

A COMPARISON OF THE PRIMARY MENTAL ABILITIES  
AND READING ABILITY OF SOME SEVENTH GRADE STUDENTS  
WITH THEIR SOCIO-ECONOMIC LEVEL

by

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## CHAPTER I

### FORMULATION AND DEFINITION OF THE PROBLEM

Today there is more and more emphasis on the development of the individual within the total school population. Warner (1944) reported that more and more emphasis is being placed on the individual and his needs, it becomes apparent that our American children are not equal and that they occupy different and unequal statuses.

#### Statement of the Problem

It was the purpose of this study to compare the reading ability with the Primary Mental Abilities Scores. A further purpose to compare both reading ability and Primary Mental Abilities Scores with the socio-economic levels of some seventh grade history students enrolled in Thomas Jefferson Junior High, Monroe City Schools, Monroe, Louisiana during the 1972-73 school session.

#### Significance of the Study

The research project is significant in that the results are beneficial in ascertaining the degree to which pupils' reading is in accordance with their mental ability. This information may be used to facilitate the formulation of principles of guidance requisite for each individual. In addition, the results of this survey can be utilized as the basis for evaluating the existing curriculum and for

projecting a modified one.

### Delimitations

The study is limited to 125 students in the seventh grade of Thomas Jefferson Junior High School located in Monroe, Louisiana. The classification of the fathers of the 125 seventh grade students was made according to skills which were sufficient for the study. The students were grouped according to their grade, the occupational classification of their fathers, and to the achieved scores on two standardized tests.

The intelligence of the students was limited to verbal meaning, number facility, reasoning, and spatial relations. The reading test was limited to vocabulary and comprehension. The intelligence and reading ability of the students were limited to the scores obtained on the standardized tests and no other factors of intelligence and reading were considered. The accuracy of these test results were affected only by the limitations inherent in any standardized tests. The objectives of this investigation may be defined in the questions posed below:

1. What was the distribution of seventh grade students according to parental occupational classifications?
2. What numbers and per cents of seventh grade students in each of the six parental occupational classifications achieved below normal intelligence (less than 90 I.Q.), normal intelligence (90-110 I.Q.), above normal (more than 110 I.Q.), on the Primary Mental Abilities Test?
3. What was the mean I.Q. for each of the six parental occupational classifications of the students according to the scores obtained on the Primary Mental Abilities Test?

4. What numbers and per cents of seventh grade students in each of the six parental occupational classifications achieved below grade norm in vocabulary and at or above grade norm in vocabulary on the Gates-MacGinitie Reading Tests?
5. What numbers and per cents of seventh grade students in each of the six parental occupational classifications achieved below grade norm in comprehension and at or above grade norm in comprehension on the Gates-MacGinitie Reading Tests?
6. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored below normal in intelligence (less than 90 I.Q.) on the Primary Mental Abilities Test and scored below grade norm and at or above grade norm in vocabulary on the Gates-MacGinitie Reading Tests?
7. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored normal in intelligence (90-110 I.Q.) on the Primary Mental Abilities Test and scored below grade norm and at or above grade norm in vocabulary on the Gates-MacGinitie Reading Tests?
8. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored above normal in intelligence (more than 110 I.Q.) on the Primary Mental Abilities Test and scored below and at or above grade norm in vocabulary on the Gates-MacGinitie Reading Tests?
9. What numbers and per cents of seventh grade students in each of the six parental occupational classifications scored below normal in intelligence (less than 90 I.Q.) on the Primary Mental Abilities Test and scored below grade norm and at or above grade norm in comprehension on the Gates-MacGinitie Reading Tests?
10. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored normal in intelligence (90-110 I.Q.) on the Primary Mental Abilities Test and scored below grade norm and at or above grade norm in comprehension on the Gates-MacGinitie Reading Tests?

11. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored above normal in intelligence (more than 110 I.Q.) on the Primary Mental Abilities Test and scored below grade norm and at or above grade norm in comprehension on the Gates-MacGinitie Reading Tests?

#### DEFINITION OF TERMS

##### Socio-economic Status

The level according to Good (1959) indicative of the economic achievement of an individual or group.

##### Intelligence

This represents the student's ability to adapt to new situations as a result of previous learning experience.

##### Grade Norm

The grade norm is the median achievement of the seventh grade students on a standardized test giving scores in reading.

## CHAPTER II

### REVIEW OF RELATED RESEARCH AND PROFESSIONAL LITERATURE

This investigation concerned itself with the comparison of the reading ability and primary mental abilities with the socio-economic level of the students. The research and literature to be reviewed relates specifically to intelligence and socio-economic status and intelligence and reading ability.

### CONCEPT OF INTELLIGENCE

Numerous definitions of intelligence have been given by psychologists which can be classified into one or three groups. One group of definitions places emphasis upon the adjustments or adaptation the individual makes to his total environment. According to this type of definition, intelligence is a general mental adaptability to new problems. The more intelligent person is one who can more extensively and easily vary his behavior appropriately as demanded by by conditions.

A second type of definition views intelligence as the ability to learn. Defined in this manner, intelligence is the extent to which a person is educable. Other definitions of intelligence state that it is the ability to carry on abstract thinking as reported by Freeman (1962). This ability is the effective use of symbols and concepts in dealing with situations, especially those problems to be solved through the use of verbal and numerical symbols.

Anastasi (1965) concluded that no single test can control

all cultural factors which influence test performance. The culture-fairness of a test is limited. It is hardly possible to construct a test which would be universally free of cultural differences. Anastasi questions the usefulness of a test. The common assumption that non-verbal tests are more nearly culture fair than are verbal test is not always true. Cultural factors of interest, value systems, work habits, problem solving attitudes, or emotional security may influence the development of specific abilities.

#### INTELLIGENCE AND SOCIO-ECONOMIC STATUS

Warner (1944) reported that all societies everywhere no matter how primitive or modern have recognized methods for distributing power, prestige and status among their members. Hall (1969) stated that occupations are central to socio-economic status they also relate to a significant aspect of the social structure.

Eells (1950) cited that the first research study in this country dealing with the relation of social status to the newly developed intelligence tests was the one by Weintraub and Weintraub, published in 1912. This study is interesting because it is one between the two factors. These investigators used the Goddard Revision of the Binet-Simon tests to test children in three institutions, which they thought represented quite different social backgrounds. They were the Horace Mann School ("wealthy, or at least, unburdened families"), the Speyer School (representing a middle group) and the Hebrew Sheltering Orphan Asylum, a barrack-plan orphanage with very limited cultured advantages.

A large number of studies have been made since the Weintraub

study in 1912; they have used such different definitions of social status as, judgments of teachers, social, environmental or occupational classification of the father, educational background of parents, measures of economic status of the family (family income, tax assessments, etc.) and a number of composite social-status scales.

All three studies tend to show the same results. The research is close to unanimous in showing that there are significant differences in intelligence-test performance of children and youth from different socio-economic backgrounds with children from the higher levels securing the higher intelligence test scores. When the comparisons are made in terms of differences of median or mean I.Q.'s, children of unskilled laborers range from 15 to 25 I.Q. points below middle class children. Where correlation techniques were used, the correlations ranged from .03 to .58.

Halsey reported by Hall (1969) held that learning ability of the subjects, as measured by standard intelligence is held constant so that even if learning ability is in any way differentially distributed across class lines, the relationship between ability and its realization in the educational system is vitally affected by the stratification factor.

Havighurst (1947) conducted a test on the relation between ability and social status in a midwestern community and found that children of higher family-social-status tended to do better in all of the tests than children of lower social positions.

In another study conducted by Havighurst (1946) the general conclusion was that continued exposure to the differential environments

of different social class groups selects out and favors certain abilities, and at the same time discourages or neglects other abilities.

There is a significant relationship between parental educational level and the measured intelligence of children. In his study Sewall (1952) found that there was a highly significant positive relationship between family social status as measured by father's occupation, parental educational attainment, and family prestige in the community, and the measured intelligence of the children. Generally speaking children whose parents are in the business and professional groups have higher intelligence test scores than children whose parents are in other occupational categories, with the children of unskilled laborers obtaining the lowest test scores.

In an attempt to determine the degree of relationship of children's intelligence and the occupational status of the father Collins (1928) reported the children of professional and managerial fathers have a higher intelligence quotient, on the average, than those of clerical or trade fathers who in turn have a higher intelligence rating than the children of laboring fathers. He concluded that the occupation of the father then may be considered as a rough index to the intelligence of the child. Various tests according to Kuhlen (1952) have been developed which assume that a useful inference regarding a person's intelligence can be drawn from information indicating how much he has learned from his day-to-day living in the American culture and how well he can perform various mental operations. A basic assumption (not always met) is that the individuals tested had sufficiently similar backgrounds and equal opportunity to learn the type of information or

tasks called for on the tests.

Users of tests obviously cannot make the assumption that a particular I.Q. represents a stable index of ability. Difference between socio-economic groups are well established and probably represent true differences in ability though undoubtedly partially a result of the test used. Measured intelligence has been shown to be associated with success in school and life, though the degree of association is far from perfect, and (in the instance of school subject fields) will vary from no association in some areas to fairly substantial association in other areas. Education has important contributions to make in promoting the acquisition of those skills, attitudes, concepts, and habits which will result in successful use of native ability. The standardization data of the Stanford-Binet test show contrasts between children of parents of various occupational groups. Children of professional and semiprofessional families averaged around 116-117 in I.Q. Those in higher level occupational groups can also provide better environment and opportunity for their children, who thus have a double advantage both genetic and environmental.

A table taken from Kuhlen (1952) shows that the I.Q. difference between higher and lower occupational groups are relatively constant between ages eight and eighteen; at all ages children of lower occupational groups average lower in I.Q. In his study the children whose fathers were in the lower occupational groups averaged 96 I.Q. while those from the upper occupational groups averaged 107. The same children were tested as they matured.

## INTELLIGENCE AND READING ABILITY

The most important factor in reading readiness is general intelligence according to Harris (1970) which being an average of many phases of mental growth is significantly related to most of the other factors. Over a period of many years, teachers were told rather dogmatically that there is a definite minimum mental age that is necessary for success in beginning reading. The general cultural level of a child's home is the most important determiner of the adequacy of his background of knowledge and experience.

Norvell's (1950) study revealed that there are four significant factors affecting reading interests, sex, age, intelligence, and socio-economic background. The socio-economic background of the young people, along with the cultural level of his home, will influence all of these factors. Many young people have little or no opportunity for contact with books of any kind before they enter school, the home is overcrowded and the family income is so meager that the essentials of life are difficult to acquire.

According to Harris (1970) general intelligence is the most important factor in readiness for reading it is obvious that intelligence tests are useful for appraising certain levels of readiness to read. Most schools rely on group intelligence tests. These tests are comparatively simple and economical. They can be given and scored by a classroom teacher and so are practical for routine use. Helen Robinson (1946) cited that since reading has been defined as a complex reaction to the printed page, involving cerebral process and since intelligence is

frequently defined as the outward manifestation of these complex processes, it would appear that the two should be related. On this point most investigators agree that there is a positive relationship.

Robinson (1946) reported severely retarded readers seem to range in mental ages and I.Q.'s about the same as unselected cases within a public school where the low-grade-feeble-minded are eliminated. The majority have I.Q.'s between 90 and 110. The Binet intelligence test supplemented by a performance and a nonverbal test seems to give the best estimate of reading expectancy. Most writers agree that a mental age of more than six years is desirable for learning to be able to teach any child with an I.Q. less than 65 to read new materials without assistance.

Kirk as reported in Robinson (1946) indicated that older children with I.Q.'s below 50 should be taught only songs and labels for their own safety, as they are incapable of learning to read. He believed that children with I.Q.'s above 50 could be taught to read in proportion to their mental ages, and he outlines methods for teaching them. As a precaution, he emphasized that the child with the lower I.Q. would not begin to read with a life-age of six years, or at least not until he had attained an adequate mental age.

Reading achievement tends to be related to intelligence at all academic levels. In the elementary school Strong from Bond (1957) found correlations of .80 to .84 between the language scores on the California Tests of Mental Maturity and scores on the Gates Basic Reading Tests. But for the nonlanguage intelligence score and the reading tests, the correlations were on 36 to 56. Using the same

ninth grade pupils, Bond (1957) found a correlation of .36 between the nonlanguage score and the reading scores. Thus verbal group intelligence test usually correlate fairly high with reading comprehension while nonlanguage group intelligence tests correlate much lower. Neither the language group test nor the nonlanguage type of test seems very appropriate for getting at the relation between intelligence and reading performance with reading disability cases. The mental age derived from a verbal group intelligence test tends itself to be largely a reading score. Although nonlanguage intelligence test scores may be of considerable help in predicting the reading potentiality of retarded readers, such tests probably do not measure satisfactorily the intellectual abilities employed in reading.

The question may be boldly put as to whether low intelligence really causes reading disability. Bond (1957) observed that specific reading disability (mechanics of reading rates, word recognition, word meanings) cannot be directly attributed to subnormality of intelligence. But perhaps it would be more accurate to say that, while low intelligence in itself is not a direct cause, it may lead indirectly to reading disability.

Monroe (1937) said reading tests usually show a fairly high but by no means perfect correlation with intelligence tests. Children who are retarded in general intelligence are usually similarly retarded in reading. An intelligence test should be given routinely to every poor reader in order to determine whether the child has the mental capacity for a higher level of reading than he is actually achieving. The mental age rather than I.Q. should serve as the criterion of expected progress.

Intellectual factors affecting reading may be divided into (1) general intelligence and (2) specific intellectual abilities.

General intelligence should be measured by a test which is not too heavily weighted with any one type of ability. Tests which require considerable reading should be avoided as poor readers are unduly handicapped on such test.

Monroe (1937) observed that sometimes children of good general intelligence show retardation in some of the specific skills which compose an intelligence test. Children whose poor reading is the result of generally low intelligence usually show the following characteristics:

- (a) Mental ages on the Stanford-Binet and Arthur Point Performance Scale are in agreement.
- (b) Reading achievement are at the same level as the mental ages.
- (c) Poor comprehension is shown in arithmetic and other school subjects as well as reading.
- (d) Scores in tests of the mechanics of reading, oral reading, and word-recognition are sometimes slightly higher than silent reading tests for comprehension. Such children learn routine skills with repetitive work but fail to utilize the skill intelligently.
- (e) The child is more sensitive to his retardation, in reading than to his general inadequacy in all subjects.

## CHAPTER III

### METHODS OF CONDUCTING THE SURVEY

The aim of the present investigation was to compare data relevant to intelligence, reading ability and the immediate socio-economic environment of 125 students enrolled in the seventh grade of Thomas Jefferson Junior High School located in Monroe, Louisiana. More specifically, the problem was to compare the measured intelligence of these pupils and their achievement in comprehension and vocabulary in reading with their socio-economic status. This chapter has been devoted to the description of the subjects who participated in the investigation; to the materials utilized in the scientific investigation; and to the procedure used to accomplish the purpose of this study.

### SUBJECTS

The subjects of this research project involved 25 females and 66 males enrolled in the seventh grade during the 1972-73 school year at Thomas Jefferson Junior High School located in the city of Monroe. The students ranged in age from 11 to 14 years. These students were taught by a wide sampling of personnel meeting state certification requirements. The course of study offered to them met both state and local requirements.

This research initially involved 125 students. Participants in the survey were eliminated because of the following reasons: (1) father deceased, (2) insufficient information given, (3) transfer to another school, (4) incomplete tests, (5) and absenteeism. Therefore

the final number of students remaining in the research project was 91.

### MATERIALS

The materials used in this research project consisted of a primary mental abilities test and a standardized reading test. The Science Research Associate Primary Mental Abilities Test was composed of five test batteries; verbal meaning, number facility, reasoning, perceptual speed, and spatial relations. Scores on the primary mental abilities were incorporated within the framework of a single-quotient score for the entire test. Thus, the single-quotient score preserved the picture of individual differences and provided a reliable estimate of intelligence, comparable to scores on tests such as the Stanford-Binet and the Wechsler Intelligence Scale for Children as found in Thurston (1965).

The Gates-MacGinitie Reading Tests consisted of four subtests but only the vocabulary and comprehension subtests were administered to the seventh grade students. The vocabulary and comprehension tests are designed to be power tests, and the time limits for these tests were made as long as practical.

### PROCEDURES

The normative survey technique is employed to obtain data from which the typical conditions prevailing in a currently existing milieu can be derived. Good (1954) said that the descriptive-survey-status research is "directed toward ascertaining the prevailing conditions and this method is essentially a technique of quantitative description

of the general characteristics of the group."

Permission to conduct the normative study was obtained from the principal, Mr. Percy Powell, Thomas Jefferson Junior High School, and Mrs. Elizabeth Taylor, Counselor, Thomas Jefferson Junior High School.

The dates for administering both tests were set by the principal and the counselor. The Primary Mental Abilities Tests were administered to the students by each seventh grade homeroom teacher with the counselor serving as the coordinator of the testing session. The counselor assembled all materials from the homeroom teachers and sent them to the school board office. The answer sheets from the junior high school were mailed to the Science Research Associate Office to be machine scored.

The Gates-MacGinitie Reading Tests were administered by the reading teachers and hand scored by them. A survey sheet containing the names of each seventh grade student and their grade placement for vocabulary and comprehension on the reading tests was also completed by the teachers.

After the test results were returned for both tests an analysis sheet was constructed by obtaining information from school records, personal interviews and test results to show the following information: sex, birthdate, father's occupation, intelligence and grade placement in reading vocabulary and comprehension. This provided the necessary data to answer those questions listed in the objectives of the project.

In summation seven steps took place in this research project. The survey encompassed the following activities: the selection of the pupils for the survey; the procurement of information through personal

data forms; compilation of data from guidance cumulative records; the arrangement for personal interviews with the students, the principal and the counselor; the selection and administration of tests, and the conversion of data into tables for convenient analysis.

## CHAPTER IV

### UTILIZATION OF THE RESULTS

It was the intent in this chapter to present the results and analyze the data in order to accomplish the purposes of this research project which were formulated in the first chapter.

School records and interviews were used to secure the necessary information to determine the parental occupations found within the framework of the seventh grade population. The problem of categorizing these occupations was resolved after a review of the literature which resulted in the use of a simplification of the system devised by A. B. Edwards for the Bureau of Census. The six occupational classifications are as follows: (1) professional persons, (2) proprietors, managers, and officials, (3) clerks and kindred workers, (4) skilled workers and foremen, (5) semi-skilled workers, and (6) unskilled workers.

The first part of this chapter was concerned with the six occupational classifications of the fathers of the students. The number of students tested and the per cents they represented were grouped according to the occupational classification of their fathers. The I.Q. which was obtained from the Primary Mental Abilities Test was first considered in terms of its relation to the total population. Presentation of three levels of I.Q.'s achieved on the Primary Mental Abilities Test were grouped according to below normal or average intelligence (less than 90 I.Q.); according to normal or average intelligence (90-110 I.Q.); and according to above normal or average intelligence (above 110 I.Q.). The mean I.Q.'s for each of the parental occupational classifications

and the mean I.Q. for the total group were also presented in this part of the chapter.

The second part concerned the arrangement of the total population into two groups according to the results achieved on vocabulary of the Gates-MacGinitie Reading Tests. Information was recorded placing the numbers of students and the per cent of students in each parental occupational classification who fell below the grade norm in vocabulary and placing the number of students and the per cent of students who fell at or above the grade norm in vocabulary. Information was also recorded concerning the number of students and the per cent of students who fell below grade norm and at or above grade norm in comprehension. Students were also classified as being below normal in intelligence (less than 90 I.Q.); normal intelligence (90-110); and above normal in intelligence (above 110) on the Primary Mental Abilities Test. Students at these three levels of intelligence were compared by number and with those scoring below grade norm, and at, or above grade norm on the vocabulary and comprehension on the Gates-MacGinitie Reading Tests.

DISTRIBUTION OF STUDENTS CLASSIFIED ACCORDING  
TO FATHER'S OCCUPATIONAL STATUS AND  
INTELLIGENCE TEST SCORES

This section of the analysis of data included the categorization of the students according to the father's occupational status and the levels of intelligence obtained from the Primary Mental Abilities Test. The intelligence scores were divided into three categories representing the number and per cents of students scoring below normal (less than 90 I.Q.), normal (90-110 I.Q.), and above normal (above 110 I.Q.). Also,

the mean I.Q. for the total population was included.

Table 1 presented the status of the fathers of the students according to the six occupational classifications: professional persons; proprietors, managers, and officials; clerks and kindred workers; skilled workers and foremen; semiskilled workers; and unskilled workers. Of the ninety-one students tested, five or 5.45 per cent, were in the first classification; eight, or 8.79 per cent were in the second classification; seventeen or 16.49 per cent were in the third classification; thirty, or 32.96 per cent, were in the fourth classification; twenty-three or 25.27 per cent were in the fifth classification; and eight or 8.79 per cent were in the sixth classification.

Table 2 presented the distribution of the numbers and per cents of the students in each of the six parental occupational classifications according to the three levels of I.Q., and above normal (above 110 I.Q.) scored on the primary Mental Abilities Test. This table indicated that of the ninety-one students involved in the research project, thirty-three or 36.26 per cent were below normal (less than 90 I.Q.) in intelligence; thirty-two or 33.16 per cent, were normal in intelligence and twenty-six or 28.58 per cent were above normal (more than 110 I.Q.) in intelligence. The largest number of students tested were shown to be in the normal or above normal category. The numbers and percentages would not be true for all communities. The school is considered a "target" school by the federal government in that the poverty level is relatively high and the school received federal funds for education.

Upon examination (Table 2) of those attaining an I.Q. below 90 on the Primary Mental Abilities Test, one, or 20.00 per cent was found

TABLE 1

## Occupational Classification of Fathers of Students

Classification	Number Tested	Per Cent Tested
Professional Persons	5	5.45
Proprietors, Managers, and Officials	8	8.79
Clerks and Kindred Workers	17	16.49
Skilled Workers and Foremen	30	32.96
Semiskilled Workers	23	25.27
Unskilled Workers	8	8.79
TOTALS	91	97.75

in the first classification; none or 0.00 per cent in the second classification; three or 17.64 per cent in the third classification; twelve or 40.00 per cent in the fourth classification; ten or 43.60 per cent in the fifth classification; and seven or 87.50 per cent in the sixth classification. The professional group apparently has the smallest percentage of students falling in the below normal category and the unskilled group had the largest percentage of students in the below normal category.

Table 2 also revealed that of those attaining a normal I.Q. score on the Primary Mental Abilities Test, none or 0.00 per cent were found in the first classification; four or 50.00 per cent in the second classification; seven or 41.17 per cent in the third classification; ten or 33.33 per cent in the fourth classification; ten or 43.60 per cent in the fifth classification; and one or 12.50 per cent in the sixth classification. This table indicated that the smallest percentage of those scoring within the normal range of intelligence (90-110 I.Q.) was in the first classification and that the largest percentage of those scoring within the normal range of intelligence (90-110 I.Q.) was in the second classification.

Examination of Table 2 indicated that of those scoring above normal (more than 110 I.Q.) on the Primary Mental Abilities Test, four or 80.00 per cent were in the first classification; four or 50.00 per cent were in the second classification; seven or 41.17 per cent were in the third classification; eight or 26.66 per cent were in the fourth classification; three or 13.04 per cent were in the fifth classification; and none or 0.00 per cent were in the sixth classification. These figures

TABLE 2

Numbers and Per Cents of Students in Each Parental Occupational Classification  
Arranged According to Three Levels of Intelligence Achieved  
on the SRA Primary Mental Abilities Test

Classification	Number Tested	Below Normal		Normal		Above Normal	
		Number	Less than 90 I.Q. Per Cent	Number	90-110 I.Q. Per Cent	Number	More than 110 I.Q. Per Cent
Professional Persons	5	1	20.00	0	00.00	4	80.00
Proprietors, Managers, and Officials	8	0	00.00	4	50.00	4	50.00
Clerks and Kindred Workers	17	3	17.64	7	41.17	7	41.17
Skilled Workers and Foremen	30	12	40.00	10	33.33	8	26.66
Semiskilled Workers	23	10	43.60	10	43.60	3	13.04
Unskilled Workers	8	7	87.50	1	12.50	0	00.00
TOTALS	91	33	36.26	32	35.16	26	28.58

revealed that the smaller percentage of students scoring above normal in intelligence (more than 110 I.Q.) was in the unskilled classification and the larger percentage was in the professional classification.

Table 3 presented the mean I.Q. for the parental occupational classifications as well as for the total population. The mean I.Q. for the first classification was 115.6; the second classification was 115.5; for the third classification it was 107.5; for the fourth classification it was 91.5; for the fifth classification it was 94.6; and for the sixth classification it was 76.3. The mean I.Q. for the ninety-one students involved in the research was 100.1. The highest mean I.Q., 115.6 was found in the first classification. The sixth classification obtained below normal I.Q. and normal I.Q. only.

Table 4 presented the numbers and per cents of the ninety-one students in each parental occupational classification according to those scoring below grade norm on the vocabulary subtest on the Gates-MacGinitie Reading Tests. Those falling below grade norm in vocabulary in the first classification were two, or 40.00 per cent, in the second classification were four, or 50.00 per cent; in the third classification were twelve, or 70.58 per cent; in the fourth classification were twenty-three or 76.66 per cent; in the fifth classification were twenty or 86.95 per cent; and in the sixth classification were eight, or 100.00 per cent.

Table 4 revealed that, of the ninety-one students tested sixty-nine, or 75.82 per cent, were below grade norm in vocabulary and twenty-two, or 24.17 per cent, were above grade norm in vocabulary according to the scores obtained on the Vocabulary Subtest on the Gates-MacGinitie

TABLE 3

Mean I.Q. for Each Parental Occupational Classification  
on the SRA Primary Mental Abilities Test

Classification	Number Tested	Mean I.Q.
Professional Persons	5	115.6
Proprietors, Managers, and Officials	8	115.5
Clerks and Kindred Workers	17	107.5
Skilled Workers and Foremen	30	91.5
Semiskilled Workers	23	94.6
Unskilled Workers	8	76.3
TOTALS	91	100.1

TABLE 4

Number and Per Cents of Students in Each Parental Occupational Classification  
Arranged According to Two Levels of Vocabulary in  
Reading on the Gates-MacGinitie Reading Tests

Classification	Number Tested	Below Grade Norm		At or Above Grade Norm	
		Number	Per Cent	Number	Per Cent
Professional Persons	5	2	40.00	3	60.00
Proprietors, Managers, and Officials	8	4	50.00	4	50.00
Clerks and Kindred Workers	17	12	70.58	5	28.82
Skilled Workers and Foremen	30	23	76.66	7	23.33
Semiskilled Workers	23	20	86.95	3	13.04
Unskilled Workers	8	8	100.00	0	0.00
TOTALS	91	69	75.82	22	24.17

Reading Tests. The smallest percentage of those falling below the grade norm in vocabulary was in the first classification representing 40.00 per cent of the group. The largest percentage of those falling below the grade norm in vocabulary was in the sixth classification representing 100.00 per cent of the group. The smallest percentage of those falling at or above grade norm in vocabulary was in the sixth classification representing 0.00 per cent of the group. The largest percentage of those falling at or above grade norm in vocabulary was in the first classification representing 60.00 per cent of the group.

Table 5 presented the numbers and per cents of the ninety-one students in each parental occupational classification according to those scoring below grade norm and at or above grade norm on the Comprehension Subtest on the Gates-MacGinitie Reading Tests.

Those scoring below grade norm in comprehension in the first classification was one, or 20.00 per cent; in the second classification were four, or 50.00 per cent; in the third classification were eight, or 49.05 per cent; in the fourth classification twenty, or 66.66 per cent; in the fifth classification were twenty-one, or 91.30 per cent; and in the sixth classification were eight, or 100.00 per cent. Those scoring at or above grade norm in comprehension in the first classification were four, or 80.00 per cent; in the second classification were four, or 50.00 per cent; in the third classification were nine, or 52.94 per cent; in the fourth classification were ten, or 33.33 per cent; in the fifth classification were two, or 8.70 per cent; and in the sixth classification were none, or 0.00 per cent.

Table 5 revealed that, of the ninety-one students tested,

TABLE 5

Numbers and Per Cents of Students in Each Parental Occupational Classification Arranged According to Two Levels of Comprehension in Reading on the Gates-MacGinitie Reading Tests

Classification	Number Tested	Below Grade Norm		At or Above Grade Norm	
		Number in Reading	Per Cent	Number in Reading	Per Cent
Professional Persons	5	1	20.00	4	80.00
Proprietors, Managers, and Officials	8	4	50.00	4	50.00
Clerks and Kindred Workers	17	8	47.05	9	52.94
Skilled Workers and Foremen	30	20	66.66	10	33.33
Semiskilled Workers	23	21	91.30	2	8.70
Unskilled Workers	8	8	100.00	0	0.00
TOTALS	91	62	68.13	29	31.86

sixth-two, or 68.13 per cent, were below grade norm in comprehension and twenty-nine, or 31.86 per cent, were at or above grade norm in comprehension according to the Comprehension Subtest on the Gates-MacGinitie Reading Tests. The smallest percentage of those falling at or above the grade norm in language was in the unskilled classification which was found to have the lowest mean I.Q. which was 76.3.

DISTRIBUTION OF STUDENTS CLASSIFIED ACCORDING TO  
FATHER'S OCCUPATIONAL STATUS AND VOCABULARY AND COMPREHENSION  
TEST SCORES, AND INTELLIGENCE TEST SCORES

The analysis of the data in this section included the scores obtained on the Vocabulary and Comprehension Subtests on the Gates-MacGinitie Reading Tests. These scores were distributed according to the numbers and per cents of the ninety-one students who scored below grade norm and at or above grade norm on the Vocabulary and Comprehension Subtests.

This same material was then categorized according to the numbers and per cents of the ninety-one in the sixth classification representing 0.00 per cent of the group. The largest percentage of those falling at or above grade norm in comprehension was in the first classification representing 80.00 per cent of the group. The results indicated more fell below grade norm in vocabulary than in comprehension.

Table 6 showed the numbers and per cents of the students in each parental occupational classification who were below normal in intelligence (less than 90 I.Q.) on the Primary Mental Abilities Test and who scored below grade norm and at or above grade norm on the Vocabulary Subtest on the Gates-MacGinitie Reading Tests. There were

TABLE 6

Numbers and Per Cents in Each Parental Occupational Classification Who Had Below Normal I.Q.'s  
(Less Than 90) Arranged According to Two Levels of Vocabulary in Reading  
on the Gates-MacGinitie Reading Tests

Classification	Number Tested	Below Normal I.Q. (less than 90 I.Q.)		Below Grade Norm in Reading Vocabulary		At or Above Grade Norm in Reading Vocabulary	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Professional Persons	5	1	20.00	1	20.00	0	0.00
Proprietors, Managers, and Officials	8	0	00.00	0	00.00	0	0.00
Clerks and Kindred Workers	17	3	17.65	2	11.76	1	5.88
Skilled Workers and Foremen	30	12	40.00	12	40.00	0	0.00
Semiskilled Workers	23	10	43.47	10	43.47	0	0.00
Unskilled Workers	8	7	87.50	7	87.50	0	0.00
TOTALS	91	33	36.26	32	35.16	1	1.09

ninety-one students tested and of this number thirty-three or 36.26 per cent, were below normal in intelligence; there were thirty-two, or 35.16 per cent, scoring below grade norm; and one, or 1.09 per cent, scoring at or above grade norm in vocabulary. Of these thirty who scored below normal in intelligence one, or 20.00 per cent, scored below grade norm in vocabulary in the first classification; none, or 0.00 per cent, in the second classification; two, or 11.76 per cent in the third classification; twelve, or 40.00 per cent in the fourth classification; ten or 43.47 per cent in the fifth classification; and seven, or 87.50 per cent in the sixth classification. Within the group scoring below normal in intelligence and at or above grade norm in vocabulary there were none scoring at or above grade norm in vocabulary in the first classification; none in the second classification; one, or 5.88 per cent in the third classification; none in the fifth classification; and zero in the sixth classification. Of the thirty-three students scoring below normal in intelligence the lower percentage scoring below grade norm in vocabulary was in the professional classification and the higher percentage scoring below grade norm was in the sixth classification. The lower percentage scoring at or above grade norm in vocabulary were in the first, second, fourth, fifth, and sixth with zero scoring at these levels and the higher percentage was in the third classification.

Table 7 presented numbers and per cents of the students in each parental classification who were below normal in intelligence (less than 90 I.Q.) on the Primary Mental Abilities and who scored below grade norm and at or above grade norm on the Comprehension Subtest on the Gates-MacGinitie Reading Tests. There were ninety-one students tested

TABLE 7

Numbers and Per Cents of Students in Each Parental Occupational Classification Who Had Below Normal I.Q.'s  
(Less Than 90) Arranged According to Two Levels of Comprehension in Reading  
on the Gates-MacGinitie Tests

Classification	Number Tested	Below Normal		Below Grade Norm		At or Above Grade Norm	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Professional Persons	5	1	20.00	1	20.00	0	0.00
Proprietors, Managers, and Officials	8	0	00.00	0	00.00	0	0.00
Clerks and Kindred Workers	17	3	17.64	2	11.76		
Skilled Workers and Foremen	30	12	40.00	12	40.00	1	5.88
Semiskilled Workers	23	10	43.47	10	43.47	0	0.00
Unskilled Workers	8	7	87.50	7	87.50	0	0.00
TOTALS	91	33	36.26	32	35.16	1	1.09

and of this number thirty-three, or 36.26 per cent, were below normal in intelligence. There were thirty-two, or 35.16 per cent, falling below grade norm and one, or 1.09 per cent, scoring at or above grade norm in comprehension. Of these thirty-three scoring below normal in intelligence there was one, or 20.00 per cent, scoring at grade norm in comprehension in the first classification; none in the second classification; two, or 11.76 per cent in the third classification; twelve, or 40.00 per cent in the fourth classification; ten, or 43.47 per cent in the fifth classification; and seven, or 89.50 per cent in the sixth classification. Within the group scoring below normal in intelligence and at or above grade norm in comprehension there were none scoring at or above grade norm in comprehension in any classification except in the third classification where there was one, or 5.88 per cent. Of the thirty-three students scoring below normal in intelligence the lowest percentage was zero in the second classification. The lowest percentage scoring at or above grade norm in comprehension fell in five classifications; first, second, third, fourth, and fifth. There were none scoring at or above grade norm in these three classifications. The highest percentage was in the third classification.

Table 8 indicated the numbers and per cents of the students in each parental occupational classification who were normal in intelligence (90-110 I.Q.) on the Primary Mental Abilities Test and who scored below grade norm and at or above grade norm on the Vocabulary Subtest on the Gates-MacGinitie Reading Tests. There were ninety-one students tested and of this number thirty-two, or 35.16 per cent, were normal in intelligence. There were twenty-four, or 26.37 per cent, scoring below

TABLE 8

Numbers and Per Cents in Each Parental Occupational Classification Who Had Normal I.Q.'s (90-110)  
 Arranged According to Two Levels of Vocabulary in Reading  
 on the Gates-MacGinitie Tests

Classification	Number Tested	Normal (90-110)		Below Grade Norm in Reading Vocabulary		At or Above Grade Norm in Reading Vocabulary	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Professional Persons	5	0		0		0	
Proprietors, Managers, and Officials	8	4	50.00	3	37.50	1	12.50
Clerks and Kindred Workers	17	7	41.17	5	29.41	2	11.76
Skilled Workers and Foremen	30	10	33.33	7	23.33	3	10.00
Semiskilled Workers	23	10	43.47	8	34.78	2	8.69
Unskilled Workers	8	1	12.50	1	12.50	0	0.00
TOTALS	91	32	35.16	24	26.37	8	8.79

grade norm and eight or 8.79 per cent, scoring at or above grade norm in vocabulary. Of these thirty-two, scoring normal in intelligence there were none scoring below grade norm in vocabulary in the first classification; three, or 37.50 per cent. in the second classification; five, or 29.41 per cent in the third classification; seven, or 23.33 per cent in the fourth classification; eight, or 34.78 per cent in the fifth classification; and one, or 12.50 per cent in the sixth classification.

Within the group scoring normal in intelligence and at or above grade norm in vocabulary there were none in the first and sixth classifications; one, or 12.50 per cent in the second classification; two, or 11.76 per cent in the third classification; three, or 10.00 per cent in the fourth classification, and two, or 8.69 per cent in the fifth classification. Of the thirty-two students scoring normal in intelligence the lowest percentage scoring below grade norm in vocabulary was zero in the first classification and the highest percentage scoring below grade norm in vocabulary was in the second classification. The lowest percentage scoring at or above grade norm in vocabulary was zero in the first and sixth classifications and the highest percentage scoring at or above grade norm in vocabulary was in the second classification.

Table 9 presented numbers and per cents of the students in each parental occupational classification who scored in the normal range in intelligence (90-110 I.Q.) on the Primary Mental Abilities Test and who scored below grade norm and at or above grade norm on the Comprehension Subtest on the Gates-MacGinitie Reading Tests. There were ninety-one students tested and of this number thirty-two, or 35.16 per cent, were normal in intelligence. There were twenty-one, or 23.07 per cent,

TABLE 9

Numbers and Per Cents in Each Parental Occupational Classification Who Had Normal I.Q.'s (90-110)  
 Arranged According to Two Levels of Comprehension in Reading on the  
 Gates-MacGinitie Reading Tests

Classification	Number Tested	Normal I.Q. (90-110)		Below Grade Norm in Reading Comprehension		At or Above Grade Norm in Reading Comprehension	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Professional Persons	5	0	0.00	0	0.00	0	0.00
Proprietors, Managers and Officials	8	4	50.00	3	37.50	1	12.50
Clerks and Kindred Workers	17	7	41.17	3	17.65	4	23.52
Skilled Workers and Foremen	30	10	33.33	7	23.33	3	10.00
Semiskilled Workers	23	10	43.47	7	30.43	3	13.04
Unskilled Workers	8	1	12.50	1	12.50	0	0.00
TOTALS	91	32	35.16	21	23.07	11	12.08

scored below grade norm and eleven, or 12.08 per cent, scored at or above grade norm in comprehension. Of these thirty-two scored normal in intelligence there were none scoring below grade norm in comprehension in the first classification; three, or 37.50 per cent in the second classification; three, or 17.65 per cent in the third classification; seven, or 23.33 per cent in the fourth classification; seven, or 30.43 per cent in the fifth classification; and one, or 12.50 per cent in the sixth classification. Within the group scoring normal in intelligence and at or above grade norm in comprehension there were none in the first classification; one, or 12.50 per cent in the second classification; four, or 23.52 per cent in the third classification; three, or 10.00 per cent in the fourth classification; three, or 13.04 per cent in the fifth classification; and none in the sixth classification. Of the thirty-two students scoring normal in intelligence the lowest percentage scoring below grade norm in comprehension was zero in the first classification and the highest percentage scoring below grade norm in comprehension was in the second classification. The lowest percentage scoring at or above grade norm in comprehension was zero in the first and sixth classifications and the highest percentage scoring at or above grade norm in comprehension was in the third classification.

Table 10 presented numbers and per cents of the students in each parental occupational classification who scored above normal in intelligence (more than 110 I.Q.) on the Primary Mental Abilities Test and who scored below grade norm and at or above grade norm on the Vocabulary Subtest on the Gates-MacGinitie Reading Tests. There were ninety-one students tested and of this number twenty-six, or 28.57 per cent

TABLE 10

Numbers and Per Cents of Students in Each Parental Occupational Classification Who Had Above Normal I.Q.'s (Over 110) Arranged According to Two Levels of Vocabulary in Reading on the Gates-MacGinitie Reading Tests

Classification	Number Tested	Above Normal		Below Grade Norm		At or Above Grade Norm	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Professional Persons	5	4	80.00	1	20.00	3	60.00
Proprietors, Managers, and Officials	8	4	50.00	1	12.50	3	37.50
Clerks and Kindred Workers	17	7	41.17	4	23.52	3	17.65
Skilled Workers and Foremen	30	8	26.66	4	93.33	4	13.33
Semiskilled Workers	23	3	13.04	2	8.65	1	4.34
Unskilled Workers	8	0	0.00	0	0.00	0	0.00
TOTALS	91	26	28.57	12	13.18	14	15.38

were above normal in intelligence (more than 110 I.Q.). There were twelve, or 13.18 per cent, scoring below grade norm and fourteen, or 15.38 per cent, scoring at or above grade norm in vocabulary. Of these twenty-six students, or 28.57 per cent, scoring above normal in intelligence there was one, or 20.00 per cent, scoring below grade norm in vocabulary in the first classification; one, or 12.50 per cent in the second classification; four, or 23.52 per cent in the third classification; four or 13.33 per cent in the fourth classification; two, or 8.65 per cent in the fifth classification; and none in the sixth classification. Within the group scoring above normal in intelligence and at or above grade norm in vocabulary there were three, or 60.00 per cent in the first classification; three, or 37.50 per cent in the second classification; three, or 17.65 per cent in the third classification; four, or 13.33 per cent in the fourth classification; one, or 4.34 per cent in the fifth classification; and none in the sixth classification.

Of the twenty-six, or 28.57 per cent, students scoring above normal in intelligence (more than 110 I.Q.) the lowest percentage scoring below grade norm in vocabulary was zero in the sixth classification. The highest percentage scoring below grade norm in vocabulary was in the third classification. The lowest percentage scoring at or above grade norm in vocabulary was zero in the sixth classification and the highest percentage scoring at or above grade norm in vocabulary was in the first classification.

Table 11 presented numbers and per cents of the students in each parental occupational classification who scored above normal in intelligence (more than 110 I.Q.) on the Primary Mental Abilities Test

TABLE 11

Numbers and Per Cents in Each Parental Occupational Classification Who Had Above Normal I.Q.'s (Over 110)  
 Arranged According to Two Levels of Comprehension in Reading on the  
 Gates-MacGinitie Reading Tests

Classification	Number Tested	Above Normal over 110 I.Q.		Below Grade Norm in Reading Comprehension		At or Above Grade Norm in Reading Comprehension	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Professional Persons	5	4	80.00	0	0.00	4	80.00
Proprietors, Managers, and Officials	8	4	50.00	1	12.50	3	37.50
Clerks and Kindred Workers	17	7	41.16	2	11.76	5	29.41
Skilled Workers and Foremen	30	8	26.66	1	3.33	7	23.33
Semiskilled Workers	23	3	13.04	2	8.69	1	4.34
Unskilled Workers	8	0	0.00	0	0.00	0	0.00
TOTALS	91	26	28.57	6	6.59	20	20.88

and who scored below, at, or above grade norm on the Comprehension Subtest on the Gates-MacGinitie Reading Tests. There were ninety-one students tested and of this number twenty-six, or 28.57 per cent, were above normal in intelligence. There were six, or 6.59 per cent, scoring below grade norm and twenty, or 20.88 per cent scoring at or above grade norm in comprehension. Of these twenty-six students, or 28.57 per cent, scoring above normal in intelligence there were none scoring below grade norm in comprehension in the first classification; one, or 12.50 per cent in the second classification; two, or 11.76 per cent in the third classification; one, or 3.33 per cent, in the fourth classification; two, or 8.69 per cent in the fifth classification; and none in the sixth classification.

Within the group scoring above normal in intelligence and at or above grade norm in comprehension there were four, or 80.00 per cent in the first classification; three, or 37.50 per cent in the second classification; seven, or 23.33 per cent in the fourth classification; one, or 4.34 per cent in the fifth classification; and zero in the sixth classification. Of the twenty-six students, or 28.57 per cent, scoring above normal in intelligence the lowest percentage scoring below grade norm in comprehension was in the first and sixth classifications. The highest percentage scoring below grade norm in comprehension was in the second classification. The lowest percentage scoring at or above grade norm in comprehension was zero in the sixth classification and the highest percentage scoring at or above grade norm in comprehension was in the first classification.

## CHAPTER V

## A. SUMMARY

It was the purpose of this study to procure data relevant to the intelligence, reading ability, and the immediate socio-economic environment of some seventh grade students, enrolled in Thomas Jefferson Junior High School, Monroe, Louisiana, during the 1972-73 school session. The students were categorized into those who scored below normal, normal, and above normal in intelligence on a primary mental abilities test and who scored below grade norm, at grade norm, and above grade norm in vocabulary and comprehension on a standardized reading test. The students were grouped according to the father's occupational classification.

The following questions were proposed:

1. What was the distribution of seventh grade students according to parental occupational classifications?
2. What numbers and per cents of seventh grade students in each of the six parental occupational classifications achieved below normal intelligence (less than 90 I.Q.), normal intelligence (90-110 I.Q.), above normal intelligence (more than 110 I.Q.), on the Primary Mental Ability Test?
3. What was the mean I.Q. for each of the six parental occupational classifications of the students according to the scores obtained on the Primary Mental Abilities Test?
4. What numbers and per cents of seventh grade students in each of the six parental occupational classifications achieved below grade norm in vocabulary and at or above grade norm in vocabulary on the Gates-MacGinitie Reading Tests?
5. What numbers and per cents of seventh grade students in each of the six parental occupational classifications achieved below grade norm in comprehension on the Gates-MacGinitie Reading Tests?

6. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored below normal in intelligence (less than 90 I.Q.) on the Primary Mental Abilities Test and scored below grade norm and at or above grade norm in vocabulary on the Gates-MacGinitie Tests?
7. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored normal in intelligence (90-110 I.Q.) on the Primary Mental Abilities Test and scored below grade norm, and at or above grade norm in vocabulary on the Gates-MacGinitie Reading Tests?
8. What numbers and percents of the seventh grade students in each of the six parental occupational classifications scored above normal in intelligence (more than 110 I.Q.) on the Primary Mental Abilities Test and scored below, at, or above grade norm in vocabulary on the Gates-MacGinitie Reading Tests?
9. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored below normal in intelligence (less than 90 I.Q.) on the Primary Mental Abilities Test and scored below grade norm and at or above grade norm in comprehension on the Gates-MacGinitie Reading Tests?
10. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored normal in intelligence (90-110 I.Q.) on the Primary Mental Abilities Test and scored below grade norm in comprehension on the Gates-MacGinitie Reading Tests?
11. What numbers and per cents of the seventh grade students in each of the six parental occupational classifications scored above normal in intelligence (more than 110 I.Q.) on the Primary Mental Abilities Test and scored below grade norm and at or above grade norm in comprehension on the Gates-MacGinitie Reading Tests?

The study was limited to ninety-one students in the seventh grade at Thomas Jefferson Junior High School located in Monroe, Louisiana. The students involved consisted of 25 females and 66 males ranging in age from 12.0 to 14.0 years. The students were grouped according to their grade, to the occupational classification of their fathers; scores on The Primary Mental Abilities Test; and scores obtained in vocabulary

and comprehension on the Gates-MacGinitie Reading Tests.

The normative survey technique was used to obtain the data needed to conduct the survey. Permission was obtained from the proper sources to conduct the survey and secure the necessary information needed.

The counselor and reading teachers were responsible for the testing and scoring of the test which is part of the testing program incorporated at the school. The Primary Mental Abilities Test answer sheets were mailed to the SRA Office to be machine scored. The reading tests were hand scored by the reading teachers.

The test results were placed on an analysis sheet which included the following information obtained from school records and interviews: sex, birthdate, father's occupation, intelligence scores, and grade placement in vocabulary and comprehension in reading.

The data from this research project were analyzed and presented in Chapter III. The first part of Chapter III included the numbers and per cents of students tested and grouped them according to the occupational classification of their fathers. The distribution of intelligence, below normal (less than 90 I.Q.), normal (90-110 I.Q.), and above normal (more than 110 I.Q.), in numbers and per cents as scored on the SRA Primary Mental Abilities Test were presented. Also, the mean I.Q. for the six parental occupational classifications was presented.

The second part of Chapter III included the numbers and per cents of students in each parental occupational classification categorized according to below grade norm, at, or above grade norm in vocabulary and comprehension on the Gates-MacGinitie Reading Tests. These students

were further classified according to scores below normal in intelligence (less than 90 I.Q.), normal in intelligence (90-110 I.Q.), and above normal (more than 110 I.Q.) on the SRA Primary Mental Abilities Test.

Upon completion of the data analysis the following information was available:

1. The distribution of the ninety-one seventh grade students was as follows: five, or 5.45 per cent, in the professional classification; eight, or 8.79 per cent, in the proprietors, managers, and officials classification; seventeen, or 16.49 per cent, in the clerks and kindred workers classification; thirty, or 32.96 per cent, in the skilled workers and foremen classification; twenty-three, or 25.29 per cent, in the semiskilled workers classification; eight or 8.79 per cent, in the unskilled classification.
2. The numbers and per cents of seventh grade students in each of the six parental occupational classifications who achieved below normal in intelligence (less than 90 I.Q.), normal in intelligence (90-110 I.Q.), and above normal in intelligence (more than 110 I.Q.) on the SRA Primary Mental Abilities Test were as follows: Of the five in the professional classification, one, or 20.00 per cent, scored below normal in intelligence, and four, or 80.00 per cent, scored above normal in intelligence. Of the eight in the proprietors, managers, and officials classification, none scored below normal in intelligence, and four, or 50.00 per cent, scored normal in intelligence. Of the seventeen in the clerks and kindred workers classification, three, or 17.64 per cent, scored below normal in intelligence, seven, or 41.17 per cent, scored normal in intelligence, seven, or 41.17 scored above normal in intelligence. Of the thirty in the skilled workers classification, twelve, or 40.00 per cent scored below normal in intelligence, ten, or 33.33 per cent, scored normal in intelligence, eight, or 26.66 per cent, scored above normal in intelligence. Of the twenty-three in the semiskilled workers classification, ten, or 43.60 per cent, scored below normal in intelligence, ten, or 43.60 per cent, score normal in intelligence, three, or 13.04 per cent, scored above normal in intelligence. Of the eight in the unskilled workers classification, seven, or 87.50 per cent, scored below normal in intelligence, one, or 12.50, per cent scored normal in intelligence, and none scored above normal in intelligence.

3. The mean I.Q. for each of the six parental occupational classifications according to the scores on the SRA Primary Mental Abilities Test was as follows: 115.6 for the professional classification; 115.5 for the proprietors, managers, and officials classifications; 107.5 for the clerks and kindred workers classification; 91.5 for the skilled workers and foremens classification; 94.6 for the semiskilled workers classifications; and 76.3 for the unskilled workers classification.
4. The numbers and per cents of seventh grade students in the six parental occupational classifications were sixty-nine, or 75.82 per cent, who scored below grade norm and twenty-two, or 24.17 per cent, who scored at or above grade norm on the vocabulary Subtest on the Gates-MacGinitie Reading Tests.
5. The numbers and per cents of the seventh grade students, in the six parental occupational classifications were sixty-two, or 68.13 per cent, who scored below grade norm and twenty-nine or 31.86 per cent, who scored at or above grade norm of the Comprehension Subtest on the Gates-MacGinitie Reading and Tests.
6. The numbers and per cents of seventh grade students in the six parental occupational classifications who were below normal in intelligence (less than 90 I.Q.) were thirty-two, or 35.16 per cent who scored below grade norm and one, or 1.09 who scored at or above grade norm on the Vocabulary Subtest on the Gates-MacGinitie Reading Tests.
7. The numbers and per cents of seventh grade students in the six parental occupational classifications were below normal in intelligence (less than 90 I.Q.) were thirty-two, or 35.16 per cent, who scored below grade norm and one, or 1.09 who scored at or above grade norm on the Comprehension Subtest on the Gates-MacGinitie Reading Tests.
8. The numbers and per cents of seventh grade students in the six parental occupational classifications who were normal in intelligence (90-110 I.Q.) were twenty-four, or 20.37 per cent, who scored below grade norm and eight, or 8.79 per cent, who scored at or above grade norm on the Vocabulary Subtest on the Gates-MacGinitie Reading Tests.
9. The numbers and per cents of seventh grade students in the six parental occupational classification who were normal in intelligence (90-110 I.Q.) were

twenty-one, or 23.07 per cent, who scored below grade norm and eleven, or 12.08 per cent, who scored at or above grade norm on the Comprehension Subtest on the Gates-MacGinitie Reading Tests.

10. The numbers and per cents of seventh grade students in the six parental occupational classification who were at or above normal in intelligence (more than 110 I.Q.) were twelve, or 13.18 per cent who scored below grade norm and fourteen, or 15.38 per cent who scored at or above grade norm on the Vocabulary Subtest on the Gates-MacGinitie Reading Tests.
11. The numbers and per cents of seventh grade students in the six parental occupational classifications who were above normal in intelligence (more than 110 I.Q.) were six, or 6.59 per cent, who scored below grade norm and twenty, or 20.88 per cent, who scored at or above grade norm on the Comprehension Subtest on the Gates-MacGinitie Reading Tests.

## B. CONCLUSIONS

The results of this survey justified the following conclusions:

Ninety-one students were tested with 36.26 per cent scoring below normal in intelligence (less than 90 I.Q.) and 63.74 per cent scored at or above normal in intelligence (90 and above) with a mean I.Q. of 100.1. The students in the professional classification had the highest mean I.Q. (115.6) and the students in the unskilled classification had the lowest mean I.Q. (76.3).

The total seventh grade population obtained the highest scores in comprehension with sixty-one, or 67.03 per cent, scoring below grade norm and twenty-nine scoring at or above grade norm. All parental occupational classifications except the semiskilled workers classifications had more students scoring at or above grade norm in

comprehension than scored below grade norm. The tables revealed there were more students scoring below grade norm in vocabulary than there were students with below normal I.Q.'s (less than 90 I.Q.). The test scores revealed there were less students who scored at or above grade norm in vocabulary than there were students scoring above normal in intelligence. This was true of five of the parental occupational classifications except the unskilled who had none.

### C. RECOMMENDATIONS

1. A developmental reading program should be initiated to help those with reading problems.
2. Extensive testing should be offered to determine the multiplicity of needs of the students.
3. Independent study courses with the chief responsibility on the students should be offered.
4. Studies of motivation should be available in understanding the underachiever.
5. Guidance facilities should be expanded to better meet the needs of all students.

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A COMPARISON OF THE PRIMARY MENTAL ABILITIES  
AND READING ABILITY OF SOME SEVENTH GRADE STUDENTS  
WITH THEIR SOCIO-ECONOMIC LEVEL

by

GLENDA BRAGGS WILSON

B. S., Philander Smith College, 1967

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AN ABSTRACT OF A MASTER'S REPORT

submitted in partial fulfillment of the

requirements for the degree

MASTER OF SCIENCE

College of Education

KANSAS STATE UNIVERSITY  
Manhattan, Kansas

1973

This study was an attempt to compare the intelligence and reading ability with the socio-economic levels of some seventh grade students.

The students were categorized in this study as below normal, normal and above normal in intelligence on a primary mental abilities test and who scored below grade norm, at grade, or above grade norm in vocabulary and comprehension on a standardized reading test.

Ninety-one seventh grade students were administered the SRA Primary Mental Abilities Test and the Gates-MacGinitie Reading Tests during the 1972-73 school year and their test scores were selected for use as data. The students were grouped according to their grade; the occupational classification of their father; scores on the Primary Mental Abilities Test; and the scores obtained on the vocabulary and comprehension subtests of the Gates-MacGinitie Reading Tests.

Of the ninety-one students tested more students were at or above normal in intelligence. The students in the professional classification had the highest mean I.Q. and the students in the unskilled classification had the lowest mean I.Q.

All parental occupational classifications except the unskilled workers' classification had more students scoring at or above grade norm in comprehension than below grade norm. The test scores revealed there were less students who scored at or above grade norm in vocabulary than there were students scoring above normal in intelligence. This was true of five of the parental occupational classifications but it was not true of the unskilled. None scored above grade norm in this classification.