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A Comparative Study of the Reading Achievement and the Influence of Environmental Changes of Second Graders from Military and Civilian Families

Ethel Mary Moore

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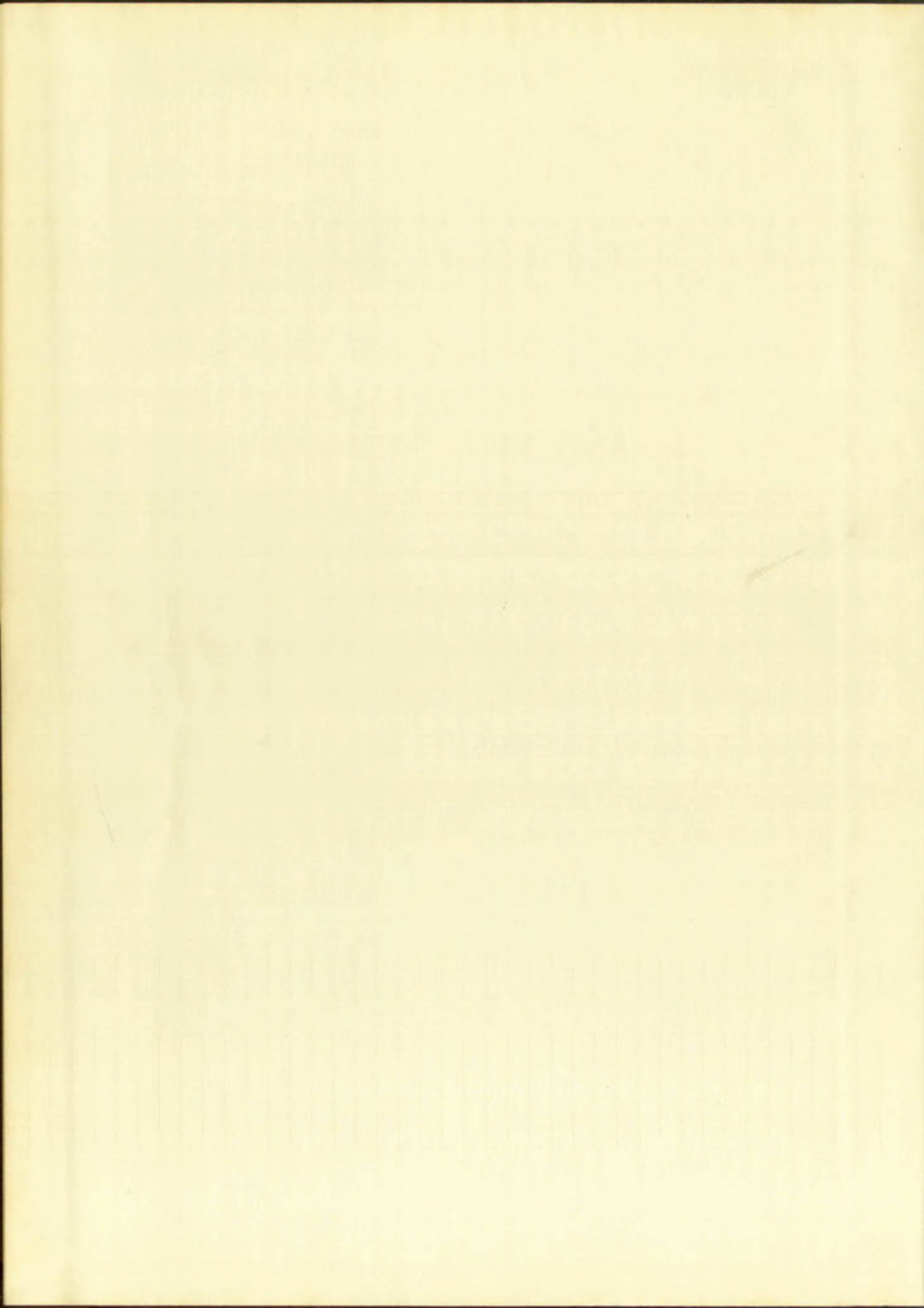
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A COMPARATIVE STUDY OF THE READING ACHIEVEMENT
AND THE INFLUENCE OF ENVIRONMENTAL CHANGES
OF SECOND GRADERS FROM MILITARY AND
CIVILIAN FAMILIES

By

Ethel Mary Moore

A Thesis

Submitted in Partial Fulfillment of the
Requirements for the Degree of
Master of Arts in Education

The University of New Mexico

1959

A COMPARATIVE STUDY OF THE READING "COMPREHENSION"
AND THE EFFECTS OF ENVIRONMENTAL CHANGES
OF SECOND GRADERS FROM ALABAMA AND
CIVILIAN WARREN

ERASE

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By

Elmer Mack Moore

A Thesis

Submitted in Partial Fulfillment of the

Requirements for the Degree of

Master of Arts in Education

The University of New Mexico

1934

This thesis, directed and approved by the candidate's committee, has been accepted by the Graduate Committee of the University of New Mexico in partial fulfillment of the requirements for the degree of

MASTER OF ARTS

E. H. Wastetter

DEAN

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CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS USED

Educators are constantly aware of the need to revise and improve educational methods. Research studies in various fields have been used to better understand the nature of learning and growth as it relates to the physical, emotional and intellectual development of the child. The mobility of population within the United States has given rise to the question of school achievement of children in such circumstances. Periodic revision of methods and materials of instruction indicate a more favorable integration of in-school activities with knowledge of child behavior as influenced by a changing environmental experience. This study attempts to analyze some factors associated with reading achievement of two groups of children at the second grade level with military, or changing environmental backgrounds and civilian, or stable environmental backgrounds.

The Problem

Statement of the Problem -- The purpose of this investigation is to make a comparative study of some reading achievement factors as shown by second grade children from military and civilian backgrounds, and an analysis of some factors of the children's environment which may explain these differences.

CHAPTER I

THE PROBLEM AND DEFINITION OF TERMS

Educators are constantly aware of the need to use the most effective educational methods. Research studies in various fields have been used to better understand the nature of learning and educational progress in the physical, emotional and intellectual development of the child. The mobility of population within the United States has given rise to the question of school achievement of children in such circumstances. The study is a revision of methods and materials of instruction and aims to provide a comparative investigation of in-school activities with respect to school achievement as influenced by a changing environmental experience. This study attempts to analyze some factors associated with reading achievement in two groups of children at the second grade level with different changing environmental backgrounds and children of stable environments and backgrounds.

The Problem

Statement of the Problem -- The purpose of this investigation is to make a comparative study of some factors in achievement scores of second and second grade children from stability and of their backgrounds, and to analyze of some factors of the children's environment which may explain these differences.

Delimitation of the Problem -- Military pupils from seven second grade rooms at the Wherry and Sandia schools on Sandia Base; and civilian children from five second grades at Monte Vista and Montezuma schools, Albuquerque, New Mexico, participated in the study. The reading achievement of the children was tested in relation to intelligence as measured by the Otis Mental Ability Test (Alpha). Various environmental factors considered included

Educational level of the parent

Change of residence

Parental absence from home

Number of children in family

Importance of the Problem -- Some parents whose children have not been able to attend school regularly, and have necessarily changed school environments due to military transfer are concerned about the ability of their children to adjust socially and to achieve academically as well as their peers who have maintained a constant home and school environment. This study was initiated to gather some evidence which might be presented to parents about the comparative performance of pupils with and without a constant home and school surrounding.

Limitations of the Problem -- The variability of the environmental factors as they affect growth is recognized. Although the questionnaire requesting information was designed to elicit replies as factual as possible, there still needs to be considered the diversity of emotional responses and the degree of growth which even the same experience induces in various children.

CHILDREN'S FACTORS

Definition of the Problem -- All these pupils, who were in the
rooms at the University and who had no other source of income
children from five second grade at Jackson Vista and Jackson
Albuquerque, New Mexico, participated in the study. The
achievement of the children was tested in the field by
measured by the Old Mental Ability Test (O-MAT). The
mental factors considered included:

- Educational level of the parent
- Change of residence
- Parental occupation/home
- Number of children in family

Importance of the Problem -- Some parents who were not
been able to attend school regularly and have not been
school environments due to military transfer and constant
ability of their children to adjust to new and to achieve maximum
as well as their parents who have remained constant in home and school
environment. This study was intended to help parents who
might be presented to parents about the importance of
pupils with and without constant home and school environment.

Limitations of the Problem -- The variability of the data was
large as they affect growth is recognized. Although the question
requesting information was designed to elicit replies which are
able, there still needs to be considered the diversity of
responses and the degree of growth which even the same responses
in various children.

The Gates Primary Reading Test was administered in the second month of the school year to all the children in their own school rooms by one examiner rather than during the first month. Though the children were already reading in slightly different school environments, it was felt that the scores from the test were valuable for comparative purposes.

The Otis Mental Ability Test (Alpha) was used at the same time to test the same children. This test was used to determine whether the military and civilian groups were equated on the basis of intelligence.

Definition of Terms Used

Military Group -- The military group includes those children of parents stationed with the military service on Kirtland Air Force Base or the Sandia Base school. Civilian children attending those schools were tested but excluded from the study.

Civilian Group -- The civilian group includes those children of civilian parents residing in the Monte Vista and Montezuma school districts. Military children attending those schools were tested but excluded from the study.

CHAPTER II

REVIEW OF RELATED LITERATURE

The study of early childhood education in America as it relates to the reading achievement of children indicates that, on the whole, boys and girls today read as well as or better than they did a generation ago--even though a larger number of less able children are attending school.¹

A child is not ready to read just because he has reached the chronological age of six years. Children grow at different rates. Some children are ready to read at five; many at six; others are not ready until seven or later. Children need sufficient maturity to get meaning from printed words from the very beginning of reading instruction.

Many factors are involved with the initial progress in reading: physical, emotional, social, intellectual, and environmental. In general, initial achievement in reading comes in response to an interest and need evidenced by the individual child, and all the experiences in a child's life help form the base for his ability to learn to read.

"Reading is reasoning", as E. L. Thorndike said many years ago. It is the process of getting the meaning of words in combination and applying the knowledge of what the author is trying to communicate.

No one of the methods used in studying reading achievement is entirely satisfactory to the teacher. The teacher needs to know students

¹Ruth Strang and Dorothy K. Bracken, Making Better Readers, (Boston: D. C. Heath and Company, 1957), p. 52.

CHAPTER I REVIEW OF RELATED LITERATURE

The study of early childhood education in America as it relates to the reading achievement of children indicates that, as a whole, boys and girls today read as well as or better than they did a generation ago -- even though a larger number of late war children are attending school. A child is not ready to read just because he has reached the chronological age of six years. Children grow at different rates. Some children are ready to read at three; many at five; others are not ready until seven or later. Children are usually ready to read at the age of five from printed words from the very beginning of reading instruction. Many factors are involved with the child's readiness to read: physical, emotional, social, intellectual, and environmental. In general, initial achievement in reading comes in response to an interest and need evidenced by the individual child, and all the environmental factors which help form the basis for his ability to learn to read. "Reading is reasoning," as E. L. Thorndike and Mary Ward say. It is the process of putting the meaning of words to work in connection with applying the knowledge of what the author is trying to communicate. No one of the methods used in studying reading achievement is entirely satisfactory to the learner. The teacher wants to know students

¹ Ruth S. Evans and Dorothy M. Bracken, *Reading Behavior* (Boston: D. C. Heath and Company, 1935), p. 32.

not only through standardized reading tests, but through daily observation of their attitudes, interests, observed mental abilities, experiences, and their environmental settings, in order to provide materials on their reading levels and in the areas of their interests.

Standardized tests of reading and vocabulary and diagnostic measures of difficulty are useful methods for teaching and evaluation, so long as results are interpreted in terms of the abilities and background of the individuals concerned. The Gates Primary Reading Tests for Grade 1 and the early part of Grade 2 are part of a program for testing reading in the grades. There are three types of tests in this series, and three equivalent forms of each type:

Type 1. Word Recognition - Time: 15 minutes

Type 2. Sentence Reading - Time: 15 minutes

Type 3. Paragraph Reading - Time: 20 minutes

These tests measure the level and range of ability in the three most important aspects of reading at the early primary stage. This team of tests was revised, and new illustrations were provided in 1942.

No statements regarding validity or reliability coefficients are given in the manual although the author does state that the reliability of the tests depends upon how carefully they are given. Two factors are believed to be of supreme importance: the explanation of the tasks to the pupils and the management of the group during the test period. Complete norms based upon approximately 250,000 records obtained from schools in all parts of the United States are given in terms of grade level, reading age, and percentiles.

not only from a standardized reading test, but from a variety of sources
tion of their attitudes, interests, and habits of study, and from their
and their environmental factors, in order to obtain a more complete
reading levels and in the case of individual tests.

Standardized tests of reading are necessary and they are used
very of difficulty are useful methods for determining reading level
long as results are interpreted in terms of the individual and background
of the individual concerned. The factor of individual differences
Grade 1 and the early part of Grade 2 is not a sufficient basis for reading
reading in the grades. There are three types of tests in this category
and three educational levels of reading tests:

- Type 1. Word Recognition - Tests of individual words
- Type 2. Sentence Reading - Tests of sentence meaning
- Type 3. Paragraph Reading - Tests of paragraph meaning

These tests measure the ability to read at the word, sentence, and paragraph
most important aspects of reading at the early primary level. With
term of tests was revised, and new classifications were introduced in 1931.
No statements were made as to the reliability of these tests and
given in the manual. The author does state that the reliability of
the tests depends upon how carefully they are given. Two factors are
believed to be of significant importance: the explanation of the tests to
the pupils and the management of the group during the test period. Con-
plete norms based upon approximately 1,000,000 records obtained from
schools in all parts of the United States are given in tables of grade
level, reading age, and vocabulary.

The several tests were designed to make possible a comprehensive measurement in reading which will reveal special strengths and weaknesses, and will thereby indicate the type of instruction most needed by the individual pupil. The tests measure not the same but different phases of reading ability and so are diagnostic. Type 1. Word Recognition. This test is designed to sample the ability to read words representative of the Gates Reading Vocabulary for the Primary Grades.² The task is to encircle the word that tells the most about the picture. The more words the pupil can identify with reasonable accuracy, the more ready he is to do independent reading. Type 2. Sentence Reading. This test measures ability to read sentences of increasing length and complexity. The pupil reads the first sentence and marks with a single line the picture which illustrates the meaning; he then reads the second and marks the proper picture with two lines; and finally he reads the third sentence, marking the correct picture with three lines. Frequent errors and lack of power in this test suggest defects in the pupil's ability to utilize context and other clues and limitation in independent reading. Type 3. Paragraph Reading. The third test requires the reading of paragraphs and measures ability to read thought units with full and exact understanding of the whole. The pupil must grasp clearly and exactly the total thought if he is to execute the directions successfully. Type 3 measures, within the limits of a carefully selected vocabulary, the pupil's ability to do independent reading of a rigorous sort. In general, the tests

²Published by the Bureau of Publications, Teachers College, Columbia University, 1926.

measure all-round reading competence, with more emphasis on accuracy, range, and level of comprehension than upon sheer rate.

The Otis Quick-Scoring Mental Ability Tests designed to measure mental ability for teaching purposes discover which pupils are bright and capable of doing better school work than they are doing and to discover which pupils are dull and may be attempting work beyond their capacity. The Alpha Test designed for Grades 1 to 4 comprises a non-verbal test and the other a verbal test which can be given with the same test papers. For a single grade the reliability coefficients of the Non-verbal and Verbal Tests are 0.68 and 0.71, respectively. The reliability of the total score (Nonverbal plus Verbal) is 0.81. These coefficients, based on 495 cases in second and third grade, indicate that the Nonverbal and Verbal Tests are of about equal reliability, but when combined they yield a total score that is appreciably more reliable than either one taken by itself. Since there is no exact criterion of mental ability, the validity of the test cannot be measured directly. The coefficients of correlation between Alpha and Grade Placement are 0.78 for the Non-verbal Test; 0.86 for the Verbal Test and 0.86 for the total score (Non-verbal plus Verbal). The probable error of the total score was found to be 4.6 points. The "error" of a pupil's score--that is, the amount by which his score in any particular test deviates from the hypothetical average score that he would obtain in a great many repetitions of the test--is due in large part to the inability of pupils to concentrate in the same degree throughout the taking of every test. This results in a pupil's doing less well on some occasions than on others, in accordance

measured all-roundness of the circle, and the range, and is a measure of the range of the circle.

The Circle - Test is a test of the ability to draw a circle of a given radius, and is a measure of the range of the circle.

and capable of drawing a circle of a given radius, and is a measure of the range of the circle.

capacity. The Circle Test is a test of the ability to draw a circle of a given radius, and is a measure of the range of the circle.

test paper. For a single grade, the reliability of the Circle Test is .85 and .87 for the verbal and Verbal Test.

ity of the total score (Verbal plus Verbal) is .85 and .87 for the verbal and Verbal Test.

based on 400 cases in which the Circle Test was used, and the Verbal Test was used, and the Verbal Test was used.

yield a total score that is a test of the ability to draw a circle of a given radius, and is a measure of the range of the circle.

taken by itself. Since there is a significant correlation between the Circle Test and the Verbal Test, the validity of the test cannot be assessed.

correlation between the Circle Test and the Verbal Test is .85 and .87 for the verbal and Verbal Test.

verbal Test; .85 for the Verbal Test and .87 for the total score (Verbal plus Verbal). The correlation of the Circle Test with the Verbal Test is .85 and .87 for the verbal and Verbal Test.

to be .85 and .87 for the verbal and Verbal Test. The correlation of the Circle Test with the Verbal Test is .85 and .87 for the verbal and Verbal Test.

by which the score in the Circle Test is a test of the ability to draw a circle of a given radius, and is a measure of the range of the circle.

average score that he would obtain in the Circle Test is .85 and .87 for the verbal and Verbal Test. The correlation of the Circle Test with the Verbal Test is .85 and .87 for the verbal and Verbal Test.

with his ability. This tendency of pupils to deviate in their performance cannot be helped and is one of the reasons why no test score is infallible and why under no circumstances should a test score be considered as a true and accurate measure of a pupil's mental ability.

Standardized reading achievement tests are often misleading and unreliable with pupils of low reading ability. These pupils with their poor working habits and their expectation of failure, are often quite unable to put forth their best efforts in a testing situation, so that such ability as they do have may not be truly represented. Many such pupils prefer to guess rather than attempt to read, and at the lowest end of the scale of reading tests, scores are greatly influenced by guessing. Non-reading pupils may have such a limited vocabulary, such poor study habits and so little independence in the type of work required by group tests that any true demonstration of ability in such tests is difficult.³

Gifted children usually read above their grade level and learn to read by many different methods. In a study made by Strang,⁴ the methods mentioned in order of frequency were: sounding out words; use of flash cards; memorizing common words and learning words at sight, thus building up a basic vocabulary; associating word with picture; learning words in simple sentences, booklets, newspaper headlines, signs, self-teaching workbooks, and first-grade readers.

³ Harrison Bullock, Helping the Non-Reading Pupil in the Secondary School, (New York: Bureau of Publications, Teachers College, Columbia University, 1956) pp. 9-13.

⁴ Ruth Strang, op. cit.

Every teacher has many opportunities to help children improve their reading. From the results of any standardized tests that have been given to the children, from informal "teaching tests" and exercises, and from day-to-day observation, the teacher can learn much about each child's reading ability. On the basis of this knowledge the teacher can provide instruction and practice which the entire class needs and also provide for individual instruction within the class.

With knowledge, materials and sound teaching methods every teacher can help students to develop the necessary reading skills and to enjoy reading.

In describing the seven-year-old, Gesell⁵ points out that many children of this age are sensitive to what others think about them and become quite anxious for fear they will not be liked by their classmates. The seven-year-old is also reaching for the approval of adults and is becoming increasingly sensitive to their approval. These two desires often conflict, as the pattern of the adults and of the child's own group is not always the same.

A comprehensive study made by Garner⁶ of the effect of entrance age upon school success as measured by achievement disclosed some interesting facts. Though data were gathered on children from kindergarten through the sixth grade, only findings pertinent to the primary

⁵ Arnold Gesell and Frances L. Ilg, The Child From Five to Ten, (New York: Harper and Brothers Publishers, 1946), pp. 131-159.

⁶ Charles E. Garner, "The Effect of Age of Entrance Into School Upon Success in School," (unpublished Doctor's dissertation, Department of Education, Washington University, St. Louis, Missouri, 1949), 126 pp.

Every teacher has some responsibility for the child's progress in reading. From the results of many studies it is clear that the child's reading progress is largely a function of the teacher's instruction. The teacher can help the child to develop a habit of reading by providing a reading program that is both interesting and useful. The teacher can also provide for individual differences in the child's reading progress. With knowledge of the child's reading progress, the teacher can help the child to develop a habit of reading and to enjoy reading.

In describing the seven-year-old, Campbell (1937) states that the child at this age is beginning to read with understanding and becomes of the reading level that will not be far from the average. The seven-year-old is also reaching for the enjoyment of reading and becoming increasingly sensitive to their environment. Campbell also states that the child at this age is often called, as the author of the study said, "the child's two years is not always the same."

A comparative study made by Campbell (1937) of the effect of reading age upon school success is presented in Campbell's study. The study is an interesting study. The study shows that the child's reading level is not always the same.

⁵ Arnold Campbell and Frances L. Campbell, *The Child's Reading Progress* (New York: Harper and Brothers, Publishers, 1937), pp. 1-10.

⁶ Campbell, E. Campbell, "The Effect of Age on the Child's Reading Progress," *Journal of Educational Psychology*, (1937), pp. 1-10.

levels will be mentioned. Tests given were the Detroit Beginning First Grade Test, Kuhlman-Anderson Intelligence Test, Alice and Jerry Reading Test, subject matter tests based on vocabulary of primary readers currently in use, and the Gates Primary Reading Battery - Grades I and II. When chronological age was correlated with such factors as reading readiness, vocabulary test, and Gates Primary Reading Test, the coefficients were found to be near zero. Scores showing greater correlations were those between Mental Age and Reading Readiness, 0.77; Mental Age and Vocabulary Test, 0.38; and Mental Age and Gates Primary Reading Test, 0.49. It was pointed out that significant relationships occurred only when factors of experiential background as shown by the social maturity rating scale, native intelligence, and techniques or training in information were correlated.

One of the characteristics of life in the United States has been the mobility of the population. In the early forties the expansion of war industries in certain areas of the country resulted in two new types of internal migration: (1) the movements of construction workers to new plant and camp sites for relatively short periods of time and (2) the movements for relatively long duration made by both defense and non-defense workers to war-industry areas. Now, following World War II and the Korean Conflict, educators are still concerned and find questions arising with regard to the school achievement of children in such circumstances due to the continuance of defense contracts, the maintenance of a comparatively large military force and the expansion of our national frontiers (the settlement of Alaska in particular).

levels will be mentioned. These levels were the lowest measured. (1951)

Grade Test, Kuhlman-Antony Intelligence Scale, Army and Navy Intel-

ligence Test, subject matter tests based on vocabulary of primary school

generally in use, and the Gates Primary Reading Battery - designed for

II. When chronological age was correlated with vocabulary, reading

readiness, vocabulary test, and Gates Primary Reading Battery, the cor-

relations were found to be as follows: Gates Primary Reading Battery and

relations were those between chronological age and vocabulary (0.70);

Mental Age and Vocabulary Test, 0.55; and Mental Age and Gates Pri-

mary Reading Test, 0.55. It was pointed out that significant relation-

ships occurred only with factors of chronological age and reading

by the social maturity factor, social, and a third factor, reading

or training is indicated with correlation.

One of the characteristics of life in the United States is the

mobility of the population. In the early decades the movement of the

districts in certain areas of the country assumed the form of a

terrestrial migration: (1) the movement of a population from one

plant and camp site for a relatively short period of time, and (2) the

movements for relatively long periods of time of both individuals and

defense workers to war and army areas. Thus, following World War II

and the Korean conflict, soldiers and still concentrated military

activity with regard to the school achievement of children in such

stances due to the continuation of defense activity, the maintenance of

a comparatively large military force and the expansion of civilian

frontiers (the settlement of Alaska in particular).

The Albuquerque Journal of September 24, 1954, carried an Associated Press release from the National Association of Real Estate Boards which reported that a United States family, on the average, moves to a new location every four years. Much of this shifting about is done by city families, but the residence-changing is so great the entire country seems to be on the move. The conclusions made by the association are based partly on Census Bureau figures showing that between April 1950, and April 1951, around a fifth of the nation, or some 31 million persons, changed addresses. The real estate association has no restlessness gauge to apply to various cities, but it did verify facts on two cities that many suspected already: that the families of Los Angeles move more often than those of Baltimore. The Post Office Department has figured that 27 per cent of the families in Los Angeles want their addresses changed each year and by contrast Baltimore families have an 18 per cent change of address during a year.

The association figures indicate the mobility of our population, but they cannot say what the reason is for this mobility. A guess is proposed that the war and its wholesale shuffling of families is a main cause. However, military transfers cannot account for the statistic given by the Census Bureau in 1949, which indicated that 21 million families moved from one address to another--and never left their home county.

Our increased mobility today results primarily from the invention of the automobile, and from the demands of our economy for a working population which can migrate easily from place to place. We are a nation on the move, and we must not apply horse-and-buggy treatment

hambra Press release that the National Association of Hotel Owners

Boards which reported that a United States family on the average

moves to a new location every four years. Each of these families

is done by city families, and the resistance-changing is so great that

the country seems to be on the move. The country has made a great

association are based partly on Census Bureau figures showing that be-

tween April 1927 and April 1931, about a third of the nation, or more

31 million persons, left and addressed. The national association

has no resistance except to report on various cities, but it is very

facts on two cities that many, which are all ways; that the families of

Los Angeles move more often than those of Baltimore. The Census Office

Department has figured that 37 per cent of the families in Los Angeles

want their addresses changed each year, and by 1931, and Baltimore fam-

ilies have an 18 per cent change of address a year.

The association figures and notes the country is in a population

but they cannot say what the reason is for this mobility. A guess is put-

posed that the war and its wholesale shifting of families is a main cause.

However, military transfers cannot account for the statistics given by the

Census Bureau in 1928, which indicated that 31 million families moved

from one address to another--and never left their homes empty.

Our increasing mobility today results in many ways from the expansion

of the automobile, and from the demands of correspondence for a quick

population which can migrate easily from place to place. The old

nation on the move, and we must not only move our minds but our bodies.

to the problem of educating our children who are faced with new school adjustments because of our mobile population.

Pre-war studies of migrant children by Seagoe,⁷ Dawe,⁸ and Grant⁹ showed that nonmigrant children were, in general, superior to migrant children in total school achievement. Similarly, Finney¹⁰ found that nonmigrants were superior in all subjects except geography, history and civics, and arithmetic problems. Munz¹¹ found migrants superior in certain grades and nonmigrants in others, while Walton¹² found that only 15.5 per cent of 167 migrant children in the Imperial Valley of California were at normal grade placement.

On the other hand, Sackett's¹³ study of migrant children in the

⁷ May V. Seagoe, "The Transient Child," Journal of Juvenile Research, XVI (July 1932), pp. 251-257.

⁸ D. Theodore Dawe, "Migratory Children: Educational Achievement Status of the Migratory Children in Kern County," Sierra Educational News, XXXIV (September 1938), pp. 12-38.

⁹ Jettye Fern Grant, "Educational Achievement and Needs of Migratory Children in California," California Journal of Elementary Education, XI (August 1942), pp. 22-30.

¹⁰ Gladys Cline Finney, "A Comparative Study of the Relative Achievement of English and Spanish Transient and Non-Transient Sixth Grade Groups." Unpublished Master's thesis, University of Arizona, 1936. Quoted in Emil L. Larson, "Migration and Its Effects on Schools," Elementary School Journal, XLI (December 1940), pp. 283-297.

¹¹ Martin Munz, "Transiency and Its Relation to the Progress of Pupils." Unpublished Master's thesis, University of Arizona, 1937. Quoted in Emil L. Larson, op. cit.

¹² Roger Walton, "Educating the Asphalt Arab," Nation's Schools, XIX (April 1937), pp. 34, 38.

¹³ Everett B. Sackett, "The Effect of Moving on Educational Status of Children," Elementary School Journal, XXXV (March 1935), pp. 517-526.

to the problem of educating the child who was faced with the new social adjustments because of his racial background.

Pro-war studies of migrant children by George, Lewis, and Grant⁹ showed that migrant children, who were in the lowest grades in the public schools in total school enrollment, were found that nonmigrants were superior in all language-reading tests, history and civics, and science to two times as many as the migrant children. In contrast to the other studies, which showed superior in certain areas and inferior in others, with the latter found that only 15.5 per cent of the migrant children were in the Valley of California in 1937, and 10 per cent in 1938.

On the other hand, Grant¹⁰ also showed that in the May 7, 1937, "The Tenth Muse," Journal of the National Education, XVI (July 1937), pp. 281-82.

¹¹ D. Theodore Dowd, "Migrant Children: Educational Status of the Migrant Children in California," *Journal of the National Education*, XXXIV (December 1937), pp. 1-10.

¹² Jettie E. Grant, "Educational Achievement and Status of Migrant Children in California," *Journal of the National Education*, XI (April 1937), pp. 12-15.

¹³ Gladys G. Grant, "A Comparative Study of the Educational Achievement of English and Spanish Speaking Migrant Children in the Grade Groups," *Unpublished Masters' Thesis*, University of Illinois, 1937. Grant is cited in Grant, Education and the Migrant Child, *Elementary School Journal*, LII (December 1940), pp. 24-25.

¹⁴ Martha Grant, "Migrant Children and the Problem of the Migrant Child," *Unpublished Masters' Thesis*, University of Illinois, 1937. Cited in Grant, *Education and the Migrant Child*.

¹⁵ Roger W. Grant, "The Migrant Child," *Journal of the National Education*, XIX (April 1937), pp. 84-85.

¹⁶ Everett H. Grant, "The Effect of the Migrant Child on the Status of Children," *Elementary School Journal*, LXXV (May 1937), pp. 217-225.

Panama Canal Zone led him to conclude that these children were handicapped very little more in getting through school, mental ability considered, than were the native children. Most of the migrant children in Sackett's study, however, were children of Army personnel and American merchants, while those studied in the United States have been children of migrant workers.

The study made by Tetreau and Fuller¹⁴ attempted to isolate the factors associated with the school achievement of migrant children. Their study showed that four factors were most closely associated with achievement: (1) father's occupation; (2) region of origin, i.e., the region in which the family lived in 1930; (3) number of states lived in between 1930-39; and (4) time of arrival in Arizona, the state where this study was made.

Huus¹⁵ undertook the study of five factors associated with the reading achievement of children from a migratory population among 97 non-migrant and 175 migrant children in Grades 3-8, inclusive, in the elementary school in Seneca, Illinois. The main purpose of this study was to extend and clarify present knowledge concerning the reading achievement of children from a migratory population, with particular reference to total school achievement, reading achievement, average number of schools attended, average number of moves per year, and occupation of

¹⁴E. D. Tetreau and Varden Fuller, "Some Factors Associated With the School Achievement of Children in Migrant Families," Elementary School Journal, XLII (February 1942), pp. 423-431.

¹⁵Helen Huus, "Factors Associated with the Reading Achievement of Children from a Migratory Population," Elementary School Journal, XLV (December 1944), pp. 203-212, 276-285.

Panama Canal Zone is a new country. The children who were
 shipped very little more than a few years ago, and who
 were then very young children, those of the same age
 are now about 10 years old, and are now in the
 merchant navy, while those who are in the United States
 are in the merchant navy.

The study made by Tetterton and Tetterton¹⁴ attempted to determine
 factors associated with the school achievement of children of
 immigrants. Their study showed that factors which were closely associated with
 achievement were: (1) father's occupation, (2) mother's occupation, (3) the
 region in which the family lived, (4) the number of children in the family,
 between 1920-25; and (5) the year of arrival in the United States. The study showed
 that this study was made.

Thus, it is evident that the study of the factors associated with the
 achievement of children from a foreign country is a very complex one. It is
 evident that the study of the factors associated with the achievement of
 children from a foreign country is a very complex one. It is evident that
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 one. It is evident that the study of the factors associated with the
 achievement of children from a foreign country is a very complex one.

¹⁴ E. D. Tetterton and Tetterton, "Factors Associated with the Achievement of
 Children from a Foreign Country," *Journal of Educational Research*, Vol. 12, pp. 1-12.

¹⁵ Tetterton, "Factors Associated with the Achievement of Children from a Foreign Country,"
Journal of Educational Research, Vol. 12, pp. 1-12.

the father. The results of this study showed that mental ability has a close relationship to reading achievement.

the father. The results of this study showed that on average, men
close relationship to reading, while women.

THE UNIVERSITY OF
THE STATE OF NEW YORK
AT ALBANY

CHAPTER III

DEVELOPMENT OF THE INVESTIGATION

Classification and analysis of pupils was made on the basis of socio-economic backgrounds and a questionnaire sent to parents in May 1954. Only pupils of military families who were attending the schools (Wherry and Sandia) at Sandia Base were classified as the military group, and only pupils of civilian families who were attending Monte Vista and Montezuma schools were classified as the civilian group. However, children comprising both groups as well as those children not eligible for inclusion in the study remained together in their originally assigned rooms. Test results for sixty-two of the three hundred sixteen pupils present at the start of the study were not used because children had moved away during the investigation or complete records could not be attained due to school absences. This left one hundred sixteen pupils in the military group and one hundred thirty-eight pupils in the civilian group.

The Otis Quick-Scoring Mental Ability Test (Alpha), Form A, was used to measure the intelligence of the pupils. The combined or total scores of the verbal and non-verbal forms were used.

The Gates Primary Reading Test was administered to all pupils by one examiner (for reliability purposes) to measure the reading achievement of the pupils in October 1953. Combined or total scores of the three

CHAPTER III DEVELOPMENT OF THE INVESTIGATION

Classification and analysis of pupils was made on the basis of socio-economic background and a questionnaire sent to parents in July 1954. Only pupils of military families were considered. (Wesley and Gendall) in Canada have been classified as military groups and only pupils of civilian families who were attending military schools. Montreal schools were divided into three groups. However, children completing both primary and secondary school as well as attending for inclusion in the study, remained together in their original group. Pupils tested for military status at the time of the study and those pupils present at inspection of the study were included in the study. Pupils moved away during the investigation were included in the study and were included due to school absence. Pupils who had not finished at the time of the military group and not included in the study were included in the civilian group.

The Otis Quick-Screening Inventory (OQSI) (1954) (1955) was used to measure the intelligence of the pupils. The inventory is based on scores of the verbal and non-verbal tests. The Otis Primary Reading Test was administered to all pupils by one examiner (for reliability purposes) in November (the reading component of the test) in October 1955. Excluded from this study were pupils

types of tests in the series:

Type 1. Word Recognition

Type 2. Sentence Reading

Type 3. Paragraph Reading

were used for comparative purposes as to the reading achievement of both groups.

Nine inquiries concerning environmental factors of child growth were included in the questionnaire sent to the pupils' parents in May 1954. Studies on the preschool child reported in the Forty-Sixth Yearbook¹⁶ of the National Society for the Study of Education were analyzed when selecting items for the questionnaire. Teachers of the children who participated in the investigation also made suggestions based on their experience as to the content.

Questionnaires were sent to the parents of all children participating in the study and eight-six per cent or one hundred eighteen were completed and returned from the civilian group. Eighty-three per cent or ninety-six questionnaires were completed and returned from the military group. Eighty-five per cent or two hundred fourteen questionnaires were returned by both groups from the two hundred fifty-four sent out.

¹⁶N. S. Light and others, Early Childhood Education, Forty-Sixth Yearbook, Part II. (Bloomington, Illinois: Public School Publishing Company, 1947), pp. 384.

Types of tests in the study:

Type 1. Word Association

Type 2. Sentence Reading

Type 3. Paragraph Reading

were used for cumulative purposes as to the relationship between the two groups.

Nine subjects completed experimental tasks of all types.

were included in the questionnaire as to the subjects' responses.

1954. Studies on the attention of children (1954-55) (1954-55)

book¹⁸ of the National Society for the Study of Education were used.

when selected items for the questionnaire. The results of the study

who participated in the study also made suggestions as to

their experience with the study.

Questionnaire results are given in the results of all subjects' responses.

in the study and eight subjects had not completed the questionnaire.

and returned from the study group. Eight subjects had not

six questionnaires were completed and returned from the study group.

Eight-five percent of two hundred forty-four questionnaires were

turned in both groups from the two hundred thirty-four study

¹⁸ H. S. Light and others, *Early Childhood Education*, 1954-55
Yearbook Part II (Washington, D.C.: National Society for the Study of Education, 1957), pp. 23-24.

CHAPTER IV ANALYSIS OF THE DATA

Intelligence and Achievement Test Factors -- One hundred sixteen children made up the group who were classified as the military group, and one hundred thirty-eight children were in the civilian group. Group means were computed on the intelligence scores for the military and civilian groups. The difference in the means of intelligence was found to be larger than could reasonably be attributed to fluctuations in random samplings; i. e., too large to permit the acceptance of the null hypothesis. The results are presented in Table I.

TABLE I
TEST FOR SIGNIFICANCE BETWEEN THE MEANS FOR
MILITARY AND CIVILIAN GROUPS ON
OTIS MENTAL ABILITY TEST

| Group | Number of Pupils | Mean | S. D. | Difference of Means | t |
|----------|------------------|--------|-------|---------------------|---------|
| Military | 116 | 103.69 | 10.71 | | |
| Civilian | 138 | 108.49 | 10.27 | 4.80 | 3.609** |

Though it was discovered that there was a statistically significant difference between the civilian and military groups, no complete understanding of the factors associated with this difference was arrived at in this study.

It should be understood that this study is concerned with achievement differences; however, since achievement differences may be

CHAPTER IV ANALYSIS OF THE DATA

Intelligence and Achievement Test Factors -- One hundred thirty children made up the group who were classified as the military group and one hundred thirty-eight children were in the civilian group. Means were computed on the intelligence scores for the military and civilian groups. The difference in the scores of intelligence was found to be larger than could reasonably be attributed to fluctuations in the item sampling; i.e., too large to permit the acceptance of the null hypothesis. The results are presented in Table I.

TABLE I
TEST FOR SIGNIFICANCE BETWEEN THE MEANS FOR
MILITARY AND CIVILIAN GROUPS ON
OTIS MENTAL ABILITY TEST

| Group | Number of People | Mean | S.D. | Intelligence of Mean | t |
|----------|---------------------|--------|-------|-------------------------|-------|
| Military | 116 | 103.33 | 16.71 | | |
| Civilian | 138 | 102.46 | 10.27 | 4.33 | .0001 |

Though it was discovered that there was a statistically significant difference between the civilian and military groups, no causal relationship of the factors associated with this difference was shown in this study. It should be understood that this study is concerned with achievement differences; however, since achievement differences may be

explained on the basis of intelligence differences, it was necessary to remove the correlation between intelligence and reading scores. In order to do this the application of an analysis of covariance was made to take out the effects of intelligence on reading. This constitutes statistical control of the variable, and Table II presents the results of an analysis of covariance in which the effects of intelligence have been statistically removed from reading scores. The analysis generated an F for group differences which was 8.86, a value significantly beyond the five per cent level of confidence. Hence it can be seen that the difference between the groups on reading scores exists even after the effects of intelligence have been removed as shown in Table II.

In order to interpret this analysis of covariance and test of significance, it was necessary that the assumption of homogeneity of regression be tested, making sure that the variation within the two groups was homogeneous. A test of homogeneity of regression was performed, and the F for deviations was found to be 1.12 which was not significant at the five per cent level. One may then conclude that the regressions were homogeneous, that is, that the regressions within the two groups do not differ significantly among themselves.¹⁷

Analysis of Environmental Factors -- Analysis of data received from the questionnaire sent to parents of children in both groups was made to discover what environmental factors, if any, might influence the achievement in reading. The questionnaire was returned in May 1954, and age

¹⁷George W. Snedecor, Statistical Methods, (Ames, Iowa: The Collegiate Press, Inc., 1937), pp. 326-328.

explained on the basis of intelligence differences. It was necessary to remove the correlation between intelligence and reading scores. In order to do this the application of an analysis of covariance was made to take out the effects of intelligence on reading. This constitutes statistical control of the variable, and Table II presents the results of an analysis of covariance in which the effects of intelligence have been statistically removed from reading scores. The analysis generated an F for group differences which was 6.88, a value significantly beyond the five per cent level of confidence. Hence it can be seen that the difference between the groups on reading scores exists even after the effects of intelligence have been removed as shown in Table II.

In order to interpret this analysis of covariance and test of significance, it was necessary that the assumption of homogeneity of regression be tested, making sure that the variance within the two groups was homogeneous. A test of homogeneity of regression was performed, and the F for deviations was found to be 1.18 which was not significant at the five per cent level. One may then conclude that the regressions were homogeneous, that is, that the regressions within the two groups do not differ significantly among themselves.¹⁷

Analysis of Environmental Factors -- Analysis of data received from the questionnaire sent to parents of children in both groups was made to discover what environmental factors, if any, might influence the achievement in reading. The questionnaire was returned in May, 1954, and gave

¹⁷George W. Snedecor, *Statistical Methods* (Ames, Iowa: The College Press, Inc., 1937), pp. 325-326.

TABLE II

ANALYSIS OF COVARIANCE AND TEST OF SIGNIFICANCE OF
ADJUSTED GROUP MEANS OF GATES READING SCORES
AND OTIS MENTAL ABILITY SCORES¹⁸

| Source of Variation | Degrees of Freedom | Sums of Squares and Products | | | Errors of Estimate | | Sig. F |
|-----------------------------|--------------------------|------------------------------|-----------|------------|--------------------|--------------------------|-----------|
| | | $\sum X^2$ | $\sum XY$ | $\sum Y^2$ | Sum of Squares | Degrees of Freedom | |
| Totals | 253 | 211245.15 | 20887.24 | 28505.26 | 27440 | 252 | |
| Between groups | 1 | 6571.96 | 3091.15 | 1453.94 | 936.03 | 1 | 8.86** |
| Within groups (error) | 252 | 204673.19 | 17796.09 | 28051.32 | 26503.97 | 251 | |
| | | | | | | | 105.59 |

¹⁸George W. Snedecor, op. cit. p. 320.

data were analyzed as of that month. Five of the nine questions indicated that they might be significant. They are listed below by the number used in the questionnaire as shown in the Appendix.

1. Age of child in years and months.
2. Number of children in the family.
- 3a. Educational level of father.
- 3b. Educational level of mother.
4. Has your family made a change of residence during the child's lifetime whereby your child's old friendships were broken and new ones formed?
- 5a. Has either parent been away from home for long periods (over a month) of time?

Information obtained was classified into categories pertaining to the two groups of children namely, military and civilian. The total number of children within these two groupings was considered as a unit and further grouping was only dependent on the basis of "yes" or "no" replies to the various questions. It was felt that these environmental factors were dissimilar to the groups of children.

Chronological ages of the children from the youngest to the oldest were tabulated as shown in Tables IIIa and IIIb.

There is an age span of twenty-six months within the military group, ranging from seven years three months to nine years five months. The age span within the civilian group is twenty-eight months, ranging from seven years to nine years four months.

data were analyzed as of last month. Five of the nine questions indicated that they might be significant. They are listed below by the number used in the questionnaire as shown in the Appendix.

1. Age of child in years and months.
2. Number of children in the family.
- 2a. Educational level of father.
- 2b. Educational level of mother.
3. Has your family made a change of residence during the child's lifetime? When? How often? How long?
- 3a. Has either parent been away from home for long periods (over a month) of time?

Information obtained was classified into categories pertaining to the two groups of children namely, military and civilian. The number of children within these two groupings was considered as a unit and further grouping was only dependent on the basis of "yes" or "no" replies to the various questions. It was felt that these environmental factors were dissimilar to the groups of children.

Chronological ages of the children from the youngest to the oldest were tabulated as shown in Tables III and IV.

There is an age span of twenty-six months within the military group, ranging from seven years three months to nine years five months. The age span within the civilian group is twenty-eight months, ranging from seven years to nine years four months.

TABLE IIIa

FREQUENCY OF MILITARY PUPILS AT
CHRONOLOGICAL AGE LEVELS

| <u>Age Years and Months</u> | <u>Number of Pupils</u> |
|---------------------------------|-------------------------|
| 7-3 | 1 |
| 7-4 | 4 |
| 7-5 | 9 |
| 7-6 | 7 |
| 7-7 | 14 |
| 7-8 | 12 |
| 7-9 | 1 |
| 7-9 | 7 |
| 7-10 | 3 |
| 7-11 | 5 |
| 8-0 | 4 |
| 8-1 | 5 |
| 8-2 | 4 |
| 8-3 | 3 |
| 8-4 | 4 |
| 8-5 | 5 |
| 8-6 | 1 |
| 8-7 | 1 |
| 8-8 | 1 |
| 8-9 | 0 |
| 8-10 | 0 |
| 8-11 | 2 |
| 9-0 | 0 |
| 9-1 | 1 |
| 9-2 | 1 |
| ---- | -- |
| 9-5 | 1 |
| Total | <u>96</u> |

TABLE III

FREQUENCY OF MILITARY POPULATIONS
CHRONOLOGICAL AGE LEVELS

| Years and Months | Age |
|------------------|-----|
| 7-3 | 1 |
| 7-4 | 2 |
| 7-5 | 3 |
| 7-6 | 4 |
| 7-7 | 5 |
| 7-8 | 6 |
| 7-9 | 7 |
| 7-10 | 8 |
| 7-11 | 9 |
| 8-0 | 10 |
| 8-1 | 11 |
| 8-2 | 12 |
| 8-3 | 13 |
| 8-4 | 14 |
| 8-5 | 15 |
| 8-6 | 16 |
| 8-7 | 17 |
| 8-8 | 18 |
| 8-9 | 19 |
| 8-10 | 20 |
| 8-11 | 21 |
| 8-12 | 22 |
| 9-0 | 23 |
| 9-1 | 24 |
| 9-2 | 25 |
| 9-3 | 26 |
| 9-4 | 27 |
| 9-5 | 28 |
| 9-6 | 29 |
| 9-7 | 30 |
| 9-8 | 31 |
| 9-9 | 32 |
| 9-10 | 33 |
| 9-11 | 34 |
| 9-12 | 35 |
| 10-0 | 36 |
| 10-1 | 37 |
| 10-2 | 38 |
| 10-3 | 39 |
| 10-4 | 40 |
| 10-5 | 41 |
| 10-6 | 42 |
| 10-7 | 43 |
| 10-8 | 44 |
| 10-9 | 45 |
| 11-0 | 46 |
| 11-1 | 47 |
| 11-2 | 48 |
| 11-3 | 49 |
| 11-4 | 50 |
| 11-5 | 51 |
| 11-6 | 52 |
| 11-7 | 53 |
| 11-8 | 54 |
| 11-9 | 55 |
| 12-0 | 56 |
| 12-1 | 57 |
| 12-2 | 58 |
| 12-3 | 59 |
| 12-4 | 60 |
| 12-5 | 61 |
| 12-6 | 62 |
| 12-7 | 63 |
| 12-8 | 64 |
| 12-9 | 65 |
| 13-0 | 66 |
| 13-1 | 67 |
| 13-2 | 68 |
| 13-3 | 69 |
| 13-4 | 70 |
| 13-5 | 71 |
| 13-6 | 72 |
| 13-7 | 73 |
| 13-8 | 74 |
| 13-9 | 75 |
| 14-0 | 76 |
| 14-1 | 77 |
| 14-2 | 78 |
| 14-3 | 79 |
| 14-4 | 80 |
| 14-5 | 81 |
| 14-6 | 82 |
| 14-7 | 83 |
| 14-8 | 84 |
| 14-9 | 85 |
| 15-0 | 86 |
| 15-1 | 87 |
| 15-2 | 88 |
| 15-3 | 89 |
| 15-4 | 90 |
| 15-5 | 91 |
| 15-6 | 92 |
| 15-7 | 93 |
| 15-8 | 94 |
| 15-9 | 95 |
| 16-0 | 96 |
| 16-1 | 97 |
| 16-2 | 98 |
| 16-3 | 99 |
| 16-4 | 100 |
| 16-5 | 101 |
| 16-6 | 102 |
| 16-7 | 103 |
| 16-8 | 104 |
| 16-9 | 105 |
| 17-0 | 106 |
| 17-1 | 107 |
| 17-2 | 108 |
| 17-3 | 109 |
| 17-4 | 110 |
| 17-5 | 111 |
| 17-6 | 112 |
| 17-7 | 113 |
| 17-8 | 114 |
| 17-9 | 115 |
| 18-0 | 116 |
| 18-1 | 117 |
| 18-2 | 118 |
| 18-3 | 119 |
| 18-4 | 120 |
| 18-5 | 121 |
| 18-6 | 122 |
| 18-7 | 123 |
| 18-8 | 124 |
| 18-9 | 125 |
| 19-0 | 126 |
| 19-1 | 127 |
| 19-2 | 128 |
| 19-3 | 129 |
| 19-4 | 130 |
| 19-5 | 131 |
| 19-6 | 132 |
| 19-7 | 133 |
| 19-8 | 134 |
| 19-9 | 135 |
| 20-0 | 136 |
| 20-1 | 137 |
| 20-2 | 138 |
| 20-3 | 139 |
| 20-4 | 140 |
| 20-5 | 141 |
| 20-6 | 142 |
| 20-7 | 143 |
| 20-8 | 144 |
| 20-9 | 145 |
| 21-0 | 146 |
| 21-1 | 147 |
| 21-2 | 148 |
| 21-3 | 149 |
| 21-4 | 150 |
| 21-5 | 151 |
| 21-6 | 152 |
| 21-7 | 153 |
| 21-8 | 154 |
| 21-9 | 155 |
| 22-0 | 156 |
| 22-1 | 157 |
| 22-2 | 158 |
| 22-3 | 159 |
| 22-4 | 160 |
| 22-5 | 161 |
| 22-6 | 162 |
| 22-7 | 163 |
| 22-8 | 164 |
| 22-9 | 165 |
| 23-0 | 166 |
| 23-1 | 167 |
| 23-2 | 168 |
| 23-3 | 169 |
| 23-4 | 170 |
| 23-5 | 171 |
| 23-6 | 172 |
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| 24-0 | 176 |
| 24-1 | 177 |
| 24-2 | 178 |
| 24-3 | 179 |
| 24-4 | 180 |
| 24-5 | 181 |
| 24-6 | 182 |
| 24-7 | 183 |
| 24-8 | 184 |
| 24-9 | 185 |
| 25-0 | 186 |
| 25-1 | 187 |
| 25-2 | 188 |
| 25-3 | 189 |
| 25-4 | 190 |
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| 59-8 | 534 |
| 59-9 | 535 |
| 60-0 | 536 |
| 60-1 | 537 |
| 60-2 | 538 |
| 60-3 | 53 |

TABLE IIIb

FREQUENCY OF CIVILIAN PUPILS AT
CHRONOLOGICAL AGE LEVELS

| <u>Age Years and Months</u> | <u>Number of Pupils</u> |
|---------------------------------|-------------------------|
| 7-0 | 1 |
| --- | -- |
| 7-3 | 1 |
| 7-4 | 5 |
| 7-5 | 11 |
| 7-6 | 7 |
| 7-7 | 9 |
| 7-8 | 6 |
| 7-9 | 11 |
| 7-10 | 8 |
| 7-11 | 10 |
| 8-0 | 6 |
| 8-1 | 9 |
| 8-2 | 8 |
| 8-3 | 11 |
| 8-4 | 3 |
| 8-5 | 3 |
| 8-6 | 2 |
| 8-7 | 2 |
| 8-8 | 2 |
| --- | -- |
| 8-11 | 1 |
| 9-0 | 1 |
| --- | -- |
| 9-4 | 1 |
| Total | <u>118</u> |

TABLE III
FREQUENCY OF CIVILIAN BIRTHS AT
CHRONOLOGICAL AGE LEVELS

| Years and Months | Age |
|------------------|-----|
| 7-0 | 1 |
| 7-3 | 1 |
| 7-4 | 1 |
| 7-5 | 11 |
| 7-6 | 7 |
| 7-7 | 9 |
| 7-8 | 8 |
| 7-9 | 11 |
| 7-10 | 8 |
| 7-11 | 10 |
| 8-0 | 8 |
| 8-1 | 8 |
| 8-2 | 8 |
| 8-3 | 11 |
| 8-4 | 3 |
| 8-5 | 3 |
| 8-6 | 2 |
| 8-7 | 2 |
| 8-8 | 2 |
| 8-9 | 1 |
| 8-10 | 1 |
| 8-11 | 1 |
| 9-0 | 1 |
| 9-1 | 1 |
| 9-2 | 1 |
| 9-3 | 1 |
| 9-4 | 1 |
| 9-5 | 1 |
| 9-6 | 1 |
| 9-7 | 1 |
| 9-8 | 1 |
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| 9-10 | 1 |
| 9-11 | 1 |
| 10-0 | 1 |
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| 10-11 | 1 |
| 11-0 | 1 |
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| 50-4 | 1 |
| 50-5 | 1 |
| 50-6 | 1 |
| 50-7 | 1 |
| 50-8 | 1 |
| 50-9 | 1 |
| 50-10 | 1 |
| 50-11 | 1 |
| 51-0 | 1 |
| 51-1 | 1 |
| 51-2 | 1 |
| 51-3 | 1 |
| 51-4 | 1 |
| 51-5 | 1 |
| 51-6 | 1 |
| 51-7 | 1 |
| 51-8 | 1 |
| 51-9 | 1 |
| 51-10 | 1 |
| 51-11 | 1 |
| 52-0 | 1 |
| 52-1 | 1 |
| 52-2 | 1 |
| 52-3 | 1 |
| 52-4 | 1 |
| 52-5 | 1 |
| 52-6 | 1 |
| 52-7 | 1 |
| 52-8 | 1 |
| 52-9 | 1 |
| 52-10 | 1 |
| 52-11 | 1 |
| 53-0 | 1 |
| 53-1 | 1 |
| 53-2 | 1 |
| 53-3 | 1 |
| 53-4 | 1 |
| 53-5 | 1 |
| 53-6 | 1 |
| 53-7 | 1 |
| 53-8 | 1 |
| 53-9 | 1 |
| 53-10 | 1 |
| 53-11 | 1 |
| 54-0 | 1 |
| 54-1 | 1 |
| 54-2 | 1 |
| 54-3 | 1 |
| 54-4 | 1 |
| 54-5 | 1 |
| 54-6 | 1 |
| 54-7 | 1 |
| 54-8 | 1 |
| 54-9 | 1 |
| 54-10 | 1 |
| 54-11 | 1 |
| 55-0 | 1 |
| 55-1 | 1 |
| 55-2 | 1 |
| 55-3 | 1 |
| 55-4 | 1 |
| 55-5 | 1 |
| 55-6 | 1 |
| 55- | |

The chronological age of the two groups was analyzed to determine if this factor could be affecting the difference in reading achievement. The difference in the means of 0.52 is not statistically significant at the five per cent level¹⁹ as shown in Table IV.

TABLE IV
MEAN CHRONOLOGICAL AGE OF 116 MILITARY AND
138 CIVILIAN CHILDREN IN STUDY

| Group | Number of Pupils | Mean | S. D. | Diff. of Means (in Months) | t |
|----------|------------------|------|-------|----------------------------|-----|
| Military | 96 | 7.87 | .44 | | |
| Civilian | 118 | 7.90 | .40 | .03 | .52 |

One may then conclude that chronological age has little or no relation to the scores made on the two tests by the two groups of military and civilian children.

How does the number of children in the family relate to the reading achievement of the child within the military and civilian groups?

Eleven military children had no brothers or sisters. Individual scores

¹⁹Significance at the five per cent level means that, if the true difference between the two measures is zero, a difference as large as, or larger than, the obtained difference could be secured five times out of one hundred by chance alone. The formula for t:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{\sum x_1^2 + \sum x_2^2}{n_1 + n_2 - 2} \left(\frac{1}{n_1} + \frac{1}{n_2} \right)}}$$

was used to determine the significant ratio. Lindquist's table was used for converting the ratios into levels of significance. (E. F. Lindquist, Statistical Analysis in Educational Research, p. 53, Boston: Houghton Mifflin Co., 1940).

The chronological age of the two groups was not significantly different. If this factor could be affected, the difference in reading achievement would be significant. The difference in the means of 0.22 is not significant. The difference is shown in Table 18.

TABLE 18
MEAN CHRONOLOGICAL AGE OF THE MILITARY AND
CIVILIAN CHILDREN IN THE

| Group | Number of Pupils | Mean | S.D. | Significance |
|----------|---------------------|------|------|--------------|
| Military | 88 | 7.37 | .44 | |
| Civilian | 118 | 7.59 | .48 | .22 |

One may then conclude that chronological age has little to do with reading achievement. The scores made on the two tests by the two groups of military and civilian children.

How does the number of children in the military group compare with the civilian group? The number of children in the military group is 88 and the number in the civilian group is 118. The difference is 30 children.

Significance at the 1 percent level. The difference between the two measures is 0.22. The difference is significant at the 1 percent level. The difference is 0.22. The difference is significant at the 1 percent level.

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s^2}{n_1} + \frac{s^2}{n_2}}}$$

was used to determine the significance of the difference between the two groups. The difference is 0.22. The difference is significant at the 1 percent level. The difference is 0.22. The difference is significant at the 1 percent level.

of these children were compared to the group scores as shown in Table V.

TABLE V
READING ACHIEVEMENT SCORES MADE BY THE SINGLE OR
ONLY CHILD IN THE MILITARY FAMILY COMPARED
WITH THE MILITARY GROUP MEAN SCORES

| <u>Pupil</u> | <u>Reading Achievement</u> |
|--------------|--------------------------------|
| 1 | 19 |
| 2 | 38 |
| 3 | 111 |
| 4 | 102 |
| 5 | 38 |
| 6 | 43 |
| 7 | 107 |
| 8 | 116 |
| 9 | 45 |
| 10 | 21 |
| 11 | 92 |
| Mean | <u>66.55</u> |
| Group Mean | 65.43 |

Observation reveals that the means for the two groups are nearly the same. Five children exceeded the group means and six were lower. The performance in reading of the single or only child in the military family thus appears from these limited data to be no different from that of his classmates who have sisters and brothers.

Seventeen civilian children had no brothers or sisters. Individual scores of these children were compared to the group scores as shown in Table VI.

Observation reveals that the means for these two groups are also nearly the same. Nine children exceeded the group means and eight were lower. The performance in reading of the single or only child in the civilian family thus appears from these limited data to be no different

of these children were compared to the group scores shown in Table V.

TABLE V

READING ACHIEVEMENT SCORES MADE BY THE SEVENTEEN ONLY CHILD IN THE MILITARY FAMILY COMPARED WITH THE MILITARY GROUP MEAN SCORES

| Pupil | Reading Achievement |
|------------|---------------------|
| 1 | 100 |
| 2 | 98 |
| 3 | 101 |
| 4 | 102 |
| 5 | 98 |
| 6 | 95 |
| 7 | 100 |
| 8 | 110 |
| 9 | 98 |
| 10 | 99 |
| 11 | 97 |
| Mean | 99.5 |
| Group Mean | 99.5 |

Observation reveals that the mean for the group was nearly the same. Five children exceeded the mean and five were below it. The performance in reading of the military family thus appears to be about the same as that of the civilian family. This is evident from the fact that the mean for the military family is nearly the same as that of the civilian family. The performance in reading of the military family thus appears to be about the same as that of the civilian family. This is evident from the fact that the mean for the military family is nearly the same as that of the civilian family. The performance in reading of the military family thus appears to be about the same as that of the civilian family. This is evident from the fact that the mean for the military family is nearly the same as that of the civilian family.

Observation reveals that the mean for the group was nearly the same. Nine children exceeded the group mean and eight were below it. The performance in reading of the military family thus appears to be about the same as that of the civilian family. This is evident from the fact that the mean for the military family is nearly the same as that of the civilian family. The performance in reading of the military family thus appears to be about the same as that of the civilian family. This is evident from the fact that the mean for the military family is nearly the same as that of the civilian family.

from that of his classmates who have brothers and sisters.

TABLE VI

READING ACHIEVEMENT SCORES MADE BY THE SINGLE OR
ONLY CHILD IN THE CIVILIAN FAMILY COMPARED
WITH THE CIVILIAN GROUP MEAN SCORES

| <u>Pupil</u> | <u>Reading Achievement</u> |
|--------------|--------------------------------|
| 1 | 40 |
| 2 | 98 |
| 3 | 74 |
| 4 | 81 |
| 5 | 62 |
| 6 | 32 |
| 7 | 46 |
| 8 | 36 |
| 9 | 99 |
| 10 | 24 |
| 11 | 63 |
| 12 | 58 |
| 13 | 39 |
| 14 | 60 |
| 15 | 44 |
| 16 | 103 |
| 17 | 36 |
| Mean | 58.53 |
| Group Mean | 55.17 |

Reports on the educational level of the parents of both groups of children were analyzed and compared on the basis of reading achievement as shown in Table VII.

TABLE VII

COMPARISON OF EDUCATIONAL LEVEL
OF MILITARY AND CIVILIAN PARENTS

| <u>Group</u> | <u>Number of Pupils</u> | <u>Mean</u> | <u>S. D.</u> | <u>Difference of Means</u> | <u>t</u> |
|--------------|-----------------------------|-------------|--------------|--------------------------------|----------|
| Military | 96 | .717 | 6.73 | | |
| Civilian | 118 | .784 | 7.22 | .067 | .07 |

from that of his classmates who have a higher reading level.

TABLE VI

READING ACHIEVEMENT SCORES MADE BY THE STUDENTS OF
ONLY CHILD IN THE CIVILIAN AND MILITARY COMPANIES
WITH THE CIVILIAN CHILD READERS

| Reading Achievement | Profile |
|------------------------|------------|
| 1 | 1 |
| 2 | 2 |
| 3 | 3 |
| 4 | 4 |
| 5 | 5 |
| 6 | 6 |
| 7 | 7 |
| 8 | 8 |
| 9 | 9 |
| 10 | 10 |
| 11 | 11 |
| 12 | 12 |
| 13 | 13 |
| 14 | 14 |
| 15 | 15 |
| 16 | 16 |
| 17 | 17 |
| Mean | Mean |
| Group Mean | Group Mean |

Reports on the educational level of the children in both groups of
children were analyzed and compared to the level of reading achieve-
ment as shown in Table VII.

TABLE VII

COMPARISON OF EDUCATIONAL LEVEL
OF MILITARY AND CIVILIAN CHILDREN

| Group | Number of Profile | Mean | S.D. | Intelligence Quotient |
|----------|----------------------|------|------|--------------------------|
| Military | 96 | 77.7 | 4.72 | 100 |
| Civilian | 116 | 77.4 | 4.72 | 100 |

The difference in educational level of the parents on the reading achievement of the children is not significant, so one may conclude that educational level of the parent has little or no relation to the reading achievement scores made by either the military or the civilian group of children.

Replies on question four indicated that fifty-two military families and fourteen civilian families had made more than three changes of residence during the child's life. These two groups were compared on reading achievement and the results are given in Table VIII.

TABLE VIII

RELATION OF CHANGE OF RESIDENCE OF MILITARY AND
CIVILIAN FAMILIES TO CHILDREN'S READING ACHIEVEMENT

| <u>Group</u> | <u>Number of Pupils</u> | <u>Mean Reading Achievement</u> | <u>S. D.</u> | <u>Diff. of Means</u> | <u>t</u> |
|--------------|-------------------------|---------------------------------|--------------|-----------------------|----------|
| Military | 52 | 59.98 | 30.90 | | |
| Civilian | 14 | 63.57 | 25.57 | 3.59 | .001 |

It should be understood that this factor is qualified by the condition that through moving, old friendships are broken, and new ones formed. Whether insecurity and sense of loss or beneficial broadening of acquaintances and interests are major responses in these children is not known from yes or no replies. The significant ratio of 0.001 between these groups is not significant.

Four military families had made no change of residence during the child's life and fifty civilian families reported no change of residence. These two groups were compared on reading achievement scores and

The difference in educational level of the parents in the reading achievement of the children is not significant, so any comparison of educational level of the parent has little or no relation to the reading achievement scores made by either the military or the civilian group of children.

Results on question four indicated that fifty-two military families and fourteen civilian families had made more than three changes of residence during the child's life. These two groups were compared on reading achievement and the results are given in Table VIII.

TABLE VIII

RELATION OF CHANGE OF RESIDENCE OR MILITARY AND CIVILIAN FAMILIES TO CHILDREN'S READING ACHIEVEMENT

| Group | Number of Pupils | Mean Reading Achievement | S.D. | Mean | t |
|----------|------------------|--------------------------|-------|-------|-------|
| Military | 52 | 89.88 | 30.87 | 89.88 | 1.001 |
| Civilian | 14 | 83.57 | 23.57 | 83.57 | |

It should be understood that this factor is qualified by the condition that through moving, old friendships are broken, and new ones formed. Whether insecurity and sense of loss or benefits attending of acquaintances and interests are major responses in these children is not known from yes or no replies. The significant ratio 0.001 between these groups is not significant.

Four military families had made no change of residence during the child's life and fifty civilian families reported no change of residence. These two groups were compared on reading achievement scores and

the results are given in Table IX.

TABLE IX

RELATION OF NO CHANGE OF RESIDENCE OF MILITARY AND
CIVILIAN FAMILIES TO CHILDREN'S READING ACHIEVEMENT

| <u>Group</u> | <u>Number of Pupils</u> | <u>Mean Reading Achievement</u> | <u>S. D.</u> | <u>Diff. of Means</u> | <u>t</u> |
|--------------|-------------------------|---------------------------------|--------------|-----------------------|----------|
| Military | 4 | 37.25 | 19.50 | | |
| Civilian | 50 | 69.28 | 24.33 | 32.03 | 2.52* |

When the families of both groups were equated for no change of residence, a significant difference in reading achievement at the five per cent level is shown favoring those children whose families reported no change of residence. The difference which exists may be inherent in the sampling because of the few military cases reporting no change of residence.

In considering the factor of parental absence, no consideration was given to the reason for absence of the parent or parents, nor whether the father or mother was the absent member. Thus, a broken home as a result of divorce was given no different classification than the home where the father had been away due to military service. An hypothesis was made that families whose membership had been intact should possibly be able to insure greater emotional security and more reading materials and opportunities for their children. Only eighteen families in the military group reported no absence from home while only twelve families in the civilian group reported absence from home.

the results are given in Table II.

TABLE II

RELATION OF NO CHANGE OF RESIDENCE TO MILITARY AND CIVILIAN FAMILIES TO CIVILIAN FAMILIES TO CIVILIAN FAMILIES

| Group | Number of Families | Percentage No Change | Percentage Change |
|----------|-----------------------|-------------------------|----------------------|
| Military | 4 | 75.00 | 25.00 |
| Civilian | 50 | 72.00 | 28.00 |

When the families of both groups were asked for no change of

residence, a significant difference in favor of the military

per cent level is shown favoring the military and civilian families reported

no change of residence. This difference was significant at the

in the sampling because of the low military families reported no change

of residence.

In considering the factor of parental residence, no significant

was given to the reason for absence of the parent or parents.

whether the father or mother was the parent reported. When a mother

home as a result of divorce was given no change of residence.

the home where the father had been away due to military service.

hypothesis was made that families whose membership had been in the

should possibly be able to insure greater continuity in the

reading materials and opportunities for their children. This question

families in the military group were that no change of residence was

two)ve families in the civilian group reported no change of residence.

Approximately fifteen per cent of the military children had enjoyed continuous companionship with one or both parents. These children rated fifteen points more on the mean score of the reading achievement test than the entire group as shown in Table X.

TABLE X

READING ACHIEVEMENT SCORES MADE BY MILITARY CHILDREN WHO HAD ENJOYED CONTINUOUS COMPANIONSHIP WITH ONE OR BOTH PARENTS COMPARED WITH GROUP MEAN SCORES

| <u>Pupil</u> | <u>Reading Achievement</u> |
|--------------|--------------------------------|
| 1 | 26 |
| 2 | 29 |
| 3 | 91 |
| 4 | 42 |
| 5 | 108 |
| 6 | 110 |
| 7 | 54 |
| 8 | 42 |
| 9 | 46 |
| 10 | 16 |
| 11 | 47 |
| 12 | 119 |
| 13 | 119 |
| 14 | 68 |
| 15 | 87 |
| 16 | 109 |
| 17 | 107 |
| 18 | 43 |
| Mean | <u>70.17</u> |
| Group Mean | 55.17 |

Approximately twelve per cent of the civilian children had been denied continuous companionship with one or both parents. These children rated one and two-tenths points less on the mean score of the reading achievement test than the entire civilian group as shown in Table XI.

Approximately fifteen per cent of the military children had enjoyed continuous companionship with one or both parents. These children scored fifteen points more on the mean score of the reading achievement test than the entire group as shown in Table X.

TABLE X

READING ACHIEVEMENT SCORES MADE BY MILITARY CHILDREN WHO HAD ENJOYED CONTINUOUS COMPANIONSHIP WITH ONE OR BOTH PARENTS COMPARED WITH GROUP MEAN SCORES

| Reading Achievement | Rank |
|---------------------|------------|
| 105 | 1 |
| 104 | 2 |
| 103 | 3 |
| 102 | 4 |
| 101 | 5 |
| 100 | 6 |
| 99 | 7 |
| 98 | 8 |
| 97 | 9 |
| 96 | 10 |
| 95 | 11 |
| 94 | 12 |
| 93 | 13 |
| 92 | 14 |
| 91 | 15 |
| 90 | 16 |
| 89 | 17 |
| 88 | 18 |
| 87 | Mean |
| 86 | Group Mean |

Approximately twelve per cent of the civilian children had been denied continuous companionship with one or both parents. These children scored one and two-tenths points less on the mean score of the reading achievement test than the entire civilian group as shown in Table XI.

TABLE XI

READING ACHIEVEMENT SCORES MADE BY CIVILIAN CHILDREN
WHO HAD BEEN DENIED CONTINUOUS COMPANIONSHIP
WITH ONE OR BOTH PARENTS COMPARED WITH
GROUP MEAN SCORES

| <u>Pupil</u> | <u>Reading Achievement</u> |
|--------------|--------------------------------|
| 1 | 96 |
| 2 | 98 |
| 3 | 89 |
| 4 | 46 |
| 5 | 85 |
| 6 | 56 |
| 7 | 37 |
| 8 | 87 |
| 9 | 15 |
| 10 | 49 |
| 11 | 101 |
| 12 | 28 |
| 13 | 83 |
| 14 | 79 |
| 15 | 51 |
| 16 | 44 |
| 17 | 48 |
| Mean | 64.23 |
| Group Mean | 65.43 |

TABLE XII

EFFECT OF ABSENCE (OVER ONE MONTH) FROM HOME OF
EITHER OR BOTH PARENTS ON MILITARY CHILDREN'S
READING ACHIEVEMENT

| <u>Question of Parental Absence</u> | <u>Number of Pupils</u> | <u>Mean</u> | <u>S. D.</u> | <u>Diff. of Means</u> | <u>t</u> |
|---|-----------------------------|-------------|--------------|---------------------------|----------|
| Parent(s) absent | 78 | .44 | .23 | | |
| Parents present | 18 | .59 | .29 | .15 | 2.25** |

A significant difference at the five per cent level is shown for military children's achievement in reading favoring those children whose families reported no parental absence.

TABLE IV

READING ACHIEVEMENT SCORES MADE BY CHILDREN WHO HAD BEEN IN THE MILITARY SERVICE WITH ONE OR BOTH PARENTS COMPARED WITH CHILDREN WHO HAD NOT

| Page | Score |
|------------|-------|
| 1 | 80 |
| 2 | 78 |
| 3 | 75 |
| 4 | 72 |
| 5 | 70 |
| 6 | 68 |
| 7 | 65 |
| 8 | 62 |
| 9 | 60 |
| 10 | 58 |
| 11 | 55 |
| 12 | 52 |
| 13 | 50 |
| 14 | 48 |
| 15 | 45 |
| 16 | 42 |
| 17 | 40 |
| Mean | 55.0 |
| Group Mean | 55.0 |

TABLE V

EFFECT OF ABSENCE (OVER ONE MONTH) FROM HOME OF EITHER OR BOTH PARENTS ON MILITARY CHILDREN'S READING ACHIEVEMENT

| Question of | Number of | Mean | Mean | Mean |
|-------------------|-----------|-------|-------|-------|
| Parental Absence | Children | Score | Score | Score |
| Parent(s) absent | 15 | 52.0 | 55.0 | 55.0 |
| Parent(s) present | 15 | 55.0 | 55.0 | 55.0 |

A significant difference in the mean scores is shown for the

children's scores when in reading the mean scores are

families reported no parental absence.

TABLE XIII

EFFECT OF ABSENCE (OVER ONE MONTH) FROM HOME OF
EITHER OR BOTH PARENTS ON CIVILIAN CHILDREN'S
READING ACHIEVEMENT

| <u>Question of Parental Absence</u> | <u>Number of Pupils</u> | <u>Mean</u> | <u>S. D.</u> | <u>Diff. of Means</u> | <u>t</u> |
|---|-----------------------------|-------------|--------------|---------------------------|----------|
| Parent(s) absent | 17 | .55 | .52 | | |
| Parents present | 101 | .56 | .09 | .01 | .19 |

No significant difference is indicated for civilian children's achievement in reading when the effect of parental absence is considered.

TABLE XIII

EFFECT OF ABSENCE (OVER ONE MONTH) FROM HOME OF
EITHER OR BOTH PARENTS ON CIVILIAN CHILDREN'S
READING ACHIEVEMENT

| Question of Parental Absence | Number of Pupils | Mean | S.D. | Diff. of Means | t |
|---------------------------------|---------------------|------|------|-------------------|-----|
| Parent(s) absent | 17 | .55 | .52 | | |
| Parents present | 101 | .58 | .53 | .01 | .19 |

No significant difference is indicated for civilian children's achieve-

ment in reading when the effect of parental absence is considered.

CHAPTER V

CONCLUSIONS AND RECOMMENDATIONS

Major conclusions that seem to result from this study which considers the factor of reading achievement of military children with frequent changes of environment and civilian children with a permanent environment are as follows:

Conclusions

1. The civilian children with a permanent environment excelled the military children in reading achievement, even after the effects of intelligence had been removed from reading achievement scores.

2. In analyzing environmental factors which might contribute significantly between the groups in reading achievement the following factors were to be significant.

- a. Effect of absence from home of either or both parents on military children's reading achievement favored those children whose families reported no parental absence.

- b. Relation of no change of residence of military and civilian families on children's reading achievement favored those civilian children whose families reported no change.

3. No evidence was discovered to indicate that military life as an individual factor of and by itself affects children's reading achievement.

WILLIAM STARR

CONCLUSIONS AND RECOMMENDATIONS

OVERALL

Major conclusions that arise from this study are that while the factor of reading ability is significant in explaining the changes of environment and other factors, the following environment are as follows:

Conclusions

1. The civilian children with a permanent environment, the military children in reading achievement, were after the change of intelligence had been removed from reading ability.
2. In analyzing environment, factors which might contribute significantly between the groups in reading achievement, the following factors were to be significant:
 - a. Effect of absence from home of either parent or grandparent on military children's reading and achievement (those children whose families reported no parental absence).
 - b. Relation of age of reading and reading and writing families on children's reading achievement (those children whose families reported no parental absence).
 - c. No evidence was discovered to suggest that the individual factor of age by itself was significant in reading achievement.

In addition, reading achievement as measured in this study seems to be greatly related to mental ability.

4. The comparison of mean reading achievement scores of children within both the military and civilian groups indicated that children's reading achievement is benefited from continuous parental association in the home.

Recommendations

Two recommendations are suggested. These are:

1. Further study should be made especially of factors discovered where the very small number of cases were insufficient to draw reliable and valid conclusions. These areas of study might profitably include children who are the single or only child in the family.

2. Further research is needed in the measurement of school achievement in children of transient (military) but not migratory (i. e., farm workers, etc.) families--in comparison to children with a permanent home--school background.

In addition, reading achievement is measured by a test which is greatly related to mental ability.

4. The comparison of reading achievement between the two groups was made within both the ability and reading groups. The results of the reading achievement test are presented in the following table.

MILLERS FALLS

EXPERIMENT

Two recommendations are made. First, the results of the reading achievement test should be used as a guide in the selection of children for the reading program.

where the very small number of children were included in the study and valid conclusions. These results are not valid for the children who are included in the study.

3. Further research is needed in the area of reading achievement in children of transient (migrant) farm workers. (See farm workers, etc.) The results of the study are not valid for the next home-school program.

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APPENDIX

May 10, 1954

Dear Parents,

In an effort to understand more fully the needs of our children, the University of New Mexico Education Department in cooperation with the Superintendent of the Albuquerque Public Schools is directing a study of background experiences of children in four second grade groups in the Albuquerque Schools. We feel that a consideration of certain factors in the child's background experiences will be valuable for the future curriculum planning.

We are asking you to assist us by filling out the questionnaire below and returning it to us by Friday, May 14. You may use the same envelope, and please seal it. The information obtained will be kept confidential.

Sincerely,

1. Name of Child _____
Present age _____ Years _____ Months.
2. Number of Children in the family now? _____
List ages and sex _____

- 3a. Educational level of Father
Completed elementary school _____
High School 1 _____ 2 _____ 3 _____ 4 _____
College 1 _____ 2 _____ 3 _____ 4 _____
Graduate _____ Degree _____
- 3b. Educational level of Mother
Completed elementary school _____
High School 1 _____ 2 _____ 3 _____ 4 _____
College 1 _____ 2 _____ 3 _____ 4 _____
Graduate _____ Degree _____

ALBUQUERQUE

May 16, 1954

Dear Parents,

In an effort to understand more fully the needs of our children, the University of New Mexico School for Gifted Children is sponsoring a study. Superintendent of the Albuquerque Public Schools is leading a study of background experiences of children who have shown high ability in the Albuquerque Schools. We feel this investigation is important to the child's background experiences will be significant in the future of their planning.

We are asking you to assist us by filling out and returning a form and returning it to me by Friday, May 22, 1954. Your cooperation is appreciated and please email. The information is confidential.

| | | |
|-----|--------------------------------------|-------|
| 1. | Name of Child | _____ |
| | Present age | _____ |
| 2. | Number of children in the family now | _____ |
| | List ages and sex | _____ |
| 3a. | Educational level of father | _____ |
| | Completed elementary school | _____ |
| | High School | _____ |
| | College | _____ |
| | Graduate | _____ |
| 3b. | Educational level of mother | _____ |
| | Completed elementary school | _____ |
| | High School | _____ |
| | College | _____ |
| | Graduate | _____ |

4. Has your family made a change of residence during the child's lifetime whereby your child's old friendships were broken and new ones formed? Yes. _____ No. _____

| Date of Move | Within U. S. | Outside U. S. | Age of Child | Was Schooling Interrupted | |
|-----------------|-----------------|------------------|-----------------|------------------------------|-------|
| | | | | Yes | No |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |
| _____ | _____ | _____ | _____ | _____ | _____ |

- 5a. Has either parent been away from home for long periods (over a month) of time?

Yes _____ No _____ Father _____ Mother _____

- 5b. If father has been away from home for military service:

| Date | Duration of absence |
|-------|---------------------|
| _____ | _____ |
| _____ | _____ |

- 5c. If either parent has been away from home for any other reason:

| Mother | Father |
|------------|------------------------|
| Date _____ | Duration of stay _____ |
| _____ | _____ |
| _____ | _____ |

6. Has the child lived in the home of a relative _____; a friend _____.

| Date | Duration of stay |
|-------|------------------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

7. Has the child's Mother been regularly employed? Yes _____ No _____

| Date | Duration of employment |
|-------|------------------------|
| _____ | _____ |
| _____ | _____ |

8. Responsibility for discipline usually has been assumed by Mother _____ Father _____ Other _____

9. Has the child traveled in the past five years? Yes _____ No _____

| Date | From | To |
|----------------|-------|-------|
| _____ | _____ | _____ |
| Mode of Travel | _____ | _____ |

| Date | From | To |
|----------------|-------|-------|
| _____ | _____ | _____ |
| Mode of Travel | _____ | _____ |

| Date | From | To |
|----------------|-------|-------|
| _____ | _____ | _____ |
| Mode of Travel | _____ | _____ |

4. Has your family made a change in your home or in the location of your home since you were born? If so, please state the new one.

Yes _____ No _____
 Date _____
 Mode of Travel _____

5a. Has either parent been away from home for more than 30 days (month) at any time? Yes _____ No _____

5b. If father has been away from home for more than 30 days, state the date. _____

5c. If mother has been away from home for more than 30 days, state the date. _____

6. Has the child been in the home of a relative? Yes _____ No _____

7. Has the child's father been away from home for more than 30 days? Yes _____ No _____

8. Has the child's mother been away from home for more than 30 days? Yes _____ No _____

9. Has the child been in the home of a relative? Yes _____ No _____

10. Has the child been in the home of a relative? Yes _____ No _____

11. Has the child been in the home of a relative? Yes _____ No _____

12. Has the child been in the home of a relative? Yes _____ No _____

13. Has the child been in the home of a relative? Yes _____ No _____

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