

A THESIS

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We hereby recommend that thethesisprepared underour supervision byNancy Bigger TylerentitledINFLUENCE OF THE TITLE I ENRICHMENTPROGRAM ON READINESS FOR FIRST GRADE CHILDREN

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CHAPTER I

INTRODUCTION

The culturally disadvantaged child has been the object of considerable address in recent years. While his problems have long been recognized and remedial action often envisioned, an adequate approach to a solution could not be attempted because of the lack of funds. The Elementary and Secondary Education Act of 1965 provided the funding needed to initiate programs on a wide scale to aid these children who have generally entered school with too little, too late.

Basically, the disadvantaged child is a child of poverty. Economic deprivation results in conditions such as, housing, inadequate diet, poor health, low self esteem, and limited opportunities for an education. According to Frost and Hawkes (8) when the disadvantaged child enters school, he is usually retarded in the social skills prerequisite to success and achievement. Compensation for this retardation is not provided by the usual school environment; thus, more deficiencies accumulate in time.

REVIEW OF LITERATURE

Conditions Characteristic of the Culturally Deprived

The success a young child achieves in the early years of his education depends, to a large extent, on his environment during the preschool years. This environment includes both a comfortable home and a location in the community where cultural influences are promoted. The child with this background has a fair chance for success. Not all children come from such homes. According to Havighurst (11) 15 per cent of the nation's children are found in poverty areas where there is little to enable them to enter school and to take their places comfortably in the usual first grade program.

According to Krugman (21), the prime years for growth of intelligence and learning ability are the preschool years. If a good foundation for learning is not established at this time, the individual has little chance for success in a school system where the program is based largely on middle class values. The child from the middle class usually enters the first grade with an experientially rich background for learning. His surroundings provide a wealth of objects and ideas to stimulate his mind and enable him to develop many elementary concepts of learning. Parents of these children provide many creative materials such as books, paper, pencils, colors and many types of music and games. Middle class

children have many opportunities for participating in cultural activities of the community. Adult associates are usually verbal and willing to answer questions with some explanation. Ideas, objects and experiences are lacking in the case of the deprived child. Usually the adults in his world are limited in their verbal ability. Answers to questions are simple, often consisting of "yes" or "no". Explanations as to "why" or "how" are rarely given.

Little opportunity to grow intellectually is available to the child with a barren cultural background. When such a child enters school, he is ill prepared for formal learning and begins almost immediately to fall behind. Each year finds the deprived child further and further behind. Consequently, he often becomes a school "drop-out" as soon as it is legally possible. The disadvantaged child fails in his school efforts which results in failure to develop positive self concepts. Chances for success in other fields are extremely limited. Hunt (17) believed that if the cycle of failure is to be broken, the break must be in the preschool years before the pattern becomes deeply ingrained.

The Title I section of the Elementary and Secondary Education Act of 1965 was created in recognition of the special needs of children of low-income families. The program provides financial assistance to public schools in order that the children from these families might be provided

with various means of improving their educational and cultural deficiencies. Through this program, such children hopefully have a better chance at success when they enter the first grade.

School Readiness

Lindgreen (22) stated that readiness may be seen solely in terms of academic preparation by the exponents of traditional forms of education. Psychologists, however, see this condition as a much more complex phenomenon including many variables: attitudes, morale, intellectual ability, general mental health, and other experiences which may include academic preparation. The author further stated, "Nothing is gained by trying to teach someone who is not emotionally, physically, intellectually and experientally ready for what is to be taught." This principle is ignored when students are expected to learn with or from materials that have no relationship to their personal experiences.

Thorndike (29), in developing his principles of readiness, stated in effect, that when an individual is "prepared" to perform in a certain way, it is satisfying to do so; not to do so is annoying. Conversely, when the individual is "unready" to perform in a certain way, being forced to do so would prove annoying.

Physical growth and maturity are discussed by Jenkins, Shacter and Bauer (18). These authors called attention to the fact that the child who is fatigued, poorly nourished, or physically ill cannot accomplish the expected school work. A lag in physical development may prevent a child from mastering the techniques of handwriting which require fine muscular coordination of the fingers. These authors further stated that all children of a given age have not necessarily reached the same point of mental growth. Mental ages of first grade children may range from that of a four-year-old to a ten-year-old. Experiences that are appropriate to the child's maturity should be offered. Readiness for the next step should be recognized, lest rebellion against restraint or loss of interest should result.

Green (10) considered what the disadvantaged child starting to school does not know. Vocabularies are one-half or less the size of the average pupil. The disadvantaged child is rarely read to and probably has never owned a book; therefore, the child is not ready to learn to read or to do arithmetic.

According to Beck and Saxe (1), readiness in learning in the classroom must closely parallel the development of readiness for reading. Academically, the lack of language facility handicaps the student. Past experiences should promote and sustain intellectual curiosity.

Roberts (26) pointed out the difficulties encountered when an immigrant child moves into a different culture in a new setting. In addition to not understanding the language, the immigrant often is not able to understand such cues as facial expression or gestures with specific meanings. The anxiety and insecurity created by such a lack of understanding affect a child's readiness to learn.

Headley (13) used statistical evidence to support the idea that kindergarten children may do better work in the first grade than those who have not had such experiences. The advantage for the kindergarten pupil lies in the fact that opportunity for working in groups, conforming to school rules, accepting criticism and suggestions, self expression, and problem-solving have been provided.

The authors of the <u>Metropolitan Readiness Test</u> (14) stated that the factors contributing to readiness for learning include linguistic attainments and aptitudes, visual and auditory perception, muscular coordination and motor skills, number knowledge, and the ability to follow directions and to pay attention in group work.

Development of Intelligence

Hunt (17) defined intelligence as the central processes which develop in the brain to mediate between the information coming into the brain of the individual by way of the senses

and the return signals that produce these processes and mental capacity are probably rooted in the child's early encounters with the world around him. This theory contradicts traditional thinking that intelligence is an inherited trait, genetically fixed and destined to unfold in a biologically predetermined manner.

Through wide experimentation with and study of children, Piaget (24) concluded that intelligence is the antithesis of a fixed predetermined capacity. On the other hand, Burton (3) stated that intelligence as the psychologist views it and works from it is best perceived as an abstraction from behavior. First, the behavior is labeled according to a cultural definition of a given abstraction. The individual is labeled according to a cultural definition of a given abstraction. The individual is then observed in behavior that seems appropriate to this definition. Finally individual behavior is placed somewhere along the continuum that this label represents. Burton further stated that intelligence must be perceived as a culturally determined concept. What is deemed intelligent in one culture may not necessarily be deemed intelligent in another culture. The author does not rule out the fact that the substructures of the behaviors called intelligence may have their underpinnings in a broad genetic base. Intelligence seems to depend on the capacity to learn. Beck and Saxe (1) contended that there has not

yet been devised an adequate measure of innate intellectual potential or a culture-free instrument for intelligence testing.

Early Development

As pointed out by Lindgreen (22), children participate in broad learning situations before they enter school continuing to learn from non-academic sources while enrolled in school and after graduation. The family provides the first learning experiences beginning with infancy. While some guidance is given consciously, parents may not be aware of the influence of parental guidance on behavior. Unconscious influence is probably greater than that undertaken deliberately. During the preschool years, the child's learning that takes place in the family includes the feelings of parents toward him and toward life in general. Thus the basis of self-concept and basic values are formed in very early childhood. The values learned depend on the interaction between the child and his parents.

Lindgreen (22) further contended that attitudes toward those in authority are formed in the home during the preschool years. If the child receives the impression that his parents are interested in his welfare, the belief that others in authority are interested in his welfare will result. Feelings of security at home help the child to cope more adequately with those problems which he encounters at school. When the home is characterized by disorganization, extreme rigidity or preventiveness, problem behavior results. Lower class families show preference for slapping and spanking while middle class parents are more likely to solve problems verbally. Lindgreen (22) also stated that the child of foreign born parents is often confused as he tries to do what his parents teach him and then finds that this runs counter to what his playmates and teachers expect of him.

The importance of early emotional experiences in the home was discussed by Jenkins, Shacter, and Bauer (18). It was their belief that the foundation for satisfactory relationships with other people and the capacity to withstand strains and frustrations in adulthood are established during this period. The influence of the family is so great that an unhealthy influence can handicap a child whose physical heredity is sound and prevent him from developing to the greatest capacity.

With reference to the school as it relates to the family, Young (31) explained that when the growth limits of the world of the dependent, vulnerable, young child push outward, the influence of that world must meet and blend with the life pattern of the family. The school is the major force in the environment outside the home. Poor families who do not understand the premises and life patterns of the middle class world,

of which the school today is an integral part, often find themselves in conflict with the aims and objectives of the school. At the same time, the school may hold unrealistic expectations for the children of the poor.

With further reference to the influence of the school, Roberts (26) said that teachers need to be aware of different ethnic and socioeconomic patterns of family organization and child rearing. The interrelationships of certain family attributes interact in specific ways to affect the learning of the child. The effect on family structure of migration, acculturation and urbanization should be studied by teachers working with children involved in such situations.

Finally, reputation as it is related to social position was discussed by Havighurst and Taba (12). Among the families of the lower social class there is little desire for mobility within the social scale, especially in regard to education. The livelihood of such families is usually derived from occupations that require little, if any, formal education. Such parents do not care to improve family social or economic status through education. As a result the children are not encouraged in educational endeavors.

Beck and Saxe (1) called attention to the failure of the family of the disadvantaged child to provide necessary experiences for competition with children whose families

provide average or better than average advantages for getting started in modern life. The disadvantaged child is denied cultural examples as well as play materials challenging intellect and creative ability. Beck and Saxe (1), in quoting Brottman, discussed migrant families, called attention to the attitudes and cultural behaviors which reflect limited acquaintance with social amenities. Frequently the adults are hostile toward many of these manifestations; consequently, their children are not pre-disposed to those experiences which seem to bear a close relation to school success.

Society exerts many influences on the developing child today. The effects of these influences are often farreaching. The important period for helping the disadvantaged child improve his achievement level in life is during the preschool years. Preschool educational programs have been largely experimental in the recent years. The extent to which these school programs have been able to aid the culturally deprived child overcome handicaps and improve intellectual capacity is of great concern in planning future programs.

STATEMENT OF THE PROBLEM

The general purpose of the current study was to compare the readiness scores of a group of first grade children who

had attended a nine-month preschool program during the previous year and the readiness scores of a group of children who came from a similar background and were eligible to attend but who did not attend the preschool.

More specifically, the purposes of this study were to:

- Compare the readiness scores of the two groups on a standardized test: The <u>Metropolitan</u> <u>Readiness Test</u>.
- Compare the scores of pre-tests and post tests measuring intelligence quotients of a group of children enrolled in a nine-month preschool program preceding entrance in the first grade.
- 3) Relate family background to the performance level of preschool children.

CHAPTER II

PROCEDURE

The major concern of the study was with the possible difference in readiness for the first grade program of formal education between a group of culturally disadvantaged children who had participated in a nine-month preschool program and a group of children of similar background who were eligible to attend but did not do so. A standardized readiness test was used as the measuring instrument. A comparison was then made of the two groups.

Another concern of the study was to determine whether intelligence quotients could be improved by participation in a nine-month preschool program. A standardized achievement test was administered near the beginning of the ninemonth program. The achievement test was administered a second time near the end of the program. A comparison of the two groups of scores was made.

An investigation of family background as it relates to the performance level of the preschool children involved in this study was the final concern. The administrators of the Fort Worth Independent School District had previously determined that, according to the Index of Social Position by

Hollingshead and Redlich (15), all the children living in the Como Elementary School District were eligible to attend the preschool program. The following factors were investigated: 1) the number in the family, 2) the number of parents gainfully employed, 3) the number of parents unemployed, 4) the number of one-parent families, and 5) the length of time the families had lived in the community.

SAMPLE

The subjects included in this study were 73 first grade children enrolled in the Como Elementary School, Fort Worth, Texas, for the academic year 1967-1968. A random sample of 50 children was taken from a list of 130 children who had attended the preschool program the previous year. A second sample was 23 children from a total of 50 children who did not attend preschool. The selection was made on the basis of the 23 children having taken the readiness test. The 27 who could not be included in the sample may have transferred into the district after the readiness testing date.

THE INSTRUMENTS

The instrument used to assess readiness was the <u>Metro-politan Readiness Tests</u>, Form <u>A</u> (14). These tests were designed to measure the extent to which school beginners have developed in the several skills and abilities that contribute to readiness for first grade instruction. The six sub-tests

included these sections: word meaning, listening, matching, alphabet, numbers and copying. Test scores reflect comprehension, visual perception and muscular coordination as well as general knowledge concerning the alphabet and numbers.

The <u>Metropolitan Readiness Tests</u> (14) were developed by Gertrude H. Hildreth, Nellie L. Griffiths, and Mary E. McGauvran. The tests have been widely used since 1949. Revisions, as recently as 1965, have been made in order to provide forms of up-to-date content.

The tests cover areas generally encountered in most school curricula. The <u>Metropolitan Readiness Tests</u> (14) have been designed to be administered and used by teachers. who have had only a minimum of formal training in standardized testing as well as by specialists in the field. The Manual of Directions, Form A, makes provisions for converting the Total Score to a percentile rank or to a letter rating indicating readiness status. The stanine corresponding to the Total Score and the letter rating and readiness status corresponding to various ranges of score on each subtest may also be obtained from the test manual.

The instrument used to investigate the change in intelligence quotients was the <u>Science Research Associates Primary</u> <u>Mental Abilities Test for Grades K-1</u>, first developed in 1941 and most recently revised in 1962. The test measures four

primary mental abilities which are considered as factors of intelligence. The areas are: verbal meaning, number facility, perceptual speed and spatial relations.

The Examiner's Manual for Primary Mental Abilities for Grades K-1 (14) provides tables for determining mental age equivalents to part scores, mental age equivalent to total score and intelligence quotients as determined by the relationship to the chronological age.

The information relative to the families of the students involved was obtained from permanent records of the children. The information included these characteristics: number in family, number of parents, number of parents at home, number of parents working and length of residence in the community.

ADMINISTRATION

The formal tests were administered by first grade and preschool teachers as a part of their regular duties. Instructions in administering the tests were given to the teachers by supervisory personnel. The time schedule was developed by the administrators of the Fort Worth Independent School District as follows: <u>Metropolitan Readiness Test</u>, September, 1967; <u>Primary Mental Abilities K-1</u>, October, 1966; and Primary Mental Abilities K-1, May, 1967.

The Research Committee of the Fort Worth Independent School District graciously consented to the use of information derived from the tests by the author of the present study.

METHOD OF ANALYSIS

Raw scores were obtained for each test according to directions in the test manual. From the raw scores, the readiness status and percentile ranks were derived by using the national norms tables in the manuals accompanying the tests.

The total score for each child in both the preschool group and non-preschool group was obtained from the <u>Metro-</u> <u>politan Readiness Tests</u>. Comparisons were made between the two groups and differences in degree of readiness noted. In determining whether there was any improvement in the intelligence quotient ratings, the total scores from the <u>Primary</u> <u>Mental Abilities Tests</u>, both pre-test and post test scores, of the preschool group were compared and differences noted. Further comparisons of data from the <u>Primary Mental Abilities</u> <u>Tests</u> included:

 Intelligence quotient improvement according to sex

- Intelligence quotient improvement in each of the four areas tested (verbal meaning, perceptual speed, number facility, and spatial relations)
- Comparison of scores according to size of family

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4) Comparison of scores according to the number of parents in the home.

CHAPTER III.

<u>ANALYSIS</u>, <u>FINDINGS AND</u> DISCUSSION OF <u>DATA</u>

This study was designed to determine whether participation in a nine-months, preschool program for the culturally deprived had any effect on readiness for the first grade program of formal instruction. The study was further designed to determine whether intelligence quotient scores could be improved by participation in the preschool enrichment program. Information regarding the families of the children involved in the study was examined to determine the influence of various family factors on the performance level of the children.

The students' readiness status and mental abilities were measured on standardized forms of <u>Metropolitan Readiness Tests</u>, <u>Form A</u> (14), and <u>Science Research Associates Primary Mental</u> <u>Abilities for Grades K-1</u> (30). The family information was obtained from the students' permanent school records.

Seventy-three first grade, culturally deprived children were the subjects of this study. Fifty of the children had attended a nine-months preschool program prior to entering the first grade. The other 23 children had not attended the

preschool. Their background were similar to those of the preschool participants. With the exception of three, they were eligible to attend but did not choose to do so. Records indicated that three children had moved into the neighborhood within the six-months period prior to entering the first grade.

READINESS STATUS

To achieve the first purpose, that of determining whether preschool attendance influenced readiness for first grade, data from <u>Metropolitan Readiness Tests</u> (14) for both groups of students were used. Measurements included six areas: word meaning, listening, matching, alphabet, numbers, and copying. Scores from these areas were added together to form the total score, which was then converted to a percentile rank based on national norms. The students' readiness scores ranged from 6 to 82 for the preschool participants and from 7 to 56 for the group that did not attend preschool. The mean scores were 52.7 and 29.7. Median scores were 55 and 27.

A t-test was judged as being an appropriate method for treating the data in this investigation. This method permitted comparison of the differences in the scores for the two groups. (See Table I.) The test revealed that for this sample of students, preschool attendance was beneficial in developing readiness for first grade.

TABLE I

COMPARISON OF READINESS SCORES OF PRESCHOOL

		•		
Population Compared	Mean	Standard Deviation	"t" Value	Level of Significance
Preschool participants	52.7 <u></u>	16.4	5.713	p<.01
Non preschool participants	29.7	13.5		

PARTICIPANTS AND NON PARTICIPANTS

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Further evidence of the beneficial influence of preschool attendance was noted when the total scores for both groups were arranged according to different levels of readiness status (Table II). The scores of 6.0 per cent of the preschool participants fell in the superior level. The highest scores of the non-participants were in the third or average level. The majority of the scores of non-participants fell in the low normal or low groups.

A comparison of readiness scores when grouped according to the size of the family for this sample of students revealed other facts concerning readiness (Table III). Thirty-two of the children having attended preschool came from families of five or more members (Table IV). The scores for these children tended to be lower than the scores of the 18 children coming from families of four or fewer members. The tendency was reversed for the group that did not attend preschool. Sixteen children came from families of five or more members. The scores of these children were higher than the scores of the seven children coming from families of four or fewer members.

The readiness scores for this group of children were further examined; additional facts emerged. Of the 18 small families in the preschool group, 56 per cent had only one member working away from the home (Table V). The scores of this group were higher than those of the children coming from

TABLE II

READINESS STATUS OF PRESCHOOL AND NON-PRESCHOOL CHILDREN BASED ON FIVE LEVELS OF TOTAL SCORES

	Children					
Readiness Status	Presc	:hool	Non-Preschool			
	Number	Per cent	Number	Per cent		
Superior	3	6.0	0	0.0		
	<u>_</u>			0.0		
High normal	11	22.0	0	0.0		
Average	19	38.0	4	17.0		
Low normal	15	30.0	10	43.0		
Low	2	4.0	9	39.0		

TABLE III

COMPARISON OF READINESS SCORES OF PRESCHOOL AND NON-PRESCHOOL

CHILDREN GROUPED ACCORDING TO SIZE OF FAMILY

Size of Family	Number Pupils	Highest Score	National Percentile Rank	Lowest Score	National Percentile Rank	Median Score	National Percentile Rank
Preschool							
Four or fewer	18	82	97	22	5	56	53
Five or more	32	77	92	6	1 -	54	48
<u>Non-preschool</u>							
Four or fewer	7	46	33	7	. 1-	23	6
Five or more	16	56	53	10	1	29	11

TABLE IV

NUMBER OF PARENTS IN THE HOME

ACCORDING TO SIZE OF FAMILY

Family Size	Number of Pupils	Two Parents in Home Number Per cent		One Parent in Home Number Per cent	
Preschool					
fewer	18	13	72.2	5	27.8
Five or more	32	25	78.1	- 7	21.9
Non-preschool					
Four or fewer	7	2	28.6	5	71.4
Five or more	16	1]	68.7	5	31.3

TABLE V

NUMBER OF WORKING PARENTS PER FAMILY

ACCORDING TO SIZE OF FAMILY

Family Size	Number	Both Parents Working Num-Per ber cent		Both Or Parents Pare Working Work Num-Per Num- ber cent ber		re ent king Per cent	Neit Pare Work Num- ber	her nt ing Per cent
<u>Preschool</u> Four or fewer Five or more	18 .32	7]4	39.0 43.8	10	55.5 55.0	1 2	5.5	
<u>Non-preschool</u> Four or fewer Five or more	7 16	0 9	0.0	7 6	100.0 37.5	0 1	0.0	

the larger families (Table III). Of the 32 larger families, 55 per cent had only one member working away from home. Each of the seven small families in the non-preschool group had only one member working. In five of these cases there was only one parent present in the home. The children from these seven samll families had the lowest group of scores obtained. Of the 16 larger families in the non-preschool group, 37 per cent had only one member working away from home. Fifty-six per cent had two members employed. Children with only one parent and with that parent employed generally have less supervision at home than those children who have two parents, even if both are employed.

PRIMARY MENTAL ABILITIES

Data from <u>Science Research Associates Primary Mental</u> <u>Abilities Tests for Grade K-1</u> (30) were used as a basis for achieving the second purpose, that of determining whether intelligence scores can be improved through participation in a preschool program. The pre-test was administered in October, 1966; the post test was administered in May, 1967. Measurements were made in four areas; verbal meaning, perceptual speed, number facility, and spatial relations. Scores in these areas were used to form the total score which was then converted into quotient scores based on national norms for the various chronological ages. The preschool children's

intelligence quotients ranged from 76 to 137, with a median score of 97 for the pre-test. The post test range of quotients was from 65 to 134, with a median score of 101.

The most appropriate method for interpreting the data in this part of the investigation was considered to be the t-test. This method permitted a comparison of the differences between the scores of the two groups. Analysis of the total scores for the pre-test and the post test indicated a higher mean score for the post test. The difference between the two groups was significant at the .Ol level.

Intelligence quotients of the preschool girls were compared with intelligence quotients of the preschool boys for both pre-test and post test (Tables VI and VII). The girls achieved higher mean scores on the pre-test in all areas than the boys. Post test scores indicated that girls scored higher in verbal meaning, perceptual speed and number facility. The mean score for boys was higher than the girls' mean score in spatial relations. The difference between girls' and boys' scores in all areas for both tests was found to be statistically non-significant.

TABLE VI

COMPARISON OF PRE-TEST INTELLIGENCE QUOTIENT

SCORES OF BOYS AND GIRLS

Test	Popula- tion	Mean	Standard Deviation	"t" Value	Level of Signifi- cance
Verbal Meaning	Female Male	101.652	14.77 20.43	.065	N.S.
Perceptual Speed	Female Male	93.826 90.833	34.68 25.89	.291	N.S.
Number Facility	Female Male	92.739 91.500	25.09 14.55	.177	N.S.
Spatial Relations	Female Male	85.826 79.666	27.34 34.89	.602	N.S.

TABLE VII

COMPARISON OF POST TEST INTELLIGENCE QUOTIENT SCORES OF BOYS AND GIRLS

Test	Popula- tion	Mean	Standard Deviation	"t" .Value	Level of Signifi- cance
Verbal Meaning	Female Male	102.137 101.894	11.73 15.17	.059	N.S.
Perceptual Speed	Female Male	111.793 97.000	27.98 38.84	1.466	N.S.
Number Facility	Female Male	102.758 97.473	16.44 · 14.28	1.098	N.S.
Spatial Relations	Female Male	90.137 93.000	16.13 17.05	.563	N.S.

CHAPTER IV.

SUMMARY AND CONCLUSIONS

The purpose of this study was to explore the possible influence of the Title I Preschool Enrichment Program on readiness for first grade. Data were obtained from 73 culturally deprived, first grade children enrolled in the Como Elementary School, Fort Worth, Texas, for the academic year 1967-1968. Fifty of the children had attended a nine-month preschool program during the previous year. The other 23 children were of similar backgrounds and were eligible to attend the preschool but did not do so.

The students' readiness status was evaluated by the <u>Metropolitan Readiness Tests</u>, <u>Form A</u> (14). This test is composed of six sub-tests including word meaning, listening, matching, alphabet, numbers, and copying. To further evaluate readiness by investigating the possible improvement in intelligence quotients, <u>Science Research Associates Primary Mental</u> <u>Abilities Tests for Grade K-1</u> (30) were used. Four areas are included in this test: verbal meaning, number facility, perceptual speed and spatial relations. This test was first administered in October, 1966; a post test was administered

in May, 1967. Comparisons of the intelligence quotients derived from the two tests were made.

Students' permanent school records were examined in order to relate performance level of the children to their family backgrounds. Family characteristics studied were: the number of parents in the home, the number of family members, and the number of parents working. Deutsch and Brown (6) presented data suggesting that preschool educational experience and family cohesion are important sources of variance in Negro-White differences in intelligence test performance. Among first and fifth grade school children in urban areas, there were higher intelligence scores among those who had preschool experience and among those whose fathers had been present in the home than among preschool children without preschool experience and without fathers in the home.

Data from <u>Metropolitan Readiness Tests</u> (14) were used as a basis for determining readiness status. The mean score for each group of students was determined. An analysis of the difference between the two groups was made. This comparison revealed that participation in the 1966-67 Preschool Enrichment Program at Como Elementary School resulted in a significant difference at the .01 level in mean readiness scores. The program was beneficial to the children in their adjustment to first grade.

Data from the Primary Mental Abilities Tests (30) were used as a basis for determining the mean intelligence quotient scores for the children in the preschool program. The mean intelligence quotient scores from the pre-test was compared with the mean intelligence quotient score for the post test. An analysis of the difference between the two mean scores was made. This analysis revealed that participation in a nine-months preschool program resulted in a significant difference at the .01 level of confidence. No statistically significant differences were found between the pre-test and post test intelligence quotients of boys and girls. Girls had higher mean scores in all areas on the pre-test than did boys. The boys' mean score for spatial relations on the post test was higher than that of the girls. The post test mean scores for girls were higher in verbal meaning, perceptual speed and number facility than the post test mean scores for the boys.

The study of family characteristics confirmed the fact that the presence of the father in the home contributes to a higher level of performance by the children. The children who scored higher tended to come from families where the father was present. The preschool children from the smaller families in this particular situation scored higher than children from larger families. The reverse was true of the children who did not attend preschool.

This study was concentrated in the areas of readiness and intelligence quotients. The author recommends further research including the positive attributes of the culturally deprived children. Research in teaching materials and equipment for use with these children would be beneficial. The feasibility of including simple basic homemaking activities in the preschool program should be investigated. A follow-up study concentrated on the lasting influence of the preschool program for the same group of children in the second or third grade would provide further information concerning the influence of preschool educational experiences.

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