A COMPARATIVE STUDY OF THE ENVIRONMENTAL INFLUENCE UPON THE
DEVELOPMENT OF FIFTY FIFTH-GRADE PUPILS FROM THE REYNOLDS
SCHOOL AND FIFTY FIFTH-GRADE PUPILS FROM THE
OLIVER SCHOOL, STAMFORD, TEXAS

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A COMPARATIVE STUDY OF THE ENVIRONMENTAL INFLUENCE UPON THE
Development of Fifty Fifth-Grade Pupils from the Reynolds
School and Fifty Fifth-Grade Pupils from the
Oliver School, Stamford, Texas

THESIS

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MASTER OF ARTS

By

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CHAPTER I

INTRODUCTION

Problem and Purpose of the Study

It has always been evident that differences exist in the environments of children. In the traditional school, a child's ability to learn was measured largely by his mental alertness and his biological inheritance. However, within recent years the environmental differences have been recognized to some extent as playing a large role in the development of the habits and ideals, the character, and the personality of the child.

In spite of the importance of this phase of child life, it has been greatly neglected. Much has been said concerning the part played by intelligence and on the necessity of right inheritance, but little has been done to point out the effect that poor environment can have on the child's personality, intelligence, character, and achievement. We live by interacting with the environment in which we live; therefore, it behooves us to emphasize the importance of early environmental influence.

The major purpose of the study is to reveal, by means of comparison, the extent to which environment has influenced
the development of the fifth-grade pupils of the Reynolds and Oliver Schools of Stamford, Texas.

A further purpose is to interpret the data collected in order that plans for environmental improvement may be made, not only in terms of the facts revealed in the data, but also in terms of factors that are operating in the community to bring about inadequate wholesome environmental conditions.

Source of Data

One hundred fifth-grade pupils, fifty from the Reynolds School and fifty from the Oliver School, were used in making this study. More than one hundred twenty pupils were tested at various times during the year, but for various reasons parts of some of the tests were not filled out. Some of the students were absent on the days when the tests were given, and some of the students moved from the district before the tests were all given. For these reasons, only one hundred pupils were selected, and these have taken the complete set of tests: intelligence, personality, achievement, and socio-economic.

In October, 1949, the group under consideration was given the Otis Group Intelligence Scale.\(^1\) The results of these tests were used to determine the intelligence quotient of each pupil. The group was given the Sims Score Card for

\(^1\)Arthur S. Otis, Manual of Directions for Administering and Scoring the Otis Group Intelligence Scale, pp. 1-10.
Socio-Economic Status in November. 2 This score card is a simple and fairly objective device by which to ascertain and record the facts about the general cultural, social, and economic home background. These score cards were used to secure the environmental conditions that each child was confronted with. The California Test of Personality was given to the group in February. 3 The results of the personality tests were used to secure the personality rankings of the pupils. The Stanford Achievement Tests were used to determine the achievement of the group. 4 These tests were given in February also.

The information gathered from these tests serves as a basis for the considerations contained in this study.

Conditions Existing in the Schools

The Reynolds Elementary School has an enrollment of 297 pupils for the year 1949-50. There are nine teachers in the system carrying on a well-planned program. The school has a special music teacher and a special art teacher. Public school music and art are offered to all pupils.


A health program is maintained by the school. It is carried out to the fullest extent with a graduate nurse on duty at all times.

This school is located in the eastern part of the town of Stamford. The residents are all home owners of long standing. The doctors, dentists, lawyers, and merchants live in this section of the town. A few bus students attend this school; however, their parents are large land owners.

The Oliver Elementary School has an enrollment of 310 pupils for the year 1949-50. There are ten teachers in the system. This school also has a well-planned program. It takes part in the health program as well as in the music and art program. The two schools are organized along the same basis; therefore, the pupils of each school receive the same training.

This school is located in the northern part of the town. A few home owners live in this area, although the residents for the most part are renters. The tourist courts are located in this section of the town; also there are various other rental units in this area. Many transient people live in this section of town due to the availability of these rental units. Also, many Latin-American families live in this area; many children are brought by bus to the Oliver School.

There is a tendency on the part of some to think that the pupils of the Reynolds school are superior in social
standards and skills, personality traits, and intellect to the pupils of the Oliver school. In a comparative study carried on with these two groups chosen from the fifth grade, fifty pupils from the Reynolds school and fifty pupils chosen from the Oliver school, the writer hopes to find out if the above opinion is true.

Conditions Existing in the Community

Stamford is a small town, with a population of about six thousand, located in West Texas. It is an important farming country; however, some ranching is carried on. In recent years oil has been the leading industry and has brought many people into town and the surrounding community.

The town has three distinct classes of people. There are many old families that have lived in Stamford for years. The children from many of these homes have excellent home environment. There are a few people living in Stamford, however, that follow the oil fields. Children of such families have the poorest types of homes, many of them living in one-room apartments and shacks. The third class of people living in Stamford is the Latin-American. These people follow the sugar beet harvest and return to Stamford in time for the cotton harvest. The Latin-Americans live in the poorest of dwellings. The children usually enter school some time after Christmas and often not until the second semester.
Related Studies

There have been a number of studies made on the relationship of the environment to achievement and other phases of the learning process.

In 1940 Clark made a study of a group of thirty-five children in the Albany school to determine the relationship of the socio-economic background to achievement in particular and to personality and intelligence as secondary considerations.\textsuperscript{5} Four standard tests were given the children, and the correlation of one phase of the learning process to the other was made. The study revealed that the socio-economic status played a large role in the personality development of the group studied, made a significant contribution to school achievement, and played a small part in determining the intelligence score of individual pupils.

In 1947 Rohde made a study of thirty-four pupils of the Pleasant Mound school to determine the influence of environmental factors upon the learning process.\textsuperscript{6} Four standard tests were given and the correlation of one phase of the learning process to the other was made. The study showed

\begin{footnotesize}
\textsuperscript{5} J. Frances Clark, "A Comparative Study of Environmental Conditions and Their Relations to Achievement, Personality, and Intelligence of Fifth Grade Pupils" (Unpublished Master's Thesis of North Texas State College, Department of Education), p. 2.

\textsuperscript{6} Hazel S. Rohde, "A Comparative Study of Environmental Conditions and Their Relations to Achievement, Personality, and Intelligence of Seventh Grade Pupils" (Unpublished Master's Thesis of North Texas State College, Department of Education), p. 2.
\end{footnotesize}
that the relationship between intelligence and achievement was very close, that a negative correlation existed between the socio-economic status and personality, and that a low intelligence score and a low socio-economic score combined resulted in a low achievement score.

The present study is somewhat like Clark's and Rohde's in that it is a study to determine the influence of environment on the achievement of the pupil, but it is different in the respect that it is a study of two groups to ascertain by means of comparison the influence of environment on the achievement of the pupils.

Definition of Terms

Socio-economic means all the things that go to make up the child's environment; these are the type of home, education of parents, social opportunities, occupation of parents, and general environmental conditions.

Environment is the aggregate of all external and internal conditions affecting the existence, growth, and welfare of organisms, that is, one's surroundings or external circumstances collectively.

Personality is defined differently by many writers. Thomas L. Hopkins says:

Personality represents the expanding and differentiating total behavior of the individual. In
its broader sense, it refers to all behavior or to the ever-expanding total behavior, or to the undifferentiated behavior of the individual.\(^7\)

Wheeler and Perkins give several different views on personality. They state: "Personality evolves a single behavior pattern with each act depending upon every other while it is emerging."\(^8\)

Achievement is the thing accomplished, a noteworthy and successful action. A child's achievement in school is the type of work that he accomplishes.

Intelligence is the product of active intellect and the capacity to meet situations, especially if new or unforeseen, by a rapid and effective adjustment of behavior. It is also the native ability to grasp the significant factors of a complex problem or situation.

Procedure

The one hundred pupils studied were given the Otis Group Intelligence Scale in October, and they were given the Sims Score Card for Socio-Economic Status in November. The results of these tests were recorded and analyzed for the purpose of determining, as far as possible, the reaction of the pupils to many school situations.

In February, the California Test of Personality was given to the group as well as an achievement test, the

\(^7\)Thomas L. Hopkins, Integration: Its Meaning and Application, p. 10.

\(^8\)Raymond H. Wheeler and Francis T. Perkins, Principles of Mental Development, p. 25.
Stanford Achievement Test. The results of these tests were also charted and their results studied.

Method Used in Collecting Data

The one hundred pupils used in the study were selected from the four fifth grades in the two elementary schools, fifty pupils from the Reynolds school and fifty pupils from the Oliver school.

The tests were given in each class of the Reynolds school by the same teacher while those given in the Oliver school were given by the principal of the school. In both cases the directions for administering the tests were observed very rigidly.

All tests were checked and scored. The percentile rank on every item was worked out, and the pupil's percentile rank for each item was charted graphically on the front of the test booklet.

A large record sheet was provided for each of the four tests on which were placed all the item scores as well as the total scores of the individual taking the tests. These data comprise the subject matter of the investigation.

The data were organized on the basis of the development of the study. A preview of the problem together with its limitations, source of data, definition of terms, and method of procedure is included in Chapter I. The basis of learning ability, the intelligence quotients of the pupils in
the two groups of children studied, is presented in Chapter II. In this chapter especial attention is directed to any differences in mental ability on the part of one group or the other which might operate to affect total grade achievement. The socio-economic status of the families of the two groups is described in Chapter III. Here again differences are stressed. The personal and social adjustments of the pupils in the two groups comprise the subject matter of Chapter IV. In Chapter V the total achievement rankings of the pupils are studied and the evaluation in terms of causative factors is developed. The summary and conclusions of the study are stated in Chapter VI, and recommendations are made where needs indicated remedial measures.
CHAPTER II

THE COMPARISON OF THE FIFTH-GRADE PUPILS OF THE REYNOLDS AND THE OLIVER ELEMENTARY SCHOOLS IN MENTAL ABILITY AS SHOWN BY THE OTIS GROUP INTELLIGENCE SCALE

In studying any group of children, especially in making comparisons, it is necessary to look first at their mental age or intelligence quotient. Where marked differences exist between groups in this respect, no valid comparisons may be made because the mental ability of the children conditions reactions to many and varying situations. One of the first steps, therefore, in studying these two groups of children was determination of differences, if any, in mental ability.

Comparison of the Total Number of Pupils in the Reynolds and Oliver Schools

The Otis Group Intelligence Scale was administered to the pupils in the Reynolds group and in the Oliver group. The results obtained from this intelligence test are presented in Table 1 and Table 2.

Table 1, page 12, presents the total scores according to the age groups of the pupils in the study to whom the Otis Group Intelligence Scale was given. As shown in Table 1, four age groups are considered in tabulating the returns from the tests.
### TABLE 1

The comparison of the total scores according to age groups of fifth-grade pupils in the Reynolds and Oliver schools as shown by the Otis group intelligence scale.

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Total Scores*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>O</td>
</tr>
<tr>
<td>9-0 to 9-11</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>10-0 to 10-11</td>
<td>.</td>
<td>1</td>
</tr>
<tr>
<td>11-0 to 11-11</td>
<td>.</td>
<td>1</td>
</tr>
<tr>
<td>12-0 to 12-11</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>13-0 to 13-11</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Total</td>
<td>.</td>
<td>1</td>
</tr>
</tbody>
</table>

*"R" represents Reynolds group; "O" represents Oliver group.

The age groups are: nine years and no months to nine years and eleven months; ten years and no months to ten years and eleven months; eleven years and no months to eleven years and eleven months; twelve years and no months to twelve years.
and eleven months; and thirteen years and no months to thirteen years and eleven months. As shown in Table 2, page 14, the medians were figured for the returns from each age group and differences were computed between the median and the norm set up in the standard test.

In the first age group, nine years and no months to nine years and eleven months, the median intelligence percentile rank is eighty-nine for the Reynolds group and eighty for the Oliver group. Since the norm for this intelligence test is fifty, the Reynolds group exceeds the norm by thirty-nine points and the Oliver group by thirty points. The Oliver group, therefore, has a slightly lower rank in intelligence rating at this age group than the same age group in the Reynolds school.

In the second age group, ten years and no months to ten years and eleven months, the median percentile rank for the Reynolds group is eighty-eight and for the Oliver group, eighty. The Reynolds group exceeds the norm by thirty-eight points, while the Oliver group exceeds the norm by thirty points. There is only one point difference between the median percentile ranks for the two age groups in the Reynolds school, while the median rank is the same in the Oliver school for both age groups considered.
### Table 2

The comparison of the total number of fifth-grade pupils in the Reynolds and Oliver schools who have certain intelligence quotients and percentile ranks computed from the various age groups and the median percentile rank of each group as shown by the Otis Group Intelligence Scale.

<table>
<thead>
<tr>
<th>Age Groups</th>
<th>Intelligence Quotient</th>
<th>Percentile Ranks</th>
<th>Total</th>
<th>Median</th>
<th>Norm</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>80-89</td>
<td>90-99</td>
<td>100-109</td>
<td>110-119</td>
<td>120-129</td>
<td>130-139</td>
</tr>
<tr>
<td></td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>R</td>
</tr>
<tr>
<td>9-0 to 9-11</td>
<td></td>
<td>1</td>
<td>4</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10-0 to 10-11</td>
<td>1</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td>11-0 to 11-11</td>
<td>3</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>12-0 to 12-11</td>
<td>2</td>
<td></td>
<td>1</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-0 to 13-11</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>11</td>
<td>16</td>
</tr>
</tbody>
</table>

*"R" represents Reynolds group; "O" represents Oliver group.
In the third age group, eleven years and no months to eleven years and eleven months, the median percentile rank in intelligence is forty-seven for the Reynolds group and fifty for the Oliver group. This percentile rank in intelligence is a decided drop for both groups, but the drop is more pronounced for the Reynolds group than for the other. The Reynolds group has a deviation of three points below the norm of fifty percentile rank in intelligence. The percentile rank of the Oliver group rests on the norm. In the two previous age groups considered, the median intelligence percentile rank of the pupils in the Reynolds school exceeds that of the pupils in the Oliver group.

In the fourth age group, twelve years and no months to twelve years and eleven months, the median percentile rank in intelligence is fifty-three for the Reynolds group and twelve for the Oliver group. In this instance the median percentile intelligence rank of the pupils in the Reynolds group exceeds the norm by three points, while that of the pupils in the Oliver group falls below the norm thirty-eight points. The greatest degree of difference yet registered is shown here.

In the fifth age group, thirteen years and no months to thirteen years and eleven months, none of the pupils from the Reynolds group placed, while the median percentile rank of the pupils in the Oliver group is eleven, a deviation of thirty-nine points below the norm of fifty points.
The total average median percentile rank in intelligence is eighty-five, thirty-five points above the norm, while that for the Oliver group is 73.5, 23.5 points above the norm. While there is a variation in favor of the Reynolds group of 11.5 points in intelligence, the fact that both groups test above the norm indicates ability to learn on the part of both groups.

In order to show a graphic comparison of the median (rough) percentile ranks of the Reynolds group and the Oliver group in each age group of the study, Figure 1 was prepared; Figure 1 is shown on page 17. The median percentile ranks are taken from the figures presented in Table 2.

As shown in Figure 1, the highest percentile rank in intelligence among the Reynolds group and the Oliver group occurs in the first age group, nine years and no months to nine years and eleven months, and the second highest percentile median is only slight lower in the ten years and no months to ten years and eleven months age group. From this level the median rank falls sharply until it is just below the norm. From here it rises slightly to three points above the norm, but the median rank does not drop any lower.

The percentile rank of the pupils in the Oliver group, as indicated by the red line in Figure 1, is eighty for both the first and second age groups. This drops to fifty in the third age group and then makes a steep dive to only slightly over ten percentile points in the fourth and fifth
Fig. 1.—The comparison of the median percentile ranks computed from the age groups of the Reynolds and Oliver pupils as shown by the Otis Group Intelligence Scale.
age groups. The total for all ages is a little more than midway between percentiles eighty and ninety and not quite midway between percentiles seventy and eighty for the Oliver group.

Summary

The following findings may be listed from a study of the data obtained from the standard intelligence test given the pupils in the Reynolds group and the Oliver group:

1. The total median percentile rank of the pupils in the Reynolds group exceeds that of the pupils in the Oliver group by 11.5 points.

2. The median percentile ranks of the pupils in intelligence in the Reynolds group exceeds that of the pupils in all age groups except the third age group.

3. The median percentile rank in intelligence for the pupils in the Reynolds group and the Oliver group varies only slightly in the first three age groups; the greatest differences are found among the older age groups.

4. There are only four pupils in the fourth age group, one from the Reynolds group and three from the Oliver group, while there is only one pupil from the latter group in the fifth age group. The majority of the pupils, ninety-five out of the total number of one hundred, therefore, are very well matched in intelligence with the differences not being significant at the first three age levels.
5. A very large majority of the pupils in the study, therefore, are well above the norm in average intelligence and are capable of learning in average school situations. In the study of their accomplishments in school, other factors than intelligence must be given consideration if failure in grade progress or low achievement scores are reported.
CHAPTER III

COMPARISON OF THE FIFTH-GRADE PUPILS OF THE REYNOLDS 
AND OLIVER ELEMENTARY SCHOOLS IN SOCIO-ECONOMIC 
STATUS AS REVEALED BY THE SIMS SCORE CARD

Modern educational philosophy advances the theory that a child's socio-economic environment greatly influences adjustments in personality. Personality adjustment, in turn, it is believed, influences grade progress in school and average achievement scores. In studying these groups of children, therefore, it was necessary to study their socio-economic environment in order to interpret personality adjustment and the part that it plays in the pupil's growth and advancement in school.

Comparison of the Socio-Economic Environment of Pupils in the Reynolds and Oliver Schools

The Sims Score Card was used in determining the socio-economic environment of the pupils in the Reynolds and Oliver groups. Various factors are considered in the ratings on this card: the education of the parents, high school and college, the occupation of the parents, the number of books and magazines in the homes, the number of servants in the homes, the number of automobiles owned by the families, and the number of rooms in the houses occupied by the families.
Twelve possible ratings are used in determining the socio-economic status: indeterminately high, highest, very high, high, medium high, medium, medium low, low, very low, lowest, and indeterminately low. The pupils filled out the Sims Score Cards, and their families were then classified under one of the twelve ratings.

The median percentile scores are used to study the socio-economic status of the families represented by the two groups of pupils. These data are shown in Table 3, pages 22 and 23.

None of the families represented by either group fall in the indeterminately high level or the indeterminately low level. Between these two extremes, many variations are found.

Only two families, one in the Reynolds group and one in the Oliver group, are in the highest classification. The median percentile score for these families is ninety-five, forty-five percentile points above the norm. Seven families are in the very high group, but six of these are in the Reynolds group. The median percentile score for the Reynolds group, in this instance, is ninety; this is forty percentile points above the norm. The median percentile score for the Oliver group is eighty-eight, which is thirty-eight points above the norm.

The number of families sharply increases in the high classification. Fifteen families in the Reynolds group
Table 3

The comparison of the total number of fifth-grade pupils in the Reynolds and Oliver schools who have certain percentile ranks on the corresponding level of socio-economic status as shown by the Sims score card and the median percentile rank of each group on each level of the status.

<table>
<thead>
<tr>
<th>Corresponding Levels of the Socio-Economic Status</th>
<th>0 4</th>
<th>5 11</th>
<th>12 20</th>
<th>21 29</th>
<th>34 49</th>
<th>50 64</th>
<th>65 77</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>O</td>
<td>R</td>
<td>O</td>
<td>R</td>
<td>O</td>
<td>R</td>
</tr>
<tr>
<td>Indeterminately high</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Highest</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Very high</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>High</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>Medium high</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>.</td>
<td>13 13</td>
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<td>3 6</td>
<td>7 12</td>
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**R** represents Reynolds group; **O** represents Oliver group.
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<td>15 7</td>
<td>64 62</td>
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<td>54 55</td>
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<td>45 42</td>
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<td>33 28</td>
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<td>71 60</td>
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fall into this category, and their median percentile score is eighty-four, thirty-four points above the norm. The Oliver group has seven families in this classification and a median score of eighty-two in the percentile rank.

At the next level, medium high, there are thirteen families from each group. Median percentile scores are sixty-nine, which is nineteen percentile points below the norm. From this point on, the number of families in each classification is greater in the Oliver group than in the Reynolds group; before this point, a greater number of the families had been from the Reynolds group at each level of classification.

At the medium level of socio-economic status, there are seven families from the Reynolds group and twelve from the Oliver group. The median percentile for the Reynolds group is fifty-four, and for the Oliver group the median percentile is fifty-five. This is the only instance where the socio-economic status of the Oliver group exceeds that of the families in the Reynolds group, and there is only one percentile point difference here.

From the medium low level the families of both groups are below the norm in median percentile scores. At this medium low level the three families in the Reynolds group are seven points below the norm, and the eight families in the Oliver group are eight points below the norm.

Three families from the Reynolds group and eight families from the Oliver group are classified as low; they fall eighteen and twenty-two percentile points, respectively, below the norm.
Two families in the Reynolds group have a median percentile score of sixteen, a deviation from the norm of thirty-four percentile points. None of the families from the Oliver group are classified at this level, but two, with a median percentile score of eight and a deviation of forty-two percentile points, are classified as lowest.

The data show that the median percentile score for the Reynolds group falls in the medium high rank on the Sims Score Card at the 15.1 point level. Median percentile score for the Oliver group is in the medium classification and has a rating of twelve percentile points. Forty-two pupils, or eighty-four per cent of the Reynolds group, represent homes which are above the average, while thirty-four pupils, sixty-eight per cent, of the Oliver group likewise come from homes above the average in socio-economic status if the level of the Score Card is satisfactorily considered average. The results show that sixteen per cent more of the families represented by the Reynolds group rate above the average than those in the Oliver group.

Very decided differences, it is indicated, exist between the two groups in socio-economic status in many instances. These differences are graphically portrayed in Figure 2, page 26.

As shown in Figure 2, the lines representing the two groups of pupils are together in the highest classification at the percentile of ninety-five. From here the red line
Fig. 2.—The comparison of the median percentile ranks computed from the corresponding levels of Socio-Economic Status of the Reynolds and Oliver pupils as shown by the Sims Score Card.
diverges to show some difference at the very high level, but it ascends again almost to the line representing the Reynolds group at the high classification. From here on each line descends sharply downwards with the red line being at the same point as the black line at percentile sixty-eight in the medium high classification. The red line then rises slightly above the black line, meets it at the medium low classification, and drops again to show some divergence at the low level. The lines meet again at the very low level, and the black line stops there at its lowest point, less than twenty percentile points. The red line representing the families in the Oliver group reaches a low point of less than ten percentiles. Total percentiles for the two groups are seventy-two for the Reynolds group and sixty for the families in the Oliver group.

The downward trends, it is shown in Figure 2, are consistent with the lines running very closely parallel to each other all the way. A lower level of socio-economic status of the families in the Oliver group is indicated in all classifications except one, and in the lower levels the difference is much greater.

Summary

The findings developed from the study of the socio-economic status of the pupils in the Reynolds group and the Oliver group of the study are as follows:
1. None of the families represented by either group of pupils are in the indeterminately high or indeterminately low level as represented on the Sims Score Card.

2. The median score for the Reynolds group falls in the medium high rank, while the median score for the Oliver group falls in the medium rank.

3. Forty-two pupils in the Reynolds group, eighty-four per cent, represent homes which are above the average.

4. Thirty-four pupils, sixty-eight per cent, of the Oliver group represent homes which are above the average.

5. The greatest differences in the socio-economic status are found in the higher and lower brackets of the socio-economic environment with the Reynolds group having a larger number of families above the median and a smaller number of families below the median than the Oliver group.

6. The pupils comprising the Reynolds Group have more opportunities for leisure and varying activities, if it is conceded that a superior socio-economic environment provides such opportunities.
CHAPTER IV

COMPARISON OF THE FIFTH-GRADE PUPILS OF THE REYNOLDS AND OLIVER ELEMENTARY SCHOOLS IN PERSONALITY AS REVEALED BY ADJUSTMENT TESTS

Numerous studies have indicated that personal and social adjustment of children are profoundly affected by their socio-economic status. For this reason, data on the socio-economic environment of the fifth-grade pupils in the Reynolds and Oliver elementary schools were presented before the study of their personal and social adjustment. The purpose of this chapter is to present data on the personal and social adjustment of the children in the study as determined by the California Personality Tests.

Comparison of the Total Number of Fifth-Grade Pupils in the Reynolds and Oliver Schools Having Certain Percentile Ranks in Personality Adjustment

The California Test of Personality is divided into two sections, self-adjustment and social adjustment. Components of self-adjustment are self-reliance, sense of personal worth, feeling of belonging, freedom from withdrawing tendency, and freedom from nervous symptoms. The components of social adjustment are social standards, social skills, freedom from anti-social tendencies, family relations, school relations, and community relations. Data from the tests over these various phases of personality are presented in Table 4.
TABLE 4

A COMPARISON OF THE MEDIAN PERCENTILE RANKS OF THE TOTAL NUMBER OF FIFTH-GRADE PUPILS IN THE REYNOLDS AND OLIVER SCHOOLS ON EACH ITEM OF THE PERSONALITY TEST

<table>
<thead>
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<th>Components</th>
<th>Total</th>
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<th>Norm</th>
<th>Difference</th>
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<td></td>
<td>*R</td>
<td>*O</td>
<td>R</td>
<td>O</td>
</tr>
<tr>
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<td>50</td>
<td>60</td>
<td>45</td>
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<td>50</td>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>Sense of personal worth............</td>
<td>50</td>
<td>50</td>
<td>65</td>
<td>50</td>
</tr>
<tr>
<td>Sense of personal freedom...........</td>
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<td>45</td>
</tr>
<tr>
<td>Feeling of belonging</td>
<td>50</td>
<td>50</td>
<td>65</td>
<td>65</td>
</tr>
<tr>
<td>Freedom from withdrawing tendencies</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Freedom from nervous symptoms......</td>
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<td>50</td>
<td>30</td>
<td>20</td>
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<tr>
<td>Social adjustment...........</td>
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<td>60</td>
</tr>
<tr>
<td>Social standards...........</td>
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<tr>
<td>Social skills...........</td>
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<td>65</td>
<td>45</td>
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<tr>
<td>Freedom from antisocial tendencies.</td>
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<td>50</td>
<td>65</td>
<td>45</td>
</tr>
<tr>
<td>Family relations...........</td>
<td>50</td>
<td>50</td>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>School relations...........</td>
<td>50</td>
<td>50</td>
<td>50</td>
<td>35</td>
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<tr>
<td>Community relations.</td>
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<td>50</td>
<td>55</td>
<td>55</td>
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<tr>
<td><strong>Total adjustment</strong></td>
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<td>50</td>
<td>325</td>
<td>50</td>
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</tbody>
</table>

*"R" represents Reynolds school; "O" represents Oliver school.

This total summary of data indicates the degree of parallelism between the two groups.

In Section I, self-adjustment, the Reynolds group shows a median percentile rank of sixty, and the Oliver group shows a median percentile rank of forty-five. Since the norm for
this diagnostic test of personal and social adjustments is fifty, the Reynolds group exceeds the norm by ten percentile points, while the Oliver group deviates five percentile points below the norm.

Individual analysis of the six items which make up the self-adjustment component of this test indicates reasons for this difference in percentile rank of the two groups of pupils. In the item self-reliance, each group has an equally satisfactory rank of seventy. It appears from the test results that the pupils from both groups feel that they are free to choose their own friends, plan their own work, and that they recognize a sense of duty toward their school work, home work, and leisure time. As a child recognizes these things and acts accordingly, his self-reliance will be increased.

In sense of personal worth, the rank of the Reynolds group is fifteen percentile points above the norm, the score being sixty-five, while the score of the Oliver group falls on the norm. This difference of fifteen points in rank is no doubt due to the fact that the Reynolds group attends more parties and takes part in more social activities than the Oliver group. The school program of activities for each school is the same, but there are many social clubs and organizations in the Reynolds school community not found in the Oliver community. As stated in Chapter I, most of the
families living in the Reynolds area are home owners of long standing, while many of the families in the Oliver area are renters and are constantly moving from one place to another. Many of the pupils of the Reynolds group take private speech, music, and dancing lessons, while very few of the Oliver pupils have these opportunities for learning social activities. When children are permitted to take part in such activities, it is nothing more than natural for them to show a higher degree of personal worth than those who have not shared in such activities.

In the sense of personal freedom, both groups drop slightly below the norm by five percentile points with a median percentile rank of forty-five each. A pupil enjoys a sense of freedom when he is permitted to share in the determination of his conduct and in the setting of the general policies that shall govern his life. Desirable freedom includes permission to choose one's friends and to have at least some spending money. Some of the pupils of the Reynolds group evidently feel that they do not have the real freedom that they should have about choosing outside activities in which they participate, while some of the pupils of the Oliver group feel that they do not get to see many new things and that they do not have sufficient spending money for social activities.

In the item "feeling of belonging" each group ranks sixty-five; this rank shows that a favorable adjustment has
been made for this feature of the total personality. A pupil feels that he belongs when he enjoys the love of his family, the well-wishes of good friends, and a cordial relationship with people in general. The test reveals that these conditions exist with both groups of pupils.

In freedom from withdrawing tendencies, the Reynolds group, having a score of fifty percentile points, rests on the norm, while the Oliver Group ranks ten points below the norm with a score of forty percentile points. The difference in ranking can be attributed to conditions surrounding those pupils who move several times during the year. Frequent changes in residence tend to prevent close contact with other young people and the formation of close friendships. The feeling develops that the people with whom they come in contact have little interest in them. The child with a normal, stabilized life and steady contacts with people develops a feeling of security, of interest in the problems of others, and an attitude of friendly cooperation and helpfulness. The greater stability of the home tenure of the Reynolds group no doubt has influenced the development of freedom from withdrawing tendencies to a greater degree than that evidenced by the pupils in the Oliver group.

In the item freedom from nervous symptoms, each group indicates poor adjustment by deviating sharply below the norm. A rank of thirty by the Reynolds group and of twenty by the Oliver group is noted. Deviations from the norm are twenty
and thirty percentile points, respectively, on this item. The pupils of the Reynolds group are permitted to attend outside activities on school nights and to stay up late. This has a tendency to cause them to be physically tired. Some of the pupils try to participate in more activities than they are physically able to take part in; hence, a nervous condition exists. The low rank shown by the Oliver group is perhaps due to several causes. Many families represented in the study are within the low income bracket, and they sometimes lack financial resources for needed medical attention. Nervous symptoms, therefore, in many instances do not have the necessary medical attention. A number of children in this group are from broken homes, and emotional conflicts almost always occur under such conditions.

In Section II, social adjustment, the median percentile ranks of the two groups are much higher than in Section I, self-adjustment. In the components of social adjustment, the Reynolds group ranks higher than the Oliver group with a score of seventy as compared to that of sixty made by the latter. An explanatory analysis of the six component items indicates reasons for the difference in percentile rank of the two groups of fifth-grade pupils.

In social standards, the Reynolds group ranks sixty and shows an adequate standard of adjustment for this item, while the Oliver group rates only thirty-five percentile points which is fifteen percentile points below norm and
indicates a very poor standard of adjustment for this item. Many of the homes in this area are small and house large families. One home which has only two rooms houses nine people. This family has no car, no books, and subscribes to no magazines. Neither the father nor mother attended high school. Many of the homes have no bathroom. Overcrowded conditions in the home have a tendency to bring on poor social conditions, especially so when there are no books and magazines in the home. These poor living conditions no doubt cause the low scores on social standards made by the pupils in the Oliver group.

In freedom from anti-social tendencies, the Reynolds group maintains a satisfactory rank of sixty-five for social skills and freedom from anti-social tendencies, but the Oliver group drops below the norm by five percentile points on each item mentioned. This great difference, it is believed, is due to the fact that the Reynolds group has had the privilege of participating in many social activities. The families of the pupils in the group entertain in their homes, at the country club, and at the Round-Up Hall. The greater majority of the homes in this area have books and magazines. The parents belong to many clubs and attend concerts often, while very few of the pupils of the Oliver group have these privileges.

In family relations, each group has an identical rank, that of sixty each; both groups show favorable relationship
at home. In school relations the Reynolds group has a percentile rank of fifty, which is the norm for the area. On the same item, the Oliver group has a rank of thirty-five, which is fifteen percentile points below the norm. Need for remedial treatment is indicated in the area. The pupil who is satisfactorily adjusted to his school is one who finds the school work adapted to his level of interest and maturity; he is one who enjoys playing with other children. In many instances the pupils of the Oliver group find that they cannot adapt themselves to the level of school work required of them because they are lacking in correct home background. Some are slow to make the proper adjustment to their school work because they remain in school for a short time and then move to another school and then to another to remain only a few weeks or months in each school.

In community relations, each group has a percentile rank of fifty-five percentile points which is five percentile points above the norm. Attitudes of the two groups toward the community, it is indicated, are favorable and satisfactory.

In total adjustment the median percentile rank of 62.5 for the fifty pupils in the Reynolds group and the median percentile rank of fifty for the fifty pupils of the Oliver group shows that the Reynolds group exceeds the norm by 12.5 percentile points and that the Oliver group rests on the norm. This indicates, for the groups as a whole, satisfactory
adjustment in most of the components that make up the personality test.

In order to show a graphic comparison of the median (rough) percentile ranks of the Reynolds group and the Oliver group on each component of the California Test of Personality, Figure 3 was prepared. The total number of median percentile ranks for each group of children were used. These median percentile ranks are taken from Table 4. Figure 3 is shown on page 38.

An examination of Figure 3 reveals that the Reynolds group has a self-adjustment rank of sixty and the Oliver group a rank of forty-five. Each group shows a self-reliance rank of seventy, but, in sense of personal worth, the Reynolds group surpasses with a rank of sixty-five as compared to that of fifty by the Oliver group. In sense of personal freedom, each group swings slightly to the left and past the norm five percentile points to a rank of forty-five. In the feeling of belonging, each group swings to the right for an equal rank of sixty-five; then in the items of freedom from withdrawing tendencies and freedom from nervous symptoms, each group swings sharply to the left once more, the Reynolds group to the norm with a score of fifty and the Oliver group swinging still farther to the left with a low score of forty for the first item and deviating even farther in the second item mentioned with a rank of thirty by the Reynolds group and of twenty by the Oliver group.
Self-adjustment
Self-reliance
Personal worth
Personal freedom
Belonging feeling
Withdrawing tendency
Nervous symptoms

Social adjustment
Social standards
Social skills
Anti-social tendencies
Family relations
School relations
Community relations

Total adjustment

Percentile

Reynolds Group. Oliver Group.

Fig. 3.--The comparison of the median percentile ranks of the Reynolds and the Oliver pupils on each item of the personality test.
In social adjustment, the Reynolds group surpasses the Oliver group with a median percentile rank of seventy as compared to that of sixty by the Oliver group. In social standards the Reynolds group ranks sixty while the Oliver group ranks below norm, the score being thirty-five which is fifteen percentile points below the norm. In social skills and anti-social tendencies, the Reynolds group outranks the Oliver group by twenty percentile points on each of the two items mentioned above, the scores being sixty-five and forty-five, respectively, on each of the two items. In family relations they come together again with an equal rank of sixty, and both groups swing back to the left, the Reynolds group stopping at the norm and the Oliver group going still farther to the left to stop at a rank of thirty-five percentile points on school relations. For community relations both groups swing to the right for a rank of fifty-five.

The Reynolds group ranks 62.5 for total adjustment, and the Oliver group ranks fifty.

Figure 3 shows that the median percentile ranks of the two groups of pupils vary with the various items in the test and come together only at the items of self-reliance, personal freedom, the belonging feeling, family relations, and community relations.

After Figure 3 was inspected, it was found that the graph shows inconsistencies in the location of the percentiles. The Reynolds group actually surpasses or equals the Oliver
group on all items of the personality test; yet, in the personal freedom and feeling of belonging components, they are shown graphically to be at the same percentile location when in reality there is a small difference, with the Reynolds group slightly exceeding the Oliver group.

Summary

The findings developed from the California Test of Personality administered to the fifth-grade pupils in the Reynolds and Oliver groups are as follows:

1. The Reynolds group of pupils exceeds the norm in the median score for self-adjustment by ten percentile points, while the pupils in the Oliver group deviate five percentile points below the norm. The Reynolds group, therefore, has a better self-adjustment than the pupils in the Oliver group.

2. In individual items in self-adjustment, the pupils in the Reynolds group have satisfactory rankings in self-reliance, sense of personal worth, feeling of belonging, and freedom from withdrawing tendencies. They have unsatisfactory rankings in sense of personal freedom and freedom from nervous symptoms.

3. In individual items in self-adjustment, the pupils in the Oliver group have satisfactory rankings in only two items: sense of personal worth and feeling of belonging. They have unsatisfactory rankings in self-reliance, sense of
personal freedom, freedom from withdrawing tendencies, and freedom from nervous disorders.

4. In social adjustment, the pupils in each group show a median score higher than the norm with the Reynolds group exceeding the pupils in the Oliver group by ten percentile points.

5. In individual items of social adjustment, the pupils of the Reynolds group have satisfactory rankings on all the items.

6. In individual items of social adjustment, the pupils in the Oliver group have unsatisfactory rankings in social standards and skills, freedom from anti-social tendencies, and school relations. These unsatisfactory rankings are believed to stem directly from unfavorable environmental conditions.

7. A definite need is indicated for improvement in personal and social adjustment in both groups with the need being much more apparent in the Oliver group than in the Reynolds group.
CHAPTER V

COMPARISON OF THE FIFTH-GRADE PUPILS OF THE REYNOLDS AND THE OLIVER ELEMENTARY SCHOOLS IN ACHIEVEMENT AS REVEALED BY THE STANFORD ACHIEVEMENT TESTS

The preceding studies made of the children in the fifth grades of the Reynolds and Oliver elementary schools are chiefly of value in studying the effects of intelligence, socio-economic status, and personality and social adjustment on the achievement of the pupils. The central purpose of the study was to determine which of these factors were more influential in the above respect. The achievement rankings of the two groups of pupils, therefore, are especially interesting in view of the previous studies. The purpose of this chapter is to present data on the results of the Stanford Achievement Test administered to all pupils of the study.

Comparison of the Total Number of Pupils in the Reynolds and Oliver Schools in Achievement

The Stanford Achievement Test covers a number of areas. The data from these areas were tabulated, and the median percentile scores were determined. Table 5, page 43, shows the items included in the testing program and the median percentile rank with difference from the norm indicated.
TABLE 5

THE COMPARISON OF THE TOTAL NUMBER OF FIFTH-GRADE PUPILS IN THE REYNOLDS AND OLIVER SCHOOLS WHO HAVE CERTAIN EQUIATED SCORE RANKS ON EACH ITEM OF THE STANFORD ACHIEVEMENT TEST AND THE MEDIAN EQUIATED SCORE RANK OF EACH GROUP ON EACH ITEM

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**"R"** represents Reynolds pupils; **"O"** represents Oliver pupils.

The pupils from the Reynolds Group exceed the norm by a range of four to nine percentile points in paragraph meaning, word meaning, language usage, and arithmetic reasoning.
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They lack one point of meeting the norm for arithmetic computation. In the same areas, the pupils from the Oliver group fail to meet the norm by one to three percentile points.
except in language usage where the norm is exceeded by three percentile points.

In the study of literature, the Reynolds group meets the norm without any deviation upwards or downwards, but the pupils in the Oliver group fall by eight percentile points to meet the norm. Pupils in both groups fail to meet the norm for Social Studies I with the Reynolds group exceeding the Oliver group by only one percentile point. The pupils in both groups meet the norm for Social Studies II with the Reynolds group exceeding the Oliver group by two percentile points.

The pupils in both groups have a satisfactory median score for elementary science with the norm being exceeded by eight and six percentile points, respectively, in the Reynolds and Oliver groups. In spelling, the pupils in the Reynolds group have a median percentile rank of fifty-four, four percentile points above the norm, while the median percentile rank of the Oliver group is fifty, the norm set up in the test for average achievement.

These differences, while not pronounced, nevertheless have a steady trend. The median percentile rank of the pupils in the Oliver group consistently falls below that of the median percentile rank of the pupils in the Reynolds group. Further analyses of these differences were made through a graphic portrayal of percentile rankings; these differences are shown in Figure 4, page 46.
Fig. 4.--The comparison of the median score ranks of the Reynolds and the Oliver pupils on each item of the Stanford Achievement Test.
The line representing the Reynolds group in Figure 4 begins at percentile fifty-seven in paragraph meaning, drops to percentile fifty-four in word meaning, and climbs to fifty-nine in language usage. At this point the line drops again to fifty-four in arithmetic reasoning and gradually ascends through the next tests until it rests at fifty-eight in elementary science. The total percentile score is fifty-four, and this line, when drawn through the norms for age equivalent and grade equivalent, touches ten years and ten months and five years and eight months, respectively.

The profile chart for the pupils in the Oliver group shows that the line begins at percentile forty-eight, climbs to fifty-three, and then angles downward until the lowest point is reached at forty-two percentile points. From here the line gradually ascends until percentile fifty-seven is reached, where a descent starts that continues until the norm, fifty percentile, is reached. The total score rests on the norm, fifty percentile points. When this line is extended it crosses the age equivalent of ten years and three months and the grade equivalent of five years and two months. The total gain in grade, therefore, of the pupils in the Reynolds group is six months, two-thirds of a school year.

The gains of the pupils in the Oliver group, as the lines on Figure 4 indicate, are consistent with but at all
times below the total achievement of the pupils in the Reynolds group. The differences are especially apparent in the areas of language and literature. The homes represented in the Oliver group, it has been developed in the study, have fewer books and magazines than the ones represented by the Reynolds group. The assumption, therefore, is warranted that these deficiencies of the socio-economic environment of the pupils have repercussions in lower achievement scores in the areas represented.

These total lower achievement rankings by the pupils in the Oliver group assume added significance when they are viewed from the standpoint of the data in Chapter II. A large majority of the pupils in the Oliver school, it was shown, are equal in mental ability with the pupils in the Reynolds elementary school. Data in Chapter III, however, showed that the fifth-grade pupils in the Reynolds elementary school have a superior socio-economic environment in many ways. Social conditions in the homes, from the standpoint of comfort and culture, are much superior to those in many of the homes of the pupils of the Oliver group. The stability of the homes in the Reynolds group is much greater than the homes in the Oliver elementary school community. Frequent moving, changing schools, and disrupted family life all tend to have a disturbing influence in the lives of the children, and the results extend on into the school life of the child. These socio-economic differences, the data in
this study indicate, cause personality difficulties to a
greater extent in the pupils in the Oliver group than those
in the Reynolds group. The fact that the total achievement
rankings are consistently lower in all areas of achievement
further indicate that personality difficulties caused by
socio-economic environment are causative factors in these
lower achievement rankings by the pupils in the Oliver group.

Summary

The findings developed from the data on the Stanford
Achievement Test are summarized as follows:

1. The total achievement rankings of the pupils in
the Reynolds group exceeds those of the pupils in the Oliver
group in each area of achievement tested.

2. The differences in total achievement rankings are
more pronounced in the areas of language and literature than
in any other, which indicates that the socio-economic environ-
ment has operated directly here to cause lower achievement
rankings.

3. A gain of six months, two-thirds of a school year,
is shown by the Reynolds group.

4. Previous data had developed the fact that the pupils
in the Reynolds and Oliver groups are not very different in
mental ability and that the pupils in the Oliver elementary
school are fully capable of average learning capacity. Like-
wise, data have been presented to show differences in
socio-economic environment, which in turn cause personality adjustment difficulties. These difficulties, it is indicated, are instrumental in causing a lower achievement level of the pupils in the Oliver group.
CHAPTER VI

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This investigation has been concerned with a study of the intelligence quotients, socio-economic status, personality and social adjustments of two groups of fifth-grade pupils in the Reynolds and Oliver elementary schools in Stanford, Texas, to determine differences and the part that these differences play in the total achievement rank of the pupils. Standard tests in each of these areas were given the children, and the results were computed and analyzed from the standpoint of median percentile scores and total achievement rank.

Summary

The following summary was made from a study of the data developed in the investigation:

1. The two groups of pupils studied represent two school communities with varying socio-economic environment. In the Reynolds elementary school community, the majority of the residents own their homes and do professional work or engage in business enterprises. The few bus students that attend the school come from the homes of large landholders in the county. The majority of the people in the community of the Oliver elementary school are renters, move frequently,
and are not stabilized. Tourist courts in the area also provide many transient pupils.

2. No major differences in mental ability were found in ninety-five out of the one hundred children studied; four of the children in the groups, one from the Reynolds group and three from the Oliver group, were older than the average child at this grade level, and the major differences in mental ability were found at this level.

3. Forty-nine of the fifty pupils in the Reynolds group and forty-six of the pupils in the Oliver group had average intelligence ratings or above; the large majority of the children in the study, therefore, were capable of learning in ordinary learning conditions.

4. Forty-two pupils in the Reynolds group, eighty-four per cent, represented homes which were above the average in socio-economic environment, and thirty-four pupils, sixty-eight per cent, of the Oliver group represented homes which were above the average. The socio-economic status of the Reynolds group, therefore, was superior to that of the families represented in the Oliver group.

5. The pupils in the Reynolds group were found to have better personal and social adjustments than the pupils in the Oliver group.

6. The pupils in the Oliver group were weakest in social adjustment, especially in social standards, skills, freedom from anti-social tendencies, and school relations.
The Reynolds group showed weak points in sense of personal freedom and freedom from nervous symptoms.

7. The pupils in the Reynolds group showed a higher total achievement rank than the pupils in the Oliver group.

8. The greatest variations in total achievement rank were found in the areas of language and literature which is a strong indication that the socio-economic environment of the pupils in the Reynolds group, with a much greater variety of books and magazines in the homes, was a causative factor in the lower achievement rank.

9. Each school of the study has exactly the same program for its pupils, curriculum, extra-class activities, and health; therefore, mental ability being comparable, some other factor was instrumental in a lower achievement rank for the pupils in the Oliver school. The data developed in this study indicates that the socio-economic environment of the pupils was a contributing factor to the variations in total achievement rank.

Conclusions

A final scrutiny of data collected from the comparative study of the socio-economic influence upon the development of the fifth-grade pupils of the Reynolds and Oliver elementary schools of Stamford, Texas, seems to justify the following conclusions:
1. Socio-economic status plays a small role in determining the intelligence quotients as a very large majority of the pupils in the study are well above the norm in average intelligence and are, therefore, capable of learning in average school situations.

2. Socio-economic status plays a large part in the personality development of the two groups of fifth-grade pupils. The Reynolds group has a total median percentile rank of 62.5 which is 12.5 percentile points above norm. The Oliver group has a total median of fifty percentile points which is at norm. This difference of 12.5 percentile points is believed to arise directly from unfavorable environmental conditions.

3. Socio-economic status appears to make a significant contribution to school achievement of the two groups of fifth-grade pupils studied. The total achievement rankings of the pupils in the Reynolds group exceeds those of the pupils of the Oliver group. The difference in total achievement rankings is more pronounced in the areas of language and literature. This indicates that the socio-economic environment has operated directly here to cause lower achievement rankings.

4. Good socio-economic status tends to accelerate child development, whereas poor socio-economic status tends to retard child development as shown by the two groups of fifth-grade pupils studied.
Recommendations

The following recommendations are offered after a study of the data on the two groups of children:

1. The two schools involved in this study should make some provisions for remedial measures for the indicated weaknesses. Since no school can change the socio-economic environment of its pupils, such measures would have to be planned to meet the individual needs of the pupils.

2. In the Reynolds school where the indicated weaknesses in personality adjustment are due to perhaps too many activities at night, a public relations program should be instituted designed to interest intelligent parents in the psychology of growing youth. The Parent-Teacher Association would be an excellent medium for carrying on such a program. Education of the parent rather than the child appears to be the need in this particular situation.

3. In the Oliver elementary school, the administration faces a challenge to put on an extra-class program that will provide more and varied opportunities for activities that will be an aid in better personal adjustment from the social standpoint. Need for a skilled guidance leader is evidenced in this school. The activities program should be well-organized, well-directed, and democratic in operation with opportunities provided for all children to participate. The school has an unequalled opportunity, in this instance, to
demonstrate the worth of many theories on ways and means of improving the social and personal adjustment of the pupils, which in turn will or should result in a higher total achievement rank for the pupils.

4. Continuous survey should be made of any program instituted and evaluation made of the results in terms of improvement.
BIBLIOGRAPHY

Books


Unpublished Material


Tests


