

THE INFLUENCE OF PRESCHOOL EXPERIENCE ON CHILDREN'S
ADJUSTMENT IN KINDERGARTEN AS JUDGED BY THEIR TEACHERS

by

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CHAPTER I

INTRODUCTION

Need for the Study and Significance of the Problem:

Changes have taken place in American society in recent years which have made it increasingly difficult for many parents to provide certain necessary experiences and opportunities for their children. Those developments include such factors as: crowded city living, inadequate housing and play space, economic uncertainties, personal maladjustments and an increase in the number of working mothers. Authorities in the fields of child development have long believed that preschool attendance, especially in nursery school, helps to provide valuable experience for young children living under these conditions. (2, 6, 21)

Provision of a variety of first hand experiences and social contacts which supplement those offered in most homes is one of the main purposes of the nursery school. Here children are encouraged to broaden their horizons, to develop new interests, while they try new activities and play materials. They experience the stimulation and satisfaction of exploring, manipulating and creating. Because nursery school furnishes an opportunity for association with children of the same age, it aids the individual in

the development of a more realistic self-concept. He should also be helped in the learning of social skills, and in the ability to live and cooperate more comfortably with others. He should grow in independence as he associates with the many adults in the nursery school. (3, 10, 12, 15, 19, 21)

Until recent times many group child care programs provided little more than custodial care for the child. Research has proven the importance of the development of the whole child, including emotional, social, mental, and physical growth. The great significance of the early years of life has been recognized. Increased knowledge of how to meet the needs of each individual, combined with better education of personnel and more rigid licensing requirements, have improved the standards of all types of pre-schools. There is a trend toward more unified standards and practices in all group programs for young children. (2, 10, 12, 15)

In spite of this trend toward common goals, differences still do exist in quality of preschool groups for young children. There is need to know how these programs which are designed to care for preschoolers are meeting the challenges which changing society has created. There is need to know how significant preschool is in helping the child in his adjustment to kindergarten and to elementary school. (2)

Review of the Literature:

Many studies have attempted to determine the effects of nursery school training upon the child's development and adjustment. Some of these have been concerned with the problem of how the school affects the child's I. Q. Other studies, which have dealt more directly with effects on personality and social behavior, include one done by Walsh in 1929. Cushing's study of adjustment of children with previous nursery school experience to kindergarten, done in 1934, used teachers' ratings as a basis for judgement. (6) Similar studies have been carried out by Green, (1930-31) by Jersild and Fite, in 1934, (12) and more recently, by Long Beach City College in 1953-54. (14)

Moustakas, (16) stated that most recent personality studies conducted in nursery schools have "generally been concerned with social development, emotional development, intellectual development, motor development, adjustment in these areas, and child-adult relations; specifically, language, I. Q., effects of success and failure, companionships, fears, aggressive behavior, conflicts, insecurity feelings, imaginative behavior, expressions of hostility, ascendant behavior, and the teacher's role in the nursery school." (16, p. 161-162)

Methods used most often in conducting these studies included:

- "1. teacher's ratings, with an average of three teacher ratings per child.
2. timed observations based on sampling procedures and ranging from three half-minute observations made each day over a period of a few weeks to ten fifteen-minute observations made over a period of nine months."
3. experimental methods, including controlled environments designed to increase children's self-confidence, parent interviews, anecdotal records kept by parents and teachers, various objective tests, and projective tests.

According to Moustakas, the summary and evaluations of the studies done in social development and adjustment seemed to indicate the following:

- "1. With increase in nursery school attendance, children became more sociable, engaged in more constructive activity, used more successful social techniques, and became more active; chose friends with similar interests, engaged in more parallel and integrated activity, and less on-looker and solitary play, and were more persistent in an activity.
2. One study showed that after one and one-half to two years of nursery school attendance there was no further gain in social maturity.
3. Sex, age, and sociality were most highly correlated with choice of friend.
4. Increasing a child's confidence in certain activities significantly increased his ascendance score, his ability to handle social situations well, and his social responsiveness." (16, p. 164-165)

In his criticisms of these studies, Moustakas noted that controls did not adequately separate the two factors of maturation and growth from the effects of nursery school experience. Ratings, dependent upon teachers' evaluations, were often based on memory. Failure to discuss reliability of ratings, questionnaires, tests, and observations and to recognize important assumptions underlying the studies were also criticized. Observations were often too brief to be reliable. The same criticisms were applicable to studies done on emotional development. In addition, many researchers assumed that changes in emotional behavior were brought about by environmental factors. Moustakas indicated that an attempt should be made to study such factors in matched groups of nursery school and non-nursery school children. All assumptions and theories underlying research should have been clearly studied and stated. He also recommended that many findings which were reported consistently by several investigators should be considered in future program planning and studies.

Bonney and Nicholson (4) presented findings from three studies which attempted to evaluate the extent to which nursery and kindergarten experiences can be shown to make a difference in classroom social adjustment in subsequent elementary grades. They first reported on a study by Angell in which seventy-eight children in two kindergartens, two first grades, one second grade, and one third grade

class were selected as subjects. Nursery school and non-nursery school children were equated according to sex, fathers' occupational level and number of siblings in the family. Results of pupil responses to a one-criterion sociometric test involving several choices per pupil for preferred classmates showed that those who had attended nursery school had a decided advantage over non-nursery school pupils in receiving positive choices from their classmates. The children were also rated by their teachers on the Winnetka Scale for Rating School Behavior and Attitudes. The nursery school children showed a reliable advantage in only one out of the five major trait-categories. This advantage, at the 5 per cent level of significance, was on the trait, "Social Consciousness."

A second study, which was done by Nicholson, also used social choices of classmates and teacher-ratings as the basis for determining advantages in personal and social behavior of nursery school over non-nursery school children. Findings of this study indicated no evidence that children who had attended some type of preschool had any advantages over those who had had no preschool training.

Pupils in four sixth grade classes in Denton, Texas, were the subjects of the third study reported by Bonney and Nicholson. The pupils responded to a two-criteria sociometric test involving "Choices for preferred classmates and for desired associates in classroom group

work." (4, p. 128) Teachers were asked to list pupils whom they considered to be in the upper and lower fourths of their classes in "over-all good adjustment to the classroom situation." When those children who had attended either nursery school or kindergarten were compared with non-preschool children, the actual difference was found to be less than one point in each of three classes. No significant differences related to preschool attendance were shown by teacher placements in upper and lower fourths of the classes. Eighty per cent of the children in the fourth class had attended both nursery school and kindergarten. The preschool pupils received an average sociometric score which was nearly twice as high as that received by non-preschoolers. This result was thought due to the unbalanced proportions of the two groups which were being compared.

In 1957, George B. Allen, for his Master's Thesis, An Evaluation of Effects of Nursery School Training on Children in Kindergarten, First and Second Grade, (1) chose to use "more adequate control groups" and "more satisfactory measures of behavior" than those provided by teacher-ratings. He made reference to Moustakas's criticisms of these controls and measurements. (16) Thirty-four children with nursery school experience and eighty-two children without nursery school experience were given a battery of five near-sociometric questions.

The children were pupils in kindergarten, first and second grades in grammar school in Syracuse, N. Y. The two groups were equated in terms of scores on the Vineland Social Maturity Test, extent of parents' education, age and sex. When mean numbers of nominations received was computed for each group of the five questions in each of the three grades, it was found that the nursery school group had received the larger mean by fourteen times. This event could have occurred by chance alone fewer than once in one thousand times. The differences between the two groups did not reach statistical significance in kindergarten or in the first grade, but significant differences were recorded in the second grade. Nursery school subjects were seen by their classmates as having more prestige, being more spontaneous and more intelligent.

Allen gave two possible reasons for this unexpected delay in differences. One may have been due to the design of the study, in that the younger child is more given to whim, caprice, and forgetting, or that the second grade child is more accustomed to testing and is less distractible. The second reason given for the results is that the non-nursery school child sees the child with nursery school experience as a peer who is somewhat independent of adults, who is perhaps more sure of himself, and who seems more free and spontaneous than the other members of the class. This is perhaps not the sort of behavior that

is attractive to the younger child, but by the second grade, this combination of traits evidently becomes highly valued and desirable. (Davits, as referred to by Allen.)

Ann Wilson Brown's study, "Relations between Nursery School Attendance and Teachers' Ratings of Some Aspects of Children's Adjustment in Kindergarten," (5) compared teacher ratings of social adjustment of forty-two children who had attended nursery school with forty-two children who had not attended nursery school. Some of the controls had, however, attended parent cooperative groups. The nursery child was matched with a non-nursery child from the same kindergarten class for I. Q., sex, socioeconomic status, and ordinal position in the family. The kindergarten teacher rated both children on their adjustment in:

1. "Activities," related to the child's adjustment in kindergarten activities, his routine attitudes toward and participation in usual classroom activities.
2. "Group," adjustment to peers in classroom as perceived by the teacher.
3. "Authority," general level of adjustment exhibited in routine relations with the teacher.
4. "Personal," inner adjustment in which the rater had to consider both her knowledge of the child in the classroom and outside. It was necessary to think in terms of general adjustment felt to characterize the child "as a person." (5, p. 587)

In addition, the study was set up so that each teacher had to mark which child she felt to be "brighter." The teachers were kept ignorant of the purpose of the study.

The basic results of the study were:

- "1. Nonnursery children were perceived by their teachers to be better adjusted than nursery school children in personal adjustment, in relations with other children, and participation in group activities. Adjustment of the child to the teacher did not produce significant differences in rating, although the direction was consistent.
2. Children who had attended nursery school did not differ in intelligence, as rated by their teachers, from those who had not.
3. The teacher's ratings of a child's adjustment varied independently of her perceptions of the relative "brightness" of the children rated.
4. Intercorrelations among the four adjustment scales ranged from moderate to high, indicating, on the one hand, a high measure of consistency in these ratings, and on the other hand, a measure of independence." (5, p. 595)

Mrs. Brown gave some possible reasons for the results of her study. The work in kindergarten may have been somewhat repetitive, with the result that many children with nursery school experience, especially the brighter ones, found kindergarten boring. She suggested that this is a possible reason for Allen's findings that positive results of nursery school training did not become evident until later in elementary school. (1) Children who had attended nursery school may also have shown more independent behavior. This may have influenced the teacher's judgement,

if the teacher did not consider this desirable behavior. Another possible explanation suggested by Mrs. Brown for the results lay in reasons why parents enrolled children in nursery school.

Hypothesis to be tested:

The present study was undertaken to determine if there are differences in children's adjustment in kindergarten as judged by the teacher between those children who have had different types and amounts of preschool experiences and those with no preschool experiences. The hypothesis to be tested was as follows: There are no measurable differences according to the judgement of kindergarten teachers in adjustment shown by kindergarten children who have had various types and amounts of preschool experience and those who have had no preschool experience.

CHAPTER II

METHOD AND PROCEDURE

Design of the Study:

A design and time table for carrying out the study was set up before the opening of the public schools. It was followed with only a few minor changes. The plan follows:

1. Obtaining preschool information:

Information concerning the preschool background of the subjects will be obtained by means of a questionnaire filled out by the parents. The questionnaire will be given to the parents by the kindergarten teacher near the beginning of the school year and will be returned to the teacher. The teacher will be requested not to look at the information.

2. Measuring instruments:

Adjustment in kindergarten will be judged for those children whose parents return the questionnaire. Two rating scales will be completed by the kindergarten teacher. One rating scale will be a simplification of the Read-Conrad California Behavior Inventory. (19) The second rating which will be used is that employed by Brown in her study.

3. Organization of information concerning preschool experience:

This information will be organized according to type, including nursery school, Sunday School, all-day group care, parent-cooperative group (parents helping paid teacher), parent-cooperative group (no paid teacher), miscellaneous, or none of these. The total length of preschool attendance and the number of days and hours per day will be considered.

4. Procedure:

- a. Permission of the elementary supervisor will be obtained during an interview. At a group meeting with the kindergarten teachers the purposes of the study will be explained and their cooperation will be requested. Directions for selecting traits from the Read-Condrad Behavior Inventory (see p. 21) will be given. Suggestions will be taken for possible improvements of the questionnaire for the parents. Arrangements will be made for distributing the questionnaire and picking up the selection sheet for behavior traits. This will be done during individual conferences near November 1, 1961.

- b. The behavior traits from the Read-Conrad scale which are most often considered significant by the majority of the teachers will be used in judging the kindergarten children.
- c. The rating scales for each subject will be completed by the teachers between January 1 and February 1, 1962.
- d. When the ratings have been returned, any existing relationship between the type and length of preschool experience and the child's adjustment in kindergarten as rated by his teacher will be determined. Ratings on the two scales will be compared for consistency.
- e. Analysis of the data will include factors other than preschool experience which might influence and affect the child's kindergarten adjustment. Factors such as age, sex, influence of siblings, and socioeconomic status of the family will be considered.

Definitions of terms:

The following terms appear often throughout the study. The definitions which are given here are those which apply

in this particular study and are also generally accepted meanings.

1. Adjustment: English and English (9) consider adjustment to be

"a condition of harmonious relation to the environment wherein one is able to obtain satisfaction for most of ones' needs and to meet fairly well the demands, physical and social, put upon one;" (9, p. 13)

2. Preschool groups: Any of those groups listed below in which three or more children not of the same family are brought together regularly for at least one hour each week.
3. Nursery School Group: Organized group in which three or more children are brought together regularly in a situation offering "educational and social advantages." Usually operates not more than one-half day for two to five days a week.
4. Parent-cooperative nursery school group: Organized group in which three or more children are brought together regularly in a situation offering "educational and social advantages." Parents assist in planning, supervising, and carrying-out of activities. There may or may not be a paid professionally-trained person acting as head teacher. Usually operates not longer than one-half day for two to five days per week.

5. All-day group care: Organized group in which three or more children are regularly brought together for an all-day (eight or nine hour) experience which has as its primary purpose provision of care as a substitute for the home during the day-time hours.
6. Miscellaneous group experience: Organized group in which three or more children are regularly brought together for experiences other than those already mentioned. In this study these include library story hour, ballet and dancing school, vacation Bible School, summer playground groups, tumbling and trampoline classes, swimming classes, and "creative dramatics" classes.
7. Sunday School group: Organized group in which three or more children are regularly brought together primarily for religious purposes. This may include church, "primary" and mid-week prayer services as well as what is regularly considered Sunday School.

Setting:

The study was carried out in the twenty kindergarten classes in the eight elementary schools in the Corvallis, Oregon, Consolidated School District. Kindergartens in this district are part of the public school system. No

charge other than \$3.50 a year for supplies is made for the class. Kindergarten children may ride school buses, so transportation to and from school presents no difficulties or additional expense. For these reasons, nearly all the children living in the school district who are eligible to attend kindergarten are enrolled.

There are ten full-time and two one-half time kindergarten teachers. Class enrollments range from twenty-one to thirty-one children per class.

Corvallis is a small, stable community which had a permanent population of 24,471 in March, 1962. This number does not include all of the 1,273 married students who attend Oregon State University which is located in Corvallis. Many of these students have school-age children who are enrolled in Corvallis schools. Two thousand one hundred Corvallis residents are employed by the University either as staff or as Civil Service employees. Lumbering, lumbering by-products and related industries employ 2,700 of Corvallis' working population. Approximately one-fourth of the population is employed in farming. The remainder of Corvallis' inhabitants work in service and other occupations.

This city does not provide many opportunities for pre-school children to participate in organized group experiences. Most mothers who work full-time outside of their homes leave their children with private baby-sitters. According to the Corvallis Chamber of Commerce,

approximately three groups provide all-day group care for young children. Oregon State University operates two, half-day laboratory nursery schools in which 36 to 40 three- and four-year-old children are enrolled. There are seven privately-operated half-day nursery schools in Corvallis. These usually enroll from eight to ten children each. Two local churches sponsor and maintain parent-cooperative nursery schools for children of interested church members. These groups, which usually have an approximate enrollment of twenty children each, are operated two or three days a week for two and one-half hours per day.

Subjects:

The subjects for this study were 384 of the 626 children attending kindergarten in the Corvallis Consolidated School District on November 1, 1961.

Parents of four hundred forty children completed and returned the questionnaires requesting information about pre-school group experiences which their children had had. Of the four hundred forty questionnaires which were returned, five were eliminated because the children were repeating kindergarten, eleven because information on the questionnaires was incomplete or obviously inaccurate and two because teachers failed to rate the children. One child was not included in the study because of long illness and absence from school which made rating difficult. Three

children moved between the time when the questionnaires were returned and rating was done. The remaining four hundred eighteen children were rated between January 1 and February 1, 1962, using the Modified Read-Conrad Behavior Inventory. (See p. 20-22 and Appendix B)

Rating of the children's adjustment in kindergarten was done at the middle rather than near the beginning of the school year so that the teachers would have time to become acquainted with their pupils. By January they had had opportunities to observe the children in many different situations over a period of time. Any lasting advantages evidenced by those children who had had group experience before attending kindergarten should still be present at this time.

After the rating scales were completed and returned by the teachers to the writer, thirty-four pupils in two kindergarten classes were eliminated because the teacher had failed to follow directions for rating.

The final number of subjects included in the study was 384. The subjects included 199 boys and 185 girls. The children ranged in age from five years to six years nine months old. (February 1, 1962) The number of children in the families of the subjects ranged from one child to nine children. This range is shown in Table 11, p. 48. There were sixteen only children included in the study. One hundred fourteen children were the oldest child in the

family, 137 were middle children, and 117 were youngest children. Four sets of twins were subjects in the study. Two children were brother and sister.

Instruments Used in the Study:

1. Rating Scales:

Two rating scales were selected for use in the study. If the ratings on the two scales were consistent, it would provide some evidence of validity of the measure.

All the teachers rated children's adjustment in kindergarten using a modification of the Read-Conrad Behavior Inventory. (19) The original inventory contains sixty-seven items. Children are rated on a seven-point scale for each item or trait. The two extremes and the average of each trait are carefully described in order to make clear what is referred to in that particular trait. (In the opinion of twenty-six clinicians and teachers, these traits were judged to reveal the most significant aspects of a child's behavior.) The inventory was used by six judges in the Purdue University Nursery School to rate eight four-year-old children. The value of the

inventory was indicated for understanding individual children.

For the present study thirty-two of the sixty-seven items were selected by the writer and thesis advisor. They felt that the complete inventory was too long to ask a teacher to use when rating her whole group. They selected those items which seemed to them to be most closely related to adjustment in kindergarten, to cover behavior which teachers might observe most readily, and which represented as wide a range of behavior as possible. (See Appendix A) The twelve kindergarten teachers were then asked to select from these thirty-two traits those which they considered most important in judging a child's adjustment in kindergarten. By taking those items which were selected by the majority of teachers, it was hoped to develop a scale of reasonable length which would be suited to the behavior and characteristics of kindergarten children. It was felt that if they had taken part in selecting the traits which formed the instrument, the teachers would become more interested and involved in the study and in carrying out the rating process.

Agreement among the teachers was high on the traits which were selected. Traits checked as

important by at least seven of the twelve teachers were included in the rating device. Nine of these traits formed the scale, or Modified Read-Conrad Behavior Inventory, which the teachers later used when rating their pupils. (See Appendix B) Most of the teachers commented that selection had been difficult because all the traits seemed important to consider in judging children's adjustment. Some of the traits were chosen because they could be more easily observed or because they applied more nearly to behavior of the kindergarten child than other traits did.

A second rating scale employed by Brown in a study, (5) was used in rating 124 of the subjects as a further measure of adjustment. The Brown Scale, based on criteria set up by Guilford (11), consists of five separate ratings to be done on continuous vertical scales. Each scale is accompanied by suggested criteria to consider when rating a child on the characteristic. Four of these scales, "Adjustment to Group Activities," "Adjustment to Other Children," "Adjustment to the Teacher," and "Personal Adjustment," were used to rate the 124 children. (See Appendix C) Mrs. Brown's fifth scale, which rates relative

brightness of the subjects, was not used because it did not apply in the present study. Brown selected this type of scale

"because it allows the rater to choose any point along the scale which he deems appropriate. ... and has the additional merit of spreading the ratings, thus helping to control any central tendency error." (5, p. 587)

She considered this type of rating to be more accurate than one consisting of a particular collection of traits, which alone may suggest "good adjustment," but when combined in a given individual will not necessarily be optimal for "good adjustment."

2. Questionnaire for Parents: (See Appendix E)

A questionnaire was sent to parents of all children in kindergarten in the fall to obtain information concerning group experiences which children had had before entering school. In addition to information about previous group experiences, age, sex, number and ages of children in the family, and occupation of the parents was requested.

Procedure:

In September, 1961, the purposes and plan for carrying out the study in Corvallis Kindergarten classes were presented to Mrs. McBee, Supervisor of Elementary Education of the Corvallis Consolidated School District. She gave her

permission, but said that the final decision to conduct the study must be made by the twelve kindergarten teachers.

Arrangements were made to meet with the teachers at their monthly "grade level meeting" on October 2, 1961. The purpose of this meeting is to provide regular opportunities for the teachers in the district's eight elementary schools to come together to coordinate programs, to discuss common problems, and to take advantage of in-service training opportunities.

During this initial meeting with the teachers, the study was presented to them. Its purposes, the procedures to be followed, and a tentative schedule for carrying the study out were fully explained and discussed. Most of the teachers expressed interest and enthusiasm in the project. Several commented that careful consideration of the children which the study would require would help them to know and understand the children better. One teacher stated that the study would be very time-consuming and might not be of value to them. Another said that if the study indicated that preschool group experiences were valuable for adjustment in kindergarten, kindergarten might be considered a valuable experience in preparing children for first grade. All of the teachers assured their participation and cooperation in carrying the study out.

At the same meeting, the check sheets for the teachers to use in selection of traits from the "Read-Conrad Behavior

Inventory" were distributed and discussed. (See p. 20-22 and Appendix A) The proposed questionnaire to parents was also discussed. Several suggestions given by teachers for improving the questionnaire were incorporated into the final instrument.

Between October 15 and November 15, appointments for individual conferences with each teacher were made. At these conferences, which were held in the kindergarten classrooms, the check sheets for selection of traits from the Read-Conrad Behavior Inventory were collected.

The questionnaire and letters to the parents (See p. 23 and Appendix D and E) were given to the teacher at the time the check list was collected from each teacher. She was asked to give these to all of the children in her class(es) to take home to their parents. In the letter parents were asked to give the completed questionnaires to the children to return to the teacher before November 20, 1961. Teachers were asked not to look at the completed questionnaires. This was done in order to avoid the influence that systematic knowledge of a child's preschool experiences might have on teachers' ratings of the child's adjustment. The questionnaires were collected from the teachers at individual conferences which were held from November 21 to December 20, 1961.

Data from the questionnaires were categorized and recorded during December, 1961 and January, 1962. At this

time, socio-economic status of the parents, which is believed to have an important relationship to children's adjustment, was eliminated as a variable to be considered in this study. This was done because of the lack of a wide range of occupations and socio-economic classes in the community.

At the grade level meeting held on January 8, 1962, each kindergarten teacher was given a list of the names of children in her class(es) who had returned completed, accurate questionnaires. Instructions were given for rating the children using the items selected by the teachers from the Read-Conrad Behavior Inventory. (This device has been called the Modified Read-Conrad Behavior Inventory. See Appendix B) The teachers were asked not to rate children who were repeating kindergarten or those who had moved away before Christmas. They were, however, asked to give reasons for not rating children whose names were listed.

At the same meeting the scales which Brown used in her study (See p. 22-23 and Appendix C) were presented and briefly discussed. Most of the teachers said that they did not have time to rate their entire groups using both devices. Three of them volunteered to use both ratings. On a later date four more teachers were asked to select ten of their pupils at random to rate using Brown's scales. This was done in order to obtain a more complete check of consistency of teachers' ratings of children's adjustment

and in an attempt to determine validity of the two rating scales.

In an attempt to reduce errors which might be made because the teachers were untrained as raters for this study, each was given a chart, printed on heavy cardboard, which listed and explained errors most commonly made by inexperienced raters. (See Appendix F) They were asked to refer to this chart as they judged each child's adjustment.

Ratings done using the Modified Read-Conrad Behavior Inventory were collected from ten of the teachers on February 5, 1962, when the group held its next grade level meeting. The three teachers who had volunteered to use the Brown Scale returned these ratings at this time, too. Ratings made by one of the remaining two teachers were picked up on February 13, 1962. The thirty-four ratings from the twelfth teacher were not received until March 13, 1962. They could not be used in the study because the teacher had rated the children using only the extreme (1 and 7) and the mid-points (4) of the Read-Conrad scale. These ratings could not, therefore, be compared with those from the eleven other teachers who had made more discriminating ratings of adjustment by using all seven points on the scale.

In discussion at the February meeting, one teacher commented that one important trait which should be considered when rating a child's adjustment in kindergarten

had not been included in the modified inventory. This trait was "attention seeking." Most of the teachers said that rating using the Modified Read-Conrad Behavior Inventory had been difficult and time-consuming. Length of rating each child varied from five to fifteen minutes. As familiarity with the device increased, rating became faster and easier. On the whole, those who had also used the Brown Scale for rating said that it required less time. It was pointed out, however, that this may have been because the teachers had already rated the children once with the other device.

The teachers asked that the ratings be returned to them after the study was completed so that they could be placed in the children's personal files. They felt that they had been worthwhile and would be valuable additions to other permanent records and materials.

CHAPTER III

RESULTS

Correlation Between the Rating Scales:

A correlation coefficient was run between adjustment scores received by the 124 children who were rated on both the Modified Read-Conrad Behavior Inventory and the Brown Scale. A correlation of .6425 was found to exist between these two ratings. While this correlation accounts for only 35.75 per cent of the variance between the two ratings, it indicates a statistically significant relationship, providing a measure of confidence in the results of the study.

Mean Adjustment Scores of Groups:

The study included 384 kindergarten children. According to replies on the questionnaires, eighty of these children had not had preschool group experience of any kind before entering kindergarten. One hundred ninety-one children had been to Sunday School but had had no other kind of group experience outside the home. One hundred thirteen children had attended one or more kinds of preschool groups including nursery school, parent-cooperative

schools, all-day group care, Sunday School, and miscellaneous types of preschool groups.

Table 1, below, gives the mean adjustment score of the children in each of these groups. The scores were obtained from the kindergarten teachers' ratings on the Modified Read-Conrad Behavior Inventory.

TABLE 1
MEAN ADJUSTMENT SCORES ON MODIFIED READ-CONRAD
BEHAVIOR INVENTORY

| Mean Adjustment Scores | Number of Children | Type of Preschool Experience |
|------------------------|--------------------|--|
| *30.75 | 113 | Children with one or more kinds of preschool experience. |
| 32.9 | 191 | Children with only Sunday School Experience. |
| *34.0 | 80 | Children with no preschool experience. |
| | 384 | Total |

*Significance of difference between these two scores was $F = 7.828$ or significance to the five per cent level.

As is shown in this table, the mean adjustment score of the group of children who attended one or more kinds of preschool before entering kindergarten was 30.75. This is the most favorable score given to any of the three groups shown in the table. The least favorable score, 34.0, was that of the group of eighty children who had had no

preschool experience of any kind previous to kindergarten. The mean adjustment score of the group of 191 children who had had only Sunday School experience was 32.9. This score falls between the two other scores.

An "F" test for significance of the difference between the most favorable and the least favorable scores was made. The difference (3.25) was found to be significant to the five per cent level of confidence. The difference between the mean adjustment score of the group with Sunday School and the group with no experience is less than the difference between the group which had Sunday School and the group which had one or more kinds of preschool experiences. This is in line with the conclusion that the number of preschool experiences and possibly the kinds of experience influence the child's adjustment in kindergarten as rated by the teachers on the Modified Read-Conrad Behavior Inventory. In other words, having preschool experience of more than one kind appears to contribute to favorable adjustment of a child in kindergarten as seen by the child's teacher.

Effects of Types of Preschool Experience on Adjustment Scores:

The mean adjustment score of one hundred thirteen children who had had one or more kinds of preschool experiences were examined. They are presented in the following table.

TABLE 2

MEAN ADJUSTMENT SCORES OF CHILDREN WHO HAD ONE OR MORE KINDS OF PRESCHOOL EXPERIENCES

| Kind of Experience | Number of Children | Mean Adjustment Scores |
|--------------------|--------------------|------------------------|
| Nursery School | 53 | 30.38 |
| "Miscellaneous" | 32 | 30.32 |
| Parent-cooperative | 23 | 29.1 |
| All-day Group Care | <u>12</u> | 30.83 |
| Total | 120* | |

*7 cases appear in more than one of the above categories.

Fifty-three of the children had combinations of preschool including nursery school. The mean score of this group was 30.38. This is nearly the same as the scores received by thirty-two children who had attended preschool groups including miscellaneous experiences (30.32) and twelve children who had all-day group care (30.83). Only one of the groups, the one which had some combination of preschool including parent-cooperative nursery school, had a more favorable score, 29.1.

All of these differences in mean adjustment scores among groups are very small. The differences between the most favorable scores received by the group with parent-cooperative background and the least favorable scores

received by those with day-care experience is only 1.73. The results suggest that the type of experiences which children had is not as important in influencing adjustment in kindergarten as having had some experience. It appears more desirable to have attended any combination of pre-school groups than to have had no preschool group experience.

A further breakdown of this group of one hundred thirteen children was made. Although the results are not shown here in table form, it was determined that the one hundred thirteen cases included seventy-one children who had attended Sunday School and one or more kinds of pre-school groups. Thirty-two of these children had had only one kind of preschool attendance. Adjustment ratings for these thirty-two children are included in Table 3.

Effects of Number of Experiences:

When those cases which were "pure," i.e. had had only one type of preschool experience were separated out, their mean adjustment scores were in every case less favorable than the scores of the total group from which they came. These results are shown in Table 3 below.

TABLE 3

MEAN ADJUSTMENT SCORES OF CHILDREN WHO HAD ONLY ONE TYPE OF PRESCHOOL GROUP EXPERIENCE COMPARED TO THOSE CHILDREN WITH MORE THAN ONE TYPE OF PRESCHOOL GROUP EXPERIENCE

| Mean Adjustment Scores | Number of Cases | Type of Preschool Experience |
|------------------------|-----------------|--|
| 31.0 | 15 | "Pure" Nursery School Cases |
| 30.38 | 53 | All cases with Nursery School Experience |
| 35.0 | 7 | "Pure" Miscellaneous Cases |
| 30.2 | 32 | All cases with Miscellaneous Experience |
| 33.0 | 5 | "Pure" Parent-cooperative Cases |
| 29.1 | 23 | All cases with Parent-cooperative Experience |
| 33.0 | 5 | "Pure" All-day Group Care Cases |
| 30.83 | 12 | All cases with All-day Group Care Experience |

These results are in line with those in the previous table, (Table 2) indicating that more than one type of preschool experience leads to a more favorable behavior rating for the child in kindergarten. Among the "pure" cases, the most favorable rating was that received by the group with nursery school experience. This was also the group with the largest number of cases. The least favorable rating was that of the group with experience in "miscellaneous" groups. The groups with experience in parent-cooperatives and with

all-day care have a score in the middle between the other two groups. Their scores are similar. The numbers appear too small for conclusions to be drawn from them.

It may be worth noting that the mean adjustment score of the "pure" cases in the group having nursery school experience was closer to the mean adjustment score of the whole group with nursery school experience than was the case with any of the other categories. With these cases in this study, if the child had only one type of preschool experience, he received a more favorable behavior rating in kindergarten if that experience was in a nursery school rather than in any other type of preschool.

Effects of Number of Hours Per Week in Preschool Groups:

Table 4 (below) gives the ratings received by 384 kindergarten children grouped according to the total number of hours per week of attendance in preschool groups. The children were rated by their teachers on the Modified Read-Conrad Behavior Inventory.

TABLE 4

HOURS OF ATTENDANCE PER WEEK IN PRESCHOOL GROUPS AND
RATINGS ON MODIFIED READ-CONRAD BEHAVIOR INVENTORY

| Hours of Attendance Per Week | Median Adjustment Scores | | | | | Cases | Total | Mean Score |
|------------------------------|--------------------------|-----|-----|----|----|-------|-------|------------|
| | 15 | 25 | 35 | 45 | 55 | | | |
| NONE | 3 | 21 | 41 | 11 | 4 | 80 | 2720 | 34.0 |
| 1-3 | 7 | 68 | 105 | 28 | 4 | 212 | 6960 | 32.17 |
| 4-8 | 5 | 8 | 10 | 3 | 1 | 27 | 815 | 30.5 |
| 9-15 | 4 | 17 | 22 | 3 | | 46 | 1390 | 30.1 |
| 16-20 | 1 | 1 | 3 | | | 5 | 145 | 29.0 |
| 20-30 | | 2 | 1 | 1 | | 4 | 130 | 32.2 |
| Over 36 | | 4 | 4 | 2 | | 10 | 330 | 33.0 |
| Totals with Preschool | 17 | 100 | 145 | 37 | 5 | 304 | 9770 | 32.1 |
| TOTALS | 20 | 121 | 186 | 48 | 9 | 384 | | |

There is a tendency for favorable ratings given by kindergarten teachers to increase slightly in groups as length of preschool attendance increased from 1 to 3 hours up to 16 to 20 hours per week. Those children who had attended more than twenty hours per week received less favorable adjustment ratings than did those attending fewer hours. Their mean rating remained, however, a more favorable one than that received by groups with no preschool experience. There were only fourteen cases in the group who had attended for more than twenty hours per week,

so no conclusions can be drawn for this particular group.

Table 5 gives ratings for 124 children grouped according to the number of hours per week of attendance in preschool groups and rated by the teachers using the Brown Scale. The results differ somewhat from those in Table 4, where the children were rated using the Modified Read-Conrad scale. When judged by this scale, the eighty children who had had no preschool group experiences received higher (less favorable) ratings than any other group except one. Ratings on the Brown Scale suggest that adjustment in kindergarten appears to decrease as hours per week of preschool attendance increased except for the nine children who had attended preschool groups for 4 to 8 hours per week. They received the most favorable mean adjustment scores. However, this group is small, especially in comparison to those who had attended for shorter periods. In all groups, numbers of cases vary too widely and differences in ratings are too small for the results to be considered of significance.

TABLE 5

HOURS OF ATTENDANCE PER WEEK IN PRESCHOOL GROUPS
AND RATINGS ON THE BROWN SCALE

| Hours of Attendance Per Week | Median Adjustment Scores | | | | | | | Cases | Total | Mean Score |
|------------------------------|--------------------------|----|----|----|----|----|----|-------|-------|------------|
| | 2 | 7 | 12 | 17 | 22 | 27 | 32 | | | |
| NONE | | 5 | 7 | 15 | 2 | 1 | | 30 | 445 | 14.83 |
| 1-3 | 2 | 8 | 18 | 24 | 12 | 4 | 1 | 69 | 1073 | 15.5 |
| 4-8 | | 1 | 5 | 3 | | | | 9 | 116 | 12.88 |
| 9-15 | | 1 | 1 | 5 | 3 | | | 10 | 170 | 17.0 |
| 16-20 | | | 1 | | 1 | | | 2 | 34 | 17.0 |
| 20-36 | | | | 1 | 1 | | | 2 | 39 | 19.5 |
| Over 36 | | | | 2 | | | | 2 | 34 | 17.0 |
| Totals with Preschool | 2 | 10 | 25 | 35 | 17 | 4 | 1 | | | |
| TOTALS | 2 | 15 | 32 | 50 | 19 | 5 | 1 | | | |

Adjustment Ratings of Children Who Attended Nursery School:

Among the groups with different kinds of preschool experiences, the group with nursery school is the largest, having fifty-three cases. A further analysis of this group was made. Table 6 shows ratings on the Modified Read-Conrad Behavior Inventory of children grouped according to the number of months of attendance in nursery school groups.

TABLE 6

MONTHS OF ATTENDANCE IN NURSERY SCHOOL AND RATINGS
ON MODIFIED READ-CONRAD BEHAVIOR INVENTORY

| Months of Attendance | Median Adjustment Scores | | | | | Cases | Total | Mean Score |
|---------------------------------|--------------------------|-----|-----|----|----|-------|--------|---------------|
| | 15 | 25 | 35 | 45 | 55 | | | |
| NONE | 15 | 106 | 155 | 46 | 9 | 331 | 10,865 | 32.82 |
| Less than 6 months | 2 | 2 | 5 | | | 9 | 255 | 28.3 |
| 6-18 months | 3 | 11 | 21 | 2 | | 37 | 1,100 | 29.73 |
| More than 18 months | | 2 | 5 | | | 7 | 225 | 32.14 |
| Total with Nursery School | 5 | 15 | 31 | 2 | | 53 | 1,580 | 30.38 |
| TOTALS | 20 | 121 | 186 | 48 | 9 | 384 | | |

This table indicates that children who attended nursery school received more favorable ratings (30.38) than those who had not been to nursery school (32.82), except for seven children who had attended nursery school for more than eighteen months. The mean adjustment score for these seven children was 32.1. This is only slightly less favorable than those who had not attended nursery school. Included in the group of those who had not attended nursery school were, of course, all children who had attended preschool other than nursery school. Only thirteen of the 124 children who were rated with the Brown Scale had attended

nursery school. This sample was considered too small for comparisons to be made.

The number of hours per week of attendance at nursery school (see Table 7 below) seemed to make almost no difference in adjustment in kindergarten. Four children who had attended nursery school for 16 to 20 hours each week received a slightly less favorable mean score than others who attended fewer hours per week. However, this score was more favorable than the mean score of the children who had not attended nursery school.

TABLE 7

HOURS OF ATTENDANCE PER WEEK IN NURSERY SCHOOL AND RATINGS ON MODIFIED READ-CONRAD BEHAVIOR INVENTORY

| Hours of Attendance Per Week | Median Adjustment Scores | | | | | Cases | Total | Mean Score |
|------------------------------|--------------------------|-----|-----|----|----|-------|--------|------------|
| | 15 | 25 | 35 | 45 | 55 | | | |
| NONE | 15 | 106 | 155 | 46 | 9 | 331 | 10,865 | 32.82 |
| 1-3 | | 3 | 4 | | | 7 | 215 | 30.5 |
| 4-8 | 3 | 3 | 8 | 2 | | 16 | 490 | 30.1 |
| 9-15 | 2 | 8 | 16 | | | 26 | 790 | 30.1 |
| 16-20 | | 1 | 3 | | | 4 | 95 | 31.2 |
| 20-36 | | | | | | | | |
| Over 36 | | | | | | | | |
| Total with Nursery School | 5 | 15 | 31 | 2 | | 53 | | |
| TOTALS | 20 | 121 | 186 | 48 | 9 | 384 | | |

No differences in adjustment which were related to the size of the nursery school group that the children attended were apparent. (see Table 8) Those who had attended smaller groups (groups with 3 to 18 children) received a mean adjustment score of 30.1. Those who had been to larger groups (more than 18 children) had a mean score of 31.4. The score for the children who attended small groups is more favorable than the score for children who attended larger groups, but the differences in scores and numbers are small.

TABLE 8

SIZE OF NURSERY SCHOOL GROUP ATTENDED AND RATINGS
ON MODIFIED READ-CONRAD BEHAVIOR INVENTORY

| Size of Group Attended | Median Adjustment Scores | | | | | Cases | Total | Score |
|---------------------------------|--------------------------|-----|-----|----|----|-------|--------|-------|
| | 15 | 25 | 35 | 45 | 55 | | | |
| NONE | 15 | 106 | 155 | 46 | 9 | 331 | 10,865 | 32.82 |
| 3-18 children | 3 | 12 | 21 | | | 36 | 1,115 | 30.1 |
| More than 18 | 2 | 3 | 10 | 2 | | 17 | 534 | 31.4 |
| Total with Nursery School | 5 | 15 | 31 | 2 | | 53 | | |
| TOTALS | 20 | 121 | 186 | 48 | 9 | 384 | | |

Adjustment Ratings of Children Who Attended Parent-Cooperative Groups:

The results with the group of children who had experience in a parent-cooperative school were also analyzed. From Table 3 (p. 34) it appeared that this group had the most favorable adjustment rating (29.1) in comparison with the average of 30.75 for the total group of children with preschool experience. The five "pure" cases, i.e., those who had been only to parent-cooperative groups before attending kindergarten, however, had a mean adjustment score of 33.0.

The further analysis of this group of 23 cases, presented below in Table 9, gives an indication that those who had attended parent-cooperatives for more than eighteen months were better adjusted than those who had attended for shorter periods of time. Four children who had attended for more than eighteen months were given the most favorable scores (22.5). Four children who attended for the shortest period (less than six months), however, received the next most favorable ratings (27.5). The least favorable mean adjustment score (31.6) was received by fifteen children who had attended from 6 to 18 months. Although the differences in scores were large, the numbers of cases were small, so that the results have little significance.

TABLE 9

MONTHS OF ATTENDANCE IN PARENT-COOPERATIVE GROUPS AND
RATINGS ON MODIFIED READ-CONRAD BEHAVIOR INVENTORY

| Months of Attendance | Median Adjustment Scores | | | | | Cases | Total | Mean Score |
|--------------------------------------|--------------------------|-----|-----|----|----|-------|--------|---------------|
| | 15 | 25 | 35 | 45 | 55 | | | |
| NONE | 16 | 113 | 177 | 47 | 8 | 361 | 11,815 | 32.7 |
| Less than 6 months | 1 | 1 | 2 | | | 4 | 110 | 27.5 |
| 6-18 months | 2 | 4 | 7 | 1 | 1 | 15 | 475 | 31.6 |
| More than 18 months | 1 | 3 | | | | 4 | 90 | 22.5 |
| Total with Parent- Cooperative | 4 | 8 | 9 | 1 | 1 | 23 | | |
| TOTALS | 20 | 121 | 186 | 48 | 9 | 384 | | |

There is a slight indication (as shown in Table 10) that children who spent more hours per week (4 to 15) in parent-cooperative groups are better adjusted in kindergarten than those who attended only 1 to 3 hours per week. This is in line with the results shown in Table 4, where favorable ratings improved as total hours per week of attendance in preschool groups increased up to 16 to 20 hours per week. (No children attended parent-cooperative groups for more than fifteen hours per week.) Although, as has already been pointed out, the numbers in each group seemed too small to indicate any significant differences, this finding gives some measure of support to the possibility

that time or hours per week of preschool attendance may have a relationship to kindergarten adjustment.

TABLE 10

HOURS OF ATTENDANCE PER WEEK IN PARENT-COOPERATIVE GROUPS
AND RATINGS ON THE MODIFIED READ-CONRAD
BEHAVIOR INVENTORY

| Hours of Attendance Per Week | Median Adjustment Scores | | | | | Cases | Total | Mean Score |
|-------------------------------|--------------------------|-----|-----|----|----|-------|--------|------------|
| | 15 | 25 | 35 | 45 | 55 | | | |
| NONE | 16 | 113 | 177 | 47 | 8 | 361 | 11,815 | 32.7 |
| 1-3 | | 1 | 3 | | | 4 | 130 | 32.5 |
| 4-8 | 3 | 4 | 5 | 1 | 1 | 14 | 420 | 30.0 |
| 9-15 | 1 | 3 | 1 | | | 5 | 125 | 25.0 |
| 16-20 | | | | | | | | |
| 20-36 | | | | | | | | |
| Over 36 | | | | | | | | |
| Total with Parent-Cooperative | 4 | 8 | 9 | 1 | 1 | 23 | | |
| TOTALS | 20 | 121 | 186 | 48 | 9 | 384 | | |

Only nine of the 124 children who were rated using the Brown Scale had attended parent-cooperative groups. Scores from this group were not considered.

No evidence about the effects of the size of the parent-cooperative group which the children had attended and their kindergarten adjustment was found. Groups were divided into small (3 to 18 children) and large (more than

18 children). There were only two cases falling into the small group category, so no comparison of adjustment could be made.

Adjustment Ratings of Children Who Attended Miscellaneous
Preschool Groups:

Thirty-two children had attended varied types of preschool groups. These experiences (which include library story hour, ballet and dancing school, vacation Bible school, summer playground groups, tumbling and trampoline classes, swimming classes, and "creative dramatics" classes) were labeled miscellaneous group experiences for the purposes of this study. The kinds of experiences which these children had obviously varied greatly. Although the results for this group are not shown here in table form, length of attendance in the groups appeared to make almost no difference in adjustment. Except for two cases who had attended for 21 to 35 hours per week, the mean adjustment scores of the remaining thirty children were within two-tenths of a point of each other. The average for the total group was close to the average for all children with preschool experience. (See Table 2)

Adjustment Ratings of Children Who Attended All-day Care
Groups:

Twelve children had combinations of preschool experiences which included all-day group care. Five of these

children had no other preschool experiences before kindergarten. This sample was too small to make it possible to draw conclusion about the effects of all-day group care on children's adjustment in kindergarten.

The mean adjustment score for the children with day-care experience included in this study was 30.38, which is very close to the mean score of all children who had attended preschool. These are somewhat unexpected results which are contrary to beliefs of many child development experts. (2, 22, 23, 24) Possible reasons for these results may be found in the lack of a large number of wide variety of all-day care groups in Corvallis. In Corvallis such groups are small. They may provide substitutes for some experiences which a child might normally share with his parents. The small number of children (twelve) who had this kind of experience make it difficult to draw accurate conclusions about adjustment.

Adjustment Ratings of Children Who Attended Sunday School:

Two hundred sixty-eight of the 384 children who were included in the study had been to Sunday School before enrolling in kindergarten. One hundred ninety-one children had had no preschool group experience besides Sunday School. Seventy-one children had been to Sunday School and one or more other kinds of preschool groups.

Table 1 (p. 30) indicates that the 191 children who had attended Sunday School only were judged to be somewhat better adjusted in kindergarten than those eighty children who had no preschool group experiences of any kind. (32.9 mean adjustment score compared to 34.0 for those who had no preschool.) Those who had Sunday School and/or other preschool experiences received higher adjustment ratings than the children who had been only to Sunday School (30.75 compared to 32.9).

Only one child had attended Sunday School for more than three hours per week, so this factor was not considered in the study.

Size of Sunday School groups attended was not considered in this study because the number of children attending varied greatly from week to week. In addition, many parents did not know how large the Sunday School group which their child had attended was.

Adjustment Ratings of Children in Relation to Other Factors Considered in This Study:

Information concerning some of the factors other than preschool attendance which might have a bearing on children's adjustment in kindergarten was also considered in this study. One of these factors, size of the family, is presented in Tables 11 and 12.

TABLE 11

NUMBERS OF CHILDREN IN FAMILIES OF KINDERGARTEN CHILDREN
AND RATINGS ON THE MODIFIED READ-CONRAD
BEHAVIOR INVENTORY

| Number of Children in Family | Median Adjustment Score | | | | | Cases | Total | Mean Score |
|------------------------------------|-------------------------|-----|-----|----|----|-------|-------|---------------|
| | 15 | 25 | 35 | 45 | 55 | | | |
| 1 | | 4 | 8 | 1 | | 13 | 425 | 32.69 |
| 2 | 8 | 31 | 59 | 7 | 5 | 110 | 3550 | 32.2 |
| 3 | 5 | 37 | 53 | 19 | 2 | 116 | 3820 | 32.93 |
| 4 | 4 | 27 | 44 | 10 | 1 | 86 | 2780 | 32.3 |
| 5 | 2 | 13 | 13 | 8 | 1 | 37 | 1135 | 30.2 |
| 6 | 1 | 5 | 5 | | | 11 | 315 | 28.7 |
| 7 | | 3 | 3 | 2 | | 8 | 270 | 33.6 |
| 8 | | 1 | | 1 | | 2 | 70 | 35.0 |
| 9 | | | 1 | | | 1 | 35 | 35.0 |
| TOTALS | 20 | 121 | 186 | 48 | 9 | 384 | | |

The most favorable rating on the Modified Read-Conrad Behavior Inventory was given to eleven children who came from families with six children. The next most favorable rating went to the thirty-seven children from families with five children and the least favorable rating to the two children from families of eight children and one from a family of nine.

It is interesting to note that the subjects from families of one, two, three and four children received

ratings which are nearly identical (32.69, 32.3, 32.93, and 32.3 respectively). The great majority of subjects included in this study fall in the last three mentioned groups. These groups are large and comparable in size. Results indicate that the thirteen only children were rated as favorably as children from most families and better than those from families of more than six children. (The number of cases in smallest and largest families are few, but results may indicate a trend.)

Table 12 shows ratings made on the Brown Scale.

TABLE 12

NUMBERS OF CHILDREN IN FAMILIES OF KINDERGARTEN CHILDREN
AND RATINGS ON THE BROWN SCALE

| Number of Children in Family | Median Adjustment Scores | | | | | | | Cases | Total | Mean Score |
|------------------------------------|--------------------------|----|----|----|----|----|----|-------|-------|---------------|
| | 2 | 7 | 12 | 17 | 22 | 27 | 32 | | | |
| 1 | | | 1 | 1 | | 1 | | 3 | 56 | 18.2 |
| 2 | 1 | 4 | 10 | 16 | 2 | 1 | | 34 | 493 | 14.17 |
| 3 | | 3 | 8 | 8 | 3 | 1 | 1 | 24 | 378 | 15.7 |
| 4 | | 5 | 7 | 16 | 2 | | | 30 | 435 | 14.5 |
| 5 | 1 | 3 | 1 | 8 | 4 | 1 | | 18 | 286 | 15.1 |
| 6 | | | 4 | | 2 | | | 6 | 92 | 15.2 |
| 7 | | | 1 | | | | | 1 | 12 | 12.0 |
| 8 | | | | | | 1 | | 1 | 27 | 27.0 |
| 9 | | | | 1 | | | | 1 | 17 | 17.0 |
| TOTALS | 2 | 15 | 32 | 50 | 19 | 5 | 1 | 124 | | |

Again, as was indicated by scores from the Modified Read-Conrad scale, the subjects from families of two, three and four children, where most of the cases fell, received almost identical ratings. With this scale eighteen children from families of five, and six children from families of six also received comparable scores. Three only children received a lower score (18.2) when teachers rated them using the Brown Scale. The three cases coming from the largest families received widely varied adjustment scores. Except for the large groups of children who received nearly identical scores, however, numbers and differences in scores on both scales are too small to indicate any differences in adjustment which can be attributed to size of the family.

Another factor considered in relation to children's kindergarten adjustment was age of the children. (See Table 13) According to the Modified Read-Conrad Behavior Inventory, the seventy children who were six years to six years six months of age showed the most favorable adjustment. The least favorably rated was the age group five years three months to five years six months. However, there were only fourteen cases in this age group.

TABLE 13

AGES OF KINDERGARTEN CHILDREN IN YEARS AND MONTHS AND
RATINGS ON THE MODIFIED READ-CONRAD
BEHAVIOR INVENTORY

| Age in Years and Months | Median Adjustment Scores | | | | | Cases | Total | Mean Score |
|-------------------------------|--------------------------|-----|-----|----|----|-------|-------|---------------|
| | 15 | 25 | 35 | 45 | 55 | | | |
| 5 to 5-3 | | 4 | 9 | 1 | | 14 | 460 | 32.1 |
| 5-3 to 5-6 | 2 | 21 | 44 | 13 | 4 | 84 | 2900 | 34.5 |
| 5-6 to 5-9 | 3 | 35 | 59 | 12 | 4 | 113 | 3745 | 33.1 |
| 5-10 to 6 | 1 | 29 | 47 | 17 | 1 | 101 | 3205 | 31.75 |
| 6 to 6-3 | 7 | 29 | 25 | 5 | | 66 | 1930 | 29.1 |
| 6-3 to 6-6 | 1 | 3 | | | | 4 | 90 | 22.2 |
| 6-6 to 6-9 | | | | | | | | |
| 6-9 to 7 * | | | 2 | | | 2 | 70 | 35.0 |
| TOTALS | 20 | 121 | 186 | 48 | 9 | 384 | | |

Table 14, below, indicates that when adjustment was measured using the Brown Scale, age did not seem to make any difference except for the small group of children who were youngest (5 years to 5 years 3 months). They received the lowest mean adjustment score (18.2). This same group received the lowest rating on the Modified Read-Conrad Behavior Inventory. The numbers of cases and differences in scores according to both scales were too small to be considered significant.

TABLE 14

AGES OF KINDERGARTEN CHILDREN IN YEARS AND MONTHS
AND RATINGS ON THE BROWN SCALE

| Age in Years and Months | Median Adjustment Scores | | | | | | | Cases | Total | Score |
|-------------------------------|--------------------------|----|----|----|----|----|----|-------|-------|-------|
| | 2 | 7 | 12 | 17 | 22 | 27 | 32 | | | |
| 5 to 5-3 | | | 1 | 1 | 2 | | | 4 | 73 | 18.2 |
| 5-3 to 5-6 | | 2 | 9 | 13 | 2 | | | 26 | 387 | 14.23 |
| 5-6 to 5-9 | 2 | 5 | 5 | 17 | 6 | 3 | 1 | 39 | 634 | 16.10 |
| 5-9 to 6 | | 6 | 5 | 8 | 6 | 2 | | 27 | 385 | 14.7 |
| 6 to 6-3 | | 2 | 11 | 10 | 3 | | | 26 | 382 | 14.18 |
| 6-3 to 6-6 | | | | | | | | 0 | | |
| 6-6 to 6-9 | | | | | | | | 0 | | |
| 6-9 to 7 | | | 1 | 1 | | | | 2 | 29 | 14.5 |
| TOTALS | 2 | 15 | 32 | 50 | 19 | 5 | 1 | 124 | | |

Nearly equal number of boys and girls were included in the study. The mean adjustment scores for the 199 boys was 33.04 on the Read-Conrad scale and 15.43 on the Brown Scale. On the Read-Conrad scale, the 185 girls received a score of 32.51. Their score on the Brown Scale was 15.22. No differences related to sex seemed to be indicated.

CHAPTER IV

DISCUSSION OF RESULTS

Discussion of Ratings:

Data collected in this study indicate that a relationship exists between children's attendance in preschool groups and their later adjustment in kindergarten as rated by their teachers. Children who had attended one or more kinds of preschools were judged to be better adjusted than those who had had no preschool group experiences before attending kindergarten. The difference between these two groups is significant to the five per cent level.

Attendance in more than one type of preschool group appeared to be more desirable in helping children adjust in kindergarten than experiences in only one or no preschool groups. (See Tables 1, p. 30; 2, p. 32; and 3, p. 34) Attending Sunday School alone appeared less desirable than attending a combination of preschool groups. However, it appeared slightly more desirable to attend Sunday School than to have had no preschool group experiences of any kind. These results suggest the possibility that hours of attendance per week in preschool groups are factors in determining future kindergarten adjustment. This is supported by results when hours per week of attendance in preschool groups were considered.

(Table 4, p. 36) Less favorable adjustment scores were received by the group of two hundred twelve children who had attended for 1 to 3 hours per week as compared to more favorable scores for groups who had attended preschool for 4 to 8 or 9 to 15 hours per week. Additional support for the possible importance of time spent in preschools in relation to kindergarten adjustment is shown in ratings of children who had attended only Sunday School. These children, except for one case, had attended for only one to three hours per week.

Results suggest the possibility that those children who had attended parent-cooperative and one or more other kinds of preschool groups are better adjusted in kindergarten according to the judgement of their teachers than those who had attended other combinations of preschools. One explanation for these results may lie in the attitude of parents who are willing to take their child to a preschool group in which parent participation and cooperation is expected. These parents may be more interested in working with young children than parents who send their children to other kinds of preschool groups. Separation from the parent is likely to be less abrupt than in some other kinds of preschool groups. In addition, the presence and participation of the parent or parents in the child's early group experience may make adjustment to future groups and later separation easier for the child. Parents who

take part in parent-cooperative groups may learn new and better ways of working with children. Some of the knowledge and understanding may be carried over and applied in the home. All of these factors may improve the child's ability to accept new situations and may make adjustment easier.

In every case, except for those who had attended only nursery school, children who had been to only one kind of preschool group were less well-adjusted than children with these experiences combined with other types of experiences. Those who had cases of "pure" nursery school attendance received a mean adjustment rating of 31.0 compared to 30.38 for those who had nursery school in combination with other experiences. In contrast, the seven children who had only miscellaneous group experiences received the lowest rating (35.0), while those with combinations including miscellaneous experiences were rated 30.2. Although the small number of "pure" cases prevents the differences from being considered significant, a definite trend toward more favorable adjustment is shown by children who had attended nursery school.

Low ratings of the children with "pure" miscellaneous group experiences may be the result of the nature of the

experiences. Some of them may have been inappropriate for children of preschool age. The rigid training which is required in some of these situations may have had inhibiting effects on the children's adjustment in group situations. Some of this training may have decreased the child's self-confidence and made him more hesitant to participate in group activities. In addition, some of the experiences probably provided little preparation for separation from the parent.

These findings suggest that an advantage may be found in provision for attendance in a variety of preschools. Broader background, which attendance in more than one kind of preschool group provides, may increase advantages and minimize disadvantages of isolated kinds of experiences. Some disadvantages may be canceled out. In addition, parents who provide their child with opportunities to attend more than one preschool group may be better able to permit the child to develop as an individual and become independent of them. These parents may be less anxious and have more confidence and trust in the child. This, according to Erikson (9), should increase the child's feelings of self-confidence and basic trust, thus improving his ability to adjust in new situations.

Data collected in this study do not support the popular belief that the number of children in the family

affects children's adjustment in kindergarten. There are no significant differences in scores of children from families of varying sizes, from only children up to nine children. There was no significant difference in scores as to whether the children were first, middle or last in the family.

There was a slight indication that age was an influence affecting the ratings. Kindergarten children who were six years or older on February 1, 1962, received more favorable ratings (with the exception of two cases who were over 6 years 9 months of age) than children under six. One explanation for this result may be related to the maturity of the older child. There is a possibility that kindergarten is used by some teachers largely to prepare children for first grade. This would mean a more formal school situation. Younger children may not be ready for such structured experiences and may not come up to expectations. These expectations and philosophy of the kindergarten teachers may have influenced the children's adjustment.

Contrary to what might be expected, no significant differences in adjustment were found when mean rating scores of boys and girls were compared. One possible explanation for this may be that Corvallis kindergarten teachers have a good understanding of developmental differences between boys and girls. They appear to have been able to accept these differences. Another possible

reason that no differences were found may lie in the decreasing distinction which our culture is making between roles and activities considered appropriate for each sex. (7, 24) To some extent, this has been reflected in child care practices. Parents are no longer making such rigid differentiation between activities, play things and training methods which are "suitable and proper" for girls and which are "suitable and proper" for boys.

Discussion of Parents' Comments Regarding Effects of Children's Preschool Attendance:

At the end of the questionnaires which were sent to them, (see p. 18, 19, 23 and Appendix E) parents were asked to express their opinions and attitudes concerning influences which the preschool group that their child attended may have had on his later adjustment in kindergarten. One hundred eighty-nine parents expressed positive attitudes about the influences of the preschool group. Negative attitudes toward preschool experiences were expressed by only twenty-four parents. Some of these were parents who had not sent their child to preschool. Ninety-one parents whose children had attended preschool before entering kindergarten did not answer the questions.

One hundred questionnaires were selected at random. Comments from these were examined more closely. Many of the parents who had expressed positive attitudes about the

influences of the preschool group which their child had attended said that the experiences had improved the child's ability to get along and to share with others. Some parents felt preschool had helped the child to learn independence and aided in separation from the home and themselves. Fifteen parents stated that they felt that their child had increased in self-confidence since attending a preschool group. A small group of parents (fourteen) said that their child had learned to conform and follow directions in the group which he attended. A number of parents expressed a belief that preschool attendance had helped their child in preparing for school and increasing his readiness to learn.

Some of the parents who had expressed negative attitudes simply stated that they felt that their child had not benefitted particularly from his experience but gave no further explanation. Among the reasons for not sending children to preschool groups were the following: enough other children in the neighborhood to play with, large family provided experiences in sharing, no preschool groups were available, children in America today need more experiences at home with their families, too much emphasis on social life all through school, and preschool groups were just excuses for lazy parents to get rid of their children.

It is possible that the ninety-one parents who did not express any opinion concerning the influence of preschool experiences on their child's adjustment in kindergarten may have felt neutral. Another reason for not completing the questions might have been that they had negative feelings which they did not want to express. They may have felt that the questions were too time-consuming to answer.

Approximately two hundred forty questionnaires sent to parents by the teachers were not returned. Some of these parents may have had negative attitudes toward group experiences for young children or they were not interested enough to complete and return the questionnaires. This may be one of the reasons why most of the parents who returned the questionnaires expressed favorable or no opinions about the preschool group experiences which their child had had.

The results of this study support opinions expressed by most of the parents. Children who had attended preschool groups before kindergarten were better adjusted according to the judgement of their teachers.

CHAPTER V

CONCLUSIONS, LIMITATIONS OF THE STUDY, AND SUGGESTIONS
FOR FURTHER STUDYConclusions:

In this study attendance in one or more types of preschool groups was found to bear a significant relationship to a child's adjustment in kindergarten as judged by his teacher. The difference in adjustment scores between those who had attended preschool groups and those who had not was significant to the five per cent level.

Attendance in several groups seemed more desirable than attendance in only one group. The number of hours per week spent in preschool groups also seemed to be related to favorable kindergarten adjustment.

Other factors appeared to exert some influence, but none of those considered in this study seemed to have a significant bearing on the child's adjustment in kindergarten.

Limitations to the Study:

The present study has many limitations in addition to those which have already been mentioned.

One of the most important of these is the nature of Corvallis, the community in which the study was conducted. It is not a typical community because it is

somewhat dominated by Oregon State University. There is not as wide a range of occupations, educational backgrounds, and socio-economic conditions as would be expected in the average community of its size. Although no great differences in these factors were found, no allowances were made for those that do exist.

Another limitation of this study is the lack of a number and wide variety of preschool groups available for Corvallis children. This is especially true of groups which provide for all-day care. In addition, little is known about the quality of the groups and training of staff in preschools that are available. Most groups are not licensed by the state or city. Some are not even registered with the Corvallis Chamber of Commerce.

Some of the factors which influenced the means of selection and elimination of subjects act as limitations to the study. Nothing is known of reasons why parents of approximately two hundred forty children did not return the questionnaires. Perhaps elimination of these children as subjects created a somewhat biased sample. Elimination of questionnaires which were incomplete may also have resulted in a biased sample. Another biasing factor may have resulted from elimination of thirty-four children in two classes who were rated incorrectly by their teacher.

Influence of factors other than those considered in the study limit the confidence that can be placed in the

results of the study. These include effects of growth and maturation, mental abilities, and quality of preschool group which the children attended before entering kindergarten.

The background, training and philosophy of the individual kindergarten teacher are other factors not considered which certainly have bearing on the results of the study. Little was known about her attitudes toward preschool experience or about her expectations for the children in her classes.

The design of the study and the limited numbers of "pure" cases of any one kind of preschool experience made it difficult to obtain results except for combinations of preschool experiences.

Suggestions for Further Study:

It is apparent that many factors which influence adjustment are to be found in those which were not considered in the present study. Researchers who would find a more complete answer to the question, "What factors influence children's early school adjustment?" need to look for additional determining elements. They need to examine more closely effects of early childhood experiences, parent and teacher attitudes, and the quality of the preschool groups attended.

In investigating effects of preschool experience on children's adjustment in kindergarten, the results and trends indicated by the present study suggest some possible directions for future research. These are:

1. Selection of a sample which includes a wider variety of types of preschool groups with larger numbers of cases in each group.
2. Development of a design which allows for better separation of children who have had different kinds of preschool experiences.
3. Development of a design which controls factors which acted as limitations to this study.
4. Further exploration of hours per week and length of attendance in preschool groups as factors influencing later school adjustment.

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APPENDICES

APPENDIX A

CHECK SHEET FOR SELECTION OF TRAITS*

Department of Family Life
 Oregon State University
 Minnie M. Kronenberg

DIRECTIONS: From the following 33 traits select the 15 traits which you feel reveal the most significant aspects of a child's behavior as it relates to his individual adjustment in kindergarten. Indicate your selection by placing an x in the blank before the trait. The explanatory phrase given in each case describes an average or mid-point rating. (In judging individual children, traits are rated on a seven-point scale from the most to the least of the trait.)**

___ 1. Popularity: (1)

Better liked by some children than by others.

*Read-Conrad California Behavior Inventory. Genetic Psychology Monographs, 22:455-487, 1940.

**SAMPLE

Popularity:

1. The child is a favorite with the other children; other children like especially to have the child as a playmate, or as a member of group activities.
4. Average popularity; better liked by some children than by others.
7. Child is unpopular; other children seldom choose him as a playmate and do not care to have him as a member in group activities.

- ___ 2. Talking to others, (social participation): (2)
Talks fairly freely to his friends; talks considerably less to others.
- ___ 3. Friendliness to adults: (4)
Friendliness depends somewhat upon mood, presence of mother, the approaches of the adult, etc.
- ___ 4. Companions in activities (social participation): (7)
Plays by self, as well as with others.
- ___ 5. Sense of responsibility in play and social reactions: (9)
Occasionally irresponsible about less important things, (e.g., will push a child from one step, or perhaps even two low steps); more likely to be somewhat rash or irresponsible when angry, tired, irritated; etc.
- ___ 6. Group cooperation: (10)
Child is interested in the group effort, and will participate normally so long as he is not asked to make a considerable sacrifice (such as doing something very menial for the group -- e.g., bringing in dirt so the others can make a long line of mud pies;) or foregoing his accustomed leadership.

___ 7. Self-reliance with respect to adults: (11)

Child asks adults for advice and help when confronted with a considerable difficulty or obstacle; asks for assistance and protection more often when tired, or when especially harassed.

___ 8. Self-sufficiency: (12)

Can enjoy playing and working by self for a while, but soon prefers to play with a companion or a group (as evidenced by slackening of the solitary activity, looking around and watching others).

___ 9. Number of interests: (13)

Has as many interests as most of the others his age.

___ 10. Curiosity: (14)

Tries to find out the principal points about the strange and the new. (Through questions or through his own investigations); but does not exhibit curiosity concerning the many aspects of the old.

___ 11. Behavior response to difficulty: (20)

Persists if the difficulty yields fairly promptly to his attempts. Otherwise effort flags and the child quits.

- ___ 12. Recovery from emotional disturbance: (21)
Average resilience. (Child may exhibit some of the "after effects" of the emotions, such as silence, inactivity, seclusion, showing off, pouting, brooding, irritability, etc., but he soon recovers).
- ___ 13. Adjustibility to new situations: (22)
Welcomes variations or small changes from the familiar, rather than genuinely new situations which he may not be prepared to meet.
- ___ 14. Happiness, cheerfulness; good humor, agreeableness: (24)
Less happy and cheerful when tired, more easily becomes cross when tired than when fresh and well.
- ___ 15. Desire for affection: (25)
Enjoys occasional caresses, but does not especially solicit or encourage them.
- ___ 16. Behavior reaction to sympathy or approval: (27)
Sympathy and approval serve with average efficiency; will not prevent child from quitting a very difficult task, or induce him to do what he strongly dislikes.
- ___ 17. Compliance with respect to suggestions: (28)
Suggestions are accepted or rejected according to their estimated utility, and according to

the person from whom the suggestion comes.

- ___ 18. Compliance in regime: (30)
Average cooperation and obedience in regime.
- ___ 19. Reaction to teasing: (32)
Is sensitive to teasing, but behavior is not especially disorganized unless many children join in the teasing at one time.
- ___ 20. Rights (self-assertion): (33)
Less insistent on some of his rights than others, but aware of what is due him and ready to make some resistance to the majority of encroachments.
- ___ 21. Attempts at leadership in group: (34)
Child tries occasionally to lead the group, but more often is content to be merely one of its several individual participants.
- ___ 22. Ease with which the child is emotionally affected: (36)
Child is average in respect to the ease or difficulty with which emotion can be aroused.
- ___ 23. Restlessness: (38)
Average self-possession when standing, sitting, watching, etc.; average restlessness.
- ___ 24. Dependence on outside suggestion and direction: (40)
Generally requires no suggestion or direction

to get started; but if an unusual difficulty is encountered, the child is likely to be more or less at a loss, and require some outside suggestion or direction in order to do something about the obstacle.

___ 25. Apprehensiveness: (42)

Becomes a little anxious, for example, while waiting for a vaccination, but does not usually worry much in advance. Occasionally slightly apprehensive at prospect of the unfamiliar.

___ 26. Elaboration or indirectness of response to failure and frustration:

Occasionally resorts to indirect response or subterfuge. Average compensation or sublimation of failure and frustration.

___ 27. Bossiness in a group or with individual playmates: (50)

Child is occasionally "bossy" under special circumstances, e.g., when a group in which he feels perfectly self-confident, when trying to show off; ordinarily, however, the child rather seldom over-orders, or makes attempts at leadership which are sufficiently unsuccessful or unwelcome to be called "bossy." Becomes "bossy" with a very submissive playmate only, or if trying to show off.

- ___ 28. Fault finding: (52)
- Usually criticizes and finds fault only when such criticism is useful or justifiable. Is discriminating in his criticisms; does not find fault needlessly, or use fault-finding as a general means of self-assertion.
- ___ 29. Ease of stimulation of anger, (other than anger displayed in temper tantrums, when child is dealing with adults): (58)
- Does not usually become angry unless he has been obviously and markedly wronged.
- ___ 30. Attacking others: (59)
- More likely to attack if the other child who denies him what he wants is smaller than himself, or if no adult is at hand.
- ___ 31. Jealousy or partiality to another child: (63)
- Notices and resents flagrant cases of partiality but is apparently unaware of, or unconcerned with, minor causes for possible jealousy.
- ___ 32. Nervous habits: (64)
- Average. Shows nervous habits under provocation.

APPENDIX B

DIRECTIONS

The Behavior Inventory consists of a list of numbered traits. Each trait in the inventory has been described; (a) by a suggestive heading; and (b) by an elaboration or illustration of the heading; in this elaboration the two extremes of the trait are rather fully illustrated and defined, and the middle or average of the trait is usually stated somewhat more briefly.

Please give all children a rating for each trait, on a seven-point scale. Rate all the children for each individual trait, before proceeding to the next trait . . . When rating, please take the child's chronological age into consideration. Each child should be rated only in comparison with others of the same chronological age.

The symbols to be used in rating are as follows:

- "1." The child is extreme and outstanding, in the manner indicated in the upper third of the description of the trait. (may be thought of as $\nearrow \nearrow 1$)
- "2." The child is noticeably exceptional, in the direction indicated by the upper third of the description of the trait. (may be thought of as $\nearrow \nearrow$.)
- "3." The child differs from the average for his age, leaning in the direction indicated by the upper third of the description of the trait. (may be thought of as \nearrow .)
- "4." Average for the child's age. (may be thought of as $\underline{\quad}$.)
- "5." The child differs from the average for his age, leaning in the direction indicated by the lower third of the description of the trait. (may be thought of as $-\cdot$.)
- "6." The child is noticeably exceptional, in the direction indicated by the lower third of the description of the trait. (may be thought of as $-\cdot-\cdot$.)
- "7." The child is extreme and outstanding, in the manner indicated in the lower third of the description of the trait. (may be thought of as $-\cdot-\cdot 1$)

Name of Child _____

Teacher _____

READ-CONRAD CALIFORNIA BEHAVIOR INVENTORY
 (from Genetic Psychology Monographs, 22:455-487, 1940.)

DESCRIPTION OF TRAITS

- 1. Companions in activities (social participation):
 (7)
1. Child's activities are highly social, always involving a playmate or a group.
 4. Average. Plays by self, as well as with others.
 7. Child's activities are characteristically asocial. Plays and works by self.
- 2. Sense of responsibility in play and social reactions: (9)
1. Child is exceptionally considerate of the consequences of what he does in his play, and in his social engagements; (e.g., will never put the yellow paint brush into the red paint); will not push a child from even a slightly dangerous place (e.g., from a step); will not let a heavy barrel which he is playing with, roll about the yard without control; will not throw a heavy object at another child, even when the object is very handy and he is very angry, etc.
 4. Average. Occasionally irresponsible about less important things, (e.g., will push a child, from one step, or perhaps even two low steps); more likely to be somewhat rash or irresponsible when angry, tired, irritated; etc.
 7. Recklessly irresponsible and inconsiderate of consequences of his actions; e.g., will quite composedly and perhaps good-naturedly "pat" a playmate on the head with a heavy board; will push a child down several steps in order to get him out of the way; when angry, will throw heavy objects at a child's face; etc.
- 3. Group cooperation: (10)
1. Excellent in group-cooperation and team-play; is either a competent and well-liked leader, or an actively interested and wholly cooperating member of the group. Is willing

to make considerable sacrifice in order to further the group aim.

4. Average. Child is interested in the group effort, and will participate normally so long as he is not asked to make a considerable sacrifice (such as doing something very menial for the group -- e.g., bringing in dirt so the others can make a long line of mud pies; or foregoing his accustomed leadership, etc.)
7. Poor in group-cooperation and team-play; is either a self-willed indomitably "Bossy" or insufficiently interested in the group aim to make a good social member.

— 4. Self-reliance with respect to adults: (11)

1. Exceptionally self-reliant; rarely asks adults for assistance, protection, or advice; rarely asks for information which he can discover by himself. Child accepts assistance from adults only if convinced by previous failure that he needs or can profit by it; accepts advice only if convinced that it is in accord with his own desires and ideas.
4. Average. Child asks adults for advice and help when confronted with a considerable difficulty or obstacle; asks for assistance and protection more often when tired, or when especially harassed.
7. Exceptionally dependent on adults. Continually making bona fide requests for help, protection, information, advice or moral support; very ready to accept assistance or advice. (Do not confuse requests which are designed mainly as bids for attention, with genuine requests for help, information, etc.)

— 5. Curiosity: (14)

1. Child is keenly curious. Asks many questions for information about things, persons, etc. (Do not confuse a bid for attention with questions prompted by genuine curiosity); explores, investigates, tries things out, etc.
4. Average. Tries to find out the principal points about the strange and the new. (Through questions or through his own

investigation); but does not exhibit curiosity concerning the many aspects of the bid.

7. Child conspicuously lacks curiosity; fails to ask questions, investigate, explore, try things out, or otherwise show interest in even the strange and the new. Child is either dully indifferent, or too timid or backward in his interests.

— 6. Behavior response to difficulty: (20)

1. Child tends to persist steadfastly, with undiminished energy, despite great difficulty or failure. Undiscriminatingly pertinacious.
4. Average. Persists if the difficulty yields fairly promptly to his attempts; otherwise effort flags and child quits.
7. Child falters quickly at difficulty, and quite too readily. Requires much encouragement to persist.

— 7. Recovery from emotional disturbance: (21)

1. After the immediate emotional response the child behaves in its normal manner; no "after effects" of the emotions such as unusual silence, inactivity, seclusion, showing off, pouting, brooding, irritability, etc. Child is exceptionally resilient, recovers very quickly.
4. Average resilience.
7. Lack of resilience. Child tends to remain (inwardly) in a persistently disturbed state; the immediate emotion brings an aftermath of disturbance in behavior (such as unusual silence, inactivity, seclusion, showing off, pouting, brooding, resentment, irritability, etc.). Internal emotion evidently continues after the emotional situation and the immediate emotional reaction have passed.

— 8. Adjustability to new situations: (22)

1. Child welcomes changes and new situations; is venturesome, exploring; enjoys novelty of a situation.
4. Average. Welcomes variations or small changes from the familiar, rather than genuinely new situations which he may not be prepared to meet.

7. Not at all venturesome; shrinks from making new adjustment; greatly prefers the habitual and the familiar to the stress of reorganization required by the new. Routinated.
- 9. Dependence on outside suggestion and direction:
(40)
1. Child requires continuous outside suggestion and direction (from adults or other children), in order to choose an activity, or to select a method of overcoming an obstacle, etc. Finds it exceptionally difficult to get started and keep going 'on his own hook.' Lacks initiative.
 4. Average initiative. Generally requires no suggestion or direction to get started; but if an unusual difficulty is encountered, the child is likely to be more or less at a loss, and require some outside suggestion or direction in order to do something about the obstacle or difficulty.
 7. Child promptly and of own accord choose the activity in which he is to engage, selects the method to be used in overcoming an obstacle, etc. Requires no outside suggestions or direction in order to get started and keep going. Has exceptional amount of initiative.

APPENDIX C

DIRECTIONS FOR RATING CHILDREN'S ADJUSTMENT
USING THE BROWN SCALESPlease Read Carefully

You are being asked to make four separate ratings concerning some characteristics of the adjustment of the child named on each sheet. Please try to make each rating independently of the others, and as accurately as possible. On each of the next two pages you are to rate 2 particular characteristics as indicated on the page. You may employ whatever criteria you deem relevant, though certain general suggestions are offered.

Each of these pages contains a line with 4 points, "Very Good," "Good," "Fair" and "Poor," indicated. These are intended as guides. You may mark anywhere on the line which you feel best represents your estimate. For example, if the child is better than "fair" but not "good," mark the line somewhere between these points, wherever you think he fits, etc.

Please feel free to make any comments which occur to you. A space for these is provided at the bottom of each rating.

Thank you.

(Mrs.) Minnie M. Kronenberg

Name of Child: _____

Teacher: _____

1. Adjustment to Group Activities*

Very Good

Good

Fair

Poor

This scale refers to the general level of adjustment exhibited by the child in his routine attitudes toward and participation in usual classroom activities.

Consider the child's ability to initiate activities, his willingness to join them, his need to be urged or his aloofness from them.

Comments:

*Brown, Ann Wilson, and Hunt, Raymond G. Relations Between Nursery School Attendance and Teachers' Ratings of Some Aspects of Children's Adjustment in Kindergarten. in Child Development, 32:585-596, 1961.

2. Adjustment to Other Children

 Very Good

This scale refers to the general level of adjustment exhibited by the child in his day-to-day relationship with the other children in his class.

Good

Fair

Poor

Consider the child's natural leadership qualities, his ability to sometimes lead and sometimes follow, his desire always to follow or bossiness in always wanting to lead.

Comments:

3. Adjustment to Teacher

 Very Good

This scale refers to the general level of adjustment exhibited in the child's routine relationships with you as his teacher.

Good

Fair

Poor

Consider child's cooperation with you, his desire to be more than helpful, his wanting to have your attention or approval or his lack of awareness of you.

Comments:

4. Personal Adjustment

Very Good

This scale refers to the general level of adjustment you feel to characterize this child as a person.

Good

Fair

Poor

You may consider both your knowledge of him within your classroom and outside your classroom. You may also wish to think in terms of his "inner" adjustment.

Comments:

APPENDIX D

Department of Family Life
School of Home Economics
Oregon State University
November 1, 1961

Dear Parents,

As a graduate student in the Department of Family Life at Oregon State University, I am interested in learning about the different kinds of pre-school experiences available for young children and would like your help.

We know that many children who are now in kindergarten have previously attended one or perhaps several pre-school groups. With the permission of Mrs. McBee and the kindergarten teachers, I am gathering information about the kinds of pre-school groups available for young children. I have prepared a blank for this purpose. I shall appreciate it very much if you will take time to fill it out, answering the questions about your child's experiences.

Please check the first part even if your child has not been to a pre-school group. If he or she has been to more than two groups, please ask the teacher for another blank or write the information on the back of this one.

I am hoping to use this information as part of a thesis for my master's degree, so it would help me very much if you would return the blank to the teacher before November 20, 1961.

Thank you very much for your cooperation.

Sincerely yours,

(Mrs.) Minnie M. Kronenberg

APPENDIX E

QUESTIONNAIRE TO PARENTS OF KINDERGARTEN CHILDREN

Part of a study by Minnie M. Kronenberg, graduate student,
Department of Family Life, Oregon State University, 1961.

Child's name: _____, _____, _____
(first) (middle) (last)

Birth date: _____, _____, _____. Sex: _____
(month) (day) (year)

Parents' occupations: Father: _____ Mother: _____

How many children in the family? _____

Ages of children in the family? _____

Kindergarten this child is now attending: _____

This child has been to: (check) nursery school _____
Sunday School _____ all-day group care _____
parent-cooperative group (parents helping paid teacher) _____
parent-cooperative group (no paid teacher) _____
other: (list) _____, _____, _____

* * * * *

Please complete a blank for each group that your child
attended before kindergarten.

* * * * *

Name of the pre-school group: _____

Address: _____, _____, _____, _____
(number) (street) (city) (state)

Dates he attended: From _____ to _____
(month, year) (month, year)

Hours he attended: (morning) from _____ to _____ o'clock
(afternoon) from _____ to _____ o'clock

Number of days per week he attended. (circle) 1 2 3 4 5 6 7

Approximate number of children who were in the group: _____

* * * * *

APPENDIX F

ERRORS COMMONLY MADE BY RATERS (20)

" G E N E R O S I T Y E R R O R - - "

TENDENCY TO OVER-ESTIMATE THOSE
LIKED BY THE RATER --
UNDER-ESTIMATE THOSE DISLIKED.

" H A L O E F F E C T - - "

TENDENCY TO RATE A PERSON
SIMILARLY ON ALL TRAITS.

" T E N D E N C Y T O A V O I D E X T R E M E S - - "

TENDENCY TO "BUNCH" THOSE BEING
RATED TOGETHER NEAR THE CENTER
OF THE SCALE.

" C O N T R A S T E R R O R - - "

TENDENCY OF RATER TO SEE OTHERS
AS DIFFERENT FROM HIMSELF.