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A Study of the Effect of Home Environment Upon the Reading Abilities of Elementary School Children

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A STUDY OF THE EFFECT OF HOME ENVIRONMENT UPON THE READING ABILITIES OF ELEMENTARY SCHOOL CHILDREN

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CONTENTS

Copies
May Not
Film
Well!

TABLES

CHAPTER I

INTRODUCTION

The purpose of this study is to determine to what extent reading ability is related to certain factors in the home environment of children.

Many authorities agree that the home conditions may influence the reading abilities of the child.

Whipple says:

"Poor home environment is conducive to reading disability. The home contributes most, if not all, of the child's pre-school training. Naturally it determines many of his attitudes and interests. If the family is illiterate or uninterested in reading, the child will have less stimulation to learn to read than in a home where reading is done."[1]

Dolch says:

"When a child is at school we see only part of his life. The other part goes on in his home or in situations produced by the home. The part of the child's life that we see at school is more an outgrowth of home life than is usually recognized. Many schools knowing this have teachers visit the homes of children. Reading failure is so often connected with the home condition that we may definitely say we must know some things about the home situation of every reading case."[2]

In determining the origin and cause of reading deficiencies, McCallister considers the home environment an important factor. He says:

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1 Whipple, Gertrude, "Causes of Retardation in Reading and Methods of Eliminating Them," Peabody Journal of Education, 16, (November, 1938), 191-200.

2 Dolch, William Edward, A Manual For Remedial Reading, Ch. II "Finding Out About The Child," The Garrard Press, Champaign, Ill., (1939), 24.

"A knowledge of home conditions may include one or more items of information relating to reading. The intellectual interests of members of the home often influence reading interests and habits. A pupil who lives in a home of few intellectual interests is not likely to find a stimulus to reading. A pupil whose life is unhappy or who experiences undesirable family relations with which he is unable to cope may divert into other channels interests which might otherwise be devoted to reading. A knowledge of the size and character of the home library, the character of the newspapers and magazines available in the home, and the character of the pupil's personal library aids in determining the facilities for reading available to the pupil. A pupil who has access to materials has greater opportunities for gaining experiences in reading than one who does not have such facilities."[3]

Monroe and Backus agree with the above authorities when they say that the child's home environment contributes its share of factors to reading disability. They say:

"Children reflect the attitudes and interests of their parents. Motivation toward reading is usually greater in a home where reading is a frequent activity than in a home where parents never engage in reading."[4]

Following is a summary of home factors which authorities believe to retard the development of reading ability:

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3 McCallister, James M., Remedial and Corrective Instruction In Reading, Ch. V "Diagnosing Deficiencies of Retarded Readers," D. Appleton-Century Company, N. Y, N. Y., (1936), 77-78.

4 Monroe, Marian, Backus, Bertie, Remedial Reading, Ch. II "General Principles of Diagnosis of Reading Disabilities," Houghton Mifflin Co., New York, (1937), 31.

1. Economic insecurity of the home so that many of the child's needs are not adequately supplied.

2. Emotional insecurity at home because of a broken home, sibling rivalry, conflicts between parents, or any factors which will cause the child to have an insecure or unwanted feeling.

3. Illiterate parents or parents who have inadequate reading interests or insufficient language background for reading.

A survey of the various publications of Gray's Summary of Investigations in Reading from September, 1935 to May, 1944 reveals only one research study which bears on the relation between home background and progress in reading.

In 1935 George H. Hillard and Eleanor Troxell made an investigation of the bearing of a rich background on reading readiness and reading progress.

This study was made in the Kalamazoo Schools, Kalamazoo, Michigan.

Two groups of kindergarten children were selected for the study. The selection was based on the judgment of the teachers, supplemented by data given by the principals and visiting nurses or by information collected in pre-health clinics. The Stanford Revision of the Binet-Simon Intelligence Scale was given. No child was included whose intelligence quotient indicated that he was below normal. Seventy children were selected for study.

A questionnaire was sent to each home. It covered the following nine main points:

1. Occupation of parents

2. Number of older and younger brothers and sisters

3. Travel experience of the child

4. Mechanical means of communication in the home

5. Social experience in the home

6. The child's language and conversational inclinations

7. The reading environment

8. Factors affecting the child outside the home such as play, contacts in the neighborhood, going to church and movies.

9. Other noteworthy experiences mentioned by the parents.

After a study of this information the two groups were enough different to be designated as the "rich-background group", and the meager-background group."

The two groups were next measured as to reading readiness by means of the Lee-Clark Reading Readiness Test and the Stone-Grover Classification Test for Beginners in Reading.

When the median and quartile scores were compared the rich-background groups were shown to have a distinct advantage.

Progress in learning to read was measured by the Gates Primary Reading Test when the children were in grade 1.6 and again when they were in grade 2.4. The rich-background group had slightly higher mental ages, but the difference was not statistically significant. It was found that the rich-background group made more rapid strides in the average reading scores than the other group and was also superior in the complex abilities represented by the test.[5]

Much research would need to be done at all grade levels to determine what factors in home environment are related to reading progress and to what extent they are related.

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[5] Whipple, Gertrude, "Causes of Retardation in Reading and Methods of Eliminating Them," Peabody Journal of Education, 16 (November 1938), 191-200.

The problem of the present study is: To discover the relationship between the reading ability of elementary school children and the following factors in their home environment:

1. The extent of the education of the mother
2. The extent of the education of the father
3. Occupation of the mother
4. Occupation of the father
5. Amount of reading material in the home
6. Number of minutes spent in going to and coming from school
7. Number of other children in the home
8. Whether the home is owned or rented
9. Whether both parents are living.

CHAPTER II

PROCEDURE

The present study was made with a fourth and fifth grade group in the Clinton Grammar School, Clinton, Tennessee and a third and fifth grade group in the Boone Demonstration School, Boone, North Carolina, during the school years 1942-43, and 1943-44. A total of two hundred fifty-eight cases were studied in those four grades.

The same procedures were followed in each school. At the close of the school year the Henman-Nelson Test of Mental Ability, Form A, was given to each child. By means of this test the mental age and intelligent quotient of each child were found.

This test was followed by the Stanford Achievement Reading Test. The Primary Test, Form D, was given to grade three, and the Intermediate Test, Form D, was given to grades four and five. From this test the reading age of each child was obtained.

Information concerning each home was secured from a questionnaire which was sent to each home and filled in by the parents. This information was checked and supplemented by home visitation, checking of school records and information given by teachers and principals.

Following is a sample of the questionnaire:

1. Name of child
2. Age of child
3. Education of mother
4. Education of father
5. Occupation of mother
6. Occupation of father
7. Amount of reading material in the home books_____, magazines_____, newspapers_____
8. Do you own or rent your home?

9. Are both parents living?

10. How many children are in your home?

11. What time does the child leave home in the morning?

12. What time does the child get home in the afternoon?

The information thus obtained for each child was tabulated according to the following classifications:

1. I.Q.
   (1) above 110
   (2) 90-110
   (3) 80-90
   (4) below 80

2. Number of grades completed by the mother
   (1) above 13
   (2) 10-12
   (3) 8-10
   (4) below 8

3. Number of grades completed by the father
   (1) above 13
   (2) 10-12
   (3) 8-10
   (4) below 8

4. The occupation of the mother
   (1) Works in the home
   (2) Works out of the home

5. The occupation of the father
   (1) Professional
   (2) Skilled laborer
   (3) Farmer
   (4) Unskilled laborer
   (5) Unemployed

6. Number of books, magazines and newspapers in the home
   (1) above 100
   (2) 20-100
   (3) 5-20
   (4) below 5

Each book, magazine, and newspaper was counted as one.

7. Time spent in going to and coming from school
   (1) below 1 hour
   (2) above 1 hour

8. The number of other children in the home

(1) below 3
(2) 3-7
(3) above 7

9. Home is
(1) Rented
(2) Owned

10. Parents living
(1) Both
(2) One

To determine whether each child's reading ability was above or below normal expectation, a ratio between the reading age and mental age was found by dividing the reading age by the mental age $\frac{(R.A.)}{(M.A.)}$. Also a ratio between the reading age and chronological age was found by dividing the reading age by the chronological age $\frac{(R.A)}{(C.A)}$.

To determine which factors in the home environment were related to reading ability, comparisons were made between the standings of the children on these two measures of reading achievement and their standings in each factor of the home environment.

The following chapter presents and analyzes the results thus obtained.

CHAPTER III

ANALYSIS

The following analysis is an attempt to find the relation between the reading ability of children and the following factors in home environment:

1. The extent of the education of the mother
2. The extent of education of the father
3. Occupation of the mother
4. Occupation of the father
5. Amount of reading material in the home
6. Time spent in going to and coming from school
7. Number of other children in the home
8. Whether the home is owned or rented
9. Whether both parents are living

The data analyzed were obtained according to the procedures described in Chapter II.

A. I.Q. and reading ability

To determine whether each child's reading ability was above or below normal expectation, ratios between the mental age and chronological age (I.Q.), between the reading age and mental age $\left(\frac{R.A.}{M.A.}\right)$, and between the reading age and chronological age $\frac{(R.A.)}{(C.A.)}$ were found for the children of four different grades: grade five, Boone, North Carolina, grade three, Boone, North Carolina, grade five, Clinton, Tennessee, grade four, Clinton, Tennessee.

The children were classified into four I.Q. groups as follows: those having I.Q.'s above 110, those having I.Q.'s of 90-110, those having I.Q.'s of 80-90, those having I.Q.'s below 80. The average I.Q. was found for

each group and compared with the average $\frac{R.A.}{M.A.}$ and $\frac{R.A.}{C.A.}$ for the group. These averages are given in Table I.

From the data of Table I it is seen that:

1. The highest average I.Q. for any group is 131 with $\frac{R.A.}{M.A.}$ of 88 and $\frac{R.A.}{C.A.}$ of 115. The lowest average I.Q. for any group is 73 with a $\frac{R.A.}{M.A.}$ of 96 and a $\frac{R.A.}{C.A.}$ of 70. Normal progress in reading would result in the $\frac{R.A.}{C.A.}$ being about equal to the $\frac{M.A.}{C.A.}$ and the $\frac{R.A.}{M.A.}$ being about 100. Therefore, both the $\frac{R.A.}{C.A.}$ and the $\frac{R.A.}{M.A.}$ in the highest I.Q. groups are below normal expectation; both the $\frac{R.A.}{C.A.}$ and $\frac{R.A.}{M.A.}$ in the lowest I.Q. groups are about normal.

2. The highest individual I.Q. in all the cases studied is 160 with $\frac{R.A.}{M.A.}$ of 75 and $\frac{R.A.}{C.A.}$ of 119. Both the $\frac{R.A.}{M.A.}$ and $\frac{R.A.}{C.A.}$ are below normal expectation. The lowest I.Q. in all the cases studied is 59 with $\frac{R.A.}{M.A.}$ of 103 and a $\frac{R.A.}{C.A.}$ of 61. Both the $\frac{R.A.}{M.A.}$ and $\frac{R.A.}{C.A.}$ are a little above normal expectation.

3. In all groups and also the combined groups, as the I.Q. increases the $\frac{R.A.}{C.A.}$ increases. However in all cases except two the $\frac{R.A.}{C.A.}$ is below the I.Q., which means the children in these groups are below normal expectation in reading ability.

4. With two exceptions it is found through all grades and also for the combined grades, that as the I.Q. goes from high to low the $\frac{R.A.}{M.A.}$ increases.

For the groups studied, on the average, the higher the I.Q. of the child, the farther his reading age falls below his mental age.

B. Education of the mother and reading ability

To determine the relation between the education of the mother and reading ability of the child, the children in the four grades were grouped

TABLE I

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ FOR VARI

	Boone 5				Boone 3				Clinton 5		
I.Q.	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{$
Above 110	15	116	92	106	11	131	88	115	12	118	87
90-110	14	100	89	89	26	100	91	91	19	102	87
80-90	15	85	91	77	14	79	93	73	8	83	92
Below 80	7	73	96	70	11	78	96	74	14	76	91

3 I.Q. GROUPS

	Clinton 4				Total			
Average R.A./C.A.	Number of Cases	Average I.Q.	Average R.A./M.A.	Average R.A./C.A.	Number of Cases	Average I.Q.	Average R.A./M.A.	Average R.A./C.A.
102	24	120	87	104	62	120	88	106
88	24	98	96	94	83	100	90	90
76	12	84	100	84	49	82	93	77
70	10	76	107	80	42	75	96	72

as follows: those whose mothers had finished above 12 years of school, those whose mothers had finished 8-10 years of school, and those whose mothers had finished below 8 years of school. The average number of years of education of the mothers of these groups was found and compared with the average I.Q., average $\frac{R.A.}{M.A.}$, and average $\frac{R.A.}{C.A.}$ of the group. These averages appear in Table II.

Analysis of Table II reveals that:

1. The average number of years of education of the mothers in various groups range from 4 to 14 years for the combined grades. The average I.Q.'s of the children range from 82 to 113 for the same groups. With few exceptions in all sixteen groups as the average education of the mother increases, the average I.Q. of the children increases. For the combined groups as the education of the mother increases, the I.Q. of the children increases. For the groups studied, a positive relation exists between the number of years of education of the mother and the I.Q. of the child.

2. In all the grades studied and also in the combined groups, as the education of the mother increases the $\frac{R.A.}{C.A.}$ increases. In other words, children whose mothers have the greater number of years of education have higher $\frac{R.A.}{C.A.}$ than those whose mothers have few years of education. However, in all the groups except one, the $\frac{R.A.}{C.A.}$ is lower than the I.Q., which means that these children are below normal reading ability.

3. In the four grades no consistent trend appears in the relation of the $\frac{R.A.}{M.A.}$ of the child to the education of the mother. For the combined groups the total average $\frac{R.A.}{M.A.}$ was about the same for each classification, the range being from 91 to 94. The education of the mother seems to have no effect on the extent to which reading ability develops in accordance with mental ability.

TABLE II

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ FOR GROUP DIVIDED ACC

Education of Mother	Boone 5					Boone 3					Clinton		
	Number of Cases	Average No. of Years Education, Mother	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average No. of Years Education of Mother	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average No. of Years Education of Mother	Average
Above 12 Years	10	15	110	92	101	11	13	113	96	107	9	15	111
10-12	11	11	90	105	95	18	11	100	90	90	10	10	87
8-10	8	8	93	91	84	11	8	96	90	86	16	8	95
Below 8	12	6	93	89	83	14	6	89	96	85	18	4	76

NG TO YEARS OF EDUCATION OF MOTHER

		Clinton 4					Total				
R.A. / M.A.	Average R.A. / C.A.	Number Of Cases	Average No. of Yrs. Education of Mother	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.	Number of Cases	Average No. of Yrs. Education of Mother	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.
6	95	8	14	121	86	104	38	14	113	90	102
9	86	24	12	102	91	93	63	11	97	94	92
0	85	23	8	93	94	87	58	8	94	91	85
1	70	11	3	74	100	74	55	4	82	93	76

C. Education of the father and reading ability

To determine the relation between the education of the father and the reading ability of the child, the children were grouped as follows: those whose fathers had finished above 12 years of school, those whose fathers had finished 10-12 years of school, those whose fathers had finished 8-10 years of school, those whose fathers had finished below 8 years of school. The average number of years of education of the father in each of these groups was found and compared with the average I.Q., $\frac{R.A.}{M.A.}$, and $\frac{R.A.}{C.A.}$ of the children. These data are found in Table III.

The data in Table III show that:

1. The average numbers of years of education of the fathers range from 4 to 15 years for the four groups of the combined grades. The average I.Q.'s of the children range from 83 to 113 for the same groups. In all sixteen groups and also for the combined groups, as the average number of years of education of the fathers increases, the average I.Q. of the children increases. In other words, on the average the children whose fathers have the greater number of years of education, have higher I.Q.s than children whose fathers have little education.

2. It is found through all four grades and also in the combined grades, that as the education of the fathers increases the $\frac{R.A.}{C.A.}$ of the children increases. However, the average $\frac{R.A.}{C.A.}$ is lower than the average I.Q. in all cases, which indicates a below normal reading situation in relation to mental ability.

3. In the combined grades and in all the separate grades, except Boone, grade five, there is a slight decrease in the $\frac{R.A.}{M.A.}$ as the average education of the fathers increases. For the groups studied the children whose fathers have much education have slightly less reading ability as

TABLE III

AVERAGE I. Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ FOR GROUPS DIVIDED AC

Education of Father	Boone 5					Boone 3					Clin		
	Number of Cases	Average No. of Yrs. Education of Father	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average No. of Yrs. Education of Father	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average No. of Yrs. Education of Father	Average I.Q.
Above 12 Years	7	15	115	94	108	11	15	111	88	96	11	15	110
10-11	11	12	108	92	98	13	11	106	88	93	18	11	101
8-10	7	8	100	88	88	9	8	94	91	85	7	8	85
Below 8	17	5	88	92	80	18	5	90	92	83	18	4	76

TABLE IV

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ OF CHILDREN WHOSE MOTHERS WORK IN

Occupation of Mother	Boone 5				Boone 3				Clinton		
	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average
Works in Home	35	99	91	90	53	98	91	89	50	99	
Works Out of Home	6	111	89	99	5	106	90	95	13	86	

DING TO NUMBER OF YEARS OF EDUCATION OF FATHER

	5		Clinton 4				Total				
	M.A.	Average R.A. / C.A.	Number of Cases	Average No. of Yrs. Education of Father	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.	Number of Cases	Avervae No. of Yrs. Education of Father	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.
		96	6	15	122	86	104	35	15	113	89	99
		89	21	11	106	90	95	63	11	105	90	94
		77	22	8	95	93	88	31	8	93	91	85
		70	12	4	78	101	79	65	4	83	93	75

E HOME AND CHILDREN WHOSE MOTHERS WORK OUT OF THE HOME

		Clinton 4				Total			
R.A.	Average R.A. / C.A.	Number of Cases	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.	Number of Cases	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.
	91	50	99	92	91	187	98	91	90
	76	13	86	90	76	37	93	90	82

compared with their mental ability than those whose fathers have little education. This difference is too small to be considered significant.

D. Occupation of the mother and reading age

To determine the relation between the occupation of the mother and the reading ability of the child, the children were classified into two groups: those whose mothers work in the home, and those whose mothers work out of the home. The two groups were compared according to the average I.Q., $\frac{R.A.}{M.A.}$, and $\frac{R.A.}{C.A.}$. These averages are found in Table IV.

From Table IV it is seen:

1. That the average I.Q. is higher for the children whose mothers work out of the home at Boone. The I.Q. is higher for those whose mothers work in the home at Clinton. For the combined groups the I.Q. is higher for those whose mothers work in the home.

2. The average $\frac{R.A.}{C.A.}$ is higher for the children whose mothers work out of the home at Boone. The $\frac{R.A.}{C.A.}$ is higher for the children whose mothers work in the home at Clinton. For the combined groups the $\frac{R.A.}{C.A.}$ is higher for those whose mothers work in the home. In all cases the $\frac{R.A.}{C.A.}$ is less than the I.Q., which indicates a below normal reading situation in relation to mental ability.

3. The $\frac{R.A.}{M.A.}$ is slightly higher for the children whose mothers work in the home, in all the groups and also the combined groups.

E. Occupation of the father and reading ability

In order to determine the relation between the occupation of the father and the reading ability of the child, the occupations of the fathers were grouped according to the following classifications: professional, skilled laborer, unskilled laborer, farmer, and unemployed. The average I.Q., $\frac{R.A.}{M.A.}$ and $\frac{R.A.}{C.A.}$ of the children were found for each of these groups. These averages are found in Table V.

TABLE V

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ OF GROUPS DIVIDED ACCO

Occupation of Father	Boone 5				Boone 3				Clinton 5		
	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average R.A.
Profes-sional	5	108	92	99	6	135	84	112	6	109	91
Skilled Laborer	12	110	90	97	12	104	89	92	11	99	88
Unskilled Laborer	5	97	93	90	14	94	93	88	22	92	86
Farmer	19	91	82	75	16	84	101	85	1	73	91
Unemployed	0	0	0	0	0	0	0	0	13	80	92

NG TO THE OCCUPATIONS OF THEIR FATHERS

	Clinton 4				Total			
Average R.A./C.A.	Number of Cases	Average I.Q.	Average R.A./M.A.	Average R.A./C.A.	Number of Cases	Average I.Q.	Average R.A./M.A.	Average R.A./C.A.
99	5	111	87	96	22	116	88	102
88	11	114	91	103	46	106	89	94
80	34	99	93	91	75	95	91	86
66	3	72	100	72	39	86	91	78
73	11	85	98	83	24	82	94	77

These averages reveal:

1. In grade three at Boone, N. C., and five at Clinton, Tenn., the children whose fathers are in the professional groups have the highest average I.Q.'s. In grades five at Boone, N. C., and four at Clinton, Tenn., the children whose fathers are skilled laborers have the highest average I.Q.'s. In all four grades the children whose fathers are farmers and unemployed have the lowest average I.Q.'s. For the total group, the average I.Q. of the children decreases for different occupations in the following order: professional, skilled laborer, unskilled laborer, farmer, and unemployed.

2. In all four grades, the children whose fathers are in the professional and skilled laborer groups have higher $\frac{R.A.}{C.A.}$ than those whose fathers are in the unskilled laborer, farmer, and unemployed groups. For the combined grades the $\frac{R.A.}{C.A.}$ decreases in the following order of occupations of the fathers: professional, skilled laborer, unskilled laborer, farmer, and unskilled laborer, farmer, and unemployed. However, the $\frac{R.A.}{C.A.}$ is lower than the I.Q. in all cases, which indicates that none of the groups are normal in reading abilities.

3. In the four grades, no consistent trend appears in the relation of the $\frac{R.A.}{M.A.}$ of the child to the occupation of the father. For the combined groups there is a slight increase in the $\frac{R.A.}{M.A.}$ in the following order of occupations of the fathers: professional, skilled laborer, unskilled laborer, farmer, and unemployed.

F. Number of books, magazines, and newspapers in the home and reading ability

In order to determine the relation between the amount of reading material in the home and the reading ability of the child, each book,

magazine and newspaper in the home was counted as one and the children were grouped as follows: those having above 100, those having from 20 to 100, those having from 5 to 20 and those having below 5 books, magazines, and newspapers in the home. The average number of books, magazines and newspapers in the homes of each group was found and compared with the I.Q., $\frac{R.A.}{M.A.}$, and $\frac{R.A.}{C.A.}$ of the children of the group. These data are presented in Table VI.

The data from Table VI show:

1. The largest average number of books, magazines, and newspapers for any group is 399; the smallest number is 1. The average I.Q. for these groups is 106 and 90. With two exceptions in all four grades, as the amount of reading material increases, the I.Q. also increases. For the combined grades, as the reading material increases the I.Q. increases.

2. In the four separate grades, no consistent trend appears in the relation of the $\frac{R.A.}{C.A.}$ of the child to the amount of reading material of the home. For the combined grades, as the amount of reading material increases the $\frac{R.A.}{C.A.}$ increases slightly. However, in all cases, the $\frac{R.A.}{C.A.}$ is lower than the I.Q. indicating a reading ability below what should be expected.

3. In all four separate grades and in the combined grades no consistent trend appears in the relation of the $\frac{R.A.}{M.A.}$ of the child to the amount of reading material of the home. The number of books, magazines, and newspapers in the home seems to have no relation to whether the child reads up to his mental ability.

G. Number of minutes spent in going to and coming from school and reading ability

To determine the relation between the amount of time spent in going

TABLE VI

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ OF GROUPS DIVIDED ACCORDING TO THE NUM

	Boone 5					Boone 3					Clint		
No. of Books, Magazines, and Newspapers in the Home	Number of Cases	Average Amount	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average Amount	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average Amount	Average I.Q.
Above 100	8	399	106	89	94	12	424	120	87	104	9	329	103
20-100	3	45	105	89	93	10	54	97	92	89	12	49	100
5-20	9	11	97	94	91	7	12	100	90	90	15	11	97
Below 5	17	2	95	91	86	20	1	97	98	95	4	1	87

OF BOOKS, MAGAZINES AND NEWSPAPERS IN THE HOME

		Clinton 4					Total				
	Average R.A./C.A.	Number of Cases	Average Amount	Average I.Q.	Average R.A./M.A.	Average R.A./C.A.	Number of Cases	Average Amount	Average I.Q.	Average R.A./M.A.	Average R.A./C.A.
	92	8	181	94	98	93	37	342	107	90	96
	86	18	47	111	87	96	43	49	104	88	91
	86	28	10	97	96	94	59	11	97	93	90
	77	12	1	84	99	83	53	1	92	95	87

to and coming from school and the reading ability of the child, the number of minutes spent in going to and coming from school, for each child, were added together. The children were divided into two groups as follows: those spending below 60 minutes and those spending above 60 minutes in going to and coming from school. The average number was found for each group and compared with the average I.Q., $\frac{R.A.}{M.A.}$, and $\frac{R.A.}{C.A.}$ of each group. These averages are given in Table VII.

These averages show that:

1. In all four grades, no consistent trend appears in the relation of the I.Q. of the child to the amount of time spent in going to and coming from school. For the combined grades the I.Q.'s of the two groups are approximately the same.

2. In all four grades, no consistent trend appears in relation of the $\frac{R.A.}{M.A.}$ of the child to the amount of time spent in going to and coming from school. For the combined grades the $\frac{R.A.}{M.A.}$'s of the two groups are approximately the same.

3. No consistent trend appears in relation of the $\frac{R.A.}{C.A.}$ of the child to the amount of time spent in going to and coming from school, in any of the separate groups or combined groups.

H. Number of other children in the home and reading ability

To determine the relation between the number of other children in the home and reading ability of the child, three classifications were made: those having below three other children in the home, those having from 4 to 7 other children in the home, those having above 8 other children in the home. The average number was found for each group and compared with the average I.Q., $\frac{R.A.}{M.A.}$, and $\frac{R.A.}{C.A.}$ of the group. These averages are found in Table VIII.

TABLE VII

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ OF GROUPS DIVIDED ACCORDING TO THE NUMBER

No. of Minutes Spent in Going to and Coming from School	Boone 5					Boone 3					Clinton 5			
	Number of Cases	Average No. of Minutes	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average No. of Minutes	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average No. of Minutes	Average I.Q.	Average
Below 60 Min.	20	45	97	92	89	30	42	104	90	94	39	42	97	
Above 60 Min.	18	117	100	91	91	25	112	92	92	84	15	74	100	

TABLE VIII

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ OF GROUPS DIVIDED ACCORDING TO THE NUMB

Number of Other Children in the Home	Boone 5					Boone 3					Clinton 5			
	Number of Cases	Average No. of Other Children	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average No. of Other Children	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average No. of Other Children	Average I.Q.	Average
Below 3	21	2	104	93	96	32	1	102	90	91	34	2	100	
4-7	13	5	94	93	87	13	5	93	95	89	17	5	94	
Above 8	4	10	87	91	80	7	8	89	94	84	3	9	78	

MINUTES SPENT IN GOING TO AND COMING FROM SCHOOL

	Clinton 4					Total				
Average R.A. / C.A.	Number of Cases	Average No. of Minutes	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.	Number of Cases	Average No. of Minutes	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.
89	48	39	93	90	84	137	43	96	91	89
91	17	68	88	95	84	75	94	95	92	88

OF OTHER CHILDREN IN THE HOME

		Clinton 4					Total				
M.A.	Average R.A. / C.A.	Number of Cases	Average No. of Other Children	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.	Number of Cases	Average No. of Other Children	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.
	88	48	1	101	94	95	135	1	101	91	92
8	88	14	5	89	93	83	57	5	92	93	86
8	77	3	9	86	93	80	17	9	86	94	81

These averages show that:

1. In all four grades and also in the combined grades, as the number of other children in the family increase the average I.Q.'s of the children decrease. In other words for the groups studied, on the average, children who live in homes with small families have higher I.Q.s than those who live in homes with large families.

2. The $\frac{R.A.}{C.A.}$ increases as the number of other children in the family decreases, in the four separate grades and also the combined grades. Although the $\frac{R.A.}{C.A.}$ is higher for the children who live in families with a small number of other children, in all cases the $\frac{R.A.}{C.A.}$ is below the I.Q. indicating a below normal reading situation.

3. In all four separate grades, no consistent trend appears in the relation of the $\frac{R.A.}{M.A.}$ of the child to the number of other children in the family. For the combined grades, as the number of other children in the family increases there is a slight increase in the $\frac{R.A.}{M.A.}$.

I. Whether the home is owned or rented and reading ability

To determine the relation between the reading ability of the child and whether the home is owned or rented, two classifications were made: those who own their homes and those who rent their homes. The average I.Q., $\frac{R.A.}{M.A.}$, and $\frac{R.A.}{C.A.}$ of these groups are given in Table IX.

From the data of Table IX it is seen that:

1. For each of the grades and also the combined grades the average I.Q. of children living in rented homes is approximately the same as the average I.Q. of children whose parents own their homes.

2. In grades five, Boone, the $\frac{R.A.}{C.A.}$ is higher for the group in which the homes are rented, and in grade five, Clinton, the $\frac{R.A.}{C.A.}$ is higher for the group in which the homes are owned. In the other two grades and the

TABLE IX

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, $\frac{R.A.}{C.A.}$ OF CHILDREN LIVING I

Own Home or Rent Home	Boone 5				Boone 3				Clinton 5		
	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{}$
Own Home	27	100	90	90	34	100	91	91	32	95	90
Rent Home	15	101	95	96	19	100	92	92	22	92	85

TABLE X

AVERAGE I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ OF CHILDREN WITH BOTH PARENTS LI

Parents Living	Boone 5				Boone 3				Clinton 5		
	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{}$
Both	50	94	87	81	54	100	91	91	31	96	89
One	3	72	102	73	1	105	96	101	12	85	89

WNED HOME AND IN RENTED HOMES

Average R.A. / C.A.	Clinton 4				Total			
	Number of Cases	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.	Number of Cases	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.
86	45	102	95	96	138	99	92	91
78	22	103	95	97	78	98	91	90

G AND CHILDREN WITH ONLY ONE PARENT LIVING

Average R.A. / C.A.	Clinton 4				Total			
	Number of Cases	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.	Number of Cases	Average I.Q.	Average R.A. / M.A.	Average R.A. / C.A.
85	66	98	93	91	201	97	90	87
76	6	89	97	86	22	85	93	80

combined grades the $\frac{R.A.}{C.A.}$ is approximately the same in the two groups.

3. The $\frac{R.A.}{M.A.}$ is higher for the children who live in rented homes at Boone, N. C. At Clinton, Tenn., in grades five the $\frac{R.A.}{M.A.}$ is higher for the children who live in homes which are owned, and it is the same for both groups of grade four. For the combined grades, the $\frac{R.A.}{M.A.}$ is approximately the same for those living in rented homes and those living in owned homes.

J. Whether both parents are living and reading abilities

To determine the relation between the reading ability of the child and whether both parents are living the children were divided into two groups: those who had both parents living and those who had only one parent living. The average I.Q., $\frac{R.A.}{M.A.}$ and $\frac{R.A.}{C.A.}$ for these groups are given in Table X.

From Table X it is seen that:

1. In all four grades except one, and also the combined grades the I.Q. is higher for the group in which both parents are living.

2. In all four grades except one and in the combined grades the $\frac{R.A.}{C.A.}$ is higher for the group in which both parents are living. In all of the groups except one the $\frac{R.A.}{C.A.}$ is lower than the I.Q. which indicates that the reading ability is below what should be normally expected.

3. The $\frac{R.A.}{M.A.}$ is higher for the group in which only one parent is living for all four grades except grade five Clinton, Tenn., in which it is the same for both groups. For the combined groups the $\frac{R.A.}{M.A.}$ is higher for the group in which only one parent is living. In the groups studied, on the average, children with only one living parent read a little better as compared with their mental capacity than children with both parents living.

K. Children with $\frac{R.A.}{M.A.}$ above 95 and children with $\frac{R.A.}{M.A.}$ below 85 selected from the two I.Q. groups: above 110 and below 80

Since the above analyses show a relation between the I.Q. and certain environmental factors and a relation between the ratio of the reading age to the chronological age and certain environmental factors but no relation between the ratio of reading age and mental age and any environmental factors, two groups, relatively homogeneous with respect to I.Q., were chosen for further study. From the group whose I.Q.'s were above 110, those children whose ratios of reading age to mental age were above 95 were compared with those whose ratios of reading age to mental age were below 85. Also from the group whose I.Q.'s were below 80, the children whose ratios of reading age to mental age were above 95 were compared with those whose ratios of reading age to mental age were below 85. These comparisons include all the environmental factors studied. These data are given in Table XI.

These data show that:

1. In both the high and low I.Q. groups, the children with $\frac{R.A.}{M.A.}$ above 95 had a lower average I.Q. than those whose $\frac{R.A.}{M.A.}$ is below 85.

2. In both I.Q. groups, the children whose $\frac{R.A.}{M.A.}$ is above 95 have a higher average $\frac{R.A.}{C.A.}$ than those whose $\frac{R.A.}{M.A.}$ is below 85.

3. For both I.Q. groups, the average number of minutes spent in going to and coming from school is greater for the children with high $\frac{R.A.}{M.A.}$.

4. In the high I.Q. group the per cent of mothers working in the home is greater for the children with high $\frac{R.A.}{M.A.}$. The per cents are the same for the groups with high and low $\frac{R.A.}{M.A.}$ from the low I.Q. group.

5. In the high I.Q. group, the children with high $\frac{R.A.}{M.A.}$ have a higher per cent of fathers who are skilled laborers, while the children with low $\frac{R.A.}{M.A.}$ have a higher per cent of fathers who are unskilled laborers and pro-

FACTORS OF HOME ENVIRONMENT, $\frac{R.A.}{M.A.}$ ABOVE 95, AND $\frac{R.A.}{M.A.}$ BELOW 85 SELEC

I.Q. Above 110

$\frac{R.A.}{M.A.}$	Number of Cases	Average I.Q.	Average $\frac{R.A.}{M.A.}$	Average $\frac{R.A.}{C.A.}$	Occupation of Mother		Occupation of Father				
					Works in Home	Works out of Home	U.L.	P.	S.L.	F.	U.
Above 95	9	116	99	114	77%	23%	22%	11%	56%	11%	0%
Below 85	19	125	82	102	63%	37%	37%	27%	21%	10%	5%

I.Q. Below 80

Above 95	19	67	99	66	80%	20%	42%	0%	5%	31%	21%
Below 85	5	70	76	53	80%	20%	60%	0%	20%	0%	20%

FROM THE TWO I.Q. GROUPS: ABOVE 110 AND BELOW 80

	Education of Father	No. of Other Children in the Family	Amount of Read. Material in the Home	No. of Min. Spent in Going to and Coming from School	Parents Living		Owns or Rents Home	
					Both	One	Own	Rent
	12	3	64	80	100%	0%	77%	23%
	11	1	130	52	100%	0%	78%	20%
	6	4	23	60	75%	25%	60%	40%
	6	4	19	48	80%	20%	40%	60%

fessionals. In the low I.Q. group the children of high $\frac{R.A.}{M.A.}$ have a larger per cent of fathers who are farmers, while those with low $\frac{R.A.}{M.A.}$ have a higher per cent of fathers who are unskilled and skilled laborers.

6. In the high I.Q. group the children with high $\frac{R.A.}{M.A.}$ have less reading material in the home. In the low I.Q. group the children with high $\frac{R.A.}{M.A.}$ have more reading material in the home.

7. As to the education of the father, education of the mother, number of children in the home, number of parents living, and whether the home is rented or owned almost no difference is found between the group with low $\frac{R.A.}{M.A.}$ and the group with high $\frac{R.A.}{M.A.}$.

From the above analysis only one environmental factor, the time spent in going to and coming from school, could be regarded as having a relation to the ratio of reading age to mental age.

CHAPTER IV

SUMMARY AND CONCLUSIONS

A. Summary

1. Purpose of study

The purpose of this study was to determine to what extent reading ability is related to certain factors in the home environment.

2. Procedure

The present study was made with a fourth and fifth grade group in the Clinton Grammar School, Clinton, Tennessee, and in the Boone Demonstration School, Boone, North Carolina, during the school years 1942-43 and 1943-44.

The following procedure was used in each school:

The mental age and intelligence quotient were found for each child by means of the Henman-Nelson Test of Mental Ability, Form A. The reading age was found for each child by means of the Stanford Achievement Reading Test, Form D. Information concerning each home was secured by means of a questionnaire which was filled in by the parents and checked by home visitation, checking records, and information from teachers. The information obtained was tabulated according to: number of years of school completed by the mother, number of years of school completed by the father, occupation of the mother, occupation of the father, number of books, magazines, a nd newspapers in the home, time spent in going to and coming from school, number of other children in the home, whether or not both parents are living. The ratios between the reading age and mental age $\frac{(R.A.)}{(M.A.)}$ and between the reading age and chronological age $\frac{(R.A.)}{(C.A.)}$ were found for each child. The average I.Q., $\frac{R.A.}{M.A.}$, and $\frac{R.A.}{C.A.}$ were found for each group and compared with each of the factors of home environment.

3. Summary of analysis

a. Different I.Q. levels compared as to $\frac{R.A.}{C.A.}$ and $\frac{R.A.}{M.A.}$

(1) It is found from a study of the different I.Q. groups that the higher I.Q. groups have higher reading ages in relation to their chronological ages. However the ratio $\frac{R.A.}{C.A.}$, with few exceptions, is always lower than the I.Q. of the group, which indicates a below normal reading achievement.

(2) When the relation between the reading ages and mental ages of these groups is studied, it is found that the higher the average I.Q. of the group, the lower the ratio of the reading age to the mental age. This tendency is consistent for the I.Q. groups of the combined grades and of the separate grades with the exception of grade five at Boone which showed no definite trend. This finding suggests that the school programs of the groups studied were such as to cause the low I.Q. groups to approach their mental capacity in reading accomplishment, while the higher I.Q. groups were not challenged to achieve in accordance with their ability.

b. Analysis of relation between environmental factors and I.Q., $\frac{R.A.}{C.A.}$, and $\frac{R.A.}{M.A.}$

An analysis of the environmental factors studied in relation to the intelligence quotient, the ratio of the reading age to the chronological age, and the ratio of the reading age to the mental age reveals the following findings:

(1) For the combined grades and for the separate grades, consistent relationships exist between the I.Q. of the child and certain environmental factors:

(a) As the average number of years of education of the mother increases the average I.Q. of their children increases.

(b) As the average number of years of education of the father increases the average I.Q. of their children increases.

(c) As the number of other children in the home increases the average I.Q. of the children decreases.

(d) As the occupation of the father goes from professional, skilled laborer, unskilled laborer, farmer, to unemployed, the average I.Q. of the children decreases.

(e) For the combined groups and for the separate groups with two exceptions, as the number of books, magazines, and newspapers in the home increases, the average I.Q. of the children increases.

(2) From a study of the ratio of the reading age to the chronological age of the child, $\frac{R.A.}{C.A.}$, in relation to the environmental factors, for the combined grades and the separate grades, certain consistent relationships are found as follows:

(a) As the number of years of education of the mother increases, the average $\frac{R.A.}{C.A.}$ of their children increases.

(b) As the number of years of education of the father increases the average $\frac{R.A.}{C.A.}$ of their children increases.

(c) The average $\frac{R.A.}{C.A.}$ of the children decreases in the following order of occupations of the fathers: professional, skilled laborer, unskilled laborer, farmer, and unemployed.

(d) As the number of other children in the home increases, the average $\frac{R.A.}{C.A.}$ of the children decreases.

(e) For the combined grades and for the separate grades,

with two exceptions, as the number of books, magazines, and newspapers in the home increases, the average $\frac{R.A.}{C.A.}$ of the children increases.

(3) When the reading age is studied in relation to the mental age of the child, using the ratio $\frac{R.A.}{M.A.}$, no definite and consistent relation is found between this ratio and any of the environmental factors. For the combined grades, there is a very slight inverse relation between the number of years of education of the father and the average $\frac{R.A.}{M.A.}$ of the children. This is found in all but one of the separate grades.

B. Conclusions

The results of the present study tend to show that:

1. There is a positive relationship between certain environmental factors and the I.Q. of the child. The environmental factors which have a positive relation to the I.Q. are: education of the mother, education of the father, number of other children in the home, occupation of the father, and number of books, magazines, and newspapers in the home.

2. There is a positive relationship between certain environmental factors and the reading age of the child in relation to his chronological age. The environmental factors studied which have a positive relation to the child's reading age are: education of the mother, education of the father, number of other children in the home, occupation of the father, and number of books, magazines, and newspapers in the home.

3. Children who have higher I.Q.s tend to have higher reading ages in relation to their chronological ages.

4. There is an inverse relationship between the child's I.Q. and his reading age in relation to his mental age. This emphasises the need for

developing a school program which will challenge the abilities of the superior pupils.

5. There is no relationship between any of the factors of home environment studied and the extent to which the reading ability of the child approaches his mental ability. This indicates that superior factors in the home environment do not necessarily result in a greater application of the child's effort and ability towards reading.

These findings that involve the use of the ratio, $\frac{R.A.}{M.A.}$, should be the subject of further investigation before any definite conclusions can be drawn. The accomplishment quotient is a sound educational idea, but it has been attacked as being inaccurate and unreliable.[6] Also it is possible that some factor or factors would operate to make the ratios between the norms of the two standardized tests favor the lower I.Q. groups and penalize the higher I.Q. groups.

None of the implications from the findings of this study should be regarded as final conclusions. This study involved only two grades from each of two communities. The findings could not be generalized to apply to all situations. However, those tendencies which were the same for all four grades studied give indications which deserve attention.

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[6] McCrory, John R., "The Reliability of the Accomplishment Quotient," Journal of Educational Research, 25, (January, 1932), 27-39

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APPENDIX

TABLE I

FOR EACH PUPIL, I.Q., $\frac{\text{R.A.}}{\text{M.A.}}$, $\frac{\text{E.A.}}{\text{C.A.}}$, ARRANGED IN ORDER OF I.Q.

GRADE THREE, BOONE, N.C.

Pupil	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{E.A.}}{\text{C.A.}}$
1	160	75	119
2	143	85	121
3	139	88	121
4	139	92	118
5	139	85	118
6	133	95	108
7	129	84	108
8	122	89	109
9	116	92	107
10	114	92	100
11	113	91	94
12	113	93	105
13	113	90	101
14	111	95	115
15	108	94	102
16	107	92	90
17	107	79	85
18	106	87	92
19	106	90	96
20	105	96	101
21	105	86	90
22	104	95	98
23	104	93	95
24	103	94	97
25	100	90	90
26	98	97	94
27	98	83	85
28	98	86	83
29	97	93	91
30	95	82	77
31	94	87	81
32	93	100	84
33	92	104	95
34	92	96	88
35	92	97	88
36	90	90	80
37	90	98	79
38	90	98	88
39	89	87	77
40	88	91	81
41	88	83	72
42	87	91	79
43	87	89	77
44	87	91	88
45	87	93	77

TABLE I (Continued)

Pupil	I.Q.	R.A./M.A.	R.A./C.A.
46	86	107	93
47	85	104	88
48	85	97	77
49	84	86	73
50	84	89	76
51	84	100	84
52	84	91	85
53	83	98	80
54	80	84	68
55	79	93	85
56	78	101	80
57	77	94	75
58	76	93	63
59	74	106	76
60	74	105	77
61	71	94	66
62	71	91	63

TABLE I (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	127	86	107
2	125	82	103
3	124	108	133
4	123	90	108
5	122	91	110
6	120	96	115
7	118	84	98
8	117	81	94
9	114	85	94
10	114	102	114
11	111	97	105
12	111	99	109
13	111	82	91
14	110	96	105
15	110	99	100
16	109	87	95
17	109	87	93
18	108	96	103
19	107	96	101
20	101	90	90
21	100	81	82
22	100	86	73
23	98	95	89
24	96	87	84
25	95	85	81
26	95	88	83
27	93	87	81
28	92	95	88
29	90	90	81
30	89	88	77
31	89	97	86
32	88	101	90
33	86	99	83
34	86	88	75
35	86	101	85
36	86	88	75
37	85	85	73
38	85	72	94
39	84	88	73
40	84	86	79
41	83	89	74
42	83	101	82
43	80	95	75
44	78	100	78
45	78	102	79
46	78	72	94
47	74	97	71
48	72	89	63
49	61	111	68

TABLE I (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	I.Q.	$\frac{\text{M.A.}}{\text{C.A.}}$	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	134	113	91	120
2	130	113	85	110
3	130	113	86	112
4	128	113	80	103
5	127	113	86	110
6	127	113	90	113
7	126	113	84	105
8	125	113	77	80
9	124	113	84	105
10	123	113	87	105
11	122	113	85	103
12	121	113	87	105
13	121	113	79	96
14	120	113	90	108
15	120	113	92	111
16	118	113	94	111
17	116	113	91	97
18	114	113	93	104
19	114	113	83	94
20	113	113	106	111
21	113	113	87	97
22	111	113	93	103
23	111	113	91	100
24	111	113	85	91
25	110	113	86	93
26	109	113	91	90
27	108	113	86	91
28	106	113	86	90
29	105	113	91	96
30	103	113	92	103
31	103	113	88	89
32	102	113	97	86
33	102	113	100	101
34	101	113	94	94
35	101	113	93	93
36	97	113	88	95
37	97	113	88	85
38	96	113	93	89
39	95	113	81	78
40	95	113	94	88
41	95	113	95	89
42	95	113	84	88
43	94	113	90	84
44	92	113	98	109

TABLE I (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	I.Q.	R.A./M.A.	R.A./C.A.
45	92	100	111
46	91	100	94
47	91	98	91
48	91	97	87
49	89	104	83
50	88	94	80
51	87	95	82
52	87	95	80
53	86	96	82
54	85	93	83
55	84	102	86
56	83	97	81
57	82	94	76
58	82	112	90
59	78	106	84
60	78	97	75
61	71	108	99
62	70	106	79
63	68	115	79
64	66	109	72
65	66	105	68
66	63	110	61
67	62	102	69
68	59	103	61

TABLE I (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	I.Q.	R.A. / M.A.	R.A. / C.A.
1	137	92	126
2	120	88	105
3	120	89	103
4	120	94	108
5	117	87	110
6	117	87	96
7	117	85	109
8	115	91	103
9	115	88	108
10	114	85	81
11	113	72	81
12	112	87	128
13	109	85	91
14	109	77	82
15	108	92	98
16	108	94	102
17	107	89	98
18	107	75	88
19	104	83	85
20	103	86	88
21	103	83	85
22	103	83	85
23	101	81	85
24	100	88	88
25	99	87	77
26	97	97	94
27	97	96	93
28	95	98	91
29	94	94	89
30	91	87	86
31	90	87	70
32	89	93	83
33	87	98	85
34	85	93	80
35	82	88	74
36	82	87	70
37	81	92	76
38	80	87	68
39	80	101	91
40	75	98	72
41	73	90	73
42	73	100	78
43	73	91	67
44	72	76	67
45	71	95	66

TABLE I (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
46	71	93	65
47	71	95	66
48	70	92	67
49	67	96	63
50	67	97	64
51	64	92	59
52	64	70	59
53	62	84	52

TABLE II

EDUCATION OF THE MOTHER, I.Q., $\frac{\text{R.A.}}{\text{M.A.}}$, $\frac{\text{R.A.}}{\text{C.A.}}$ FOR EACH PUPIL ARRANGED IN ORDER OF EDUCATION OF THE MOTHER.

GRADE THREE, BOONE, N.C.

Pupil	Education of Mother	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	17	90	90	80
2	16	107	92	90
3	16	160	175	119
4	16	122	89	109
5	16	100	90	90
6	14	113	90	101
7	14	143	85	121
8	14	93	82	77
9	14	93	100	84
10	13	97	97	94
11	13	114	92	100
12	12	139	88	121
13	12	139	85	118
14	12	129	84	106
15	12	104	95	98
16	12	106	87	92
17	12	90	98	88
18	12	94	87	81
19	12	105	86	90
20	12	83	98	80
21	12	107	79	85
22	12	87	89	77
23	12	79	93	85
24	12	92	97	88
25	12	87	91	79
26	10	92	96	86
27	10	92	86	79
28	10	97	86	83
29	10	105	96	101
30	9	98	83	95
31	9	74	90	96
32	9	106	90	96
33	9	101	90	96
34	8	133	95	108
35	8	81	83	72
36	8	103	94	97
37	8	113	93	105
38	8	71	94	66
39	8	84	91	85
40	8	98	93	91
41	7	92	104	95
42	7	90	98	79
43	7	71	91	63
44	7	84	89	76

TABLE II (Continued)
GRADE THREE, NOONE, N.C.

Pupil	Education of Mother	I.Q.	$\frac{\text{R. A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
45	7	85	97	77
46	7	85	102	88
47	7	116	92	107
48	7	74	105	77
49	6	84	86	73
50	5	113	91	94
51	5	104	93	95
52	5	78	101	80
53	5	84	100	84
54	4	87	93	77

TABLE II (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Education of Mother	I.Q.	R.A./M.A.	R.A./C.A.
1	16	83	93	77
2	16	117	81	94
3	16	110	96	105
4	16	109	87	95
5	16	84	88	77
6	16	124	108	133
7	15	127	86	107
8	14	108	96	103
9	14	118	84	98
10	13	120	96	115
11	12	95	88	83
12	12	125	83	108
13	12	100	81	82
14	12	122	91	110
15	12	114	102	114
16	12	111	97	105
17	12	109	87	93
18	12	101	91	90
19	10	107	96	101
20	10	96	87	84
21	10	83	101	82
22	9	83	74	89
23	9	78	100	78
24	8	88	101	90
25	8	86	99	83
26	8	74	97	71
27	8	95	85	81
28	8	111	87	91
29	8	92	88	88
30	7	110	99	100
31	7	123	90	108
32	7	78	72	94
33	7	101	88	75
34	7	84	86	79
35	7	111	99	109
36	6	89	88	77
37	6	117	72	94
38	6	100	86	73
39	6	61	111	68
40	5	90	90	81
41	5	86	101	85
42	5	80	95	75

TABLE II (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Education of Mother	I.Q.	R.A. / M.A.	R.A. / C.A.
1	16	128	80	103
2	16	130	85	110
3	15	130	90	112
4	14	127	86	113
5	13	113	87	97
6	13	114	83	94
7	13	120	92	111
8	13	110	86	93
9	12	109	91	90
10	12	126	86	110
11	12	94	90	84
12	12	126	84	105
13	12	105	84	96
14	12	121	87	105
15	12	95	84	88
16	12	101	94	94
17	12	120	90	108
18	12	96	93	89
19	12	78	97	75
20	12	80	125	123
21	12	97	88	85
22	12	124	84	105
23	12	123	87	106
24	12	91	98	87
25	12	91	97	87
26	12	103	88	89
27	12	111	85	91
28	12	87	95	80
29	12	106	86	90
30	12	111	91	100
31	12	85	93	83
32	12	102	97	86
33	9	92	98	109
34	9	95	95	89
35	9	114	93	104
36	9	102	100	101
37	8	59	103	61
38	8	122	85	103
39	8	118	94	111
40	8	113	106	111
41	8	86	96	82
42	8	83	97	81
43	8	91	100	94
44	8	87	95	82
45	8	84	102	86
46	8	103	91	89
47	8	111	94	83

TABLE II (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Education of Mother	I.Q.	R.A./M.A.	R.A./C.A.
48	8	125	77	80
49	8	92	100	111
50	8	121	79	96
51	8	97	98	95
52	8	95	94	88
53	8	62	110	69
54	6	102	88	90
55	6	100	93	93
56	6	66	105	68
57	5	95	81	78
58	5	62	110	72
59	4	71	108	99
60	4	71	92	82
61	3	63	102	61
62	3	70	106	79
63	3	66	109	72
64	0	82	94	76
65	0	69	105	71

TABLE II (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Education of Mother	I.Q.	R.A./M.A.	R.A./C.A.
1	16	108	94	102
2	16	101	81	85
3	16	106	92	98
4	16	120	88	105
5	16	137	92	126
6	16	109	85	91
7	15	113	72	81
8	13	115	88	108
9	13	90	87	70
10	12	70	94	64
11	12	117	87	96
12	12	73	100	78
13	12	103	83	85
14	12	109	77	82
15	12	112	87	128
16	12	99	87	77
17	11	103	83	85
18	10	91	87	86
19	9	107	89	98
20	9	70	99	68
21	9	82	85	74
22	9	89	93	83
23	8	80	87	68
24	8	114	81	114
25	8	67	64	67
26	8	103	88	103
27	8	120	89	103
28	8	82	87	70
29	8	107	75	88
30	8	97	96	93
31	8	97	97	94
32	8	117	85	109
33	8	115	91	103
34	8	95	98	91
35	8	100	88	88
36	7	100	94	94
37	6	104	83	85
38	6	85	93	80
39	6	75	98	72
40	6	67	98	63
41	5	80	101	91
42	5	81	92	78
43	5	70	92	67
44	5	62	84	62
45	5	73	98	73
46	5	71	93	65

TABLE III

EDUCATION OF THE FATHER, I.Q., $\frac{\text{R.A.}}{\text{M.A.}}$, $\frac{\text{R.A.}}{\text{C.A.}}$ ARRANGED IN ORDER OF EDUCATION OF THE FATEER.

GRADE THREE, BOONE, N.C.

Pupil	Education of Father	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	19	90	90	80
2	17	143	85	121
3	17	160	75	119
4	16	105	66	90
5	16	139	88	121
6	16	107	92	90
7	14	93	100	84
8	13	113	90	101
9	13	95	82	77
10	13	87	89	77
11	13	90	97	94
12	12	87	91	88
13	12	87	91	88
14	12	139	92	118
15	12	139	85	118
16	12	129	84	106
17	12	83	98	80
18	12	104	95	98
19	12	106	87	92
20	12	97	86	83
21	12	94	87	81
22	12	105	96	101
23	10	114	92	100
24	10	107	79	85
25	9	92	97	88
26	9	90	98	88
27	8	91	90	90
28	8	113	93	105
29	8	71	94	66
30	8	98	83	95
31	8	87	75	72
32	8	103	94	97
33	8	92	100	95
34	7	90	98	79
35	7	87	93	77
36	7	71	91	63
37	7	84	89	76
38	7	74	105	77
39	7	108	94	102
40	7	77	64	75
41	7	116	92	107
42	7	85	104	88

TABLE III (Continued)
GRADE THREE, BOONE, N.C.

Pupil	Education of Father	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
43	7	98	93	91
44	7	106	87	92
45	7	87	91	79
46	7	79	93	85
47	4	84	100	84
48	4	113	91	94
49	4	84	86	73
50	4	84	91	85
51	4	89	87	77
52	4	92	86	79
53	4	92	96	88
54	3	104	93	95
55	3	78	101	80

TABLE III (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Education of Father	I.Q.	R.A./M.A.	R.A./C.A.
1	18	127	86	107
2	16	108	96	103
3	16	124	108	133
4	14	118	84	98
5	14	110	96	105
6	14	110	96	105
7	13	107	97	105
8	12	109	96	101
9	12	84	87	93
10	12	120	88	73
11	12	122	96	115
12	12	114	91	110
13	12	101	102	114
14	12	88	90	90
15	12	110	101	90
16	12	117	99	100
17	12	125	81	94
18	12	85	82	103
19	12	99	72	94
20	8	111	99	83
21	8	83	99	109
22	8	96	93	77
23	8	95	85	81
24	8	101	82	91
25	8	85	88	83
26	8	123	72	94
27	7	92	90	108
28	7	96	95	88
29	7	83	87	84
30	7	86	101	82
31	7	86	88	75
32	7	80	101	85
33	7	78	95	75
34	6	61	100	78
35	6	89	111	68
36	4	100	88	77
37	4	84	86	73
38	4	100	86	79
39	4	74	81	82
40	3	90	97	71
41	2	83	89	74

TABLE III (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Education of Father	I.Q.	R.A./M.A.	R.A./C.A.
1	20	130	85	110
2	16	128	80	103
3	16	120	83	93
4	15	114	92	111
5	14	113	87	97
6	14	127	90	113
7	12	130	86	112
8	12	110	86	93
9	12	94	90	84
10	12	126	84	105
11	12	105	91	96
12	12	120	90	108
13	12	78	97	75
14	12	70	125	123
15	12	97	88	85
16	12	124	84	105
17	12	123	87	106
18	12	103	88	89
19	12	95	93	83
20	12	87	95	80
21	12	123	87	106
22	12	106	86	90
23	12	111	91	100
24	11	102	100	101
25	11	121	87	105
26	11	101	94	94
27	10	125	77	80
28	9	95	81	78
29	9	95	95	89
30	9	114	93	104
31	9	96	93	89
32	8	109	91	90
33	8	126	86	110
34	8	95	84	88
35	8	59	103	61
36	8	122	85	103
37	8	113	106	111
38	8	111	93	103
39	8	92	100	111
40	8	121	79	96
41	8	97	88	95
42	8	95	94	88
43	8	62	102	69
44	8	62	110	72
45	8	66	105	68
46	8	83	87	91

TABLE II (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Education of Father	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
47	8	84	102	86
48	8	86	96	82
49	8	102	97	86
50	6	103	93	93
51	6	91	100	94
52	5	87	95	82
53	5	71	108	99
54	4	80	92	82
55	4	70	106	79
56	4	63	110	61
57	3	82	94	76
58	3	66	109	72
59	3	69	105	71
60	2	88	94	80
61	2	68	115	79

TABLE IV (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Education of Father	I.Q.	R.A./M.A.	R.A./C.A.
1	16	101	81	85
2	16	108	89	103
3	16	108	85	81
4	16	137	89	98
5	16	115	87	86
6	16	117	87	70
7	16	97	99	68
8	15	113	88	74
9	14	120	97	64
10	14	109	75	88
11	13	90	96	93
12	12	101	94	89
13	12	73	93	80
14	12	103	96	63
15	12	109	83	85
16	12	112	101	91
17	12	99	92	76
18	12	103	84	52
19	12	89	90	73
20	12	80	93	65
21	12	103	70	59
22	12	115	76	67
23	12	100	95	66
24	12	120	94	102
25	11	70	92	98
26	11	117	92	126
27	11	120	88	108
28	11	114	87	96
29	11	107	97	94
30	9	91	72	81
31	8	82	88	105
32	8	70	85	91
33	8	82	87	70
34	8	67	81	85
35	8	107	100	78
36	8	97	83	85
37	6	94	77	82
38	6	85	87	128
39	5	67	87	77
40	5	104	83	85
41	5	80	93	83
42	5	81	87	68
43	5	62	86	88
44	5	73	91	103

TABLE IV (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Education of Father		R.A./M.A.	R.A./C.A.
45	5	71	88	88
46	5	64	94	64
47	5	72	94	64
48	4	71	85	109
49	3	73	98	85
50	2	64	92	67
51	2	71	98	72
52	2	87	95	66
53	2	70	92	67
54	0	75	98	72
55	0	95	98	91

TABLE IV

OCCUPATION OF THE MOTHER, I.Q., $\frac{\text{R.A.}}{\text{M.A.}}$, $\frac{\text{R.A.}}{\text{C.A.}}$ ARRANGED ACCORDING TO THE OCCUPATION OF THE MOTHER

GRADE THREE, BOONE, N.C.

Pupil	Occupation of Mother	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	Works in the Home	143	85	121
2	"	160	75	119
3	"	105	86	90
4	"	139	88	121
5	"	107	92	90
6	"	93	100	84
7	"	122	89	100
8	"	113	90	101
9	"	95	82	77
10	"	87	89	77
11	"	98	97	94
12	"	139	92	118
13	"	129	84	106
14	"	83	98	80
15	"	104	95	98
16	"	97	86	83
17	"	94	87	81
18	"	105	96	101
19	"	114	92	100
20	"	107	79	85
21	"	90	98	88
22	"	98	83	85
23	"	133	95	108
24	"	88	83	72
25	"	92	104	95
26	"	90	98	79
27	"	87	93	77
28	"	71	91	63
29	"	84	89	76
30	"	84	100	84
31	"	104	93	95
32	"	78	101	70
33	"	91	99	90
34	"	82	97	88
35	"	87	91	79
36	"	92	86	79
37	"	87	91	88
38	"	74	90	96
39	"	87	96	88
40	"	113	93	105
41	"	91	94	66
42	"	84	91	85
43	"	98	93	91
44	"	85	97	79

TABLE IV (Continued)
GRADE THREE, BOONE, N.C.

Pupil	Occupation of Mother	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
45	Works in the Home	108	94	102
46	"	74	105	77
47	"	85	104	88
48	"	116	92	107
49	"	77	94	75
50	"	89	87	77
51	"	84	86	73
52	"	113	91	94
53	Works out of the Home	90	90	80
54	"	139	85	118
55	"	92	96	88
56	"	106	87	92
57	"	103	94	97

TABLE IV (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Occupation of Mother	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	Works in the Home	127	86	107
2	"	108	96	103
3	"	124	108	133
4	"	111	97	105
5	"	107	96	101
6	"	109	87	93
7	"	111	97	105
8	"	114	102	114
9	"	101	91	90
10	"	88	90	101
11	"	110	99	100
12	"	117	72	94
13	"	78	72	94
14	"	123	90	108
15	"	92	88	88
16	"	96	87	84
17	"	101	82	83
18	"	125	83	88
19	"	111	87	91
20	"	96	85	81
21	"	83	93	77
22	"	111	99	109
23	"	86	99	83
24	"	101	88	75
25	"	86	101	85
26	"	80	95	75
27	"	78	100	78
28	"	61	111	68
29	"	89	88	77
30	"	100	86	73
31	"	84	86	79
32	"	100	81	82
33	"	74	97	71
34	"	83	74	89
35	Works out of the Home	118	84	98
36	"	110	96	105
37	"	84	88	77
38	"	120	96	115
39	"	122	91	110
40	"	117	81	94

TABLE IV (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Occupation of Mother	I.Q.	R.A./M.A.	R.A./C.A.
1	Works in the Home	118	94	111
2	"	95	84	88
3	"	109	91	90
4	"	59	103	61
5	"	122	85	103
6	"	113	108	111
7	"	96	93	89
8	"	120	90	108
9	"	94	90	84
10	"	84	105	126
11	"	105	84	96
12	"	120	92	111
13	"	113	87	97
14	"	128	80	83
15	"	114	83	94
16	"	130	85	110
17	"	69	105	71
18	"	82	94	76
19	"	66	109	72
20	"	70	106	79
21	"	60	102	61
22	"	71	92	82
23	"	95	81	82
24	"	66	105	68
25	"	84	102	86
26	"	87	95	82
27	"	97	86	102
28	"	91	100	94
29	"	83	97	81
30	"	86	96	82
31	"	102	97	86
32	"	106	86	90
33	"	87	95	80
34	"	123	87	106
35	"	62	110	69
36	"	95	94	88
37	"	97	98	95
38	"	121	79	96
39	"	111	93	103
40	"	102	100	101
41	"	114	93	104
42	"	127	86	113
43	"	97	88	85
44	"	124	84	105

TABLE IV (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Occupation of Mother	I.Q.	R.A./M.A.	R.A./C.A.
45	Works in the Home	123	87	108
46	"	91	98	87
47	"	91	97	87
48	"	103	88	89
49	Works out of the Home	68	115	79
50	"	92	98	109
51	"	126	86	110
52	"	121	87	105
53	"	101	94	94
54	"	110	86	93
55	"	130	90	112
56	"	62	110	72
57	"	88	94	80
58	"	111	91	100
59	"	102	88	90
60	"	92	110	111
61	"	95	95	89
62	"	103	93	93

TABLE IV (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Occupation of Mother	I.Q.	R.A./M.A.	R.A./C.A.
1	Works in the Home	120	94	108
2	"	117	87	96
3	"	115	91	103
4	"	80	101	91
5	"	97	96	93
6	"	97	97	94
7	"	108	94	102
8	"	101	81	85
9	"	108	92	98
10	"	120	88	105
11	"	137	92	126
12	"	109	85	91
13	"	115	88	108
14	"	90	87	70
15	"	73	100	78
16	"	103	83	85
17	"	112	87	128
18	"	99	87	77
19	"	107	89	98
20	"	114	85	81
21	"	93	83	89
22	"	80	87	68
23	"	103	86	88
24	"	82	87	70
25	"	120	89	103
26	"	117	85	109
27	"	115	91	103
28	"	94	94	89
29	"	120	94	108
30	"	91	87	86
31	"	73	91	67
32	"	85	94	85
33	"	85	93	80
34	"	67	96	63
35	"	62	84	52
36	"	71	93	65
37	"	64	70	59
38	"	64	92	59
39	"	87	98	86
40	"	94	84	70
41	"	99	68	70
42	Works out"of the Home	72	81	113
43	"	95	98	91
44	"	109	77	82

TABLE IV (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Occupation of Mother	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
45	Works out of the Home	103	83	85
46	"	107	75	88
47	"	100	88	88
48	"	81	92	76
49	"	67	97	64
50	"	75	98	72
51	"	70	92	67
52	"	73	90	93
53	"	72	76	67
54	"	71	95	66

TABLE V

OCCUPATION OF FATHER, I.Q., $\frac{\text{R.A.}}{\text{M.A.}}$, $\frac{\text{R.A.}}{\text{C.A.}}$, ARRANGED ACCORDING TO THE OCCUPATION OF THE FATHER

GRADE THREE, BOONE, N.C.

Pupil	Occupation of Father	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	Professional	139	85	118
2	"	90	90	80
3	"	143	85	121
4	"	160	75	119
5	"	105	86	90
6	"	98	97	94
7	"	135	92	118
8	"	129	84	106
9	Skilled Laborer	87	89	77
10	"	139	88	121
11	"	107	92	90
12	"	93	100	84
13	"	122	89	109
14	"	113	90	101
15	"	95	82	77
16	"	104	95	98
17	"	94	87	81
18	"	107	79	85
19	"	101	90	96
20	Unskilled Laborer	100	90	90
21	"	83	98	80
22	"	97	86	83
23	"	105	96	101
24	"	114	92	100
25	"	133	95	108
26	"	104	93	95
27	"	78	101	70
28	"	106	87	92
29	"	92	96	88
30	"	77	94	75
31	"	98	93	91
32	"	87	91	88
33	"	74	94	96
34	"	79	93	85
35	Farmer	90	98	88
36	"	98	83	95
37	"	88	83	72
38	"	92	104	95
39	"	87	93	77
40	"	71	91	63
41	"	84	89	76
42	"	84	100	84
43	"	103	94	97

TABLE V (Continued)
GRADE THREE, BOONE, N.C.

Pupil	Occupation of Father	I.Q.	$\frac{R.A.}{M.A.}$	$\frac{R.A.}{C.A.}$
44	Farmer	113	91	94
45	"	84	86	73
46	"	74	105	77
47	"	108	94	102
48	"	103	92	107
49	"	85	104	88
50	"	84	91	85
51	"	113	93	105
52	"	92	86	79
53	"	87	91	79

TABLE V (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Occupation of Father	I.Q.	R.A./M.A.	R.A./C.A.
1	Professional	83	93	77
2	"	110	96	105
3	"	122	91	110
4	"	127	86	107
5	"	108	96	103
6	Skilled Laborer	111	82	91
7	"	83	89	74
8	"	118	84	98
9	"	84	88	73
10	"	120	96	115
11	"	124	108	133
12	"	109	87	95
13	"	109	87	73
14	"	111	97	105
15	"	114	102	114
16	"	117	81	94
17	"	123	90	108
18	Farmer	107	96	101
19	"	101	90	90
20	"	92	95	88
21	"	96	87	84
22	"	83	101	82
23	"	83	100	83
24	"	95	85	81
25	"	111	99	109
26	"	86	99	83
27	"	86	88	75
28	"	86	100	85
29	"	80	95	75
30	"	78	100	78
31	"	61	111	68
32	"	89	88	77
33	"	100	86	73
34	"	84	86	79
35	"	100	81	82
36	"	117	81	94
37	Unskilled Laborer	125	82	103
38	"	89	87	77
39	"	90	90	81
40	"	88	101	90
41	"	110	99	100

TABLE V (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Occupation of Father	I.Q.	R.A./M.A.	R.A./C.A.
1	Professional	114	83	94
2	"	113	87	97
3	"	130	85	110
4	"	110	86	93
5	"	91	97	87
6	Skilled Laborer	113	106	111
7	"	120	90	108
8	"	128	80	103
9	"	130	86	112
10	"	97	88	85
11	"	111	93	103
12	"	102	100	101
13	"	114	93	104
14	"	127	90	113
15	"	124	84	105
16	"	91	97	87
17	Farmer	84	102	86
18	"	66	105	68
19	"	71	108	99
20	"	82	94	76
21	Unskilled Laborer	62	102	69
22	"	95	94	89
23	"	121	79	96
24	"	97	88	85
25	"	123	87	106
26	"	103	88	89
27	"	103	93	93
28	"	95	95	89
29	"	125	77	80
30	"	92	100	111
31	"	102	88	90
32	"	111	87	106
33	"	87	95	80
34	"	106	86	90
35	"	95	93	83
36	"	86	96	82
37	"	91	100	94
38	"	102	97	86
39	"	87	95	82
40	"	63	110	61
41	"	70	106	79
42	"	69	105	71
43	"	62	110	72
44	"	80	92	82
45	"	118	94	111

TABLE V (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Occupation of Father	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
46	Unskilled Laborer	95	84	88
47	"	109	91	90
48	"	122	85	103
49	"	96	93	89
50	"	126	84	105
51	"	120	92	111
52	"	101	94	94
53	"	121	87	105
54	"	128	86	110
55	Unemployed	59	103	61
56	"	94	90	84
57	"	105	91	96
58	"	92	98	109
59	"	83	87	91
60	"	95	81	78
61	"	66	109	72
62	"	111	91	100
63	"	88	94	80
64	"	68	115	79
65	"	80	125	123

TABLE V (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Occupation of Father	I.Q.	R.A./M.A.	R.A./C.A.
1	Professional	70	94	64
2	"	115	88	108
3	"	120	88	105
4	"	108	94	102
5	"	108	92	98
6	"	137	92	126
7	Skilled Laborer	115	91	103
8	"	120	89	103
9	"	89	93	83
10	"	112	87	128
11	"	73	100	78
12	"	90	87	70
13	"	109	85	91
14	"	101	81	85
15	"	113	72	81
16	"	100	88	88
17	"	71	95	66
18	Unskilled Laborer	82	87	70
19	"	87	98	85
20	"	64	92	59
21	"	62	70	59
22	"	62	84	52
23	"	91	87	86
24	"	104	83	85
25	"	99	94	89
26	"	117	85	109
27	"	80	87	68
28	"	114	85	81
29	"	107	89	98
30	"	99	87	77
31	"	103	83	85
32	"	120	94	108
33	"	80	101	91
34	"	97	96	93
35	"	109	77	82
36	"	103	83	85
37	"	107	75	88
38	"	67	97	64
39	"	75	98	72
40	Farmer	73	91	67
41	Unemployed	70	92	67
42	"	93	90	73
43	"	72	76	67
44	"	71	95	66
45	"	71	93	65

TABLE V (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Occupation of Father	I.Q.	$\frac{R.A.}{M.A.}$	$\frac{R.A.}{C.A.}$
46	Unemployed	67	96	63
47	"	85	93	80
48	"	82	88	74
49	"	82	87	70
50	"	103	86	88
51	"	97	97	94
52	"	95	98	91
53	"	81	92	76

TABLE VI

NUMBER OF BOOKS, MAGAZINES, AND NEWSPAPERS IN THE HOME, I.Q., $\frac{\text{R.A.}}{\text{M.A.}}$, $\frac{\text{R.A.}}{\text{C.A.}}$, ARRANGED IN ORDER OF THE NUMBER OF BOOKS, MAGAZINES, AND NEWSPAPERS IN THE HOME

GRADE THREE, BOONE, N.C.

Pupil	Number of Books, Magazines and Newspapers in the Home	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	1011	160	75	119
2	1005	133	95	108
3	709	90	90	80
4	521	139	92	118
5	412	143	85	121
6	410	122	89	109
7	364	87	89	77
8	225	139	88	121
9	114	95	82	77
10	107	129	84	106
11	108	113	90	101
12	104	100	90	90
13	93	106	87	92
14	84	104	95	98
15	60	103	94	97
16	86	84	91	85
17	58	103	93	105
18	51	84	86	73
19	36	79	93	85
20	33	107	92	90
21	20	105	86	90
22	20	98	97	94
23	18	116	92	107
24	15	83	98	80
25	15	97	86	83
26	12	139	86	118
27	12	94	87	81
28	7	105	96	101
29	6	89	91	79
30	4	107	79	85
31	3	98	83	95
32	3	108	94	102
33	3	85	104	88
34	3	92	97	88
35	2	84	89	76
36	2	78	101	80
37	2	90	98	79
38	2	92	86	79
39	2	89	87	77
40	1	90	98	88
41	1	104	93	95
42	1	93	100	84
43	1	84	100	84
44	1	113	91	91

TABLE VI (Continued)
GRADE THREE, BOONE, N.C.

Pupil	Number of Books, Magazines and Newspapers in the Home	I.Q.	R.A./M.A.	R.A./C.A.
45	1	92	96	98
46	1	67	105	77
47	1	77	94	75
48	1	106	90	96
49	0	98	93	91

TABLE VI (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Number of Books, Magazines and Newspapers in the Home	I.Q.	R.A./M.A.	R.A./C.A.
1	1014	127	86	107
2	504	117	81	94
3	413	109	87	93
4	407	109	87	95
5	363	111	97	105
6	205	84	88	73
7	153	107	96	101
8	140	83	93	77
9	58	120	96	115
10	51	95	85	81
11	31	100	86	73
12	17	111	99	109
13	15	125	82	103
14	14	118	84	98
15	12	86	99	83
16	10	61	111	68
17	10	110	90	100
18	9	80	95	75
19	8	78	100	78
20	6	108	96	103
21	4	80	95	75
22	4	100	81	82
23	3	111	82	91
24	3	101	88	91
25	3	83	101	83
26	3	96	87	84
27	2	74	97	71
28	2	90	90	81
29	2	86	88	75
30	2	89	88	77
31	2	92	95	88
32	2	101	90	90
33	2	114	102	114
34	2	110	96	105
35	1	123	90	108
36	1	84	86	79
37	0	83	101	82

TABLE VI (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Number of Books, Magazines and Newspapers in the Home	I.Q.	R.A./M.A.	R.A./C.A.
1	400	78	97	75
2	205	118	94	111
3	200	103	93	93
4	180	80	125	123
5	150	97	88	95
6	111	91	97	87
7	102	89	104	83
8	104	105	91	96
9	90	103	88	89
10	83	130	85	110
11	76	128	80	103
12	70	120	90	108
13	52	116	91	97
14	50	91	98	97
15	54	122	85	103
16	45	134	91	120
17	43	110	86	93
18	42	113	87	97
19	39	95	84	88
20	36	126	86	110
21	37	102	88	90
22	33	96	93	89
23	28	97	88	85
24	25	91	100	94
25	24	114	83	94
26	20	125	77	80
27	18	121	79	96
28	17	114	93	104
29	17	111	93	103
30	15	126	84	105
31	15	109	91	90
32	13	111	91	100
33	13	106	86	90
34	13	130	86	112
35	14	121	87	105
36	14	111	85	91
37	14	94	90	84
38	12	113	106	111
39	12	92	98	109
40	11	86	96	82
41	10	127	90	113
42	10	95	94	88
43	10	95	95	89
44	9	120	92	111
45	9	95	81	78

TABLE VI (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Number of Books, Magazines and Newspapers in the Home	I.Q.	R.A./M.A.	R.A./C.A.
46	8	85	93	83
47	8	62	110	72
48	6	100	94	94
49	6	80	92	82
50	6	102	97	86
51	5	80	112	90
52	5	123	87	106
53	5	102	100	101
54	4	84	102	86
55	4	108	86	91
56	3	82	94	76
57	4	124	84	105
58	1	97	95	82
59	1	66	105	68
60	1	66	109	72
61	0	70	106	79
62	0	71	108	99
63	0	88	94	80
64	0	68	115	79
65	0	92	100	111

TABLE VI (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Number of Books, Magazines and Newspapers in the Home	I.Q.	R.A./M.A.	R.A./C.A.
1	693	115	88	108
2	600	117	87	110
3	510	108	94	102
4	155	70	94	64
5	150	120	88	105
6	202	73	100	78
7	301	82	88	74
8	149	109	77	82
9	129	137	92	126
10	93	115	91	103
11	83	120	89	103
12	68	109	85	91
13	50	91	87	86
14	55	62	84	52
15	38	103	83	85
16	35	101	81	85
17	36	80	101	91
18	31	113	72	81
19	63	90	87	77
20	20	117	85	109
21	18	107	89	98
22	15	114	85	81
23	15	97	96	93
24	13	67	96	63
25	12	117	87	96
26	13	117	87	96
27	12	80	87	68
28	12	70	92	67
29	10	94	94	89
30	10	120	94	108
31	9	99	87	77
32	9	71	93	65
33	8	112	87	128
34	8	100	88	88
35	5	103	86	88
36	4	97	97	94
37	1	107	75	88
38	0	99	87	77
39	0	73	93	67
40	0	71	95	66

TABLE VII

NUMBER OF MINUTES SPENT IN GOING TO AND COMING FROM SCHOOL I.Q., $\frac{R.A.}{M.A.}$, $\frac{R.A.}{C.A.}$, ARRANGED IN ORDER OF MINUTES SPENT IN GOING TO AND COMING FROM SCHOOL.

GRADE THREE, BOONE, N.C.

Pupil	Number of Minutes Spent in Going to and Coming From School	I.Q.	$\frac{R.A.}{M.A.}$	$\frac{R.A.}{C.A.}$
1	15	87	91	88
2	15	74	90	96
3	25	106	87	92
4	30	98	93	91
5	30	97	86	83
6	30	93	100	84
7	30	90	90	80
8	30	105	86	90
9	30	139	88	121
10	30	139	85	118
11	40	84	100	84
12	45	139	92	118
13	45	113	90	101
14	45	129	84	106
15	45	95	82	77
16	45	107	92	90
17	45	100	90	90
18	50	122	89	105
19	60	103	93	105
20	60	85	104	88
21	60	89	87	77
22	60	87	89	77
23	60	78	101	70
24	60	94	87	81
25	60	83	98	80
26	60	133	95	108
27	60	97	97	94
28	60	160	75	119
29	60	105	96	101
30	60	114	92	100
31	65	77	94	75
32	65	108	94	102
33	75	90	98	79
34	75	107	79	85
35	75	98	83	95
36	90	84	91	85
37	90	84	86	73
38	90	106	87	92
39	90	104	93	95
40	105	84	86	78
41	105	87	93	77
42	110	104	95	98
43	120	87	91	79
44	120	92	96	88

TABLE VII (Continued)
GRADE THREE, BOONE, N.C.

Pupil	Number of Minutes Spent in Going to and Coming from School	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
45	120	85	97	77
46	120	116	92	107
47	120	113	91	94
48	120	92	86	79
49	120	84	89	76
50	120	103	94	97
51	135	79	93	85
52	135	92	104	95
53	150	74	105	77
54	165	71	91	63
55	225	92	97	88

TABLE VII (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Number of Minutes Spent in Going to and Coming from School	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	15	127	86	107
2	25	90	90	81
3	35	88	101	90
4	35	96	87	84
5	35	83	101	82
6	40	86	101	85
7	40	83	93	77
8	45	111	97	105
9	45	110	99	100
10	50	109	87	93
11	50	78	72	94
12	60	120	96	115
13	60	108	96	103
14	60	83	89	74
15	60	95	85	81
16	60	89	87	77
17	60	125	83	103
18	60	78	100	78
19	60	111	87	91
20	60	86	99	83
21	60	111	97	108
22	65	110	84	98
23	90	124	108	133
24	90	61	111	68
25	90	101	88	75
26	100	123	90	108
27	105	100	86	73
28	120	110	96	105
29	120	117	81	94
30	120	80	95	75
31	130	92	88	88
32	135	89	88	77
33	135	84	86	79
34	135	100	81	82
35	180	111	99	109
36	205	101	91	90
37	225	83	100	83

TABLE VII (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Number of Minutes Spent in Going to and Coming from School	I.Q.	R.A./M.A.	R.A./C.A.
1	30	92	98	109
2	30	110	86	93
3	30	70	106	79
4	30	120	90	108
5	30	128	80	103
6	30	109	91	90
7	30	126	94	105
8	30	125	77	80
9	30	97	98	95
10	30	87	95	80
11	30	85	93	83
12	30	113	106	111
13	30	95	81	78
14	45	94	90	84
15	45	80	92	82
16	45	102	88	90
17	45	111	93	103
18	45	62	110	69
19	45	66	109	72
20	45	126	86	110
21	45	106	86	90
22	45	127	86	113
23	45	101	94	94
24	45	120	92	111
25	45	114	93	94
26	45	91	100	94
27	45	91	97	87
28	45	95	94	88
29	45	92	100	111
30	45	105	84	96
31	45	121	87	105
32	45	114	93	104
33	45	97	88	85
34	50	130	85	110
35	50	113	87	97
36	50	96	93	89
37	50	130	90	112
38	60	111	91	100
39	60	70	125	123
40	60	87	95	82
41	60	102	97	86
42	60	66	105	68
43	60	68	115	79
44	60	102	100	101
45	60	124	84	105

TABLE VII (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Number of Minutes Spent in Going to and Coming from School	I.Q.	R.A./M.A.	R.A./C.A.
46	60	121	79	96
47	60	123	87	106
48	60	103	88	89
49	65	116	91	97
50	65	59	103	61
51	65	83	97	81
52	65	91	98	87
53	65	68	102	61
54	65	111	85	91
55	65	95	84	88
56	65	62	110	72
57	65	84	102	86
58	65	86	96	82
59	65	95	95	89
60	65	103	93	93
61	70	88	94	80
62	75	71	92	82
63	120	69	105	71
64	120	82	94	76
65	120	122	85	103

TABLE VII (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Number of Minutes Spent in Going to and Coming from School	I.Q.	R.A./M.A.	R.A./C.A.
1	15	71	93	65
2	15	73	90	73
3	15	71	95	66
4	15	90	87	79
5	30	71	95	66
6	30	108	92	98
7	30	137	92	126
8	30	64	92	59
9	30	87	98	85
10	30	97	97	94
11	30	109	85	91
12	30	130	88	105
13	30	103	83	85
14	30	117	87	96
15	30	115	88	107
16	30	83	87	70
17	40	73	100	78
18	40	80	101	91
19	40	67	96	63
20	40	75	98	72
21	45	72	76	67
22	45	81	92	76
23	45	103	83	85
24	45	91	96	93
25	45	107	89	98
26	45	104	83	85
27	45	108	94	102
28	45	120	94	108
29	45	103	86	88
30	45	100	88	88
31	45	94	94	94
32	60	67	97	64
33	60	82	88	74
34	60	91	87	86
35	60	120	89	103
36	60	114	88	81
37	60	89	93	83
38	60	101	81	85
39	60	95	98	91
40	65	64	70	59
41	65	70	94	64
42	65	80	87	68
43	65	62	84	52
44	65	99	87	77
45	65	109	77	82

TABLE VII (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Number of Minutes Spent in Going to and Coming from School	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
46	65	107	75	88
47	65	70	99	68
48	65	112	87	128
49	65	70	92	67
50	65	85	93	80
51	65	115	91	103
52	65	117	85	109
53	65	113	72	81
54	120	73	91	67

TABLE VIII

NUMBER OF CHILDREN IN THE HOME I.Q., $\frac{R.A.}{M.A.}$, AND $\frac{R.A.}{C.A.}$ ARRANGED IN ORDER OF THE NUMBER OF OTHER CHILDREN IN THE HOME

GRADE THREE, BOONE, N.C.

Pupil	Number of Other Children	I.Q.	$\frac{R.A.}{M.A.}$	$\frac{R.A.}{C.A.}$
1	0	105	86	90
2	0	105	96	101
3	0	98	93	91
4	0	79	93	85
5	1	92	104	95
6	1	87	91	88
7	1	74	84	68
8	1	90	90	80
9	1	93	100	84
10	1	104	93	95
11	1	87	89	77
12	1	95	82	77
13	1	129	84	106
14	1	97	86	83
15	1	143	85	121
16	1	95	97	77
17	1	100	90	90
18	2	107	79	85
19	2	139	88	121
20	2	113	90	101
21	2	103	94	97
22	2	98	97	94
23	2	107	92	90
24	3	84	86	73
25	3	116	92	107
26	3	106	87	92
27	3	139	85	118
28	3	94	87	81
29	3	78	101	70
30	3	90	98	79
31	3	160	75	119
32	4	90	98	88
33	4	84	89	76
34	4	83	98	80
35	4	113	91	94
36	4	92	86	79
37	4	84	91	85
38	4	133	95	108
39	5	89	87	77
40	5	106	87	92
41	6	79	104	88

TABLE VIII (Continued)
GRADE THREE, BOONE, N.C.

Pupil	Number of Other Children	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
42	6	108	94	102
43	7	89	109	122
44	7	85	104	88
45	7	74	105	77
46	8	92	96	88
47	8	87	91	79
48	8	84	100	84
49	8	114	92	100
50	9	71	91	63
51	10	113	93	105
52	12	82	97	88

TABLE VIII (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Number of Other Children in the Home	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	1	120	96	115
2	1	86	88	75
3	1	78	72	94
4	1	111	97	105
5	1	110	96	105
6	1	101	91	90
7	2	108	96	103
8	2	88	101	90
9	2	109	87	93
10	2	127	86	107
11	2	123	90	108
12	3	117	81	94
13	3	124	108	133
14	3	118	84	98
15	3	110	99	100
16	3	96	87	84
17	3	83	101	82
18	3	61	111	68
19	3	100	86	73
20	3	100	81	82
21	3	86	99	83
22	4	83	88	101
23	4	114	102	114
24	4	83	93	77
25	4	111	87	91
26	4	78	100	78
27	5	125	82	103
28	6	89	87	77
29	6	111	99	109
30	6	84	86	79
31	6	89	88	77
32	7	86	101	85
33	7	88	88	92
34	7	111	97	105
35	8	80	95	75
36	10	90	90	81
37	11	95	85	81
38	12	83	89	74

TABLE VIII (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Number of Other Children in the Home	I.Q.	R.A./M.A.	R.A./C.A.
1	0	114	93	104
2	0	103	91	89
3	0	92	98	109
4	0	110	86	93
5	0	121	87	105
6	0	105	84	96
7	1	103	93	93
8	1	95	95	89
9	1	92	100	111
10	1	123	87	106
11	1	95	94	88
12	1	91	97	87
13	1	124	84	105
14	1	102	100	101
15	1	86	96	82
16	1	91	100	94
17	1	70	106	79
18	1	114	83	94
19	1	120	90	108
20	1	128	80	103
21	1	130	90	112
22	1	109	91	90
23	1	122	85	103
24	1	96	93	89
25	1	126	84	105
26	1	120	92	111
27	1	101	94	94
28	1	125	77	80
29	1	71	108	99
30	2	68	115	79
31	2	127	86	113
32	2	88	94	80
33	2	97	98	95
34	2	84	102	86
35	2	66	105	68
36	2	87	95	80
37	2	86	90	106
38	2	93	83	85
39	2	102	97	86
40	2	87	95	82
41	2	126	86	110
42	2	113	87	97
43	2	130	85	110
44	2	66	109	72
45	3	62	88	90

TABLE VIII (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Number of Other Children in the Home	I.Q.	R.A./M.A.	R.A./C.A.
46	3	111	93	103
47	3	70	125	123
48	3	113	106	111
49	4	102	88	90
50	4	97	88	85
51	4	80	92	82
52	4	62	110	72
53	4	94	90	84
54	4	95	84	88
55	4	111	91	100
56	5	82	94	76
57	5	111	85	91
58	5	118	94	111
59	6	68	102	61
60	6	91	98	87
61	7	69	105	71
62	7	95	81	78
63	8	83	87	91
64	8	59	103	61
65	11	116	91	97

TABLE VIII (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Number of Other Children in the Home	I.Q.	R.A./M.A.	R.A./C.A.
1	0	82	87	70
2	0	95	98	91
3	0	115	88	108
4	0	90	87	70
5	0	101	81	85
6	0	117	87	96
7	0	113	72	81
8	1	94	94	89
9	1	117	85	109
10	1	103	83	85
11	1	89	93	83
12	2	115	91	103
13	2	71	95	66
14	2	114	85	81
15	2	85	93	80
16	2	70	92	67
17	2	94	94	89
18	2	70	99	68
19	2	120	88	105
20	2	109	85	91
21	2	100	88	88
22	3	103	86	88
23	3	107	75	88
24	3	120	94	108
25	3	108	94	102
26	3	97	97	94
27	3	87	98	85
28	3	64	92	59
29	3	104	83	85
30	3	109	77	82
31	3	137	92	126
32	3	108	92	98
33	3	75	98	72
34	3	107	89	98
35	3	99	87	77
36	3	67	96	63
37	3	73	90	73
38	3	91	87	86
39	4	97	96	93
40	4	103	83	85
41	5	62	84	52
42	5	80	87	68
43	5	73	91	67
44	5	71	93	65
45	5	120	89	103

TABLE VIII (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Number of Other Children in the Home	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
46	6	70	94	64
47	6	71	95	66
48	7	72	76	67
49	7	81	92	76
50	7	82	85	74
51	7	64	70	59
52	8	80	101	91
53	8	67	97	64
54	11	73	100	87

TABLE IX

WHETHER HOME IS RENTED OR OWNED, I.Q., $\frac{\text{R.A.}}{\text{M.A.}}$, $\frac{\text{R.A.}}{\text{C.A.}}$, ARRANGED ACCORDING TO WHETHER THE HOME IS RENTED OR OWNED

GRADE THREE, BOONE, N.C.

Pupil	Own Home or Rent Home	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	Own Home	122	89	109
2	"	87	89	77
3	"	95	82	77
4	"	129	84	106
5	"	113	90	101
6	"	87	91	88
7	"	104	95	98
8	"	103	94	97
9	"	107	92	90
10	"	98	97	94
11	"	83	98	80
12	"	97	86	83
13	"	139	85	118
14	"	107	79	85
15	"	84	89	76
16	"	90	98	79
17	"	90	98	88
18	"	104	93	95
19	"	84	100	84
20	"	160	75	119
21	"	139	92	118
22	"	100	90	90
23	"	84	91	85
24	"	79	93	85
25	"	116	92	107
26	"	87	91	79
27	"	85	104	88
28	"	92	86	79
29	"	92	96	88
30	"	77	94	75
31	"	114	92	100
32	"	71	96	63
33	"	92	97	88
34	Rent Home	143	85	121
35	"	139	88	121
36	"	105	86	90
37	"	94	87	81
38	"	105	96	101
39	"	78	101	70
40	"	93	100	84
41	"	90	90	80
42	"	133	95	108
43	"	108	94	102
44	"	113	91	94

TABLE IX (Continued)
GRADE THREE, BOONE, N.C.

Pupil	Own Home or Rent Home	I.Q.	R.A./M.A.	R.A./C.A.
45	Rent Home	74	106	76
46	"	87	91	88
47	"	106	90	96
48	"	98	93	91
49	"	87	91	88
50	"	87	93	77
51	"	92	104	95
52	"	88	83	72

TABLE IX (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Own Home or Rent Home	I.Q.	R.A./M.A.	R.A./C.A.
1	Own Home	111	99	109
2	"	117	81	94
3	"	83	93	79
4	"	95	85	81
5	"	100	86	73
6	"	83	89	74
7	"	84	86	79
8	"	89	88	77
9	"	86	88	75
10	"	83	88	83
11	"	100	81	82
12	"	86	101	85
13	"	86	99	83
14	"	122	91	110
15	"	109	87	93
16	"	109	87	95
17	"	111	97	105
18	"	84	88	73
19	"	107	96	101
20	"	118	84	98
21	"	110	99	100
22	"	96	87	84
23	"	83	101	82
24	"	110	96	105
25	"	114	102	114
26	"	101	90	90
27	"	123	90	108
28	Rent Home	90	90	81
29	"	74	97	71
30	"	111	82	91
31	"	78	100	78
32	"	86	101	85
33	"	61	111	68
34	"	125	82	103
35	"	88	101	90
36	"	78	72	94
37	"	124	108	133
38	"	127	86	107
39	"	108	96	103
40	"	124	108	133
41	"	120	96	115
42	"	114	85	94

TABLE IX (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Own Home or Rent Home	I.Q.	R.A./M.A.	R.A./C.A.
1	Own Home	59	103	61
2	"	94	90	84
3	"	105	91	96
4	"	114	83	94
5	"	113	106	111
6	"	120	90	108
7	"	128	80	103
8	"	110	86	93
9	"	113	87	97
10	"	130	85	110
11	"	118	94	111
12	"	95	84	88
13	"	109	91	90
14	"	122	85	103
15	"	96	93	89
16	"	126	84	105
17	"	120	92	111
18	"	101	94	94
19	"	121	87	105
20	"	83	97	81
21	"	95	81	78
22	"	66	109	72
23	"	111	91	100
24	"	116	91	97
25	"	66	105	68
26	"	123	87	106
27	"	86	96	82
28	"	91	100	94
29	"	63	110	61
30	"	62	110	72
31	"	80	92	82
32	"	70	125	123
33	"	89	104	83
34	"	68	115	79
35	"	97	88	95
36	"	110	93	103
37	"	124	84	105
38	"	95	94	88
39	"	121	79	96
40	"	102	88	90
41	"	92	100	111
42	"	125	77	80
43	"	95	95	89
44	"	103	93	95
45	"	103	88	89

TABLE IX (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Own Home or Rent Home	I.Q.	R.A./M.A.	R.A./C.A.
46	Own Home	97	88	85
47	Rent Home	92	98	109
48	"	130	86	112
49	"	126	86	110
50	"	88	94	80
51	"	84	102	86
52	"	71	106	99
53	"	82	94	76
54	"	87	95	80
55	"	106	86	90
56	"	85	93	83
57	"	102	97	86
58	"	87	95	82
59	"	70	106	79
60	"	69	105	71
61	"	91	98	87
62	"	97	88	95
63	"	114	93	104
64	"	127	90	113
65	"	91	97	87
66	"	62	102	69
67	"	123	87	106

TABLE IX (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Own Home or Rent Home	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	Own Home	71	93	65
2	"	85	93	80
3	"	97	97	94
4	"	106	98	91
5	"	70	92	67
6	"	137	92	126
7	"	108	92	98
8	"	108	94	102
9	"	120	88	105
10	"	115	88	108
11	"	87	98	85
12	"	64	92	59
13	"	64	70	59
14	"	62	84	52
15	"	94	94	89
16	"	117	85	109
17	"	80	87	68
18	"	114	85	81
19	"	99	87	77
20	"	103	83	85
21	"	80	101	91
22	"	97	96	93
23	"	109	77	82
24	"	107	75	88
25	"	67	97	64
26	"	75	98	72
27	"	115	91	103
28	"	120	89	103
29	"	89	93	83
30	"	112	87	128
31	"	73	100	78
32	"	100	88	88
33	Rent Home	67	96	63
34	"	82	88	74
35	"	82	87	70
36	"	103	86	88
37	"	81	92	76
38	"	73	90	73
39	"	72	76	67
40	"	71	95	66
41	"	73	91	67
42	"	94	64	70
43	"	99	68	70
44	"	91	87	86
45	"	104	83	85

TABLE IX (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Own Home or Rent Home	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
46	Rent Home	107	89	98
47	"	120	94	108
48	"	103	83	85
49	"	90	87	70
50	"	109	85	91
51	"	101	81	85
52	"	117	87	96
53	"	113	72	81
54	"	71	95	66

TABLE X

WHETHER BOTH PARENTS ARE LIVING, I.Q., $\frac{R.A.}{M.A.}$, $\frac{R.A.}{C.A.}$, ARRANGED ACCORDING TO WHETHER BOTH PARENTS ARE LIVING.

GRADE THREE, BOONE, N.C.

Pupil	Both Parents Living One Parent Living	I.Q.	$\frac{R.A.}{M.A.}$	$\frac{R.A.}{C.A.}$
1	Both Parents Living	143	85	121
2	"	122	89	109
3	"	87	89	77
4	"	139	88	121
5	"	95	82	77
6	"	129	84	106
7	"	113	90	101
8	"	106	87	92
9	"	104	95	98
10	"	103	94	97
11	"	107	92	90
12	"	105	86	90
13	"	98	97	94
14	"	83	98	80
15	"	97	86	83
16	"	139	85	118
17	"	94	87	91
18	"	107	79	85
19	"	98	83	95
20	"	84	89	76
21	"	78	101	80
22	"	90	98	79
23	"	90	98	88
24	"	104	93	95
25	"	93	100	84
26	"	84	100	84
27	"	90	90	80
28	"	133	95	108
29	"	160	75	119
30	"	139	92	118
31	"	114	92	100
32	"	71	91	63
33	"	87	93	77
34	"	92	104	95
35	"	88	83	72
36	"	113	93	105
37	"	84	86	73
38	"	71	94	66
39	"	92	97	88
40	"	84	91	85
41	"	100	90	90
42	"	101	90	96
43	"	98	93	91
44	"	106	90	96
45	"	90	96	74

TABLE X (Continued)
GRADE THREE, BOONE, N.C.

Pupil	Both Parents Living One Parent Living	I.Q.	R.A./M.A.	R.A./C.A.
46	Both Parents Living	77	94	75
47	"	67	105	77
48	"	92	96	88
49	"	113	91	94
50	"	92	86	79
51	"	85	104	88
52	"	108	94	102
53	One Parent Living	116	92	107
54	"	79	93	85
55	"	105	96	101

TABLE X (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Both Parents Living One Parent Living	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
1	Both Parents Living	72	89	63
2	"	73	105	75
3	"	89	87	77
4	"	78	72	94
5	"	78	102	79
6	"	78	100	78
7	"	80	95	75
8	"	83	101	82
9	"	83	89	74
10	"	84	86	79
11	"	84	88	73
12	"	85	72	94
13	"	85	85	73
14	"	86	88	75
15	"	86	101	85
16	"	86	88	75
17	"	86	99	83
18	"	88	101	90
19	"	89	97	86
20	"	89	88	77
21	"	90	90	81
22	"	92	95	88
23	"	93	87	81
24	"	96	87	84
25	"	95	85	81
26	"	98	95	89
27	"	100	86	73
28	"	100	81	82
29	"	83	100	83
30	"	101	90	90
31	"	108	96	103
32	"	109	87	93
33	"	109	87	95
34	"	110	99	100
35	"	110	96	105
36	"	111	82	91
37	"	111	99	109
38	"	111	97	105
39	"	114	102	114
40	"	114	85	94
41	"	117	81	94
42	"	118	84	98
43	"	120	96	115
44	"	122	91	110

TABLE X (Continued)
GRADE FIVE, BOONE, N.C.

Pupil	Both Parents Living One Parent Living	I.Q.	R.A./M.A.	R.A./C.A.
45	Both Parents Living	123	90	108
46	"	124	108	133
47	"	125	82	103
48	"	127	86	107
49	One Parent Living	83	93	77
50	"	61	111	68

TABLE X (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Both Parents Living One Parent Living	I.Q.	R.A./M.A.	R.A./C.A.
1	Both Parents Living	78	97	75
2	"	71	108	99
3	"	70	106	79
4	"	70	125	123
5	"	66	105	68
6	"	63	110	61
7	"	62	102	69
8	"	59	103	61
9	"	78	106	84
10	"	80	112	90
11	"	80	92	82
12	"	82	94	76
13	"	83	97	81
14	"	84	102	86
15	"	85	95	83
16	"	86	96	82
17	"	87	95	80
18	"	87	95	82
19	"	88	94	80
20	"	89	104	83
21	"	91	97	87
22	"	91	98	87
23	"	111	85	91
24	"	91	100	94
25	"	92	100	111
26	"	92	98	109
27	"	94	90	84
28	"	95	84	88
29	"	95	95	89
30	"	95	94	88
31	"	96	93	89
32	"	97	88	85
33	"	97	88	95
34	"	101	93	93
35	"	101	94	94
36	"	102	100	101
37	"	102	97	86
38	"	103	88	89
39	"	103	92	103
40	"	106	86	90
41	"	108	86	91
42	"	109	91	90
43	"	110	86	93
44	"	111	93	103

TABLE X (Continued)
GRADE FOUR, CLINTON, TENN.

Pupil	Both Parents Living One Parent Living	I.Q.	$\frac{\text{R.A.}}{\text{M.A.}}$	$\frac{\text{R.A.}}{\text{C.A.}}$
45	Both Parents Living	113	87	97
46	"	113	106	111
47	"	114	83	94
48	"	114	93	104
49	"	116	91	97
50	"	118	94	111
51	"	120	92	111
52	"	120	90	108
53	"	121	79	96
54	"	121	87	105
55	"	122	85	103
56	"	123	87	106
57	"	124	84	105
58	"	125	77	80
59	"	126	84	105
60	"	127	90	113
61	"	126	86	110
62	"	128	80	103
63	"	130	86	112
64	"	130	85	110
65	"	134	91	120
66	One Parent Living	105	91	86
67	"	66	100	72
68	"	95	81	78
69	"	111	91	100
70	"	68	115	79
71	"	91	98	87

TABLE X (Continued
GRADE FIVE, CLINTON, TENN.

Pupil	Both Parents Living One Parent Living	I.Q.	R.A./M.A.	R.A./C.A.
1	Both Parents Living	62	84	52
2	"	64	70	59
3	"	64	92	59
4	"	67	97	64
5	"	70	92	67
6	"	71	95	66
7	"	73	91	67
8	"	73	100	78
9	"	75	98	72
10	"	80	101	92
11	"	80	87	68
12	"	82	87	70
13	"	85	93	80
14	"	87	98	85
15	"	89	93	83
16	"	90	87	70
17	"	91	87	86
18	"	94	94	89
19	"	97	96	93
20	"	99	97	77
21	"	100	88	88
22	"	101	81	85
23	"	103	83	85
24	"	103	83	85
25	"	104	83	85
26	"	106	98	91
27	"	107	89	98
28	"	108	94	102
29	"	108	92	98
30	"	109	77	82
31	"	109	85	91
32	"	112	87	128
33	"	113	72	81
34	"	115	88	108
35	"	115	91	103
36	"	117	85	109
37	"	117	87	96
38	"	120	94	108
39	"	120	89	103
40	"	120	88	105
41	"	137	92	126
42	One Parent Living	107	75	88
43	"	94	67	70
44	"	71	95	66
45	"	72	76	67

TABLE X (Continued)
GRADE FIVE, CLINTON, TENN.

Pupil	Both Parents Living One Parent Living	I.Q.	R.A. M.A.	R.A. C.A.
46	One Parent Living	73	90	73
47	"	81	92	76
48	"	97	97	94
49	"	103	86	88
50	"	82	88	74
51	"	67	96	63
52	"	71	93	65
53	"	117	87	110

TABLE XI

COMPLETE DATA FOR CHILDREN WITH I.Q.'s ABOVE 110 AND CHILDREN WITH I.Q.'s BELOW 80, ARRANGED IN ORDER OF $\frac{\text{R.A.}}{\text{M.A.}}$

Pupil	I.Q.	R.A./M.A.	R.A./C.A.	OCC of Mother	OCC of Father	Ed. of Mother	Ed. of Father	No. of Other Children in Home	Rent or Own Home	Both Parents Living or One Parent Living	Amount of Reading Material in Home	No. of Min. Spent in Going to and From School
						I.Q. Above 110						
1	124	108	133	W in H	SL	16	16	3	Rent	Both	110	90
2	113	106	111	"	"	8	8	3	Own	"	12	30
3	114	102	114	"	"	12	12	4	"	"	2	105
4	111	99	109	"	F	7	8	6	"	"	17	180
5	110	99	100	"	UL	8	12	3	"	"	10	45
6	111	97	109	"	SL	12	13	1	"	"	363	60
7	120	96	115	W out H	"	13	12	1	"	"	31	30
8	110	96	105	W in H	P	16	14	1	"	"	2	120
9	133	95	108	"	UL	8	8	4	Rent	"	105	60
10	143	85	121	"	P	14	17	1	"	"	412	30
11	139	85	118	W out H	"	12	12	3	Own	"	500	30
12	130	85	110	W in H	"	16	20	2	"	"	83	30
13	122	85	103	"	UL	8	8	1	"	"	54	120
14	117	85	109	W out H	"	8	11	1	"	"	20	65
15	114	85	94	"	U	8	8	1	Rent	One	20	15
16	114	85	81	W in H	UL	8	11	2	Own	Both	15	60
17	129	84	106	"	P	12	12	1	"	"	107	30
18	126	84	105	"	UL	12	12	1	"	"	15	30
19	124	84	105	"	SL	12	12	1	"	"	4	30
20	118	84	98	W out H	"	14	14	3	"	"	14	65
21	125	82	103	W in H	UL	12	12	4	Rent	"	15	60
22	111	82	91	"	"	8	8	4	Own	"	3	60
23	117	81	94	W out H	F	16	12	1	"	"	504	120
24	128	80	103	W in H	SL	16	16	1	"	"	76	30
25	121	79	96	"	UL	8	8	2	"	"	18	60
26	125	77	80	W out H	"	8	10	3	"	"	20	30

TABLE XI (Continued)

Pupil	I.Q.	R.A./M.A.	R.A./C.A.	OCC of Mother	OCC of Father	Ed. of Mother	Ed. of Father	No. of Other Children in Home	Rent or Own Home	Both Parents Living or One Parent Living	Amount of Reading Material in Home	No. of Min. Spent in Going to and From School
						I.Q. Above 110						
27	160	75	119	W in H	P	16	17	3	Own	Both	1011	60
28	113	72	81	W out H	SL	15	15	1	Rent	"	31	65
						I.Q. Below 80						
29	80	125	123	W out H	U	12	12	3	Own	Both	180	60
30	68	115	79	W in H	"	8	2	3	"	One	0	60
31	61	111	68	Dead	F	6	6	3	"	"	10	90
32	63	110	61	W out H	UL	4	4	6	"			
33	66	109	72	W in H	"	3	3	2	"	One	1	45
34	71	108	99	"	F	5	5	2	Rent	Both	0	65
35	85	104	88	"	"	7	7	7	Own	"	3	60
36	70	106	79	W out H	UL	3	4	2	Rent	"	0	30
37	74	105	77	W in H	F	7	7	7	"	"	4	150
38	66	105	68	"	"	6	8	2	Own	"	1	60
39	59	103	61	"	U	8	8	8	"	"	5	65
40	62	102	69	"	UL	8	8	3	Rent	"	6	45
41	73	100	74	"	"	12	12	11	Own	"	202	40
42	78	100	78	"	F	9	7	4	Rent	"	8	60
43	75	98	72	W out H	UL	6	2	3	Own	"	8	40
44	85	97	77	W in H	"	7	7	1	"	"	10	120
45	89	87	77	"	"	8	4	5	Rent	"	2	60
46	67	97	64	W out H	"	8	8	8	Own	"	8	60
47	67	96	63	W in H	Dead	6	6	4	Rent	One	13	40
48	62	84	52	"	UL	5	5	5	Own	Both	55	65
49	74	84	68	"	"	9	8	1	Rent	"	15	15
50	72	76	67	W out H	Dead	5	5	7	"	One	10	45
51	78	72	94	W in H	UL	7	7	2	"	Both	10	50
52	64	70	89	"	SL	5	5	7	Own	"	5	65

P - Professional SL - Skilled Laborer UL - Unskilled Laborer F - Farmer U - Unemployed