a rather critical attitude toward adults as well as children. But she is ordinarily friendly and cordial to everyone and responds in a normal manner to most situations.

Kay's eating habits were very spasmodic; however, she ranked high in the percentiles in height and weight. She ate very small

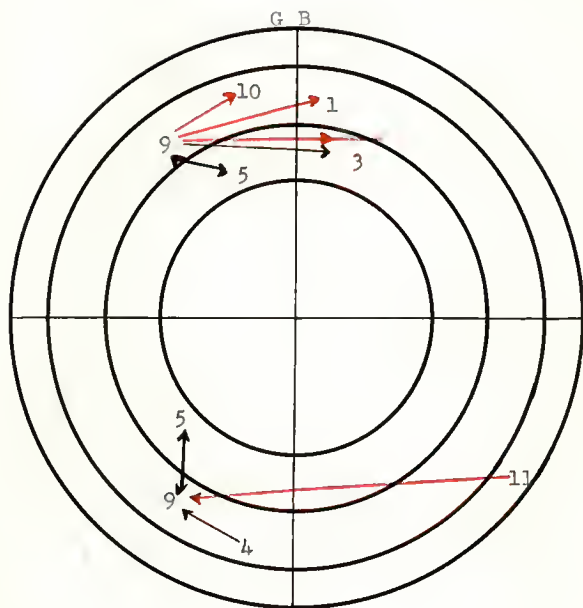


Fig. M. Sociogram 9.

No. 9 - Key  
 Sex - female  
 Age - 3-9  
 Semesters in N.S. - 2

quantities of the foods, taking a longer time to eat than the average child. This semester was Kay's first experience in the nursery school lunch situation. Her previous two semesters had been with afternoon groups. She seemed to enjoy the social situation of eating more than she did the food and talked almost incessantly. The major portion of the conversation was centered around food. For example:

Kay: I chose you because I like you. Bobby, I would like you to eat with me today. Two people. I eat lunch at home, too. What's that white stuff across there?

Teacher: Taste it and then tell me.

Kay: Is it cottage cheese?

Bobby: It looks like marshmallow.

Kay: What's that white stuff? I think's marshmallow. It's cheese, \_\_\_\_\_ said. Is that cottage cheese? Well I never ate it before.

Kay: Watch. (Drinks all her milk.) Teach, my glass went almost up to here. Carrot's good, isn't it. Watch how I drink my milk. Do I drink fast? (Empties second glass.) I never took a taste of my sandwich yet. (Plays with her food.) Well! Well! Hey, teacher, would you give me more milk? (She is encouraged to eat other foods.) This is our table, isn't it?

Bobby: Uh huh.

Kay: There's one little boy and one little girl.

The fact that Kay was allergic to tomatoes seemed to make her more conscious of foods in general. Her Food Preference Chart listed more than 40 food dislikes. Cottage cheese was her only dislike which was served at either of the two lunches for which she was chooser. She was given a very small serving of the cheese which she finally ate after a considerable monologue on the subject.

Kay's choosing in Situation I was rather uncertain. After choosing Bobby she inquired concerning the whereabouts of Jean who was absent. This was recorded as her second choice. She made no

other choices and ended the conversation with "Just Bobby, that's all." As she skipped out of the room she added "You're just making me work." In Situation II she unhesitatingly made her three choices.

Kay chose only two children in Situation I: Jean, her only mutual choice, and Bobby. In the second situation she again chose Bobby and then added Johnny and Betsy.

In regard to circle position Kay is in CP3 while both her choices in Situation I are in a CP ahead of her. In Situation II one choice, Bobby, is in CP2 and the other two choices, Johnny and Betsy, are in CP3 with Kay.

Two children chose Kay in Situation I: Jean, her mutual choice, and Nan. She was chosen by one child, Jerry, in Situation II. Her first choice, Bobby, in both situations never chose her.

Of her choosers, only Nan is in CP3 with Kay. Jean is in CP2, a position ahead of her while Jerry is in the isolated CP4, behind her.

Kay chose two girls and two boys--one of the boys twice, and she was chosen by two girls and one boy. She was not chosen by any of the boys whom she had chosen. With the exception of one boy, the children whom Kay chose are in the same or more popular position than her own.

The behavioral characteristics of the children in this group varied widely. Kay ate extraordinarily small amounts of food and led the conversation. Johnny was disinterested in his food, messy in handling it, and played during the lunch situation; Betsy ate in small quantities and had some difficulty remaining in her seat during lunch but contributed little to the conversation; Nan and Jerry ate average amounts of food and engaged in much conversation and "silly"

play while at the table; Jean and Bobby were hearty eaters and much less boisterous in play at the table than were the others. Kay and Nan rode to school together but this fact did not seem to affect Kay's choices as it did Nan's. With the exception of Betsy and Jerry all of Kay's choices and choosers were older than she. In MA-CA difference all except Betsy and Jerry ranked above her. Three of them were in the more superior group. One of her choices and one chooser were in the group of taller children while all were below her in weight.

Table 31. Data of choices.

|           | Name           | CA   | MA-CA   | Percentile |     | Av. eating time (min.) |
|-----------|----------------|------|---------|------------|-----|------------------------|
|           |                |      |         | Ht.        | Wt. |                        |
| Subject:  | No. 10. Betsy  | 3-5  | 5 mos.  | 28         | 45  | 26                     |
| Chosen:   | No. 2. Marian  | 4-6  | 11 mos. | 35         | 10  | 17                     |
|           | No. 11. Jerry  | 3-4  | 15 mos. | 10         | 15  | 19                     |
|           | No. 8. Eddy    | 3-10 | 7 mos.  | 5          | 15  | 18                     |
| Choosers: | No. 12. George | 3-3  | 2 mos.  | 60         | 35  | 17                     |
|           | No. 1. Johnny  | 4-7  | 2 mos.  | 5          | 10  | 20                     |
|           | No. 4. Nan     | 4-4  | 15 mos. | 80         | 70  | 20                     |
|           | No. 6. Tommy   | 4-2  | 3 mos.  | 70         | 60  | 18                     |
|           | No. 9. Kay     | 3-9  | 6 mos.  | 75         | 95  | 32                     |

Subject No. 10, Betsy. Betsy's father is a local business man and she has one younger sister. Staff ratings describe Betsy as an agile-minded, curious child. She is quite energetic and has an excellent physique although she is small in size as shown by her height and weight percentile rank. She is usually friendly but can be insistent concerning her own desires. Her emotions are easily aroused and she can become very excited at times.

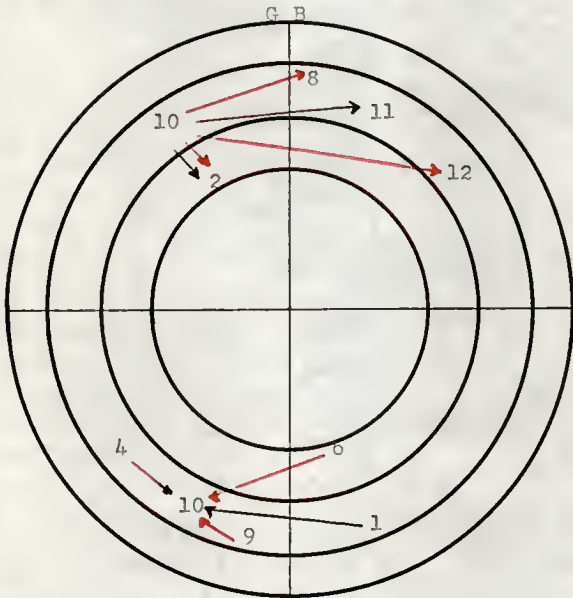


Fig. N. Sociogram 10.

No. 10 - Betsy  
 Sex - Female  
 Age - 3-5  
 Semesters in N.S. - 2

There are very few food dislikes listed on Betsy's Food Preference Chart, and none of them were served at the meals for which she was choosor. She ate average amounts of the foods but had some difficulty remaining in her seat during the meals. Her contributions to the conversation during lunch were limited to short sentences concerning the food. For example:

Jerry: Do they have that stuff every day? That stuff with cherries in it.

Betsy: I like it.

Jerry: These are real green beans.

Betsy: I want some more beans.

Marian: Don't take too many. Just what you can hold.

Betsy: I'll drink my milk all gone. All gone!

Betsy seemed rather uncertain of herself in the choosing situation. In Situation I she made only two choices; in Situation II her choice of Eddy was probably influenced by the fact that he was in the room while she was choosing. She was also in a riding group with George and Tommy which may have influenced her choices. During lunch Bobby was seated at the table in Eddy's place while the latter was placed in a more permissive atmosphere.

Betsy made only two choices in Situation I: Marian and Jerry. In Situation II she chose Marian again, George and Eddy. There were no mutual choices.

One of Betsy's choices, Jerry, is in CP3 with her in Situation I: Marian is in CP2. In the second situation Marian is still in CP2 while the two other choices are in CP3 with Betsy.

Johnny was the only child choosing Betsy in Situation I. In Situation II three children, Nan, Tommy, and Kay chose her. With the exception of Tommy all of her choosers are in CP3 with Betsy.

Tommy is in CP2, a position ahead of her.

Altogether Betsy chose one girl twice and three boys. She was chosen by two girls and two boys. None of the children whom she chose chose her. The behavioral characteristics of these children in the lunch situation were greatly varied. Marian, George and Tommy enjoyed the foods as well as the social situation: Betsy, Jerry, Nan and Tommy ate average amounts but played more than was warranted. Eddy and Johnny did not seem to enjoy their food, and their boisterous play, in light of other personality factors, resulted in their being moved to a more permissive and less stimulating atmosphere during lunch. Key enjoyed the social situation more than she did the food and ate in diminutive amounts. This wide range in differences of the children is not confined to behavior. Differences are also seen in the ages, MA-CA, average eating times and height and weight of the children.

In respect to both choosing and being chosen, Betsy showed some gains in social acceptability from Situation I to Situation II. Although she was not an extreme in relation to the total group in measurable traits, the differences between her and her lunch companions seem meaningful in interpretation of her social position.



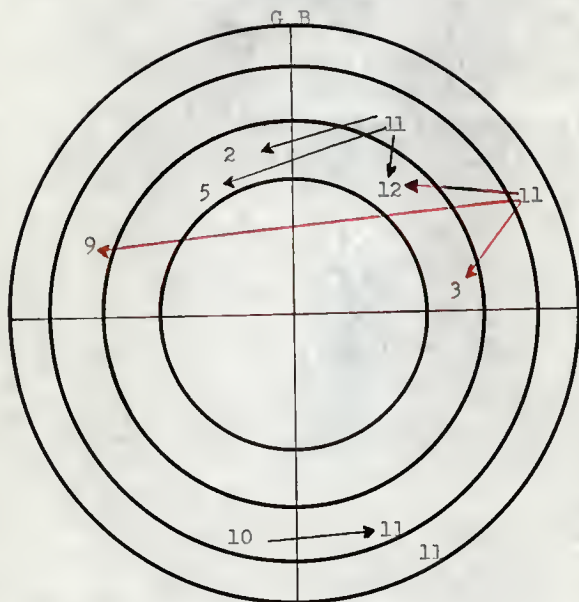


Fig 0. Sociogram 11.

No. 11 - Jerry  
 Sex - Male  
 Age - 3-4  
 Semesters in N.S. -  $2\frac{1}{2}$

Table 32. Data of choices.

| Name     |                | CA  | MA-CA   | Percentile | Av. eating time (min.) |    |
|----------|----------------|-----|---------|------------|------------------------|----|
|          |                |     |         | Ht.:       | Wt.:                   |    |
| Subject: | No. 11. Jerry  | 3-4 | 15 mos. | 10         | 15                     | 19 |
| Chosen:  | No. 2. Marian  | 4-6 | 11 mos. | 35         | 10                     | 17 |
|          | No. 5. Jean    | 4-3 | 7 mos.  | 85         | 60                     | 18 |
|          | No. 12. George | 3-2 | 2 mos.  | 60         | 35                     | 17 |
|          | No. 3. Bobby   | 4-6 | 13 mos. | 7          | 70                     | 20 |
|          | No. 9. Kay     | 3-9 | 6 mos.  | 75         | 95                     | 32 |
| Chooser: | No. 10. Betsy  | 3-5 | 5 mos.  | 38         | 45                     | 26 |

Subject No. 11, Jerry. Jerry is the only child of a local business man. His teachers rated him as a bright, alert, eager child. He thinks rapidly and his interests are widely varied but his interest span is brief. His physique is good although he is small in size. He is energetic and has an unusual amount of endurance. Jerry's vocabulary is well developed, and he talks more than most children of his age. He actively seeks social pleasures and seems to be confident of himself in social situations. Jerry usually follows adult guidance but can be very assertive, independent and critical of faults in others. He is usually sympathetic and open-minded to suggestions.

There were only five dislikes listed on Jerry's Food Preference Chart. None of these foods were served at the meal for which Jerry was chooser. Jerry's eating habits follow the pattern of his independence. The social aspect of the lunch situation seemed far more intriguing than the food but he ate all his food. The eating behavior of the children whom Jerry chose, with the exception of Kay, was similar. They were all interested in the foods and ate in average

amounts. There was some quiet play at the table and the somewhat random conversation was centered around the eating situation. For example:

Jerry: Here's your place. (To each child.) What do we have for dessert today?

Teacher: Pears.

George: I already have a carrot.

Jean: Can I get a sandwich?

Jerry starts to go, too, but teacher tells him to wait until the next time.

Jerry: If we need some more.

Marian: Look how full my glass is.

Jerry: I just thought you didn't have a sandwich.

Jean: You got two. So do I.

Marian: You put yours in your mouth.

The conversation continued in a similar manner throughout the meal.

Jerry had some difficulty in making his choices in Situation I. It required several minutes for him to think of the name of a third child. His choices included Marian, Jean, and George. This was changed in Situation II, and Jerry readily named his three choices: George, Bobby, and Kay.

Jerry's CP in Situation I is CP3 while that of all three of his choices is CP2 or one ahead of him. In Situation II Jerry has moved back one position. He is in CP4 as an isolate whereas Kay is in CP3 and his other choices are in CP2.

Jerry was chosen by only one child, Betsy, in Situation I. She is in the same CP3 with Jerry. In Situation II Jerry received no choices. As a result he is moved back from CP3 to an isolated position in CP4.

Altogether Jerry chose three girls and two boys. George, who was the same age as Jerry, was chosen twice. However, Jerry was

never selected by any boy nor by any girl whom he had chosen. Betsy, who was the same age as he, was the only child choosing him. In Situation II Jerry was in an isolated position within the group, but he had no difficulty in making his choices. The one boy whom he chose twice was one of the most popular within the group. In fact all the children whom he chose were within a more popular position than he was.

With one exception all of Jerry's choices were children older than he. Though Jerry rated the highest in MA-CA of the entire group, within his lunch group there is a wide range. Jerry ranked very high in verbal skill. He was the lowest of the group in actual height and weight though when the factor of age was considered he did not have the lowest percentile rank. One child was below him in height percentile rank, and one was below him in weight percentile. While his previous attendance in school may have made it easy for him to choose children it seemed to have no influence on helping him to be chosen. This is again borne out by a comparison of Situations I and II. Whereas he was chosen by one child in Situation I, he was an isolate in Situation II. The differences between these two factors in consideration of Jerry's wide interest in people and in things seems significant in an understanding of his social acceptance even though it decreased between Situations I and II.

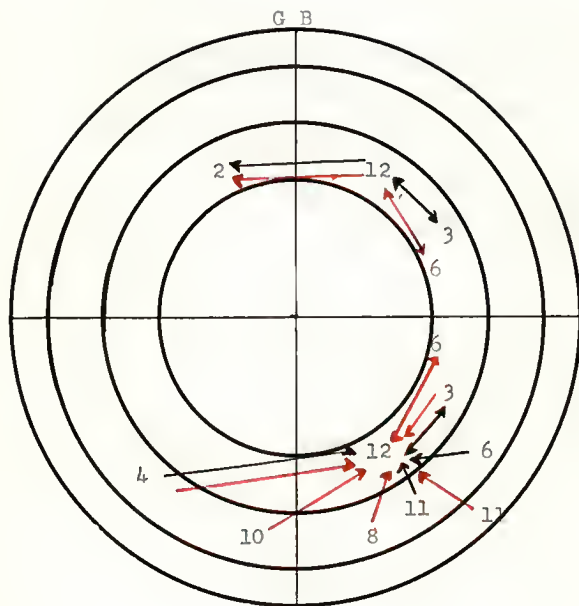


Fig. P. Sociogram 12.

No. 12 - George  
 Sex - Male  
 Age - 3-2  
 Semesters in N.S. - 2 $\frac{1}{2}$

Table 33. Data of choices.

|           |         | Name   | CA  | MA-CA   | Percentile<br>Ht. | Wt. | Av. eating<br>time (min.) |
|-----------|---------|--------|-----|---------|-------------------|-----|---------------------------|
| Subject:  | No. 12. | George | 3-2 | 2 mos.  | 60                | 35  | 17                        |
| Chosen:   | No. 2.  | Marian | 4-5 | 11 mos. | 35                | 10  | 17                        |
|           | No. 3.* | Bobby  | 4-5 | 13 mos. | 7                 | 70  | 20                        |
|           | No. 6.* | Tommy  | 4-1 | 3 mos.  | 70                | 60  | 17                        |
| Chosen by | No. 11. | Jerry  | 3-3 | 15 mos. | 10                | 15  | 19                        |
|           | No. 4.  | Nan    | 4-3 | 15 mos. | 80                | 70  | 20                        |
|           | No. 8.  | Eddy   | 3-9 | 7 mos.  | 5                 | 15  | 18                        |
|           | No. 10. | Betsy  | 3-4 | 5 mos.  | 28                | 45  | 26                        |

\* Mutual

Subject No. 12, George. George has one younger sister. His father is a college professor. George's teachers rated him as a child of average intelligence and he is ordinarily active, moving with the required speed and has satisfactory endurance. He possesses the usual curiosity of a child his age and enters the usual social activities. He is ordinarily quiet and self-conscious in most activities but can become very excited. He has a less dynamic personality than other children but has a very friendly manner and readily accepts adult guidance. He has a slight speech impediment and stammers, particularly when excited.

There were only 16 food dislikes listed on George's Food Preference Chart and none of them were served on the day he was choosier. He was interested in the food as well as the social situation. The conversation was "silly" but there was no boisterous play at the table. For example:

George: Come on, Marian. Hot.  
 Marian: Who sits there? (Empty place.) That's hot,  
 isn't it? (Soup) Oh, beanie! (Cheese tidbit)  
 George: There's another cracker and there's another cracker.

Marian: I got some beanies.

George: I got some beanies.

Marian: That's good, isn't it, George? (Soup)

Bobby: These should be like that. (Turns spoon) But she has turned them the wrong way.

Marian: Did you invite me to your table?

-----  
 Put your finger in there. (Finger trap) The girl will bite you, see. When big people can't understand they put their fingers in and ouch! Put your finger in there.

George had some difficulty in making his choices in Situation I. He hesitated or said "I don't know" several times before making two choices. In Situation II there was no hesitation but in neither situation did he make more than two choices.

In Situation I George's two choices were Marian and Bobby. In Situation II he again chose Marian and Tommy. One choice in each situation, Bobby and Tommy, was reciprocated. George was in a riding group with Tommy and Betsy which may have influenced his choosing. The CP of George and his choices in both situations are the same, CP2. He was one of the two children who did not make three choices in Situation II.

The children choosing George in Situation I included Nan, Jerry, Tommy, and Bobby. In Situation II he was chosen again by the same four children in addition to Eddy and Betsy. He was the only child in either situation to receive six choices. Bobby was a mutual choice in Situation I but not in Situation II while Tommy was a mutual choice in Situation II but not in Situation I.

The relative CPs of all of the children except Jerry and Tommy remain constant in both situations. In Situation II Jerry moves back from CP3 to CP4 while Tommy moves ahead from CP3 to CP2. Of his other choosers, Bobby is the only one in CP2 with George.

Nan, Betsy, and Eddy are in CP3. Thus in Situation I one chooser is in CP2 with George, who is a star, while the other three are in a CP behind them; and in Situation II, two choosers are in the same CP with George while three are in CP3 and one is in CP4.

The sex distribution of George's choices and choosers was very uneven. He chose one girl twice and two boys. He was chosen by two girls, twice by one of them, and four boys, twice by three of them. The behavioral characteristics of George's choices in the lunch situation were all very similar. They enjoyed the food as well as the social situation. The characteristics of the other four children choosing George were different from his but similar among themselves. They were more interested in the social aspects of the situation than in the food, engaging in a great deal of "silly", sometimes boisterous, play,

George's choices were much more narrow in CP and number than the children who chose him. His choices were all within one CP while the CP's of his choosers ranged widely from CP4 to CP2. There was also a varied sex and age difference. All the children whom he chose or who chose him were older than he and were superior to him in MA-CA. Two of his choices and two of his choosers were in a definitely superior group.

In physical status only one of George's choices and one of his choosers ranked above him in height percentile while two of his choices and two of his choosers were above him in weight percentile.

In comparing George's previous school attendance with that of the other children, it is shown that four of his seven lunch companions had been in his nursery school group approximately as long as he had.



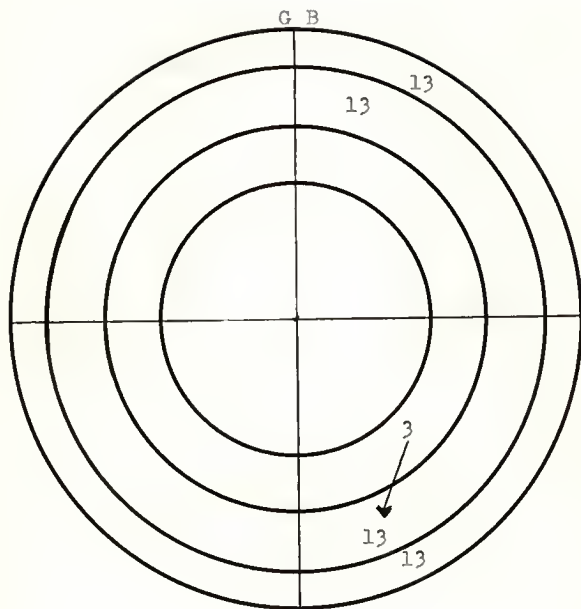


Fig. Q. Sociogram 13.

No. 13 - Carl  
Sex - Male  
Age - 3-2  
Semesters in N.S. - 3

Table 34. Data of choices.

| Name :                 | CA : | MA-CA : | Percentile : |       | Av. eating<br>time (min.) |
|------------------------|------|---------|--------------|-------|---------------------------|
|                        |      |         | Ht. :        | Wt. : |                           |
| Subject: No. 13. Carl  | 3-2  | 2 mos.  | 80           | 35    | 30                        |
| Chosen by No. 3. Bobby | 4-5  | 13 mos. | 7            | 70    | 20                        |

Subject No. 13, Carl. Carl's father is a college student and he has one younger brother. Teachers' ratings describe him as a friendly, self-controlled, even-tempered, quiet child who responds to most situations in a normal manner. He is usually ready to accept adult suggestions but can be very determined when he prefers his own way. He is rather self-conscious and less socially inclined than most children. He rarely speaks when he is in a group of children and only occasionally when with adults. He has a good physique and endures physical activities satisfactorily.

In the first choosing situation Carl seemed to be very embarrassed, speaking only twice, and when asked to make his choices he chose the writer. Finally he was accompanied to the resting room where he could see the children. There he vaguely indicated Tommy but no choices were recorded for him. Jean and Marian were selected by the teacher to eat with him. In Situation II Carl was absent when it was his turn to choose so that again no choices were recorded.

Carl received only one choice, from Bobby, in Situation I and none in Situation II. Consequently his CP in Situation I is CP3, one position behind his only chooser, and in Situation II he is in CP4, an isolated position.

Carl was a hearty eater, eating slowly but large portions of foods. There were 21 dislikes listed on his Food Preference Chart but none were served on the day he was choosor. He rarely played while at the table and in Situation I he did not speak until the other children from his table had left the room. Then the conversation was almost a monologue, as shown:

Carl: I want some more. (Dessert)

-----  
That was Tommy's plate and there's milk in there. Tommy forgot to pour it in his glass. He's going to come back, isn't he?

Key, at another table, spills her milk.

Carl: Did you spill that milk? He spilled that milk, didn't he? That's Key. Look where he spilled that milk.

As he finished eating he carried his dishes to the serving table.

Carl: Yea. I throw my napkin in the waste basket. Where's my glass? (Laughs) Yes, this is mine.

And he leaves the room.

The behavioral characteristics of Bobby were similar to Carl's with the exception that Bobby was more socially outgoing than Carl. Bobby and Carl had a common interest in that they mutually enjoyed constructive block play. A wide difference is apparent between the ages, the MA-CA, physical standings and average eating time of the two boys. The common factor between them was a mutual play interest.

## SUMMARY AND CONCLUSIONS

From the data of this study there are similarities and trends which may be noted. The group sociograms showed an increase of five in the total number of choices made between Situations I and II. This suggests that over a period of time and with a second trial the children in this group met the choosing situation with greater ease. This suggestion is also noted in the fact that five children made three choices in Situation I as compared to 11 children who made three choices in Situation II. Only one child made no choices in Situation I and had no opportunity to choose in Situation II.

Table 35. Number of choices made by subjects.

| Choices | Situation I | Situation II |
|---------|-------------|--------------|
| 3       | 5           | 11           |
| 2       | 6           | 1            |
| 1       | 1           | 0            |
| 0       | 1           | 1            |

The diagrams of the social group, when focused upon an individual child, show a patterning in the relationship between the number of choices made and received. For one group of 5 children (Nos. 2, 3, 5, 6 and 12) the pattern was for the children to receive more choices than they made. However, for 4 children another pattern is suggested. The number of choices made by Nos. 1, 7, 9 and 10 were comparable to the number of choices they received. A smaller number of children, 3 (Nos. 4, 8 and 11), showed a third pattern in that they made their full quota of choices but received only one or two.

The mutual choices were not made solely between the most popular children. Number 5, who rated as one of the most popular, was the recipient of 5 mutual choices while No. 2, another popular child, received 2. On the other hand No. 7, a less popular child, was the recipient of 3 mutual choices. Sex cleavage was more noticeable in the mutual choices in Situation I. The 5 mutual choices were 3 boy-boy and 2 girl-girl. These changed in Situation II to 1 girl-girl, 2 boy-boy, 1 girl-boy and 1 boy-girl. Two of the reciprocated choices between Nos. 2 and 5, and 1 and 7 remained constant in both situations whereas the recipients of the others changed.

The sex cleavage of the entire group weakened between Situations I and II by an increase of 4 girl-boy choices. A contrast may be observed in the case of three of the children (Nos. 2, 3 and 6) who chose only within their own sex in Situation I: in Situation II this was not true of any child in the group. Three children (Nos. 6, 7 and 9) were the only ones receiving choices solely from their own sex in Situation I. In Situation II, however, all children, except the isolates, received one or more choices from the opposite sex. These findings are interesting in relation to reports in the literature that preschool children seem to make little distinction between playing with boys or with girls.

The social status of the majority of the children in this study remained fairly constant in the two choosing situations. Four of the 13 changed CP as shown in Table 36. Two moved ahead, Nos. 6 and 8) while two other children, Nos. 11 and 13 regressed. Numbers 11 and 13 were two of the youngest children in the group. Most of the choices made by five of the children (Nos. 2, 3, 5, 6 and 12)

Table 36. CP's of subjects in Situations I and II.

| Subjects   | Situation I | Situation II |
|------------|-------------|--------------|
| 1. Johnny  | 3           | 3            |
| 2. Marian  | 2           | 2            |
| 3. Bobby   | 2           | 2            |
| 4. Nan     | 3           | 3            |
| 5. Jean    | 2           | 2            |
| 6. Tommy   | 3           | 2            |
| 7. Roger   | 3           | 3            |
| 8. Eddy    | 4           | 3            |
| 9. Kay     | 3           | 3            |
| 10. Betsy  | 3           | 3            |
| 11. Jerry  | 3           | 4            |
| 12. George | 2           | 2            |
| 13. Carl   | 3           | 4            |

in CP2 were directed to children from all the CPs . Almost the opposite is true of another group of five children (Nos. 1, 4, 7, 9 and 10) who are in CP3. They chose children from their own or a more popular CP and received most of their choices from children in CP3. Numbers 8 and 11 chose only the more popular children.

There are 4 in this group of 13 children who remained stars in both situations: No. 3, Bobby, No. 5, Jean, No. 2, Marian, and No. 12, George. The three isolates are all boys: No. 8, Eddy, No. 11, Jerry, and No. 13, Carl. Each boy, though an isolate in only one situation, never received more than one choice so that his relative position changed only slightly. There were no girls at any time in the isolated position, CP4. For this group of children, the conclusion may be drawn that even among preschool age children the over-all social position of each child within a group remains relatively constant over a period of time with the positions of a few individuals varying slightly.

Within the narrow age range of the children in this study, the age cleavage showed a tendency toward preferences of younger children for older ones, although the pattern varied between the two situations as shown in Table 37.

Table 37. Total choices according to age.

|                | Situation I | Situation II |
|----------------|-------------|--------------|
| Chose: Younger | 13          | 19           |
| Older          | 17          | 16           |
| Chosen by:     |             |              |
| Younger        | 24          | 16           |
| Older          | 6           | 19           |

In Situation I four more children chose older than younger as compared to three more children who chose younger than older in Situation II. As regards the choices received, 18 more choices were received by older children in Situation I in comparison to 3 more choices received by the older than the younger children in Situation II. It is seen that there was a wider fluctuation in Situation I than in Situation II which leads to a conclusion that for this group of children the time between the two situations tended to reduce the age cleavage of the group. Table 38 shows the ages of the children in each CP.

Table 38. Ages and CP's of subjects.

| CP   | : | Subjects   | : | Age |
|------|---|------------|---|-----|
| CP1: |   | 0          |   | 0   |
| CP2: |   | 2. Marian  |   | 4-5 |
|      |   | 3. Bobby   |   | 4-5 |
|      |   | 5. Jean    |   | 4-2 |
|      |   | 6. Tommy   |   | 4-1 |
|      |   | 12. George |   | 3-2 |
| CP3: |   | 11. Johnny |   | 4-7 |
|      |   | 4. Nan     |   | 4-3 |
|      |   | 6. Tommy   |   | 4-1 |
|      |   | 7. Roger   |   | 4-0 |
|      |   | 8. Eddy    |   | 3-9 |
|      |   | 9. Kay     |   | 3-8 |
|      |   | 10. Betsy  |   | 3-4 |
|      |   | 11. Jerry  |   | 3-3 |
|      |   | 13. Carl   |   | 3-2 |
| CP4: |   | 8. Eddy    |   | 3-9 |
|      |   | 11. Jerry  |   | 3-3 |
|      |   | 13. Carl   |   | 3-2 |

The more popular group of Children in CP2 were, with one exception (No. 12), all older children. Number 12 was one of the youngest. The other children ranged widely in relation of age to CP. Therefore the conclusion is made that for these subjects age is a defining factor in the determination of social position.

Physical measurements of the three children holding extreme positions in height and weight within the group of 13 children are shown in Table 39.



Table 39. Comparisons of physical status.

| Shortest   |               | Tallest  |               |
|------------|---------------|----------|---------------|
| Subjects   | Ht. in inches | Subjects | Ht. in inches |
| 11. Jerry  | 37            | 7. Roger | 42.5          |
| 10. Betsy  | 37.5          | 5. Jean  | 42.5          |
| 12. George | 38.75         | 4. Nan   | 42.25         |

| Lightest  |               | Heaviest |               |
|-----------|---------------|----------|---------------|
| Subjects  | Wt. in pounds | Subjects | Wt. in pounds |
| 2. Marian | 33.12         | 7. Roger | 44.93         |
| 10. Betsy | 31.3          | 9. Kay   | 41.3          |
| 11. Jerry | 29.5          | 4. Nan   | 40.69         |

For this group of children, relative size did not seem to exert any definite influence in the pattern of selection as made by the children. A comparison was made in the choice patterns of the shortest and tallest three in height and the lightest and heaviest three in weight on the basis of actual measurements (Table 39). The results showed that one of the shortest children, one of the tallest and one of the lightest were among the most popular while the others ranged widely in degrees of social position. This same trend seems to be true of the three children who showed the highest MA-CA deviation. (Nos. 3, 4, 11). Subject No. 3 was one of the more popular while the other two ranked among the less popular children. One outstanding child is No. 11, Jerry, who showed the widest MA-CA deviation, was the smallest in actual physical measurements of the group, and held an isolate's position. Thus for this group, neither physical size nor mental age was a determining factor in circle position attained.

In this study the behavioral characteristics of the subjects

were not given any definite measurement. They were used only for descriptive purposes. However, analysis indicates a certain similarity between social position and behavior characteristics. For instance the five most popular children (Nos. 2, 3, 5, 6 and 12) seemed to follow a common trend in behavior. All were hearty eaters, companionable in a group situation, readily followed adult guidance, and exhibited generally controlled behavior. On the other hand, five less popular children (Nos. 1, 4, 7, 9 and 10) who showed a disinterest in food seemed to show more aggressiveness in overt behavior. This same trend of behavior is true of the characteristics of Nos. 8 and 11, two of the isolates. Therefore the general trend seemed to be preference for children who exhibited more controlled behavior, leading to the conclusion that for this group overt behavior was a strong factor in choosing.

With three exceptions the average eating time of the subjects did not vary more than three minutes for the group. The three children whose average eating time was longest (Kay averaged 32 minutes, Betsy 26 and Carl 30) were among the less chosen in the group. However, due to the small variation in eating time for the group, no comparisons between in and the social status of individuals in the group can be made.

Comparison of the number of semesters the children were in nursery school shows that this exerts little influence on circle position. Johnny was in school 7 semesters but was one of the least popular. Jean was in school 5 semesters and was one of the stars. Bobby had been in a different group 1½ semesters but was a star while Carl had been in the group 2 semesters but was an isolate. Daily

absences also show no consistency in comparison with the number of choices made or received.

In summary, the areas which showed the least relationships to the choosing situation for this group as a whole included sex cleavage, physical size, MA-CA deviation, eating time and attendance in school. However, this study shows that for this group of children the social status remained reasonably constant within the group and was influenced more by age and by individual behavior characteristics than by any other single factor.

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