

T
140

AN ANALYSIS OF (LEADERSHIP BEHAVIOR
IN
PRESCHOOL CHILDREN)

by

E. Maxine Bruhns

A Thesis

Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Arts in the
Department of Education
American University of Beirut

August 1954

ACKNOWLEDGEMENTS

To Professor Frederick R. Korf, Chairman of my thesis committee, I am indebted for his invaluable suggestions, and his encouraging interest and guidance throughout the writing of this thesis.

I also wish to thank Professors Habib Kurani and John A. Jensen for their suggestions and criticisms concerning the concepts underlying the study as a whole.

Special appreciation is due to Miss Eleanor Kamar and Miss Hilda Teen, teachers in the American Community Nursery School, for their valuable assistance and continued cooperation in organizing and accomplishing this study.

To my husband, Fred C. Bruhns, I am grateful for his generous help, criticism and encouragement at all stages of the study.

To the 32 children who served as enthusiastic subjects, I extend my special thanks.

E.M.B.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
LIST OF FIGURES AND TABLES	v
CHAPTER I. INTRODUCTION	1
A. Purpose of the Study	1
CHAPTER II. RELATED RESEARCH	3
A. Leadership Studies in General	3
B. Studies of Leadership in Children	7
CHAPTER III. STATEMENT OF THE RESEARCH PROBLEM	9
A. Assumptions Underlying This Study	9
B. Formulation of the Specific Research Problem	13
C. Definitions Adopted for Purposes of this Study	14
D. Hypothesis	15
CHAPTER IV. METHOD AND PROCEDURE	16
A. The Nature of the Sample	16
B. The Nature of the Evidence	18
(1) Conditions of Observation	18
(2) Evidence from the Play Sessions	20
(a) Stenographic Record	20
(b) Leadership Rating by Investigator	21
(c) Classification and Tabulation of Stenographic Evidence	21
(3) Identification of Leaders	22
(a) Teacher Ranking	22
(b) Teacher Rating on Behavior Rating Scale	22
(c) Investigator Rating of Leadership	22
(d) Peer Preference Ratings	23
C. Statistical Treatment of Data	24
(1) Limitations on Interpretation of Statistical Data	24
(2) Statistical Procedure	25

CHAPTER V. RESULTS	29
A. The Factor of Sex	29
B. The Factor of Age	29
C. The Factor of Participation	30
D. Factors Related to Classification of Behavior	30
CHAPTER VI. DISCUSSION OF RESULTS	34
CHAPTER VII. CONCLUSIONS	39
A. Theoretical Implications	39
B. Practical Implications for Teachers	39
C. Implications for Future Research	42
APPENDIX	44
47 Behavior Categories for the Purpose of Classifying Child Responses	44
Sample Coded Play Sessions	51
Teacher Rating Scale of Social Behavior	73
Sample Tabulation Sheet	76
Observation Room Plan	77
Photograph	78
BIBLIOGRAPHY	79

LIST OF FIGURES AND TABLES

FIGURE		PAGE
1	Age Distribution of Sample	17

TABLE

I.	Summary of Results	31
II.	Cohesion-Oriented Behaviors Used Significantly More Often by Leaders	35
III.	Cohesion-Oriented Behaviors <u>Not</u> Used Significantly More Often by <u>Leaders</u>	38

ABSTRACT

AN ANALYSIS OF LEADERSHIP BEHAVIOR
IN
PRESCHOOL CHILDREN

by

E. Maxine Bruhns

A Thesis

Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Arts in the
Department of Education
American University of Beirut

August 1954

Purpose and Statement of the Problem:

This study of leadership in preschool children has as its purpose the identification of the types of leadership behavior exhibited by this age group (three years to six years) and the investigation of the applicability to preschool groups of some of the more recent concepts developed on school and adult groups concerning the phenomenon of leadership.

Recent studies concerning the leadership phenomenon indicate that one of the most important aspects of leadership is the behavior which relates to the satisfaction of the needs or to the achievement of the goals of a specific group. In this study of free play in preschool age groups, however, neither the individual nor the group needs or satisfactions could be adequately determined or measured. It was decided, therefore, to observe the types of behavior manifested by the group participants and to code every behavior into specific categories. A comparison of the behavior of identified leaders and non-leaders could then be made for significant differences. A final classification of the specific behaviors into three main types, i.e., 1) cohesion-oriented behavior, 2) disruptive behavior, and 3) neutral or unclassifiable behavior, would then enable a support or disproof of the hypothesis that leaders among preschool age children (three to six years) will, in free

play group situations, exhibit cohesion-oriented behavior, as identified in this study, to a significantly greater degree than non-leaders.

Method:

The 32 subjects were enrolled in the American Community Nursery School in Beirut, Lebanon. The sample is not to be considered representative of American preschool groups due to factors such as above average socio-economic status, the transient nature of many of the families, and their residence in a foreign culture.

Selected groups of three children were observed in a total of 11 one-hour and 29 half-hour play sessions in a room which contained a low platform with toys such as masks, trains, bottles and droppers, toy weapons, ropes, dolls, etc. No initial structuring was done and very few restrictions were imposed by the investigator who sat at a corner desk and recorded stenographically all verbalizations and as much of the non-verbal activity as possible.

The typed transcripts of these data were coded into 47 specific categories of behavior, e.g., order giving, verbal aggression, imitating, questions, assumption of role, etc., defined by the investigator on the basis of preliminary observations. Later these 47 categories were classified into the aforementioned three main types: cohesion-oriented, disruptive, or neutral or unclassifiable behavior.

The identification of leaders was accomplished by establishing three criteria: 1) teacher ranking of the overall leadership activity of each child in her group, 2) child's score on a behavior scale rated by the teachers, and 3) investigator rating at the end of each play session of the exhibited leadership activity of each participant. A composite score based on the above three criteria enabled the assignment of a rank number to each child. Using a cut-off point above which every child had leader or second leader status in two or more sessions and below which no child (with one exception who had led four times out of five and was placed in the leader group) had led in more than one session, the sample was thus divided into a leader group consisting of 15 children and a non-leader group containing 17 children.

With the leaders thus identified and the total recorded behavior responses coded into 47 categories, a comparison of the frequency of use of specific behaviors by the leaders and non-leaders was possible.

The significance of the differences in behavior between leaders and non-leaders was tested by statistical techniques. The difference between means, and the "t-technique" using "Student's" distribution were the measures applied. It was decided to adopt the .05 level of significance for this study.

Results:

Of the 29 specific behaviors classified as cohesion-oriented, five could not be processed statistically by comparing mean responses due to the exceptionally few responses occurring. Of the 24 cohesion-oriented behaviors amenable to statistical analysis, 10 were found to be used with a significantly greater frequency by leaders than by non-leaders at the .05 or more stringent level of significance. An additional two behaviors were used more frequently by leaders than by non-leaders at the .06 level of significance. Of the five cohesion-oriented behaviors with exceptionally few responses, two were found by the Chi square technique to be used significantly more often by leaders than by non-leaders at the .01 level of significance.

Of the 29 behaviors classified as cohesion-oriented, then, 14 were used significantly more often by the leader group. Of these 14 behaviors, 12 showed significance at the .05 or more stringent level.

For all behaviors classified as disruptive or neutral, no significant difference in the frequency of use between leaders and non-leaders was found.

Conclusions:

The results obtained in this study, i.e., significant differences in the frequency of use of behaviors by leaders

over non-leaders were found only in those behaviors classified as cohesion-oriented, lend support to the hypothesis that leaders among preschool children will, in free play situations, exhibit cohesion-oriented behavior to a significantly greater degree than non-leaders.

The results also indicate the applicability to preschool age groups of the concept which considers leadership as a dynamic, interactional, group-situational phenomenon which much be understood in terms of the functional needs arising from a particular group situation. The basic assumption is made that no satisfaction of functional group needs is possible without cohesion-oriented behavior.

A further analysis of the specific types of behavior used significantly more often by leaders than by non-leaders indicate that the majority of these behaviors imply a vital concern with group function as opposed to the non-significant cohesion-oriented behaviors which appear less potent as operating forces. The significant behaviors also appear to be highly saturated with the factor of "sensitivity" or concern regarding individual group members. These findings are similar to those emerging in studies by several other investigators carried out on school and adult groups. Thus the results of this study suggest the existence of significant similarities between elements in the behavior of preschool leaders and elements identified by researchers investigating leadership in older age groups.

In view of the findings of this study and assuming that the cohesion-oriented behaviors used significantly more frequently by leaders than by non-leaders are, by definition, those which contribute to group cohesion or harmony, suggestions have been made as to the possible application of these findings by preschool teachers in helping to provide withdrawn or maladjusted children with possible tools for obtaining more social satisfaction.

Since this study has been conducted on a limited and unrepresentative sample and has several subjective aspects, further investigation is needed on a larger and more representative sample using rigorous experimental techniques. In addition, efforts should be directed toward determining the effects on leadership behavior of such factors as socio-economic level, authoritarian or democratic disciplinary backgrounds, and cultural framework and traditions. Such research on various cultural groups might reveal basic differences on which further investigations could be based.

CHAPTER I

INTRODUCTION

A. The Purpose of the Study

The early socialization processes of children have been of great interest to this investigator for several years. Recently this interest has been focussed on a more specific aspect of early socialization, i.e., the leadership phenomenon.

Leadership behavior, according to Parten (1), occupies an increasing portion of the child's activity from about the 2.5 year age level and is especially evident in formed social groups such as a nursery school population. A survey of the literature on leadership in general and children's groups in particular reveals an almost exclusive concern with leadership in school and adult groups. It was felt, therefore, that an analysis of early childhood manifestations of leadership behavior would not only serve the interests of this investigator, but, at the same time, could help fill the need for leadership studies on this particular age group.

Recent leadership studies on older age groups, notably Jennings (2), Carter, Haythorn, Shriver and Lanzetta (3), Hemphill (4), Maier (5), Toki (6), Chowdhry and Newcomb (7), Martin, Gross and Darley (8), Berkowitz (9), Hare (10), and Lippitt, Redl, and Polansky (11), have made extensive use of questionnaires and sociometric techniques such as estimation

by group members of an individual's leading power or influence or stated choice of companions for different activities. In these studies the setting of specific tasks or the assigning of particular roles is often utilized to provide opportunities for observation of leadership behavior. In dealing with preschool children, however, the use of such techniques is limited due to the inability of very young children to respond to complicated evaluative questions or to specific task or role directions.

Carter, Haythorn, Shriver, and Lanzetta (3) in their study of the behavior of leaders and other group members point out the paucity of studies utilizing the direct observation with immediate recording of the behavior exhibited by persons in a group situation. The need for this type of study as a means of obtaining a picture of leadership activity seems obvious if, as Stogdill (26) finds necessary, we are to "discover what leaders do".

It was felt, therefore, that a study of leadership in preschool children based on data gathered by direct observation of group activities could help to identify the types of leadership behavior exhibited by this age group and to determine whether they display characteristics in common with leadership activities which have been found in older age groups.

CHAPTER II

RELATED RESEARCH

A. Leadership Studies in General

Until recently, research on the subject of leadership has been mainly concerned with trying to identify the personality "traits" which correlate highly with leadership behavior. Stogdill's (12) survey of the literature on personal factors associated with leadership reveals so many conflicting results of studies investigating age (10 studies found leaders older, six found leaders younger), height (nine studies found leaders taller, two found leaders shorter), appearance (two studies found leaders better dressed, two found appearance negatively correlated with leadership), personality (11 studies found leaders more dominant, four found domineering persons rejected as leaders), and other traits as causal factors that a new approach to the study of leadership is strongly indicated. Stogdill in summarizing the results of this survey states: "The findings suggest that leadership is not a matter of passive status, or of the mere possession of some combination of traits. It appears rather to be a working relationship among members of a group, in which the leader acquires status through active participation and demonstration of his capacity for carrying cooperative tasks through to completion."

Sanford (13) concludes from the research done on "leadership traits" that either "a) there are no general 'leadership traits' or b) that if there are, they do not come in such a form as to be properly described in terms of those personality variables which we now can most easily measure".

Hartley and Hartley (14) attribute "the sterility of 'trait' approach" to the fact that leadership in that context was conceived of "statically as an individual endowment or as an individual behavior pattern" and there existed among the "trait" investigators a confusion between the "(static) position of headship", which is imposed on the group and the "(dynamic) position of leadership", which is spontaneously accorded by the group.

The 1952 edition of the Encyclopedia of Educational Research (15) describes the recent trend toward "action research" by Lewinian-oriented investigators and others on the leadership phenomenon. The Lewinian approach emphasizes the necessity of considering behavior in the light of the total situation with all of its dynamic aspects. By investigating social interaction in its situation, new insights have been gained into the meaning of leadership, leadership techniques, ways of identifying leaders, the possibilities of leadership training, and group dynamics as a field for scientific investigation.

Studies by Murphy (16) and Brown (17) have indicated that the leader is one who has mastered the social relations

in the group and helps bring about a condition which is more satisfying to the group as a whole.

Jennings' (2) sociometric study of girl leaders in a training school considers leadership as a "process" in which no one individual alone is responsible but which is shared by many. It was found that the girl leaders exhibited such behavior tendencies as enlarging their social space, helping non-leaders to accomplish their goals, exhibiting concern over and acting to improve the situation of isolates, taking disciplinary and censuring measures toward group members who were "expected to know better", being protective toward non-adjusting members, and acting to raise the level of conduct of the group. The non-leaders, on the other hand, were found to contribute 12 times as many instances of actively or passively interfering with the group's activities.

Jennings states that "the 'why' of leadership appears not explainable by any personality quality or constellation of traits... It appears to reside in the interpersonal contribution of which the individual becomes capable in a specific setting eliciting such contributions from him".

A recent paper by Stogdill (18) emphasizes the inadequacy of existing definitions of leadership and stresses the importance of studying leadership as an aspect of organization. He defines an organization as "a special kind of social group in which members are differentiated as to their responsibilities for the task of achieving a common goal". He reiterates the protest against considering leadership as a collection of personal traits.

Sanford (13), in avoiding what he considers a fruitless search for "leadership traits", conducted a study of the follower's role in leadership phenomena, the concept being that leadership is a relation between leader and follower. He, therefore, concentrated on clarifying the role of the follower. Through questionnaires, a cartoon projective technique, and sentence completion, he gathered data on American adult reactions to types of leadership in general, and to Roosevelt as the nation's current leader in particular. He also investigated the psychological factors in leader and follower which tend to affect this reaction. He concluded that who will become a leader will depend on:

- a) the pattern of follower needs and
- b) the pattern of leader needs and abilities.

He discovered that different group goals call forth a demand by the followers for different types of leaders. A social group may be happier with a "nice guy" type of leader who provides them with a warm feeling of camaraderie, whereas the same group, once it develops a desire to do a specific and challenging job, may depose the socially comfortable leader for a more positive and vigorous one.

The above-mentioned studies suggest that one of the most important aspects of leadership is the behavior which relates to the satisfaction of the needs, or to the achieving of the goals, of a specific group. In the opinion of Zeleny (19) the most needed research in leadership is the

careful analysis of the leadership patterns in many typical kinds of groups, since every group demands a different type of leadership behavior according to its needs.

B. Studies of Leadership Behavior in Children

Leadership behavior is observable at very early ages in children. Moreno (20) found the first signs of "vertical", i.e., clear-cut dominance relations, differentiation in a group of infants at the age of 40 to 42 weeks when a "top" and a "bottom" in gaining group attention began to develop. He states that "with the stage of 'vertical' structuring, leadership emerges".

Parten (1) conducted an early study of leadership in preschool children with an age range of from under two years to four years and 11 months, in which she observed "following, independent pursuing of own ends, both directing and following, reciprocally directing, and directing". She found significant positive correlations between age and the degree and type of leadership behavior.

A more recent study by Merai (21) in post-war Hungary dealt with the observation of the influence of older and more aggressive leaders when introduced into a small group of non-leaders who had established "traditions" or structured play patterns within their group. The types of social behavior rated were "imitating - being imitated", "order giving - order following", "object appropriation", "diplomatic means of social penetration through acceptance of the group 'traditions' formed previously and subsequent modification of them",

"widening the range of activities", and "raising of the degree of concerted action". This study, conducted on day nursery children four to eleven years of age, found that in all cases (with one explainable exception) the groups composed of non-leaders "conquered" the older leader who was introduced. The introduced leader found his power initially ineffective in these groups and had to accept the already-formed "traditions" of the non-leaders. After accepting the traditions, he often reassumed the role of leader but with necessary alterations in technique. Since the aim of Merel's study was to discover which was more powerful, the group or the leader, the results led the author to identify the main factor in his study as the "plus" arising from "groupness" which raises the power of the group above the average strength of its members. These results lend support to the theory that the relationship between leader and follower is active and reciprocal and that leadership is based on the satisfaction of group needs.

The experiments by Lippitt and White (22) on the "social climate" of children's groups have shown the variations in group reaction under adult leaders using authoritarian, democratic, and laissez-faire techniques. It is possible that some of the results obtained in their study regarding the cohesive and disruptive forces operating in such groups and the greater satisfaction of group needs in a democratic atmosphere may show their counterparts in this study which involves less-structured groups of younger children relying on the spontaneous emergence of child leaders.

CHAPTER III

STATEMENT OF THE RESEARCH PROBLEM

A. Assumptions Underlying this Study

Assuming the situational approach to leadership to have multiple advantages over the "trait" approach, it was decided to conduct this study of leadership by direct observation of behavior in a group situation with a view to determining whether current concepts relating to the satisfaction of group needs as developed on adult and school age populations are also applicable to preschool age children. If this study can help to show that the concept of leadership as "that element in a group situation which, when exerting a conscious and controlling influence, brings about a new situation which is more satisfying to the group as a whole", (16) applies also to situations involving preschool children, increased validity will be given to the interpretation of the concept of leadership as a dynamic, interactional, group-situational phenomenon which must be understood not in terms of the leader's specific personality traits but in terms of functional needs evolving from a particular group situation.

In applying the theoretical framework given above to the specific research situation with which the investigator was confronted, the fulfillment of two main requirements became necessary: a) a practicable process had to be devised by which leaders in the observed play sessions could be

identified as reliably and accurately as possible, and b) criteria had to be found by which it could be judged whether or not leadership actions, i.e., the behavior of the identified leaders, would actually "bring about a new group situation which is more satisfying to the group as a whole" (16), or, according to another formulation of the concept, whether the behavior of the identified leaders would "contribute to the more complete satisfaction of the needs of the group as a whole" (15) to an appreciably higher degree than the behavior of the non-leaders.

The first requirement was met by the establishment of three criteria, namely:

- 1) teacher ranking of leaders
- 2) scores received on a behavior rating scale (rating done by teachers)
- 3) rating of leadership activity based on observation by the investigator of the child in group situations.

The fulfillment of the second requirement presented more difficulties. The formulation "contributing to the more complete satisfaction of the needs of the group as a whole" raises several questions. What are the functional needs of a group as a whole as distinguished from the needs of its individual members? How can one ascertain either kind of need, and how can their intensity and dynamic constellation be measured? By what means can one ascertain and measure the satisfaction of either kind of need?

Individual case studies of the participating children, aside from their observation in approximately five group play situations per child, were impossible within the framework of this study due to the limitations of time, personnel, and practical arrangements such as parental consent. No attempt could be made, therefore, to ascertain individual needs or satisfactions. On the other hand, a thorough analysis of group needs and satisfactions was impossible due to the temporary aspect of the groups observed. Each was a transitory play group, functioning, for practical reasons, no longer than one hour.

An alternative solution for the fulfillment of the second requirement, also rejected by the investigator, would have been to hypothesize certain basic individual and group needs of children in this age group. Some support for this procedure would be gained from the research reports of psychologists such as Frank (23) who postulate such "basic" or "typical" needs. The problem, then, would consist of ascertaining whether the observed behavior of the children identified as leaders would, in practice, be directed toward the satisfaction of these hypothesized needs to a greater extent than the behavior of the non-leaders. However, since group needs, probably to an even greater degree than individual needs, are not static but vary according to the presence or absence of various factors, this procedure seemed untenable to this investigator.

While "typical" needs are those which are likely to occur in many situations, the limited number of sessions

observed (40) made it seem desirable to search for a procedure which could take advantage of all of the types of behavior which might be observed.

Since the functional group needs and satisfactions could not be directly observed due to the stated reasons, an indirect approach was necessary. This approach consisted of recording stenographically all verbal behavior and as much of the seemingly pertinent non-verbal behavior as possible of each member of the group during the entire play session, i.e., the entire period of functioning of the group. Subsequently, each recorded item of behavior was classified into one of three main categories:

- 1) cohesion-oriented behavior, i.e., behavior which was directed toward the goal of maintaining or strengthening the common activity of the group;
- 2) disruptive behavior, i.e., behavior which was directed toward the goal of some personal or individual satisfaction at the expense of group cohesion; and
- 3) unclassifiable or neutral behavior, i.e., behavior resulting in no discernible effect on the group, or behavior of such a nature that effect was not classifiable.

To facilitate classification of behavior, 47 specific "behavior categories" (see Appendix) were established from preliminary observations as an intermediate ordering step and before final classification into the three above-mentioned main categories was accomplished.

The rationale underlying this approach is as follows: If leaders do contribute to the satisfaction of the functional group needs to an appreciably higher degree than non-leaders, their behavior must also be appreciably more cohesion-oriented than the behavior of non-leaders. It is assumed, of course, that no satisfaction of functional group needs is possible without cohesion-oriented behavior. If direct observation of group needs and satisfactions is impossible, the observation of the orientation of behavior of the group participants becomes an adequate substitute tool providing a criterion by which leaders may be compared with non-leaders.

B. Formulation of the Specific Research Problem

The specific problem with which this study is concerned evolved then as follows: From the total group of children observed, the leaders among them were identified by three procedures, i.e., teacher ranking, score on a behavior rating scale rated by teachers, and investigator rating. The problem was then to test whether the orientation of the behavior exhibited in group situations by the leaders was significantly different from the orientation of the behavior exhibited in the same situations by the non-leaders. The difference was analyzed in terms of the classification criteria given above. The significance of the difference was tested by statistical techniques; in this case, the differences between means, and the "t-technique" (using "Student's" Distribution) provided appropriate measurements for the problem. Details of the statistical treatment of data will be discussed below.

C. Definitions Adopted for Purposes of this Study

Leader - A child serving as a leader or second leader in not less than two play sessions and receiving a composite leadership rank of 14 or less. (For detailed ranking procedure see under Identification of Leaders, p. 22).

Cohesion-Oriented Behavior - Behavior which is directed toward, or which results in, the maintaining or strengthening of the common activity or "hanging together" (22) of the group, e.g., suggesting a new activity, order giving, etc. 29 categories of response have been classified as cohesion-oriented behavior. See p. 44 for a complete listing.

Disruptive Behavior - Behavior which is directed toward the satisfaction of some personal or individual need at the expense of group cohesion, e.g., verbal aggression, rejection of others, etc. 11 categories of response have been classified as disruptive behavior. See p. 49 for a complete listing.

Neutral or Unclassifiable Behavior - Behavior which has neither cohesive nor disruptive orientation, or which has no observable effect on group cohesion, e.g., performing with no reaction from peers, etc. Seven categories of response have been classified as neutral or unclassifiable behavior. See p. 48 for a complete listing.

D. Hypothesis

The hypothesis is advanced that leaders among preschool age children (3.1 to 6 years old) will, in free play group situations, exhibit cohesion-oriented behaviors, as identified in this study, to a significantly greater degree than non-leaders. In each analysis of a particular behavior, the null hypothesis thus becomes: Leaders and non-leaders are equally likely to exhibit this behavior.

CHAPTER IV

METHOD AND PROCEDURE

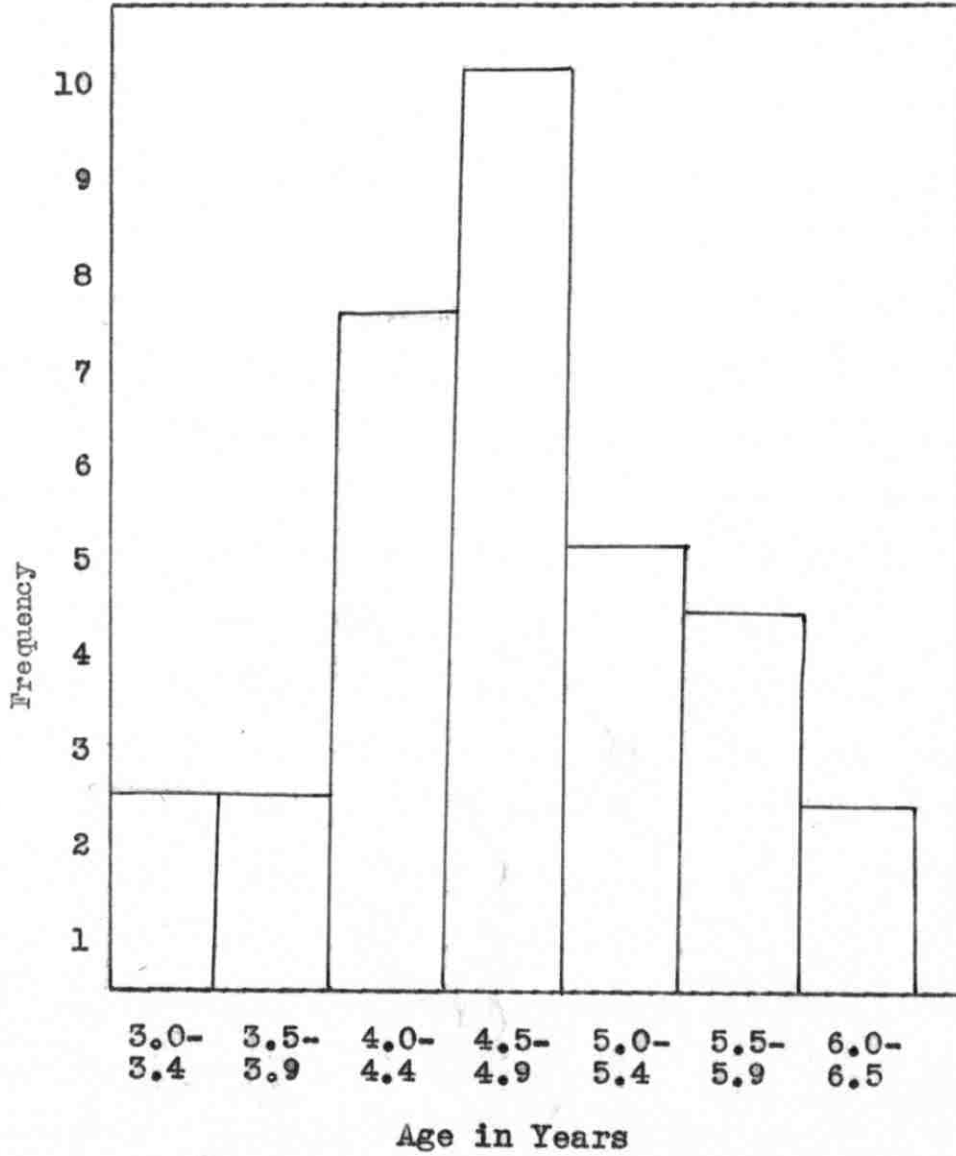
A. The Nature of the Sample

The 32 subjects of this study attended, in 1954, the Nursery School and Kindergarten of the American Community School in Beirut, Lebanon. Out of the total enrollment, all children served as subjects except those under three years of age and those few with language handicaps. The sample consisted of 13 girls and 19 boys with ages ranging (at the beginning of the study) from three years to six years (see Figure 1).

It must be pointed out that this sample cannot be considered typical of American preschool groups due to three factors: 1) the socio-economic status of the families was above average with father occupations including college professors, missionaries, airline pilots, business executives, and government foreign service personnel, 2) the turnover in school population is rapid due to the unsettled nature of many families' careers (several of the children had recently arrived from America or from another foreign post and were, consequently, in a period of adjustment), and 3) the fact of residence in a foreign culture introduces a number of possible variables whose effects cannot be estimated.

Figure 1

AGE DISTRIBUTION OF SAMPLE



B. The Nature of the Evidence

(1) Conditions of Observation

Since the aim of this study was to observe the dynamic manifestations of leadership behavior in free play situations, a small room (see Appendix for plan) adjoining the Nursery School was prepared for use as an observation location. Observations were made usually on Tuesday or Thursday between the hours of 10 and 11:30 a.m. during the months of February, March and April.

The furniture consisted of a low platform near the wall on which were placed numerous attractive toys, e.g., animal and human face masks, eye glasses, moustaches, toy trains, a puppet, small bottles with droppers, a jumping rope, cans and other containers, small dolls, bow ties, toy weapons, a tank, a top, etc., two desks and three chairs.

The investigator, who had previously established rapport with the children by frequent visits to the school in the role of an unobtrusive participant helper in such situations as toy distribution and playground activities, solicited groups of three children to come with her into the "little room" and, with no predisposing remarks or preparation, assumed her position at a desk in the corner and proceeded to record in shorthand all verbalizations and as many activities as possible. Spontaneous verbalization and interaction invariably began immediately upon the children's entering the room and seeing the toys.

The role of the investigator was one of non-interference except in cases of undue aggression or too extensive water

play. The children were free to get water at the hall fountain just outside the door. The only restrictions imposed (when the case arose) concerned squirting each other with the water pistol, abusing the masks, and taking toys outside the play room.

To end each session the investigator suggested having a parade with the masks and asked, "Who is the leader?" This one directive maneuver often threw an interesting light on the competition for leadership status between the leader and non-leaders.

It was necessary to limit the participating group to three since the recording of two two-way conversations between four subjects was found to be impossible for one investigator. The formation of groups by random selection was not practicable since attendance was erratic and willingness to accept the suggestion of playing apart from the larger group varied from child to child and from day to day. Just before each session, the investigator solicited groups of three children with varying combinations of the factors of age, sex, friendship, and apparent leadership. The one condition for the selection of these groups was that the three children should not have played together in a session before.

With the exception of four children (two late-comers and two reluctant participants) each child was observed in a one-hour session and in varying numbers of 30 minute sessions -- all on separate days. The mean number of observations was 5.4 for the leaders and 4.45 for the non-leaders with the one-

hour session considered as two observations and the 30 minute sessions as one observation.

(2) Evidence from the Play Sessions

(a) Stenographic Record

A stenographic record of all verbalizations and as many activities as possible was made by the investigator during each play session. This type of recording was found, in the Lippitt and White studies (22), to be the basis of the most significant data when compared with data gathered by an interpretative running account of member actions, a minute-by-minute group-structure analysis, and a quantitative running account of the social interactions. These stenographic notes were transcribed in typed form as soon as possible after the end of each session. (See Appendix for scored sample sessions.)

An observer reliability check was not possible since no cooperators could be found who possessed sufficient skill in shorthand for recording purposes and it was impossible to score responses simultaneously with observation due to the complicated and numerous categories. A method of checking scoring reliability whereby several persons would be asked to code a transcribed session and these codings correlated with the observer coding was rejected as invalid due to the fact that many responses appear meaningless or unclear in typed form but were classifiable when heard and seen in the live situation.

While this lack of observer reliability check is acknowledged to be a possible source of error, it is not felt that any feasible check would have provided a reliable indication of the probable amount of error which was introduced.

(b) Leadership Rating by the Investigator

Immediately upon conclusion of the play session, i.e., before transcribing of the stenographic record, a subjective rating by the investigator was made of the degree of leadership of each child participating in the session. This rating was based on the observation of the dynamic development of the play activity, the interaction of the participants with respect to the influence of one upon the other, and the relative effectiveness of each child in his role as a group member. In all sessions, with the exception of two short ones, a leader could be discerned and, in many cases, a second leader, i.e., a less effective but aspiring leader, emerged.

(c) Classification and Tabulation of Stenographic Evidence

Based upon preliminary observations, 47 categories of behavior and verbalizations were devised for the purpose of classifying each remark, response, or maneuver of every child during the play session. As is the case in many observer situations, classification included a measure of subjective weighting based on observation of expression, voice tone, and the total group interaction.

The typed results of each session were coded in terms of the 47 categories of behavior, then were tabulated on sheets showing the frequency of each response per child per session. (See Appendix for sample tabulation sheet.) A similar tabulation sheet was prepared for each individual child showing the total number of each type of response made during all sessions plus a symbol indicating the degree of leadership the child manifested in each session (as adjudged by the investigator).

(3) Identification of Leaders

Three criteria were established by which an estimate of the leadership behavior of each child was obtained.

(a) Teacher Ranking

The teacher of the Nursery School and the teacher of the Kindergarten were asked to rank all of the children in their respective groups, placing the strongest leader at the top of the list and the one who evidenced the least tendency to lead at the bottom.

(b) Teacher Rating on Behavior Rating Scale

The same two teachers were requested to rate each child on a three-point behavior rating scale (see Appendix for a reproduction of this scale) prepared by the investigator for the purpose of distinguishing leaders from non-leaders.

(c) Investigator Subjective Rating of Degree of
Observed Leadership

The third criterion was the rating of the

investigator regarding the emerged leader or leaders in each play session as described above. For purposes of scoring, these ratings were weighted as follows: leader - 2, second leader - 1, non-leader - 0.

Utilizing the scores obtained on the three above-mentioned criteria and weighting them: teacher ranking - 1, behavior-rating scale - 1, observer rating - 2, a composite score was obtained for each child from which it was possible to assign a rank number. With a total of 32, the cut-off point selected was 14 which produced 14 high scorers all of whom had leader or second leader status in at least two play sessions. Below this rank fell 18 children, only one of whom had leader status in more than one session. This case was placed in the leader group since she had led in four out of five sessions, thus differing markedly from the non-leader group. Two groups were thus established: the leaders with 15 members and the non-leaders with 17 members.

(d) Peer Preference Ratings

A sociometric rating of peer preference was also obtained by asking each child separately which three children he preferred to play with. The disadvantages inherent in using this device with young children made it seem advisable to eliminate it as a valid criterion. Experiences immediately preceding the questioning, the difficulty for the younger children of grasping the concept of choice or preference, and some apparent trouble in remembering peer names when not in face-to-face contact seemed to cast doubt on the validity of this technique.

The results of this experiment, however, showed a significantly higher mean number of preferences for the leader group (4.86) than for the non-leader group (2.51). This difference is significant at the .012 level.

C. Statistical Treatment of the Data

(1) Limitations on Interpretation of Statistical Data

The following facts must be borne in mind when interpreting the statistical data and results reported in this study:

(a) For purposes of this study, leadership is defined by a composite score, obtained from the teacher and the investigator, and converted to a rank. Numerical ranks above 14 are to be considered leaders, and ranks below 14 (with one aforementioned exception) non-leaders. The basis of this ranking is subjective, since the basic measures are:

- (i) Subjective teacher-ranking,
- (ii) Subjective investigator-scoring, and then ranking,
- (iii) Teacher response on a rating scale constructed by the investigator. The individual items of the scale were subjectively evaluated by the investigator to be indicative of leadership if marked in a certain way.

(b) No systematic check was made on observer reliability, thus some degree of error must be assumed to have been introduced.

(c) The 47 behavior categories were set up as a direct result of observation of individual behaviors, and were not classified as cohesive, disruptive and neutral until all the observations had been made. This classification into the three main categories was made by the investigator in consultation with a trained sociologist, but must also be considered, at least to some extent, to be a subjective one. This fact, together with the subjectivity of the leader - non-leader classification, makes it impossible to claim that, for any particular behavior, a statistically significant difference between leaders and non-leaders is independent of the investigator's judgment.

This summary of limitations is made here for the purpose of reminding the reader that this study, while objective in the sense that it is based on an on-the-spot and verbatim stenographic record of leadership activities, has several subjective aspects, thus any statistical manipulations must be regarded as revealing an inseparable combination of observer judgment and objective behavior data.

(2) Statistical Procedure

To enable a meaningful comparison to be made between leaders and non-leaders, it was necessary to make the response scores of leaders in a certain behavior comparable to the scores of non-leaders in the same behavior. This was accomplished by dividing the score of each child by the number of times he was observed, thus obtaining an average

score per child per session for each behavior. The totals of these average scores obtained by each child in each technique, done separately for the leader and non-leader groups, were then divided by the number of children in each group resulting in a mean score per child per session for each of the two groups, and for each behavior. The difference between these mean scores, i.e., between the mean score of the leaders and of the non-leaders in each behavior, allows the drawing of conclusions as to whether a certain behavior is used significantly more frequently by one of the groups.

To analyze the difference between means, it is necessary to compute the estimated population variance of each group for each behavior. Applying small sample techniques, the variances are obtained by the formula:

$$s^2 = \frac{N\sum X^2 - (\sum X)^2}{N(N-1)}$$

Having determined the variances, the significance of the difference between the means may then be determined directly by use of the proper formula (see below) and by utilizing the "Table of Percentile Values of 'Student's' Distribution". (24) This table, by relating the difference between the means to the variances and the number of subjects in each group in each behavior, indicates at what significance level a certain difference between means may be considered a real or non-chance difference. For this study it was decided to adopt the .05 level of significance.

This means that each difference for which significance is claimed could not have occurred more than 5 times out of 100 by chance (with two exceptions which are noted).

The formulas utilized to compute the statistic "t" (which is the critical ratio corrected for small samples), and "n" (degrees of freedom) necessary for entering "Student's" distribution were the following:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{N_1} + \frac{s_2^2}{N_2}}}, \text{ and}$$

$$n = \frac{\left(\frac{s_1^2}{N_1} + \frac{s_2^2}{N_2}\right)^2}{\left(\frac{s_1^2}{N_1}\right)^2 \frac{1}{N_1 - 1} + \left(\frac{s_2^2}{N_2}\right)^2 \frac{1}{N_2 - 1}} - 2,$$

where \bar{X}_1 is the mean score for leaders in a particular behavior

\bar{X}_2 is the mean score for non-leaders in a particular behavior

s_1^2 is the variance of leaders' scores

s_2^2 is the variance of non-leaders' scores

N_1 is the number of leaders (this was constant at 15)

N_2 is the number of non-leaders (this was constant at 17)

Note: The score of a particular leader or non-leader is numerically equal to the average number of times per session he exhibited a particular behavior.

CHAPTER V

RESULTS

Before the correlations between leadership and certain kinds of behavior were analyzed, it was ascertained that there was no significant relationship between a) sex and leadership and b) age and leadership as defined in this study.

A. The Factor of Sex

The leader group consisted of eight boys and seven girls and the non-leader group contained eleven boys and six girls. The factors of leadership and sex were then examined for independence from each other. When a frequency comparison was made by means of the Chi square technique, it was found that the proportion of boy leaders was not significantly different from the proportion of girl leaders. That is, leadership and non-leadership in this sample showed no dependence on sex.

B. The Factor of Age

Similarly, an examination was made to determine whether the mean age of leaders was significantly different from the mean age of the group as a whole. This was done by ascertaining the standard error of the mean age of leaders and by then testing the significance of the deviation of the mean age of the leaders from the mean age of the group as a whole.

The formula used is suggested by McNemar (25) for comparing the mean of a subgroup with the mean of the total group of which it forms a part.

$$CR = \frac{(M_{\text{leaders}} - M_{\text{total}})}{S_{M_{\text{leaders}}}}$$

The critical ratio thus obtained showed that the difference was not significant and eliminated age as a factor related to leadership in this study.

C. The Factor of Participation

In order to ascertain whether the children identified as leaders participated in play sessions more than the non-leaders, (that is, whether they made a greater number of recordable responses) the mean response score of leaders per session was compared with that of non-leaders, and the difference between the means was tested for significance using the statistic "t" and "Student's" distribution. The difference in mean response scores was found to be significant at the .001 level. It can be concluded, therefore, that the leaders in this study made a significantly higher mean number of responses in play situations.

D. Factors Related to Classifications of Behavior

Table I (page 31) summarizes the results of this study.

It should be noted that, for all behaviors classified as disruptive or neutral, no significant difference in the

Cohesion-Oriented Responses

	Mean Response of Leaders	Mean Response of Non-Ldrs.	Used signifi- cantly More by Leaders	Used signifi- cantly More by Non-Ldrs.	Difference not Signif.
N - Use of peer name	4.42	1.95	**		
O - Announcing to group	3.5	2.28	***		
X - Agreeing	.39	.27			x
4 - Performing with reaction	.80	.68			x
6 - Bid for attention (things)	.83	.83			x
7 - Teasing or attack in fun	.72	.61			x
8 - Bid for attention (personal)	.36	.17			x
10 - Assumption of role	2.88	1.4	**		
11 - Reprimand or discipline	.48	.20	**		
12 - Assumption of role of authority	.58	.28	*		
17 - Imposition of arbitrary rules	.17	---	****		
18 - Question	1.87	1.26			x
19 - Criticism of peers	.63	.23	**		
20 - Dispensation of toys	.76	.39	**		
22 - Imitating	1.17	1.06			x
24 - Suggesting new activity	2.18	.64	***		
26 - Diplomatic toy exchange	.27	.33			x
30 - Assumption of responsibility	.16	.06	*		
36 - Protective or helpful act	1.1	.58	**		
38 - Sounding out ideas of peers	.88	.29	***		
40 - Incorporating ideas of peers	.03	.05			x
42 - Recognition of peers	.62	.57			x
44 - Imparting enthusiasm	.88	.36			x
46 - Order, direction, or rule	5.2	1.79	***		
48 - Asking help from peer	.59	.33			x
50 - Assigning roles	.30	.16			x
52 - Inviting others into play	.14	.01	****		
54 - Mediating	.03	.02			x
56 - Persuasion	.08	.05			x

Symbols indicating significance levels: **** χ^2 .99
 *** .001
 ** .05
 * .06

Neutral or Unclassifiable Responses

	Mean Response of Leaders	Mean Response of Non-Ldrs.	Used signifi- cantly More by Leaders	Used signifi- cantly More by Non-Ldrs.	Difference not Signif.
Y - Disagreeing or declining	.17	.18			x
2 - Performing (no reaction)	.31	.52			x
14 - Naming	.64	.57			x
16 - Imaginative naming	.44	.26			x
28 - Approach to adult	3.22	2.18			x
34 - Remarks, information, etc.	3.75	2.82			x
58 - Unclassifiable	.03	.06			x

Disruptive Responses

	Mean Response of Leaders	Mean Response of Non-Ldrs.	Used signifi- cantly More by Leaders	Used signifi- cantly More by Non-Ldrs.	Difference not Signif.
1 - Verbal approp. of toys	.75	.86			x
3 - Grabbing toys	.48	.46			x
5 - Grabbing with remark	.36	.34			x
9 - Resisting peer action	1.46	1.27			x
13 - Aggression - hitting	.53	.53			x
15 - Aggression - verbal	.46	.24			x
21 - Bully tactics	.01	.01			x
23 - Rejection of peer	.23	.10			x
25 - Unfav. comparison of toy	.01	.02			x
27 - Rejection of toys	.04	.04			x
32 - Asks adult interference	.69	.26			x

TABLE I

SUMMARY OF RESULTS

frequency of use between leaders and non-leaders was found.

Altogether, 29 behaviors were classified as cohesion-oriented. Five of these 29 could not be processed statistically by analyzing the difference between the means due to the extremely small number of responses occurring (no variances could be meaningfully computed).

It was found that out of 24 behaviors which were classified as cohesion-oriented and which were amenable to statistical analysis, 10 were used with a significantly greater frequency by leaders than by non-leaders at the .05 or more stringent level of significance. An additional two behaviors were evidenced significantly more often by leaders than by non-leaders at approximately the .06 level of significance.

The remaining 12 of these 24 cohesion-oriented behaviors were not shown significantly more often by leaders than by non-leaders.

Of the five behaviors with exceptionally few responses, two (Nos. 17 and 52) revealed response patterns (total score for leaders - 14, total score for non-leaders - 0, and total score for leaders - 12, total score for non-leaders - 1) which showed them to have been used almost exclusively by leaders. As this pattern was likely to indicate a significant difference between leaders and non-leaders, but could not, due to the small number of responses, be tested by the comparison of means, a comparison of frequencies was made by the application of the Chi square technique corrected by Yates' formula. The number of leaders using each behavior

was significantly greater than the number of non-leaders using it at the .01 level of significance. For the remaining three behaviors no significant difference between leaders and non-leaders was found. Their numbers are 40, 54, and 56.

The total result, then, amounts to the claim that the leader group used 14 of the 29 behaviors classified as cohesion-oriented significantly more often than the non-leader group. Of these 14 behaviors, 12 show significance at the .05 or more stringent level.

CHAPTER VI

DISCUSSION OF RESULTS

The results obtained in this study show that any significant difference in the frequency of use of behaviors exhibited by the identified leaders applies only to the behaviors which were classified as cohesion-oriented. No significant difference between leaders and non-leaders was found in the frequency of use of behaviors which were classified as neutral or disruptive. It is held, therefore, that, within the aforementioned limitations of the study, support is lent to the hypothesis that leaders among pre-school children will, in free play situations, exhibit cohesion-oriented behavior to a significantly greater degree than non-leaders.

While the data show that a significant difference between leaders and non-leaders occurs in cohesion-oriented behavior, only about half of the cohesion-oriented behaviors were used significantly more frequently by leaders than by non-leaders. This is, however, in accordance with the hypothesis: no claim has been made that leaders exceed non-leaders in the frequency of use of all cohesion-oriented behaviors. Further, it will be noted that there was no case in which non-leaders showed a significantly more frequent use of a cohesion-oriented behavior, or, for that matter, of any behavior. Non-leaders, of course, use

cohesion-oriented behaviors, also, and it will depend on the functional needs of the group and other factors as to which particular behaviors the leader will choose in exerting his influence. No leader, however, can be expected to exceed non-leaders in the frequency of use of disruptive or neutral behaviors for an extended period of time without losing his position as a leader.

Table II lists the cohesion-oriented behaviors which were used significantly more frequently by leaders than by non-leaders.

TABLE II

COHESION-ORIENTED BEHAVIORS USED
SIGNIFICANTLY MORE OFTEN BY LEADERS

Use of peer names
Announcing
Assumption of role
Reprimand or discipline
Assumption of role of authority
Imposition of arbitrary rules
Criticism of others
Dispensation of toys
Suggesting new activity
Assumption of responsibility
Protective or helpful act
Sounding out ideas of others
Order, direction, or rule
Inviting others into play

It will be noted that the majority of these behaviors imply a vital concern with group function, e.g., sounding out the ideas of other members, making rules, criticizing behavior of group members, suggesting new group activity, assumption of role in group dramatic play, reprimanding or disciplining group members, dispensation of toys, announcing to the group, etc. In other words, the leaders showed significantly more behavior relating to initiation, control and manipulation of group activity.

These types of behavior, namely, analyzing the situation, initiating action, giving directions, and integrating group behavior, were found by Jennings (2) and Carter, Haythorn, Shriver, and Lanzetta (3) to differentiate leaders from other group members in their particular group situation.

Another element which appears to run through the significantly frequent behavior of the identified leaders in this study is a sensitivity or concern regarding the other group members as indicated by protective or helpful acts, sounding out the ideas of others, inviting others into play, and the use of peer names.

Indications of the importance of the factor of sensitivity have also been found in studies by Jennings (2) and Chowdhry and Newcomb (7). Jennings, in describing her girl leaders, says: "It is as if these individuals recognize and think more of the needs of others than others think of their own needs". Chowdhry and Newcomb discuss the evidence found in the Bennington College data which

shows "that individuals who later acquire prestige and leadership status are those who possess more than the average amount of sensitivity to group opinion". They conclude from their study on the ability of leaders to estimate group opinion that, "Leaders of groups like these are chosen, in part at least, because of recognized qualities of 'sensitivity' to other members of the group".

Those cohesion-oriented behaviors which did not show a significant difference in frequency of use by leaders and non-leaders are listed in Table III (see page 38). It will be noted that these behaviors appear to be generally less potent as operating forces. For example, agreeing, performing, questions, imitating, asking for help, teasing, etc. are behaviors which do not suggest strongly goal-directed motivation. In addition, it is of interest that these behaviors do not suggest the existence of the aforementioned factor of sensitivity but are rather of a more superficial nature and imply less personal involvement with other group members.

It can be said, then, that the results of this study suggest strongly that there are significant similarities between elements in the behavior of these preschool leaders and those elements identified by researchers investigating leadership in older age groups.

TABLE III

COHESION-ORIENTED BEHAVIORS NOT USED
SIGNIFICANTLY MORE OFTEN BY LEADERS

Agreeing

Performing with reaction

Bid for attention (things)

Teasing

Bid for attention (personal)

Question

Imitating

Diplomatic toy exchange

*Incorporating ideas of others

Recognition of others

Imparting enthusiasm

Asking help from peers

Assigning roles

*Mediating

*Persuasion

* Responses of this type were too few to be analyzed statistically.

CHAPTER VII

CONCLUSIONS

A. Theoretical Implications

It will be remembered that the conceptual basis for this research was formed from several studies which considered leadership as a dynamic, interactional, group-situational phenomenon which must be understood not in terms of the leader's specific personality traits but in terms of the functional needs evolving from a particular group situation.

The present approach to leadership in preschool children has yielded results which lend support to this view and indicate that the manifestation of leadership in this age group is similar in orientation to leadership behavior as it has been observed in older age groups.

B. Practical Implications for Teachers

The results of this study, which point to the applicability of the situational approach to the early childhood manifestations of leadership, may be considered to have certain implications for the preschool teacher.

A modern nursery school in America concerns itself with the encouragement of healthy social relations among the children and with helping the individual child to discover his potential as a contributing member of society.

A consideration of the behavior techniques in this study which were most often used by successful leaders could suggest to the teacher specific types of behavior which might be profitably encouraged in withdrawn, shy or maladjusted children in similar nursery school play situations.

It should be understood that the purpose behind utilizing such devices is not to make every child a leader. Aside from the doubtful desirability of such a purpose, it does not follow that because leaders use certain techniques, all children who use, or learn to use, the same techniques will be leaders. The applicability of these techniques is determined by the situation and other factors such as the psychological reactions of the leader and non-leaders. The cohesion-oriented behaviors used significantly more frequently by leaders than by non-leaders are, however, by definition, those which contribute to group cohesion or harmony. To the extent, then, that we encourage these behaviors in withdrawn or maladjusted children, we help provide them with a reservoir of possible tools for use in obtaining more social satisfaction.

The following examples present themselves:

(1) Familiarizing a child with the names of his peers. e.g., A child who has not learned or does not use peer names can be encouraged through games, in which he must choose by name a partner or a team, and through frequent teacher use of peer names in conversing with the child, to learn the names of his playmates. Through this

device his feelings of isolation and strangeness could be lessened, and his acceptance by his peers strengthened.

(2) Encouraging the child to participate in dramatic play through role assumption. e.g., In this study, the six animal and human face masks proved to be very valuable in stimulating dramatic play activity. Shy children who were normally reserved and quiet became loud and active "lions, cats and Indians" behind the anonymity of the masks.

(3) Provision of opportunities for the withdrawn child to serve in the role of toy dispenser. e.g., A socially isolated child may be assigned the task of distributing books, clay, crayons, etc. The status accorded a potential favor-bestower can add measurably to a child's feeling of importance and participation.

(4) Suggesting interesting play ideas and variations which a child can in turn propose to his peers. e.g., To a child who is alone and seems at a loss for something to do, a tactful suggestion along the lines, "There are some water cans and brushes in the cupboard, perhaps Sally would like to go out with you and 'paint' the swings", could guide him to an enjoyable social activity.

(5) Encouraging the child to initiate helpful or protective actions toward a peer. e.g., If a child is in mild difficulty trying to lift a large box or gathering up a spilled puzzle, a withdrawn child could be encouraged to "go and see if you can help Jack get the puzzle back in the box".

(6) Encouraging the child to sound out the ideas of others as a means of social approach. e.g., If a shy child complains he has no one to play with, the teacher could suggest that he find out how many children would like to do finger painting and bring all of them to the painting tables.

(7) Helping a child to become familiar with the existing social "rules" of his peer group. e.g., A child who finds himself in trouble with his peers because he grabs their toys could be given the explanation that the "rules" are that the one who gets a toy first may keep it until he is finished but, if one needs that particular toy very badly, it is all right to ask if you may have it as soon as he is through.

C. Implications for Future Research

With the realization in mind that this research has been accomplished on a small and somewhat unrepresentative preschool population, using subjective measures, a logical next step for a researcher would be to conduct a similar study on a larger and more representative sample of American preschool children, using rigorous experimental techniques. Furthermore, the effect of certain factors such as socio-economic level, authoritarian or democratic disciplinary backgrounds, and cultural framework and traditions must be studied in their relation to the manifestation of leadership.

The pattern of leadership behavior as determined by a similar study on preschool children from a strongly authoritarian culture, for example, might prove to be radically different from that of the present study. Comparisons of the results of similar studies on various cultural groups might reveal basic differences on which further investigations could be based.

It is also necessary, as Zeleny (19) has pointed out, to conduct studies on the particular patterns of leadership behavior demanded by many particular kinds of groups. This type of research could be approached by the method employed in the present study.

For the purposes of this study it was assumed but not established that leadership phenomena are strongly affected by the groups and the situations in which they may occur. In a future study, it would be desirable to analyze the behavior of each child as it occurs in different situations. In this way, there would be some measure of the influence of differing situations and group structures on the phenomenon of leadership.

APPENDIX

47 BEHAVIOR CATEGORIES FOR THE PURPOSE OF
CLASSIFYING CHILD RESPONSES

Cohesion-Oriented Responses

- N - Addressing or referring to peer by name.
- 0 - Announcing - A statement or announcement to the group as a whole concerning an intended action, fact or observation not classifiable under 14, 16, 34, or 44. e.g., "I'm going to get some more water." "I got this train." "Now we are looking for Johnny."
- X - Agreeing - A response indicating agreement or acceptance of suggestion but not implying special enthusiasm as in 44. e.g., "O.K.", "Yes, I like it."
- 4 - Performing with reaction or imitation by peer - Attempt to attract the attention of others by actions, singing, nonsense phrases, etc. (not announcing as in 0) with resulting peer recognition such as laughter, imitation or criticism.
- 6 - Bid for attention (things) - Calling the attention of peers to toys or objects. e.g., "Hey, look at this big train." "See what a nice hat."
- 7 - Teasing or attack in play - Verbal or bodily attack (not aggression as in 13 and 15) such as throwing water for fun, pushing, wrestling.
- 8 - Bid for attention (personal) - Calling the attention of peers to personal action or attribute. e.g., "Look at me." "See how high I can jump."
- 10 - Assumption of role (remarks in character or in play situation) - Any assumption of role not included

in 12, any remark as a play character or remarks pertinent to play situation not classifiable in other category. e.g., "I'm a wolf." "I'm the shoe shine boy." "The train's running, now it's stopped, now the passengers get on."

- 11 - Reprimand or discipline - Usually made in response to offense by peer. e.g., "Ow, why did you hit my head?" "Be quiet." "Put it back, it's not yours."
- 12 - Assumption of role of authority - Assertions such as: "I'm the mommy and you all have to do what I say." "I'm the doctor and only the doctor gives shots."
- 17 - Imposition of arbitrary rules - Making restrictions or regulations to fit the immediate situation without regard to logic. e.g., "Leave it alone, it's only for girls." "You can't play with these, they aren't any fun."
- 18 - Questions - Question to peers unless in the form of sounding out the ideas of others as in 38, or asking for help as in 48.
- 19 - Criticism of peers - Disapproving type of criticism (not as in 46) usually regarding misbehavior. e.g., "You are a silly girl." "You always spill the water." "You were a bad boy."
- 20 - Dispensation of toys - Handing out toys to others or making suggestions that toys be used by them. e.g., "You take the puppet." "Here, have a mask."

- 22 - Imitating - Any direct imitation of behavior or verbalization of peer. Mocking imitation also included in this category.
- 24 - Suggesting new activity - Any proposal of a new play plan or action. e.g., "I know, let's play doctor." "Let's put on ties, John."
- 26 - Diplomatic toy exchange - Effecting a desired exchange or acquisition of a toy by tactful means. e.g., "I have this whistle but you can blow it if you give me that gun."
- 30 - Assumption of responsibility - Volunteering to do small chore or request. e.g., "There's no more water, I'll get some." "I'll close the door."
- 36 - Protective or helpful act - e.g., "Come, David, I'll tie it for you." "Are you all right?" "I found one for you, Jan."
- 38 - Sounding out ideas of peers - Any questions regarding preference or opinion of others. e.g., "Do you want to go outside, Carol?" "Who wants to be the horsie?" "Do you want me to play hospital?"
- 40 - Incorporating ideas of peer - Accepting and implementing ideas of peer into play plan. e.g., In answer to "(Let's take) this little baby," the reply, "This little baby's going to be sick."
- 42 - Recognition of others - Calling attention to or laughing at antics of peer. e.g., "Look at him." "Oh, isn't he funny."

- 44 - Imparting enthusiasm - All remarks not classifiable under 0, 6, 8, 10 or 42 which imply excitement or enthusiasm over some aspect of play. e.g., "Yikes!" "What a cute baby." "Oh, it was fun."
- 46 - Order, direction, or rule - All such responses given in a constructive manner not classifiable under 11, 17, 19, 23. e.g., "Don't use that, it's broken." "The mother goes here and the little baby goes here." "Don't step on everything, Ann."
- 48 - Asking help from peers - Requests made of peers. e.g., "Can I see?" (not accompanied by grabbing as in 5). "Please hand me the rope, John."
- 50 - Assigning roles - Directing peers to assume specific play roles. e.g., "You be the sick boy and Roy must be the doctor."
- 52 - Inviting peers into play - Encouraging others to join group. e.g., "Come, Carol, you can sit here." "Here, Billy, play doctor with us."
- 54 - Mediating - Attempt to settle difference between others. e.g., "No, Billy, you had it enough, now let David play it." "If you take the wolf then Sue can have the horsie, O.K.?"
- 56 - Persuasion - Use of reasoning to influence peer toward certain behavior (when not classifiable under 54). e.g., "You go out, Jay, and when I'm finished here in just a teeny minute, I'll come out, O.K.?"

Neutral or Unclassifiable Responses

- Y - Disagreeing or declining - Mild disagreement, not implying criticism of peers or attempt at positive direction as in 9 and 46. Declining to accept offer or suggestion. e.g., "No, I don't want to." "I'm doing this now."
- 2 - Performing with no reaction from peers - Unsuccessful attempts to attract the attention of others by singing, nonsense phrases, actions, etc. (not announcing as in 0).
- 14 - Naming - Identifying a toy or object by name (seemingly just for the pleasure of utilizing the word). Even if the utterance expressed enthusiasm, it was placed in this category rather than in 44. e.g., "Masks." "Lions and tigers." "This is a train." "A man, a woman and a little baby."
- 16 - Imaginative naming - Same as 14 except some descriptive adjective or imaginative name is applied to an object. e.g., "These are stinky ear drops." "This is an Indian, a real bad guy." "This is the captain doll."
- 28 - Approach to adult - All remarks to adult, except those classifiable under 32, whether in form of a question, asking permission, or conversation.
- 34 - Remarks, information or "small talk" - Any casual remark or statement often not related to group situation. e.g., "We have a dog at home named Jigger." "I had a whistle like this in America." "My mommy

says it's not winter anymore."

- 58 - Unclassifiable - meaning not apparent to observer.

Disruptive Responses

- 1 - Verbal appropriation of toys - Verbal demand for toys (not request as in 46 or 48) or assertion of ownership during dispute over possession. e.g., "Give me it, it's mine." "I had it first."
- 3 - Grabbing toys - Taking any toy from a peer by forceful grabbing--even if other child does not overtly protest.
- 5 - Grabbing toys with remark - Same action as in 5 but accompanied by a remark such as: "Can I see that?" "I'll do it." "I want it."
- 9 - Resistance to peer's approach or action - e.g., "Don't." "Stop it, John." "Leave me alone."
- 13 - Aggression (hitting) - Any aggressive hitting not occurring as part of play as in 7 or 10.
- 15 - Aggression (verbal) - Threats, name calling, etc. not spoken as part of role as in 7 or 10. e.g., "I'm going to beat you up--both of you." "I'm going to throw this shoe at you, you puny thing."
- 21 - Bully tactics - Bodily aggression accompanied by threats or declaration of ultimatum. e.g., (Sitting atop opponent's chest) "Are you going to stop doing that?"

- 23 - Rejection or exclusion of peer - "You can't play with us." "Get out, this is not for you." "Let's not play with her."
- 25 - Unfavorable comparison of toys - "I got the prettier one." "Mine is nicer than yours, yours is black."
- 27 - Rejection of toys - Criticism of toys with consequent rejection. Not when merely part of play as in 10 or 46.
- 32 - Request for adult interference - Usually in the form of a complaint or "telling" to an adult. e.g., "Mrs. Bruhns, he's getting me all wet." "Make her stop taking my doll."

SAMPLE PLAY SESSION I

<u>Participants</u>	<u>Age</u>
**Jan	4.9
*Lou	4.9
Sue	4.2
Beki	3.10

Beki and Sue enter. I ask Beki to close door but Sue does it. Beki begins to fill bottles with water.

Beki 46 - to Sue - DON'T TAKE ONE.

Sue 1 - I WANT ONE. I WANT ONE.

Beki 8, N - LOOK, SUE (puts a dropper in her mouth).

Sue 22 - (Both girls put water in their mouths with droppers.)

Beki 0 - (puts water in the top, then says) I HAVE TO GO TO THE BATHROOM.

Sue 0 - (returns from getting water at the fountain, finds Beki gone and announces) I WANT TO MAKE PP.

(While both girls are in bathroom Jan and Lou, who are close friends, enter.)

Lou 18 - WHERE SHALL I PUT MY FLOWERS?

(Sue returns.)

Lou 46 - DON'T YOU DARE TOUCH THESE FLOWERS BECAUSE THEY ARE MY FLOWERS BECAUSE I PICKED THEM.

Jan 46 - to Sue - DON'T TOUCH THEM.

Sue 9 - THEN I WON'T GIVE YOU THESE (glasses).

Lou 48, N, N - to Jan - WOULD YOU WATCH SUE AND BEKI SO THEY DON'T GET MY FLOWERS?

** Rated by investigator as "Leader" in this session.

* Rated by investigator as "Second Leader" in this session.

- Jan 36 - ALL RIGHT, DEAR. I'LL HOLD THEM FOR YOU.
- Lou 46 - YOU KEEP MY FLOWERS.
- Lou N, 24 - JAN, LET'S PLAY DOCTOR.
- Beki 0 - (with glasses) EVERYTHING IS RED.
- Sue 0, 24 - (returns from fountain) I'VE GOT SOME MEDICINE
FOR EVERYBODY.
- Jan 3 - (reaches for Sue's bottle).
- Sue 1 - THIS IS MINE.
- Jan 46 - WAIT, I WANT TO PUT SOME WATER IN IT.
- Lou N, 34 - JAN, HERE'S A TOP FOR US (bottle top).
- Jan 0 - I WANT TWO TOPS.
- Lou 34 - THERE ARE ONLY ONE.
- Sue 0, 50 - HERE I BROUGHT SOME MEDICINE FOR EVERYONE. YOU
ARE ALL SICK.
- Beki 10 - I AM SICK, I AM SICK, NURSE.
- Jan 10, 46, 19 - YES, NURSE (to Sue) COME HERE. A NURSE
DON'T GOT PIGTAILS (laughs at Sue's hair style). YOU GOT
A HORSIE TAIL.
- Jan 48 - HEY, COULD YOU HAVE THE DOCTOR TO FIX THIS? BANDAGE
OR SOMETHING, COULD YOU?
- Lou 0, 18 - (returns from fountain) I GOT LOTS OF WATER.
CAN I PUT?
- Jan X - ALL RIGHT.
- Jan 46, 12 - HEY, PUT THE WATER IN HERE BECAUSE I AM THE
NURSE AND NURSES HAVE TO DO THIS.
- Beki 12 - I AM THE DOCTOR AND THE DOCTOR HAS THE MEDICINE.
- Jan 20, 10 - to Beki - HERE'S YOUR TIE, DOCTOR.

Sue 20, 36 - to Jan - HERE'S A TOP FOR YOU.

Jan 46 - GIVE ME A TOP FOR THE BOTTLE.

Lou 58 - WHO WANTS TO BE SICK?

Jan Y - I DON'T.

Lou 19, N - LOOK WHAT BEKI DID, SHE STEPPED ON THAT.

Jan 23, N - LET'S NOT PLAY WITH BEKI BECAUSE SHE STEPPED ON
THAT.

Jan 23, N - LET'S NOT PLAY WITH BEKI BECAUSE SHE ALWAYS STEPS
ON IT.

Jan 46, 50^N/₋ (to Lou, who has begun taking water from a can)
HOW MANY TIMES DID I SAY THE NURSE HAS TO DO THAT? AND
SUE'S GOING TO BE THE NURSE AND WE ALL HAVE TO TELL WHAT
THE RULES ARE.

Sue 10 - I'M THE NURSE.

Lou 46, N - NO YOU AREN'T, SUE.

Sue 9 - I DON'T WANT TO BE THE SICK GIRL.

Jan 50 - YES, YOU ARE GOING TO BE THE SICK GIRL.

Jan 46 - to Lou - YOU FORGOT TO PUT WATER IN HERE, IT'S EMPTY.
(Beki returns with gun.)

Jan 32 - to me - OH, SHE PUT WATER IN THIS GUN.

(I ask, "You didn't, did you, Beki?")

Beki 28 - to me - NO.

Jan 46, N - PUT IT HERE, SUE, (a bottle which Jan thinks is
hers).

Jan 1 - I HAD ONE.

Sue 1 - I HAD ONE, TOO.

Jan 1, N - ANYWAY, LOU ... (had some).

Lou 19 - to Sue - AND YOU GOT SIDDY (sic) SHOES ON.

Jan 46 - (laughing at Lou) YOU SAID "SIDDY", AND IT SHOULD BE "SUNDAY" SHOES.

Lou 34 - SILLY! (She had meant to say "silly shoes".)

Sue 34 - (defending her shoes) I WASN'T ON THE BOAT AND YOU DIDN'T SEE ME AND I SAID TO MY MOTHER, "BUY ME SOME FOR THE SUMMER".

Jan 34 - THIS IS WINTER TIME.

Lou Y - NO IT ISN'T.

Jan 34 - IT'S WINTER TIME, SUMMER IS WARM AND WINTER IS COLD.

Lou 34 - MY MOTHER SAID IT IS GONE AND ISN'T WINTER ANY MORE.

Jan 28 - to me - ISN'T IT WINTER, MRS. BRUHNS?

(I answer, "It's in between winter and summer, now it's Spring.")

Jan 34 - to others - IT'S IN BETWEEN.

Jan 18, 48 - to Sue - WHAT IS THAT? (a bottle) CAN I HAVE ONE?

Sue Y, 46 - NO, THESE ARE FOR THE NURSE.

Jan 23 - THEN I DON'T LIKE YOU.

Sue 23 - THEN I GO OUT (outside).

Jan 46 - (urging Lou to grab bottle from Sue) GET IT! GET IT!

Sue 9 - screams.

Jan 3, 36 - (has acquired one of the bottles but when Sue cries she hands it to her saying) HERE.

Sue 24 - (smiles and says) LET'S BE NURSE.

Jan 48 - LET ME HAVE THIS, I'LL GIVE IT BACK. (a dropper)

Sue 36, 34 - HERE'S ONE. HUH OH, IT'S ALL BROKE.

Sue 36, N, 16 - YOU WANT IT, DON'T YOU, JAN? THOSE ARE
COUGH DROPS.

Lou 46 - LET ME SEE IF IT'S BROKEN INSIDE.

Sue 46 - BE CAREFUL, BE CAREFUL, BE CAREFUL WITH A BROKEN
THING.

Jan 24 - LET'S PLAY WITH THAT JUMPING ROPE BECAUSE I ALMOST
CAN JUMP.

Sue X, 34 - YES. I CAN.

Jan Y, 46 - NO YOU CAN'T. LET ME SEE.

Sue 4 - (demonstrates how she jumps rope).

Jan 19 - YOU DIDN'T JUMP.

Sue Y - YES I DO.

Lou 19, 34 - THAT ISN'T THE WAY MY SISTER JUMPS. MY SISTER
PUT IT BEHIND HER THEN PUT IT IN FRONT OF HER TO MAKE IT
GO BEHIND HER.

(A small boy tries to enter the room.)

Sue 46 - (evicts him with) NO, ONLY GIRLS' DAY.

Jan 1 - (re rope) LET ME HAVE IT. LET ME HAVE IT.

Sue 9 - NO, I GOT IT.

(Jan assumes a hurt look.)

Sue 20, 36, 46 - (immediately offers Jan the rope saying) SHOW
ME HOW TO JUMP.

Jan 36, 24 - LET'S BOTH JUMP.

Beki 0 - (returns from looking for her handkerchief which she
lost before the session began) I DROPPED IT.

Lou N, 36 - BEKI, HERE'S YOUR SWEATER.

(Jan and Sue turn the jumping rope.)

Lou 46 - (directing) PUT IT DOWN LIKE THIS. NO, LIKE THIS.

NOT TOO HIGH ALL AROUND BECAUSE I MIGHT FALL.

Lou 4 - (jumps to demonstrate to others).

Jan 46 - to Sue - NO, MAKE IT HIGH. WAIT A MINUTE.

Jan 3 - (takes the rope from Sue in an exasperated way).

Sue 23 - (explodes in anger and stomps out of the room, slamming the door).

Jan 36, N - (calling after Sue) OK, OK, YOU CAN HAVE IT, SUE.

(Sue has gone back to the Nursery School.)

Jan 46 - to Lou - GO GET HER.

Lou 23, N - WE DON'T NEED SUE.

Jan 46 - OK, WE HAVE TO TOUCH (a part of jumping rope activity).

Beki 0 - (comes again wailing) I DROPPED MY HANKY.

Jan 19, 46, 18 - to Lou - YOU CAN'T JUMP. LET ME SEE. YOU DON'T KNOW HOW TO JUMP. IS THAT THE WAY HOW YOUR SISTER JUMPS?

Jan 0 - I'M GOING TO PUT THAT IN HERE (manipulating the rope).

Beki 0 - (by now is conducting an intensive search and returns to inform us) I DIDN'T FOUND IT.

Jan 42 - (re Lou who has tied the rope around her knees) LOOK AT HER LEGS!

Lou 10 - I CAN'T PUT MY FEET OUT. I CAN'T.

Jan 18, 34, 4 - DO YOU KNOW THE WAY HOW MY DADDY DOES? HOW HE PUTS ON HIS SKIS AND GOES DOWN IN THE SNOW (demonstrates).
(A small boy tries to enter and I say, "Only girls".)

Beki N, 28 - MIKE WAS IN HERE (and he's a boy).

(Beki is carefully stepping on each toy, I ask her not to.)

(Lou and Jan play a game of surprising each other.)

Beki 28 - to me - IS THIS A PUPPETS?

(Jan hides behind a blackboard.)

Lou N, 46 - JAN, DON'T GET BEHIND THERE.

Beki 22 - (also goes behind blackboard).

Lou 23 - to Beki - NO, NO, YOU CAN'T PLAY WITH US.

Jan 17, 23 - to Beki - YOU ARE NOT GOING TO PLAY WITH THIS,
STAY IN HERE.

Lou N, 23, 17, 18 - BEKI, GO AWAY, YOU DON'T KNOW HOW TO,
YOU'LL GET SQUEEZED. DOES SHE? (To Jan.)

Jan 23 - NO.

Jan N, 32, N - to me - BEKI IS PUSHING ME. LOOK AT WHAT BEKI
IS DOING.

Lou N, 46 - BEKI, STOP IT.

(I break up the bickering with suggestion for a parade.)

Jan 10 - (is the unchallenged leader).

SAMPLE PLAY SESSION II

<u>Participants</u>	<u>Age</u>
**Lou	4.9
*Ann	4.5
Matt	4.-

Lou 46 - (to small boy who tries to enter) YOU CAN'T COME IN.

Lou 28 - to me - WHAT CAN I PUT MY FLOWERS IN?

Lou 46 - to Ann - LEAVE IT (the door) OPEN SO I CAN PUT MY FLOWERS IN.

(Matt plays with train.)

Lou N, 46 - ANN, COULD YOU CLOSE THE DOOR?

Ann 0, 0, 18 - THERE IS A LITTLE BOTTLE. THERE IS THE LADY BUT WHERE'S THE LITTLE BABY?

Lou 36 - I'LL FIND THE BABY, A LITTLE RUBBER BABY.

Matt 22 - A LITTLE WUBBER (sic) BABY? (He smiles at Lou's baby talk.)

Matt 34 - I LIKE THEM, YOU KNOW, ONE OF THOSE LITTLE THINGS.

Ann 0 - HERE'S THE BABY.

Matt 28 - to me - I WANT A BOTTLE.

(I show him where one is lying.) (All three children go out to get water in the bottles.)

Lou 46 - WE ARE SUPPOSED TO HAVE ONE OF THESE IN THE TOP (dropper).

Matt 34 - I DO.

Lou 34, 36 - to Matt - THAT'S A BROKEN ONE. IT REALLY IS.

I'LL SHOW YOU. (Lou takes Matt's dropper and looks at it.)

Matt Y - NO (it isn't broken).

Lou 34 - THERE'S ONE OF THESE THAT ARE BROKEN.

Lou 20, 46, N - (handing two pieces of the dropper to Matt)

YOU PUT IT TOGETHER, MATT.

Lou 24, 38 - WHO WANTS TO BE SICK?

Ann 10 - THIS LITTLE BABY HERE.

Lou 40 - THIS LITTLE BABY'S GOING TO BE SICK.

Matt 44 - YES SIR.

Lou 17, 12, N - to Matt - YOU CAN'T DOCTOR HER, JUST CATHY

(meaning Ann) AND ME.

Matt 18 - WELL, WHERE'S THE DOCTOR?

Lou 46 - to Ann - DIP THIS INTO WATER, THEN DO THIS, (put

a drop of water on the baby) THEN DRINK IT. DO IT.

Ann 14 - THIS IS THE MOTHER AND THE FATHER.

Lou 10 - NOW THE BABY'S HAD A DRINK OF WATER FROM THE DOCTOR.

Ann 6, 34, N - LOOK THE EYEGLASSES ARE BROKEN. LOOK, MATT.

THESE ARE TOO DARK, THEY ARE NOT GOOD FOR MY EYES.

Lou 34 - HERE'S A PIECE FROM THE GLASSES.

Ann N, 6, 2 - YOU KNOW WHAT, MATT? LOOK AT THIS, LOOK. (blows

whistle for Matt).

Lou 6, N, 20 - LOOK, ANN. (offers Ann a dropper).

Ann Y - (declines Lou's offering) THANK YOU, BUT I AM WEARING

A TIE.

(Matt goes out to get water.)

Ann 28 - to me - WILL YOU PLEASE TIE THIS FOR ME?

Ann 25 - (to Lou as Lou picks up other tie) I GOT THE PRETTIER

ONE.

Lou 28 - to me - WILL YOU PLEASE TIE THIS? (tie).

Matt 34 - (with bottle) THIS IS FOR A SICK PERSON.

(Lou starts to go out to fountain but some women are around it. She returns. I ask her, "Who's there?")

Lou 28 - SOME MOTHERS.

Lou 34, N - NOW THEY HAVE GONE, ANN.

Ann X - YES.

(Lou and Ann go out to get water.)

Matt 28 - to me - WHERE DID THE OTHER GUYS (girls) GO?

Lou returns.

Matt 18 - to Lou - HEY, WHERE'S THE OTHER ONE?

(Ann returns and closes door quietly.)

Lou 46 - to Ann - SLAM IT.

Ann N, 46 - LOU, COME ON.

(Lou and Matt follow Ann out to fountain.)

Lou 0, 0 - WE EACH GOT WATER. I AM GOING TO TAKE SOME WATER OUT OF THE BOX.

Matt 38, 34 - ANYBODY SICK? YOU KNOW MY BOTTLE'S RIGHT HERE.

Ann 1 - THIS IS MINE AND THIS.

Ann 0 - I GOT THIS TO WASH.

Lou 28 - (handing me a tin box to close) THAT'S THE WAY I PUT IT EXCEPT I CAN'T CLOSE IT.

Lou 34 - to others - I PUT TWO THINGS IN HERE.

Lou 19, 0 - to Matt - SILLY, SILLY, I GOT THIS.

Matt 0, 38 - to Lou - I GOT GLASSES. WHAT SHALL I TAKE?

Ann 24, 52, N - LET'S PLAY CIRCUS. COME ON, LOU. (Ann takes a mask).

(Lou doesn't react to this suggestion.)

Matt 1 - THESE ARE MY THINGS.

Ann 28, N - to me - WHY DOESN'T LOU PLAY CIRCUS WITH ME?

(I reply, "Why don't you ask her?")

Ann 28 - I DID.

Matt 0, 34 - I DON'T WANT TO BE A NURSE. LADIES ARE NURSES.

Lou N - ANN McDANIEL (calling Ann by wrong last name).

Matt N, 0 - ANN, I HAVE MY BOTTLES.

Lou 6 - LOOK AT THIS NICE PUSSY CAT.

(Ann takes the cat mask offered by Lou.)

Matt 25, N - I GOT AS MUCH AS ALL OF YOU BUT MORE THAN LOU.

Ann 0 - I'LL LOOK THROUGH THIS (kaleidoscope).

(Lou pulls typewriter ribbon along floor.)

Lou 46 - to Ann - TRY TO STEP ON IT.

Lou 0 - (pulling the ribbon as Ann stands on it) I'LL BREAK IT. I WILL.

Matt 0 - I'M GOING TO MAKE SOME MEDICINE.

Lou 46, 38 - to Ann - NOW TRY TO GET IT. NOW PUT IT BACK, OK?

Ann Y, 18 - NO, HOW DOES THIS GO ON?

(Lou kicks the jumping rope. Ann walks away pulling rope.)

Lou 7 - (stands on rope as Ann pulls it.)

Ann 9 - NO, GET OUT.

Ann 28 - to me - MRS. BRUHNS, HOW DOES THIS MASK GET ON HERE?

(the mask is tangled up with the rope and I free them).

Ann N, 46 - to Lou - LOU, DON'T PULL, YOU WILL BREAK IT.

Matt 18 - to Ann - WHY ARE YOU ROLLING IT UP?

Ann 34, 30 - BECAUSE NOBODY WILL TREAD OVER IT. WHEN IT'S

LYING ABOUT SOMEONE WILL TREAD OVER IT.

Matt 18 - IF I TRIPPED?

Lou 0 - HUH OH.

Matt 22, 18 - (imitating her) HUH OH, DID IT FALL?

Lou 28 - (shows me her dirty hands and I remark that she'll have to wash them).

Lou 28 - to me - WILL YOU TAKE THE NECKTIE OFF ME? (She leaves to wash.)

Ann 28, N - to me - WHERE'S THE LONG THING THAT DAVID WAS PLAYING WITH?

Matt N, 26 - ANN, YOU HAVE THREE AND I ONLY HAVE ONE, SO CAN I HAVE THAT?

Ann 34 - I DON'T FIND THE BOTTLE.

Matt 34 - YOU FOUND THE BOTTLE. I DON'T HAVE ONE BOTTLE.

Ann 18 - BUT I FOUND THESE TWO BOTTLES DIDN'T I?

Matt 56 - WELL, YOU NEED... BECAUSE YOU DON'T HAVE ANY OF THOSE.

Ann 20, 36 - (gives one of her bottles to Matt).

Matt 26, 38 - SEE WE ARE DIVIDING, AREN'T WE? SEE, WE HAVE AS MUCH AS EACH OTHER, DON'T WE?

Ann 34 - YOU HAVE GOT THREE AND I HAVE GOT THREE.

Matt X, 38, 34 - YES, ISN'T THAT NICE? AND YOU HAVE GOT MORE THAN THREE.

Matt 34 - to Lou - WE CHANGED THESE TWO BOTTLES.

Matt 8, N - HI, ANN.

Lou 1 - BUT I WANT SOMETHING (some bottles).

Matt 9 - NONE OF MINE.

Lou Y, 34 - NO, I JUST GOT TWO.

Matt 22 - TWO OF THEM.

Lou 0 - I GOT TWO AND ONE.

Matt 34, 18 - AND SOME MORE, ISN'T THAT RIGHT?

Lou 34 - ONE.

Matt Y - ONE, NO.

Lou 28 - (handing me a necktie) CAN YOU TIE THIS?

Matt 1 - I WANT TO HAVE A NECKTIE. (There are only two.)

Matt 48, 1 - to Ann - HEY, CAN I HAVE THAT NECKTIE? I WANT
A NECKTIE.

(Ann doesn't react.)

Lou 0 - WE ARE GOING TO PUT SOME WATER IN HERE.

Lou 46 - to Ann - WAIT, WAIT, COME HERE. GO AND GET YOUR DOCTOR-
ING THING.

Matt 10 - (with doll) BABY'S COMING.

Ann 34 - THERE IS NO WATER IN HERE.

Ann 46 - WAIT.

Matt 0, 18 - to others - I GOT TWO DROPPERS. NO FAIR, I GOT
TWO DROPPERS. AND YOU GOT TWO DROPPERS, DO YOU?

Ann 34 - NO. THERE IS NOT ENOUGH WATER IN THERE.

Lou Y, 46 - YES THERE IS. WAIT A MINUTE, LET ME PUT THE HEAD IN.

Matt 34, N - YOU GOT A DROPPER AND I GOT A DROPPER TOO. LOU'S
GOT ONE DROPPER.

(I suggest a parade.)

Ann 10 - (says she wants to be the leader and takes her place
in front of me.)

Lou Y - (seeing this says she doesn't want to make a parade.)

(Matt returns from fountain and puts on mask.)

(Ann and Matt start marching.)

Lou 10 - (jumps in front so as to be the leader).

(Ann looks unhappy but doesn't protest.)

Matt 24 - (after the parade is finished) I WANT TO MAKE ANOTHER
PARADE.

(This time they march in a tight circle, one after the
other, so that no one serves as leader.)

SAMPLE PLAY SESSION III

<u>Participants</u>	<u>Age</u>
**Meg	6.-
*Jay	5.5
Cal	4.9

Jay 0 - I WANT A DRINK OF WATER OUTSIDE.

Meg 28 - to me - WHAT ARE YOU GOING TO WRITE IN SHORTHAND?

(I reply that I practice.)

(Cal is occupied with bottles, smelling the water.)

Jay 2 - (returns with a bottle full of water and drinks some from it, laughing at Meg.)

Cal 34 - (whispers to Jay) THERE IS WATER IN THIS ONE.

Jay 4 - to Meg - I STICK IT UP MY NOSE.

(Meg smiles at this, then gets top and plays with it.)

Cal 22 - (imitates Jay and sticks dropper in his nose).

Jay 2 - (puts glasses on his nose and laughs).

Meg 28 - (to me, showing her bandaged hand) I HAD TO GO TO THE HOSPITAL YESTERDAY BUT JUST TO GET A NEW BANDAGE.

Cal 34 - I DIDN'T HAVE TO GO BECAUSE I DIDN'T BURN MYSELF.

Jay 0 - (with water gun) THERE IS STILL WATER IN THIS THING.

Meg 46, N, 48 - PUT SOME WATER IN IT, JAY, AND LET ME SQUIRT IT TOO.

(Jay and Meg half sneak out the door since they are aware of restrictions against squirting water on each other.)

Jay 46, N - CLOSE THE DOOR, MEG.

(Jay and Meg return with water in the gun.)

Meg 46 - SQUIRT IT IN THIS (bottle).

Jay 7 - (squirts Cal).

Cal 9, N - QUIT IT, JAY (in a small voice).

Meg 20 - (puts horse mask on Jay).

(Jay squirts water through mask's eye.)

Meg 11 - DON'T SQUIRT AT MY GOOD DRESS.

Cal 22 - DON'T SQUIRT AT MY GOOD PANTS.

Jay 4 - (with girl mask) GIRLY, GIRLY.

Meg 4 - (puts on girl mask).

Jay 22 - (puts on lion mask).

Meg 10 - HELLO, LITTLE LION.

Jay 10 - (crawls toward Meg, she runs).

Cal 22, 10 - (puts on horse mask and whinneys).

(Meg squirts water on floor.)

Jay 10 - (attacks Meg as a lion).

Meg 15 - I'LL SQUIRT AT YOU.

Jay 10 - (attacks Meg).

Meg 7 - (squirts water in his face).

Meg 9 - DON'T.

Jay 9 - WELL, YOU QUIT.

Meg 0 - I'M GOING TO GET SOME MORE WATER IN THIS.

Jay 18 - TO SQUIRT AT ME?

Meg 38 - (returns with water in gun) SHALL I MAKE A WATER FOUN-

TAIN? (I say, "Only a small one".)

Meg 0 - THERE IS NO WATER (in the gun).

Jay Y - YES THERE IS, TOO.

Meg 0 - NO, THERE IS NO MORE.

(Jay and Meg go out to get water.)

Jay 3 - (returns with gun).

Meg 1 - GIVE ME THE GUN, I HAD IT.

(Jay squirts gun.)

Meg 11 - DON'T SQUIRT MY KITTY (she is carrying a toy cat).

Meg 46 - GIVE ME THAT IF YOU ARE GOING TO SQUIRT.

Jay 1 - I HAD IT FIRST.

Meg 1 - I HAD IT SECOND SO GIVE IT TO ME. IF YOU DON'T GIVE
ME THAT GUN... (Meg gives up attempt to get gun.)

Meg 28 - to me - WHAT ARE THESE SCIZZORS FOR? (I was cutting
scotch tape with them.)

Meg 28 - to me - CAN I CUT A PIECE OF SCOTCH TAPE? (I allow
her to cut one.)

Meg 0, N - I'M GOING TO STICK IT ON JAY'S FACE.

Jay 15 - IF YOU DO, BOY, YOU KNOW WHAT'S GOING TO HAPPEN.

Meg 38 - DO YOU WANT ME TO PLAY HOSPITAL?

Jay X - YES.

Meg 46 - THEN I HAVE TO PUT IT ON YOU.

(Jay submits and Meg puts the tape on his face.)

Meg 46 - NOW LEAVE IT ON.

Jay 18 - ARE YOU GOING TO SQUIRT ME?

Meg 34 - NO.

Jay 34, N - I KNOW YOU, MEG, I KNOW YOU WELL ENOUGH. (He
thinks she will squirt him.)

Meg 7 - (squirts at Jay).

Cal 3 - (tries to take gun from Meg).

Meg 9 - STOP IT, YOU STINKER. (Meg giggles.)

Jay 42 and Cal 42 both giggle.

Jay 22 - YOU ARE A STINKER, TOO.

Jay 13 - (tosses a pasteboard box at Meg).

Cal 22, 13 - (tosses another box at Meg).

Meg 9 - I'M GOING TO TELL MRS. BRUHNS.

Meg 32 - to me - THEY ARE THROWING THINGS AT ME AND HITTING ME.

(I say laughingly that she was squirting them, and if she stops, they will stop.)

Jay 46 - to Meg - SEE, THAT'S THE DIFFERENCE.

Jay 10 - (puts on cat mask) I'M THE CAT FAMILY, I'M THE LEOPARD.

Cal 22 - (puts on lion mask) I'M THE LION FAMILY.

(Jay and Cal go out to get water.)

Jay 46 - to Cal - GO INSIDE WHILE I FILL IT UP WITH GALLONS OF WATER.

Meg N, 32 - to me - JAY TOOK THE GUN AWAY FROM ME. (This had happened at the fountain.)

Meg 28 - (comes to my desk where I am writing) I CAN WRITE MY NAME.

Jay 7 - (starts squirting water at Cal, I say, "Don't squirt it on people".)

Meg 28 - to me - CAN I WRITE MY NAME AND SHOW YOU HOW IT'S SPELLED? (I give her pencil and paper. Both boys watch in fascination as she writes.)

Meg 34 - MY MIDDLE NAME IS ELLEN BUT I DON'T KNOW HOW TO WRITE IT.

(Cal has water gun trying to squirt a line on the blackboard.)

Jay 36, N, ⁴⁶ I'LL SHOW YOU, CAL, I'LL SHOW YOU, SEE. DO IT LIKE THIS.

Jay 0 - I GOT TO GO TO THE BATHROOM. (He goes and returns.)

Meg 18, N - WHAT ARE YOU DOING, JAY? (She is still drawing.)

(The school athletic director enters to get equipment.)

Jay 28 - to teacher - THOSE ARE NEW BATS, HUH? (Yes.)

Cal 7 - (shoots Jay with water gun and I say it's not allowed.)

Meg 19 - THEY ARE JUST A BIG BUNCH OF COO COO IN THE HEADS.

Jay 22, N - YOU ARE, MEG.

Jay 15, N - to Cal - I'LL GIVE YOU A BLACK EYE AND THAT WILL BE GOOD FOR YOU, CAL.

(Jay comes to look at what Meg is drawing.)

Meg 17 - YOU CAN'T SEE THE KITTY. IT'S MY KITTY.

Jay 3 - (tries to take water gun from Cal).

Jay 38, 46, 24 - YOU WANT TO HAVE A FIGHT WITH ME? (This is a friendly suggestion.) PUT IT DOWN (the gun). LET'S HAVE A FIGHT.

(They begin to box, it looks like Cal's first experience.)

Jay 46, N, 44 - (instructing) NO, CAL, YOU STAY OVER IN THAT END. LET'S HAVE A REAL FIGHT, HUH?

(Cal falls down.)

Jay 44 - BOOM!

Jay 46, N - COME ON, LET'S BE CLEVER IN BOXING. YOU HAVE TO PUNCH RIGHT HERE (indicating his stomach). LOOK, CAL, KEEP YOUR HAND UP LIKE THIS TO PROTECT YOU AND HIT LIKE THIS.

Meg 28, N - to me - THERE'S GOING TO BE A PLAYGROUND FOR PEGGY AND I AT THE ALUMNI CLUB. (She is still drawing a cat.)

Cal N, 32 - to me - JAY'S GOING TO SQUIRT ME.

Meg 28 - (points to my notes) WHAT DOES THIS SAY? (It says CA.)

Jay 22 - (comes to look) CA.

Jay 32, N - to me - I DON'T LIKE THAT BIG FATTY CAL.

Cal 0 - (leaving to get water) I'M JUST GOING TO GET THIS FILLED.

Jay 0 - I CAN WRITE UP TO A HUNDRED IN ARABIC.

Meg 46 - DO IT.

Jay 0 - I DON'T WANT TO.

Meg 24 - ALL RIGHT, THEN, WE WILL WRITE SOME ANIMALS.

Meg 28 - to me - WRITE A PONY IN SHORTHAND. (I do.) AN ELEPHANT, GIRAFFE, RIGHT HERE.

Cal 0 - (returns) I GOT SOME WATER (in the gun).

Jay 46, N - DON'T SHOOT ME, CAL, SHOOT SOMEONE ELSE.

Meg 22 - WELL, DON'T SHOOT ME.

Jay 15 - IF YOU SHOOT ME, YOU ARE GOING TO GET A BROKEN HEAD OFF.

Meg 28 - to me - WRITE FLOWER AND MAKE A FLOWER IN SHORTHAND.

NOW TIGER LILY, RIGHT HERE.

Jay 22 - (who has been watching) WRITE LION LILY IN SHORTHAND.

Meg 20, N - THAT IS FOR JAY.

Jay 34 - A LION CAN KILL A TIGER. A LION CAN KILL AN ELEPHANT AND I CAN WRITE UP TO A HUNDRED PRETTY SOON. I AM UP TO 50.

Jay 22 - THAT IS FOR ME (the writing).

Meg 38 - SHALL I SCRIBBLE ON THAT?

Cal 6 - (drinking water from gun) LOOK, NOW IT'S ALL RUNNING OUT OF WATER.

Jay 4, N - IT IS NOT, CAL, IT'S HALF, NOT ALL.

Meg 0 - I'LL MAKE A SNOW MAN (on the paper). ONE BIG ROUND ONE, THREE MIDDLE SIZED ONES AND A HAT FOR HOPPY. ONE EYE, TWO EYES.

Jay 46 - MAKE A BROOM. MAKE A BROOM. (He watches as Meg draws a broom.)

Meg 0 - NOW A HAND AND HE IS HOLDING A BROOM.

Meg 28 - to me - NOW RIGHT ON HIS TUMMY BUTTON (write) SNOWMAN.

Meg 48 - to Cal - LET ME SQUIRT THE GUN.

Jay 18, N, 36 - YOU WANT TO SQUIRT IT, MEG? I'LL TAKE IT AWAY FROM HIM.

Jay 5, N - (goes to Cal and starts to take gun) MEG WANTS TO SQUIRT IT.

Meg N, 32 - to me - CAL WON'T LET ME HAVE THAT.

Jay 3 - (gets gun and brings it to Meg).

Jay 0 - I SWEEP IT OUT OF HIS HAND.

Meg 7, 36 - (squirts Jay then says) I'M SORRY.

Meg 48 - to Jay - FILL THIS UP WITH WATER AND GIVE IT TO ME PLEASE.

Jay X, 36 - OK (runs to do her request).

(Jay knocks at the door to be let in. Meg goes to open door.)

Jay 7 - (squirts Meg in face as she opens the door).

Meg 11, N - (surprised and angry) THAT WAS NOT NICE, JAY, YOU SQUIRTED ME IN THE EYE. I DON'T LIKE YOU.

Jay 36, 20 - (immediately is contrite and gives gun to Meg).

Meg 0 - I'LL SQUIRT THE KITTY.

Jay 46, N - SQUIRT IT IN MY EYE, MEG.

Meg 7 - (squirts him gentle and then goes to squirt the blackboard.)

(I suggest a parade.)

Jay 10 - (is first with a mask and wants to be the leader).

Cal 10 - (says he wants to be the leader, too, but gets behind Jay.)

Meg Y - (doesn't want to wear a mask but marches with her kitty in her arms.)

(Jay has the lion mask and marches fiercely.)

TEACHER RATING SCALE OF SOCIAL BEHAVIOR

Child's name _____

Date of birth _____

- | | | |
|--|---|--|
| 1) Usually plays alone
-1 | 0 | Usually plays with a group
1 |
| 2) Rarely talks unless
asked a question
-1 | 0 | Initiates conversation and
verbalizes freely
1 |
| 3) Does not call many
children by name
-1 | 0 | Knows & uses first names
of most children
1 |
| 4) Other children don't
pay much attention
to him
-1 | 0 | Is often the center of
children's activities
1 |
| 5) Does not show much
evidence of having
a vivid imagination
-1 | 0 | Often invents play var-
iations and shows vivid
imagination
1 |
| 6) Often has emotional
clashes with peers
-1 | 0 | Is even tempered & rarely
has difficulty with peers
1 |
| 7) Rarely provides ideas
for others to follow
-1 | 0 | Often "performs" for & is
imitated by others
1 |
| 8) Demands his own way,
often by bullying or
complaining
-1 | 0 | Is diplomatic in getting
his own way without offend-
ing others
1 |
| 9) Is often afraid
to do new things
-1 | 0 | Meets new situations with
enthusiasm & is often
daring
1 |
| 10) Usually plays with
the same toys
-1 | 0 | Enjoys & knows a variety
of activities
1 |

11)	Seems unsure of himself	0	Displays self-confidence & lack of shyness	1
	-1			
12)	Is slow in learning new games	0	Learns new games quickly & sets example for peers	1
	-1			
13)	Moody & often unhappy when playing with peers	0	Cheerful & enthusiastic	1
	-1			
14)	Is irresponsible, doesn't seem aware of the consequences of his acts	0	Assumes responsibility in many situations	1
	-1			
15)	Often evokes a negative response from peers	0	Seems liked & respected by most of his peers	1
	-1			
16)	Doesn't seem interested in peers' feelings or troubles	0	Often helps to comfort & protect a peer	1
	-1			
17)	Voice is low and difficult to understand	0	Usual voice is clear and loud	1
	-1			
18)	Has trouble expressing his wishes or ideas to peers	0	Is able to give precise & clear directions to peers	1
	-1			
19)	Often confused & taken aback by new situations	0	Displays unusual ability in appraising & meeting new situations	1
	-1			
20)	Does not comment on or seem interested in nursery school topics of conversation	0	Appears to have a great deal of general knowledge & communicates it at every opportunity	1
	-1			
21)	Is listless & tires easily	0	Has almost boundless energy & vitality	1
	-1			

- | | | |
|-------|--|---|
| 22) | Doesn't seem stimulated to ask questions--even about new things | Asks many questions & is curious about everything |
| -1 | 0 | 1 |
| <hr/> | | |
| 23) | Is often inhibited & shy in play situations | Excitation usually overcomes all inhibition in a play situation |
| -1 | 0 | 1 |
| <hr/> | | |
| 24) | Is often critical of other children--sometimes displays jealousy | Often praises the achievement or possession of other children |
| -1 | 0 | 1 |
| <hr/> | | |

Please note any other outstanding behavior tendencies you have observed in this child.

Does the child have any physical defects which may account for some of his social behavior?

With which child or children does this child play more often or seem to consider his (her) best friends?

- 1 _____
- 2 _____
- 3 _____
- 4 _____

Comments:

Rated by _____

Date _____

SAMPLE TABULATION SHEET

Name	N	O	X	Y	1	2	3	4	5	6	7	8	9
------	---	---	---	---	---	---	---	---	---	---	---	---	---

**Jan													
-------	--	--	--	--	--	--	--	--	--	--	--	--	--

Cal													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

*Jay													
------	--	--	--	--	--	--	--	--	--	--	--	--	--

Total													
-------	--	--	--	--	--	--	--	--	--	--	--	--	--

	10	11	12	13	14	15	16	16	17	18			
--	----	----	----	----	----	----	----	----	----	----	--	--	--

Jan													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

Cal													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

Jay													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

Total													
-------	--	--	--	--	--	--	--	--	--	--	--	--	--

	19	20	21	22	23	24	25	26	27	28			
--	----	----	----	----	----	----	----	----	----	----	--	--	--

Jan													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

Cal													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

Jay													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

Total													
-------	--	--	--	--	--	--	--	--	--	--	--	--	--

	30	32	34	36	38	...	58				TOTAL		
--	----	----	----	----	----	-----	----	--	--	--	-------	--	--

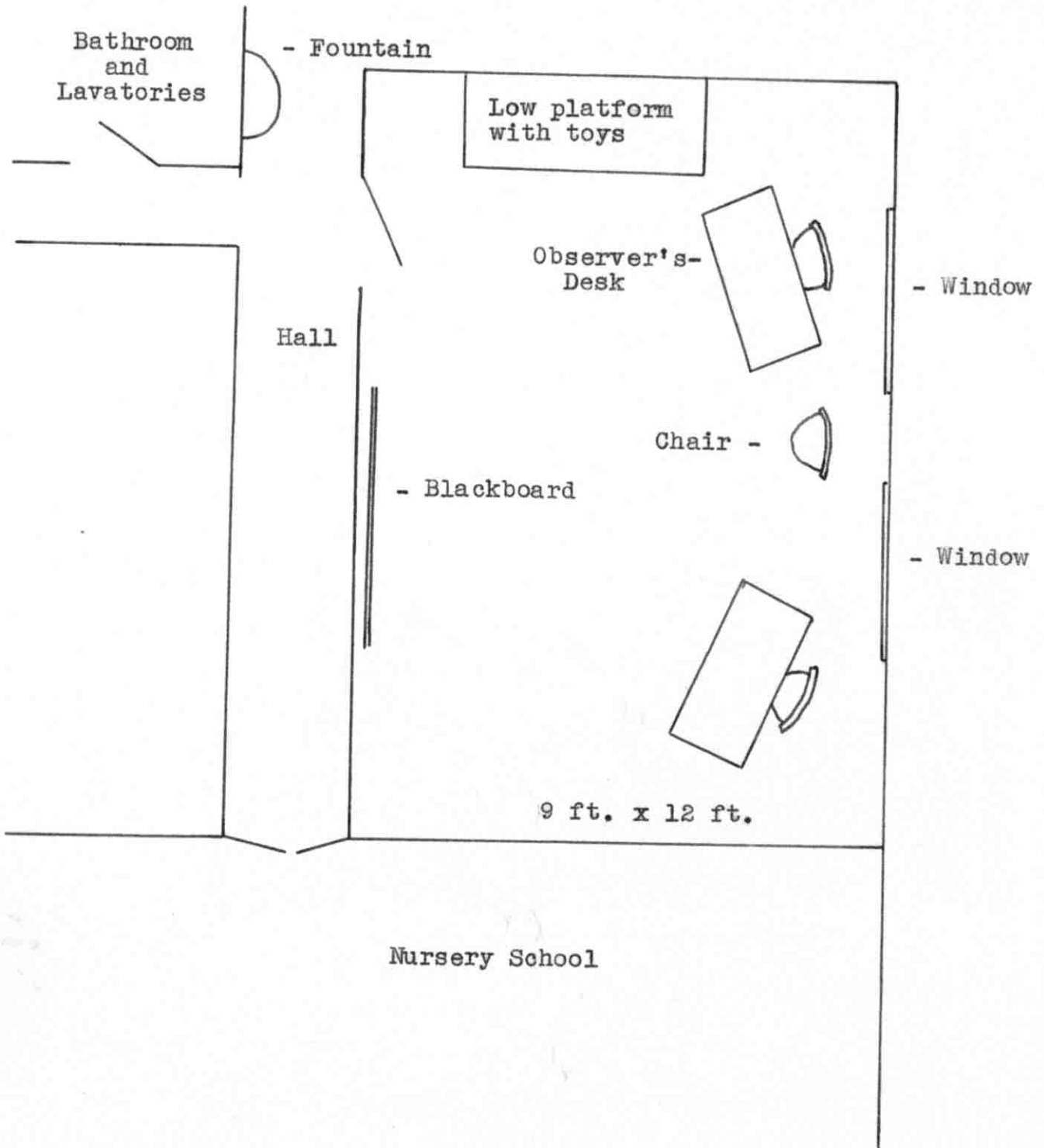
Jan													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

Cal													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

Jay													
-----	--	--	--	--	--	--	--	--	--	--	--	--	--

** Rated by investigator as "Leader" in this session.

* Rated by investigator as "Second Leader" in this session.



OBSERVATION ROOM PLAN



SUBJECTS DURING A PLAY SESSION

BIBLIOGRAPHY

- (1) Parten, Mildred and Newhall, S. M. "Social Behavior in Preschool Children." (In) Barker, Roger G., Kounin, Jacob S., and Wright, Herbert F. Child Behavior and Development. New York. McGraw-Hill Book Company, Inc., 1943. pp. 509-25.
- (2) Jennings, Helen Hall. "Leadership and Sociometric Choice." (In) Swanson, Guy E., Newcomb, Theodore M., and Hartley, Eugene L. (ed.) Readings in Social Psychology. New York. Henry Holt and Company, 1952. pp. 312-18.
- (3) Carter, Launor, Haythorn, William, Shriver, Beatrice, and Lanzetta, John. "The Behavior of Leaders and Other Group Members." Journal of Abnormal and Social Psychology, 46:589-95, 1951.
- (4) Hemphill, John K. "Relations between the Size of the Group and the Behavior of 'Superior' Leaders." Journal of Psychology, 32:11-22, 1950.
- (5) Maier, Norman R. F. "The Quality of Group Decisions as Influenced by the Discussion Leader." Human Relations, 3:155-74, 1950.
- (6) Toki, K. "The Leader-Follower Structure in the School Class," cited by Hartley, Eugene L. and Hartley, Ruth E. Fundamentals of Social Psychology. New York. Alfred A. Knopf, 1952.
- (7) Chowdhry, Kalma and Newcomb, Theodore M. "The Relative Abilities of Leaders and Non-Leaders to Estimate Opinions of Their Own Groups." Journal of Abnormal and Social Psychology, 47:51-7, 1952.
- (8) Martin, William E., Gross, Neal, and Darley, John G. "Studies of Group Behavior: Leaders, Followers, and Isolates in Small Organized Groups." Journal of Abnormal and Social Psychology, 47:838-42, 1952.
- (9) Berkowitz, Leonard. "Sharing Leadership in Small Decision-Making Groups." Journal of Abnormal and Social Psychology, 48:231-38, 1953.
- (10) Hare, A. Paul. "Small Group Discussions with Participatory and Supervisory Leadership." Journal of Abnormal and Social Psychology, 48:273-75, 1953.

- (11) Lippitt, Ronald, Polansky, Norman, and Rosen, Sidney. "The Dynamics of Power." Human Relations, 5:37-64, 1952.
- (12) Stogdill, Ralph M. "Personal Factors Associated with Leadership: A Survey of the Literature." Journal of Psychology, 25:35-71, 1948.
- (13) Sanford, Fillmore H. "The Follower's Role in Leadership Phenomena." (In) Swanson, Guy E., Newcomb, Theodore M., and Hartley, Eugene L. (ed.) Readings in Social Psychology. New York. Henry Holt and Company, 1952. pp. 328-40.
- (14) Hartley, Eugene L. and Hartley, Ruth E. Fundamentals of Social Psychology. New York. Alfred A. Knopf, 1952. p. 605.
- (15) Monroe, Walter S. (ed.) Encyclopedia of Educational Research. New York. The Macmillan Company, 1952. pp. 662-67.
- (16) Murphy, Albert J. "A Study of the Leadership Process." American Sociological Review, 6:674-87, 1941.
- (17) Brown, J. F. Psychology and the Social Order. New York. McGraw-Hill Book Company, Inc., 1936. pp. 342-48.
- (18) Stogdill, Ralph M. "Leadership, Membership and Organization." Psychological Bulletin, 47: 1-14, 1950.
- (19) Zeleny, Leslie Day. "Leadership." Encyclopedia of Educational Research. New York. The Macmillan Company, 1952. p. 667.
- (20) Moreno, J. L. Who Shall Survive, cited by Krech, David and Crutchfield, Richard S. Theory and Problems of Social Psychology. New York. McGraw-Hill Book Company, Inc., 1948. pp. 434-35.
- (21) Merei, Ferenc. "Group Leadership and Institutionalization." (In) Swanson, Guy E., Newcomb, Theodore M., and Hartley, Eugene L. (ed.) Readings in Social Psychology. New York. Henry Holt and Company, 1952. pp. 318-28.
- (22) Lippitt, Ronald and White, Ralph K. "The 'Social Climate' of Children's Groups." (In) Barker, Roger G., Kounin, Jacob S., and Wright, Herbert F. Child Behavior and Development. New York. McGraw-Hill Book Company, Inc., 1943. pp. 485-508.

- (23) Frank, Lawrence K. "The Fundamental Needs of the Child." Mental Hygiene, July, 1938.
- (24) Walker, Helen M. and Lev, Joseph. Statistical Inference. New York. Henry Holt and Co., 1953. p. 465.
- (25) McNemar, Quinn. Psychological Statistics. New York. John Wiley & Sons, Inc., 1949. p. 88.
- (26) Stogdill, Ralph M. and Shartle, Carroll L. "Methods for Determining Patterns of Leadership Behavior in Relation to Organization Structure and Objectives." Journal of Applied Psychology, 32:286-91, 1948.
- (27) Cattell, Raymond B. "New Ways of Measuring Leadership in Terms of Concept." Human Relations, 4:161-84, 1951.
- (28) Good, Carter V., Barr, A. S., and Scates, Douglas E. The Methodology of Educational Research. New York. D. Appleton-Century Company, Inc. 1941.
- (29) Goodenough, Florence L. and Anderson, John E. Experimental Child Study. New York. The Century Company, 1931.