THE RELATIONSHIP BETWEEN CHILDREN'S PRESCHOOL

EXPERIENCE AND THEIR READINESS

FOR FORMAL LEARNING

Bу

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Dean of the Graduate College

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CHAPTER I

THE PROBLEM AND ITS IMPORTANCE

This study was concerned with the relationship between children's preschool experience at the Early Childhood Development Center and their readiness for formal learning as measured by the <u>Sprigle School Readiness Screening Test</u>. An educational program is provided for 240 fouryear-old children living in the Model Cities area in Tulsa at the Early Childhood Development Center, which is located at Lowell Elementary School. In addition, the center serves as a training center for paraprofessionals, day-care workers and early childhood educators. Under the direction of Tulsa Public Schools, the program was conducted by a staff of sixteen professionals and sixteen paraprofessionals during its first year (1971-1972). The financing is provided jointly by the Tulsa Public Schools, using a grant from the Tulsa Model Cities Program, the Education Professions Development Act, and local sources.

The Center places its emphasis on providing an environment to stimulate the intellectual and social growth of the four-year-old as well as to promote the child's self awareness. The purpose for the Center is:

(1) To increase each child's conceptual development.

(2) To foster the development of language skills of children.

(3) To facilitate pupils' perceptual-motor development.

(4) To aid in the development of problem-solving abilities of pupils.

A second purpose of the project is to provide continuing education for kindergarten teachers in the Tulsa Public Schools. A third purpose is to train paraprofessionals and day-care personnel in the Model Cities neighborhood.

Need for Study

Many children from the Tulsa Model Cities area bring to kindergarten a background of emotional and intellectual deprivation. For some of these children living in extreme poverty, there is a serious deprivation of life experiences and language development. The Early Childhood Development Center in Tulsa is presently providing a prekindergarten experience designed to enrich these young children's somewhat limited environment.

The need for determining the contributions of preschool experience at the Early Childhood Development Center is important for two reasons. (1) Should there be a significant relationship between the child's attendance at the Center and a higher performance on the school readiness test than those children who do not attend, then the Center should continue to receive financial support. (2) Should the Early Childhood Development Center continue its operation, professionally trained teachers in early childhood education will be needed. Leeper (14) suggests that basic skills, knowledge, understandings, and information needed to work with young children may be acquired only through special training and experiences with young children. The continuation of a program at the Early Childhood Development Center will require the

preparation of teachers with a professional education and is related to the teacher education programs in colleges and universities. Evans (7) observed that a definite trend is toward pre-kindergarten programs and that there is "a persistent shortage of persons qualified for instructional positions" (p. 18).

Olson and Larson (18) stated: "Giving attention to disadvantaged children at an early age should give maximum opportunities for change" (p. 130). Maney (16) reported evidence that children from middle-class homes have acquired many of the skills necessary for school readiness by the time they reach kindergarten and those children lacking such skills immediately fall behind and often stay behind, sometimes becoming potential dropouts. Maney, also, stated in relation to providing preschool experience: "It's an attempt to give these little children the experience and the background more fortunate children their age get at home" (p. 68). Hymes (10) has stressed the need for public support and increased financial aid to continue preschool programs for children. He concluded that unless public funds are earmarked for such programs, children under six are shortchanged. It is anticipated that the findings of this study will be of value to administrators who will be involved in decisions related to the funding and staffing of early childhood education programs.

Purpose of Study

The overall purpose of this study was to determine the relationship between a child's preschool experience and his readiness for kindergarten as measured by the <u>Sprigle School Readiness Screening Test</u>.

Specific purposes were:

1. To ascertain the difference between children who did and who did not attend the Early Childhood Development Center in terms of their readiness for formal learning.

2. To ascertain the difference between male and female children in terms of their readiness for formal learning.

3. To ascertain the difference between males who did and males who did not attend the Early Childhood Development Center in terms of their readiness for formal learning.

4. To ascertain the difference between females who did and females who did not attend the Early Childhood Development Center in terms of their readiness for formal learning.

5. To ascertain the difference between readiness for formal learning of children from intact and broken families.

6. To ascertain the difference between readiness for formal learning of children from intact homes in relation to attendance at the Early Childhood Development Center.

7. To ascertain the difference between readiness for formal learning of children from broken homes in relation to attendance at the Early Childhood Development Center.

Hypotheses

The following hypotheses were examined:

- There is no significant difference between children who did and children who did not attend the Early Childhood Development Center in terms of their readiness for formal learning.
- 2. There is no significant difference between male and female

children in terms of their readiness for formal learning.

- 3. There is no significant difference between males who did and males who did not attend the Early Childhood Development Center in terms of their readiness for formal learning.
- 4. There is no significant difference between females who did and females who did not attend the Early Childhood Development Center in terms of their readiness for formal learning.
- 5. There is no significant difference between readiness for formal learning of children from intact and broken families.
- 6. There is no significant difference between readiness for formal learning of children from intact homes in relation to attendance at the Early Childhood Development Center.
- 7. There is no significant difference between readiness for formal learning of children from broken homes in relation to attendance at the Early Childhood Development Center.

CHAPTER II

RELATED LITERATURE

Years of recognized neglect have initiated the current efforts by educators to overcome some of the difficulties encountered by children labelled as the "culturally disadvantaged." One avenue presently being explored is that of an intervention program for these children beginning with preschool. The related literature reviewed will be in three general categories: (1) characteristics of disadvantaged children, (2) the need for compensatory preschool programs, (3) the effects of intervention on intellectual and social development.

Characteristics of Disadvantaged Children

Children who could be categorized as disadvantaged have often been deprived in many areas of their development. The term "culturally disadvantaged" refers to those aspects of middle-class culture--such as education, books, formal language--from which these children have not benefited.

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Reissman (22) reported that in fourteen large cities in 1950, one child in ten could be termed "culturally disadvantaged." By 1960, the number had risen to one in three. In addition, Rees (21) found that disadvantaged Americans included those groups living on low incomes and with high percentages of unemployment. Rees stated: "The general atmosphere among these groups tends to be one of discouragement" (p. 12).

Kaplan (11) stated that "culturally disadvantaged children usually exhibit two characteristics: they are from lower socio-economic groups in the community and they are notably deficient in cultural and academic strengths" (p. 38). Similarly, Karnes (12) noted that culturally disadvantaged children are of all races, nationalities, and ethnic groups. However, certain characteristics of the relationship between the individual and his environment can be said to define the category. Karnes (12) further states: "The disadvantaged characteristically differ significantly from the middle-class in self-concept, motivation, social behavior, language, intellectual functioning, and physical fitness" (p. 2).

When considering some of the characteristics of disadvantaged children, Beiser (1) found that these children are sometimes apprehensive and their trust in adults is limited. They may be exceptionally impulsive and hyperactive. On occasion, they may vent their hostility both physically and orally, while remaining apathetic and unresponsive at other times. Hunt (9) reported that culturally disadvantaged children are apt to have various linguistic disabilities such as faulty grammar, poor articulation, and limited vocabularies. In spite of the significance of these limitations, Loretan (15) felt that probably the most serious characteristic of the disadvantaged child is his feeling of inadequacy and his poor self-concept. He often begins school feeling that success is impossible for him.

Although young disadvantaged children need special consideration and understanding, Biber (2) reported that they have basically the same characteristics as other children, "the same curiosity, the same basic human problems to face in life--except that life has given them some

extra ones no children should have" (p. 30). Riessman (22) suggested that the parents of culturally disadvantaged children have found it impossible to provide the quality of background, motivation, varied experiences, and readiness for formal learning that middle-class parents provide as a matter of course. Because the disadvantaged child may not receive the necessary environmental enrichment at home, the schools must provide programs geared to meet this child's needs.

The Need for Compensatory

Preschool Programs

One of the greatest gaps in the knowledge of child care is in the field of prevention. This is especially the case in the prevention of intellectual and emotional deprivation of children living with their own families. McCandless (17) feels that the young child deprived of the cognitive experiences necessary to function well has been largely ignored. Pringle (20) supports this point of view when he indicated that adolescent behavior attracts much attention, yet action then is mainly a patching up of difficulties whose roots go back to earlier times. The basis for personality development and intellectual growth is laid during the preschool years.

The importance of early intervention is recognized by many researchers. Corbin (5) suggests that early childhood experiences set the stage for all later development, that the early years of a child's life are significant ones which greatly influence the limitations which act on later growth and achievement. Bloom (3) estimated that 17 percent of intellectual growth takes place between the ages of four and six. If this is so, preschool programs during these years can have far-reaching effects on a child's learning patterns.

Deprivation of experiences and its relationship to program planning for culturally disadvantaged children is recognized by Deutsch (6):

One does not sit by and wait for children to "unfold" either on the intellectual or behavior levels, rather, it is asserted that growth requires guidance of stimulation, and that this is particularly valid with regard to the child who does not receive the functional prerequisite for school learning in the home. (p. 260)

Giving attention to disadvantaged children at an early age may provide opportunities for change. Orem (19) emphasizes that the bleakness of poverty and deprivation often produces children who are by age six two years behind middle-class children in language development. There is evidence to support the theory that by this age the handicap is never completely overcome. The real answer appears to be a broad program of preschool experiences for culturally disadvantaged children. If their homes cannot provide language experiences and related skills, then school must do it. Loreton (15) supported the basic hypothesis that:

A curriculum based on learning theory appropriate to the disadvantaged child, and starting at least two years before the traditional schooling can compensate for much of the deprivation experienced by these youngsters. (p. 19)

In addition, Taba (24) stated:

For culturally deprived children, school must first both supplement and counteract their social learning if they are to have an equal opportunity to learn. School must also fill the gap left by inadequate social learning at home and bridge the conflict between the culture of the home and that of the school. (p. 7)

Maney (16) reported that by the time most children reach kindergarten, they have learned many of the skills necessary to cope with the kindergarten curriculum. Those children whose backgrounds are severely limited fall immediately behind. They are likely to stay behind until

they drop out of school. Hymes (10) explains the need for preschool programs for disadvantaged children quite well.

Many children have already led disrupted lives. Most will eventually become public school children. They can enter our schools with a backlog of healthy living behind them or, if left alone to drift, they will enter damaged--hurt by the strains within their home life. (p. 11)

The Effects of Intervention on Intellectual and Social Development

In most cases, studies which have measured the effects of deprivation on intellectual development have found that disadvantaged children function at a lower level than children from advantaged homes. Over a period of years poverty area children generally show a decreasing trend in IQ scores. Programs designed to offset these trends have made it possible to study two groups of children whose backgrounds were the same except for preschool attendance.

Lee (13), while investigating the relationship between intelligence scores of Negro children and their amount of time spent in school found that: ... the group which had attended kindergarten averaged consistently higher than the group which entered the first grade with no preschool experience."

Brazziel and Terrell (4) conducted an experiment in school readiness for twenty-six Negro first grade children. The experimental group was exposed to a preschool readiness program designed to develop vocabulary, perception, word reasoning, and ability to follow directions. After six weeks, the experimental class had reached the fiftieth percentile on readiness, as measured by the <u>Metropolitan Readiness Test</u>, while the nonexperimental classed in the same school were at the fifteenth percentile.

Gray and Klaus (8) reported on the Early Training Project in Murfreesboro, Tennessee. This project involved two experimental groups of culturally disadvantaged children, with twenty children in each group. Group T 1 offered preschool programs for two successive summers and home contact for the intervening year for children of age three and a half. T 2 offered a program of one summer for children of age five. There were two matched control groups. The experimental program sought to improve achievement, aptitudes, and abilities. Results of pre- and post-testing over a period of fifteen months showed that the experimental groups showed significantly greater improvement on the <u>Stanford-Binet Intelligence Scale</u> and the <u>Peabody Picture Vocabulary Test</u> than did the control groups. Average IQ gains were: for experimental group T 1, 10.1 points; for experimental group T 2, 5.1 points.

Another such study is reported by Spicker, Hodges, and McCandless (23). In this project, research efforts were concentrated on a particular group of disadvantaged children. Now in its third year, the Indiana Project included young children who scored between 50 and 85 on the <u>Stanford-Binet Intelligence Scale</u> and came from families of the lowest socio-economic class. These children received a preschool curriculum designed to remedy specific diagnosed deficits of individual children in areas of language development, fine motor coordination, concept formation, and socialization as compared to a control group of similar children who remained at home. At the end of one year, the experimental group had gained nineteen points on the <u>Stanford-Binet Intelligence Scale</u> as compared to a gain of six points by the control group.

A special program designed to provide data concerning the effectiveness of preschool intervention on the intellectual development of culturally disadvantaged children is the Perry Preschool Project. Weikart (25) reports that the Perry Preschool Project has provided a cognitively oriented preschool curriculum for intellectually disadvantaged Negro children in the mornings. The emphasis is placed on structured group teaching for a brief period of time, self-selected activities, and field trips. A home intervention program for mothers is held in the afternoons.

Criteria for selection of the children to participate in the program included date of birth, residence within a specified locale, IQ's between 50 and 85 on the <u>Stanford-Binet Intelligence Scale</u>, and degree of cultural deprivation as measured by a formula which includes parents' education, occupation, and degree of crowding in the home. Children who met these criteria were randomly selected and assigned to an experimental and control group.

There was no significant difference on the Stanford-Binet IQ scores between experimental and control children at the beginning of the project, but for those children who participated in the preschool program a significant gain was made at the end of one year.

Although the major long-term goal of preschool intervention programs has been to improve academic achievement, it might be considered whether such cognitively oriented programs have succeeded at the expense of the child's social adjustment. Weikart (22) evaluated the social behavior of the children who participated in the Perry Project using the <u>Pupil Behavior Inventory</u> during kindergarten and grades one and two. The experimental group was superior in all aspects.

Similar results were found by Spicker, Hodges, and McCandless (23) in evaluating the Indiana Project. The teachers who had experimental and control groups were asked to rate the social adjustment of all the children in their rooms. This was done by comparing each child with every other child in the class on the basis of whether he was equal to, better than, or worse than that child on personal-social adjustment. An analysis of the results indicated that the social adjustment of the experimental children was significantly better than that of the other children in the room. These findings seem to indicate that cognitively oriented preschool programs enhance good social adjustment.

Summary

The literature related to this study revealed the following: (1) Culturally disadvantaged children have basically the same characteristics as all children, but may differ in motivation, language, selfconcept, and intellectual functioning. (2) Early childhood experiences may set the stage for future learning. (3) Preschool programs for the culturally disadvantaged have affected the child's intellectual and social development in a positive way.

CHAPTER III

PROCEDURE

The major purpose of this study was to ascertain the relationship between a child's experience at the Early Childhood Development Center and his readiness for formal learning in kindergarten as measured by the <u>Sprigle School Readiness Screening Test</u>. To achieve the purpose of this study, the following steps were taken:

(1) A contact by conference and letter was made with Dr. Paul McCloud, Director of Instructional Research of the Tulsa Public Schools to obtain permission to secure data from the kindergarten information sheets in schools accommodating children from the Model Cities Area.

(2) Sprigle scores of children were obtained from the Tulsa County Mental Health Association to make comparisons between those who have attended the Early Childhood Development Center and those who were eligible and did not attend.

(3) A face sheet was designed to ascertain the background data concerning: (a) with whom the child lives, (b) the child's sex, and (c) the occupation of the parent as designated on the kindergarten information sheet.

Description of Subjects

The subjects whose responses were examined were 193 kindergarten children in four Tulsa Public Schools during the 1972-73 school year.

There were 105 boys and 88 girls coming from low socio-economic levels. Subjects were matched by the following criteria: (1) same residential area and equal eligibility for attendance at the Early Childhood Development Center, and (2) family composition, i.e., with whom the child lives.

Description of Test

Sprigle School Readiness Screening Test: To measure readiness for formal learning, the Sprigle School Readiness Screening Test (1965) was utilized. There are nine areas of abilities and skills included in the test. The child must listen and respond to directions given by the examiner. These areas are: (a) verbal comprehension, (b) size relations, (c) visual discrimination, (d) reasoning, (e) understanding of numbers, (f) information, (g) analogies, (h) spatial relations, and (i) vocabulary. The child is also asked to draw a picture of himself. A psychologist from the Tulsa Public Schools evaluates these and will confer with the teacher upon request. Results received by the teacher include the raw score and an index of the child's developmental level. The five levels of developmental readiness for the Sprigle School Readiness Screening Test are: (a) accelerated, (b) high average, (c) low average, (d) questionable readiness, and (e) below average. Norms were derived from 575 children randomly selected from kindergarten and day nurseries in four cities from the South, East, and Midwest. Children from lower class, lower-middle class, and middle class families were used. Three sources were used to test the validity of the Sprigle School Readiness Screening Test. The scores on the Sprigle School Readiness Screening Test were compared with scores on the Stanford-Binet

Intelligence Scale, the Metropolitan Readiness Test, and the Gates Primary Reading Test (paragraph reading). While not all children took all the tests in the development of the instrument, a representative sample took one or more of them. Correlation of the <u>Sprigle School</u> <u>Readiness Screening Test</u> and the <u>Stanford-Binet</u> was .95 in each age group. The reliability of the test scores on the <u>Sprigle School Readiness Screening Test</u> was obtained by testing thirty randomly selected children and then retesting with a different examiner. The correlation coefficient between the test-retest scores was .96. A more detailed explanation of the validity and the reliability can be obtained from the <u>Sprigle School Readiness Screening Test Manual</u> (1965).

CHAPTER IV

ANALYSIS OF DATA

The purpose of this study was to determine the relationship between a child's preschool experience and his readiness for kindergarten as measured by the <u>Sprigle School Readiness Screening Test</u>. The data were analyzed by the Mann-Whitney U Test. z scores were calculated in order to determine the significance of U values. The hypothesis and results are presented in Tables I-VI.

<u>Hypothesis I.</u> <u>There is no significant difference between children</u> who did and children who did not attend the Early Childhood Development Center in terms of their readiness for formal learning.

Table I reflects that the children who did attend the Early Childhood Development Center scored significantly higher (p = .001) on the <u>Sprigle School Readiness Screening Test</u> than those children who did not attend. Therefore, Hypothesis I is rejected. This suggests that the Early Childhood Development Center has been effective in enriching the environments of these preschool children.

<u>Hypothesis II.</u> There is no significant difference between male and female children in terms of their readiness for formal learning.

No significant difference in performance of males and females on the school readiness test was observed; therefore, Hypothesis II is not rejected.

TABLE I

AI	TEND THE EZ	ARLY CHILDHOOD	DEVELOPMENT	GENIER
Attended ECDC	N	Mean Sprigle Scores	z Score	Level of Significance
Yes	62	18.00	/ 10 ⁻¹	
No	131	14.82	4.19	.001

z SCORES REFLECTING DIFFERENCE BETWEEN <u>SPRIGLE</u> <u>SCHOOL READINESS</u> <u>SCREENING TEST</u> SCORES OF CHILDREN WHO DID AND DID NOT ATTEND THE EARLY CHILDHOOD DEVELOPMENT CENTER

<u>Hypothesis III</u>. <u>There is no significant difference between males</u> who did and males who did not attend the Early Childhood Development <u>Center in terms of their readiness for formal learning</u>.

Table II reflects that males who did not attend the Early Childhood Development Center achieved a higher level of readiness as measured by the <u>Sprigle School Readiness Screening Test</u> than those males who did attend (p = .05). Therefore, Hypothesis III is rejected.

<u>Hypothesis IV</u>. <u>There is no significant difference between females</u> who did and females who did not attend the Early Childhood Development Center in terms of their readiness for formal learning.

Table III indicates that girls who attended the Early Childhood Development Center received a higher Sprigle score than those girls who did not attend (p = .001). Therefore, Hypothesis IV is rejected.

<u>Hypothesis V.</u> There is no significant difference between readiness for formal learning of children from intact and broken families.

TABLE II

z SCORES REFLECTING DIFFERENCE BETWEEN <u>SPRIGLE SCHOOL READINESS</u> <u>SCREENING TEST</u> SCORES OF MALE CHILDREN WHO DID AND DID NOT ATTEND THE EARLY CHILDHOOD DEVELOPMENT CENTER

Attended ECDC	N	Mean Sprigle Scores	z Score	Level of Significance
Yes	38	17.60	2.35	05
No	67	22.40	. 2.35	.05

TABLE III

z SCORES REFLECTING DIFFERENCE BETWEEN <u>SPRIGLE SCHOOL</u> <u>READINESS</u> <u>SCREENING TEST</u> SCORES OF FEMALE CHILDREN WHO DID AND DID NOT ATTEND THE EARLY CHILDHOOD DEVELOPMENT CENTER

Attended ECDC	N	Mean Sprigle Scores	z Score	Level of Significance
Yes	24	18.63	3.38	.001
No	64	14.20	0.00	.001

Table IV reflects there is a significant difference (p = .001) in the Sprigle scores of children from intact and broken families, with the children from intact homes receiving superior scores. Therefore, Hypothesis V is rejected. The data suggest that the environment provided by an intact home may be advantageous to the development of readiness skills of the young child.

TABLE IV

z SCORES REFLECTING DIFFERENCE BETWEEN <u>SPRIGLE SCHOOL READINESS</u> <u>SCREENING TEST</u> SCORES OF CHILDREN FROM INTACT AND BROKEN HOMES

Homes	N	Mean Sprigle Scores	z Score	Level of Significance
Intact	66	17.86	3.57	001
Broken	127	, 14.80	3.3/	.001

<u>Hypothesis VI</u>. <u>There is no significant difference between readi</u>ness for formal learning of children from intact homes in relation to attendance at the Early Childhood Development Center.

Table V indicates that children from intact homes who attended the Early Childhood Development Center did not score significantly higher on the <u>Sprigle School Readiness Screening Test</u> than children from intact homes who did not attend; therefore, Hypothesis V is not rejected. This may imply that readiness for formal learning may be nurtured by the security of an intact family situation regardless of whether the child did or did not attend a preschool program.

TABLE V

z SCORES REFLECTING DIFFERENCE BETWEEN <u>SPRIGLE SCHOOL READINESS</u> <u>SCREENING TEST</u> SCORES OF CHILDREN FROM INTACT HOMES WHO DID AND DID NOT ATTEND THE EARLY CHILDHOOD DEVELOPMENT CENTER

Attended ECDC	N	Mean Sprigle Scores	z Score	Level of Significance
Yes	22	18.86	1 00	
No	44	17.36	1.28	n。s。

<u>Hypothesis VII.</u> <u>There is no significant difference between readi-</u> ness for formal learning of children from broken homes in relation to attendance at the Early Childhood Development Center.

Table VI reflects that children from broken homes who attended the Early Childhood Development Center received significantly higher Sprigle scores than children from broken homes who did not attend; therefore, Hypothesis VII is rejected. This indicates that for children who may not receive the benefits a complete family situation provides, a preschool enrichment program is worthwhile.

TABLE VI

z SCORES REFLECTING DIFFERENCE BETWEEN <u>SPRIGLE SCHOOL READINESS</u> <u>SCREENING TEST</u> SCORES OF CHILDREN FROM BROKEN HOMES WHO DID AND DID NOT ATTEND THE EARLY CHILDHOOD DEVELOPMENT CENTER

Attended ECDC	N	Mean Sprigle Scores	z Score	Level of Significance
Yes	40	. 17.53	/ 22	001
No	87	13.54	4.33	.001

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CHAPTER V

SUMMARY, FINDINGS, AND RECOMMENDATIONS

The major purpose of this study was to determine the relationship between a child's preschool experience and his readiness for kindergarten as measured by the <u>Sprigle School Readiness Screening Test</u>. Subjects used for this study were all kindergarten children from Hawthørne, Burroughs, Woods, and Frost Elementary Schools in Tulsa, Oklahøma, during the 1972-73 school year. The <u>Sprigle School Readiness Screening</u> <u>Test</u> was administered to the total number of 193 children.

Data from the <u>Sprigle School Readiness Screening Test</u> were compared in relation to a child's attendance at the Early Childhood Development Center, the child's sex, and his family composition, i.e., with whom the child lived. Data were placed on IBM cards and treated statistically, using the Mann-Whitney U Test.

Findings

The results of the statistical analysis of data gathered in the research were as follows:

(1) Children who attended the Early Childhood Development Center scored significantly higher (p = .001) on the <u>Sprigle School Readiness</u> <u>Screening Test</u> than those children who did not attend.

(2) There was no significant difference between male and female children in terms of their readiness for formal learning.

(3) Males who did not attend the Early Childhood Development Center scored significantly higher (p = .05) on the <u>Sprigle School Readiness</u> <u>Screening Test</u> than those males who did attend.

(4) Females who did attend the Early Childhood Development Center received a significantly higher score on the <u>Sprigle School Readiness</u> <u>Screening Test</u> (p = .001) than those females who did not attend.

(5) There was a significant difference (p = .001) in readiness for formal learning as measured by the <u>Sprigle School Readiness Test</u> of children from intact and broken families, with the children from intact homes receiving superior scores.

(6) There was no significant difference between readiness for formal learning of children from intact homes in relation to attendance at the Early Childhood Development Center.

(7) Children from broken homes who attended the Early ChildhoodDevelopment Center received significantly higher Sprigle scores (p = .001) than children from broken homes who did not attend.

Recommendations

The investigator makes the following recommendations for further research related to this study:

(1) A longitudinal study should be considered to determine longterm academic benefits from attendance at the Early Childhood Development Center.

(2) Further research should be conducted to measure developmental gains other than readiness for formal learning of children who attended the Early Childhood Development Center. Such a study might involve the measurement of self-concept and social skills developed. (3) The Early Childhood Development Center should continue to receive financial support in order to facilitate its operation. By so doing the investigator believes that children from limited environments may continue to profit from this enriching preschool experience.

SELECTED BIBLIOGRAPHY

- Beiser, Morton. "Poverty, Social Disintegration and Personality." Journal of Social Issues, Vol. 21 (January, 1965), pp. 56-78.
- (2) Biber, Barbara. "Emotional Needs of Young Deprived Children." <u>Childhood Education</u>, XLIV (September, 1967), pp. 30-36.
- (3) Bloom, Benjamin S. <u>Stability and Change in Human Characteristics</u>. New York: Wiley, 1964.
- (4) Brazziel, W. F., and Mary Terrell. "An Experiment in the Development of Readiness in a Culturally Disadvantaged Group of First-Grade Children." Journal of Negro Education, Vol. 31 (1962), pp. 4-7.
- (5) Corbin, Richard. Language Problems for the Disadvantaged. Champaign: National Council of Teachers of English, 1965.
- (6) Deutsch, Martin. "Facilitating Development in the Pre-school Child, Social and Psychological Perspectives." <u>Merrill</u>-Palmer Quarterly, X (July, 1964), pp. 249-263.
- (7) Evans, Ellis D. <u>Contemporary Influences in Early Childhood Edu-</u> <u>cation</u>. Dallas: Holt, Rinehart and Winston, Inc., 1971.
- (8) Gray, Susan W., and R. A. Klaus. "Interim Report: Early Training Project." Unpublished report, George Peabody College and Murfreesboro, Tennessee City Schools, 1963.
- (9) Hunt, J. McV. "How Children Develop Intellectually." <u>Children</u> (May-June, 1964), pp. 83-91.
- (10) Hymes, James L. <u>Teaching the Child Under Six</u>. Columbus: Merrill Company, 1968.
- (11) Kaplan, Bernard. "Issues in Education the Culturally Disadvantages." <u>Phi Delta Kappan</u>, November, 1963, pp. 70-76.
- (12) Karnes, Merle B. <u>The Culturally Disadvantaged Child and Guidance</u>. Boston: Houghton Mifflin Company, 1971.
- (13) Lee, E. S. "Negro Intelligence and Selective Migration: A Philadelphia Test of the Klineberg Hypothesis." <u>American</u> <u>Sociological Review</u>, Vol. 16 (1951), pp. 227-233.

- (14) Leeper, Sarah Hammond, Ruth Dales, Dora S. Skipper, and Ralph L. Witherspoon. <u>Good Schools for Young Children</u>. New York: The Macmillian Co., 1968.
- (15) Loretan, Joseph O. <u>Teaching the Disadvantaged</u>. Columbia: Teachers College Press, 1966.
- (16) Maney, Catherine. "A Pre-kindergarten Program That Can Prevent Dropouts." <u>School Management</u>, VIII (October, 1964), pp. 66-70.
- (17) McCandless, B. R. "Environment and Intelligence." <u>American</u> <u>Journal of Mental Deficiency</u>, Vol. 56 (1952), pp. 674-691.
- (18) Olson, J. L., and R. G. Larsøn. "An Experimental Curriculum for Culturally Deprived Children." <u>Educ. Leadership</u>, 22:7 (1965).
- (19) Orem, R. C. <u>Montessori for the Disadvantaged</u>. New York: G. P. Putnam's Sons, 1967.
- (20) Pringle, M. L. <u>Deprivation and Education</u>. London: Lowe and Brydone, 1971.
- (21) Rees, Helen E. <u>Deprivation and Compensatory Education</u>: <u>A Con-</u> <u>sideration</u>. Boston: Houghton Mifflin Company, 1968.
- (22) Riessman, Frank. <u>The Culturally Deprived Child</u>. New York: Harper and Row, 1962.
- (23) Spicker, H. H., W. L. Hodges, and B. R. McCandless. "A Diagnostically Based Curriculum for Psychosocially Deprived Preschool Mentally Retarded Children." <u>Exceptional Children</u>, Vol. 33 (1966), pp. 215-220.
- (24) Taba, Hilda. <u>Teaching Strategies for the Culturally Disadvan-</u> <u>taged</u>. Chicago: Rand McNally and Company, 1966.
- (25) Weikart, D. P. <u>Preschool Intervention</u>: <u>A Preliminary Report of</u> <u>the Perry Preschool Project</u>. Ann Arbor: Campus Publishers, 1967.

APPENDIX

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SPRIGLE READINESS TEST STEPS

- Step 1. <u>Verbal Comprehension</u>--The ability to follow spoken directions in the form of a sentence.
- Step 2. <u>Size Relations</u>--The ability to recognize the real size relationship between pictured objects.
- Step 3. <u>Visual Discrimination</u>--The ability to visually discriminate and perceive likenesses and differences of form.
- Step 4. <u>Reasoning</u>--The classification according to function. The child must be able to understand relationships.
- Step 5. <u>Understanding of Numbers</u>--The child is asked to count objects ending at a specified number.
- Step 6. <u>Information</u>--The child must draw upon his own awareness of the things within his environment.
- Step 7. <u>Analogies</u>--The child must recognize the correct relationship in one specific instance and apply this relationship to another instance.
- Step 8. <u>Vocabulary</u>--The child must understand words and be able to use them. He is asked to say one thing about an object.
- Step 9. <u>Spatial Relationships</u>--The child is shown simple maizes such as a house having two pathways. The child must decide which pathway represents the shortest way to school. The child must be able to recognize the relationships of objects in space.

The information given here is provided by the Tulsa Public Schools in cooperation with the Mental Health Association. When the test results (sample, p. 32) are received, an explanation sheet concerning the nine steps and the meaning of the scores (p. 32) is included.

SPRIGLE SCHOOL READINESS TEST

Meaning of Scores

Age (when tested)	Raw Score	Developmental Level
4-6 to 4-11	0 to 9	Below average
	10 to 14	Low average
	15 to 19	High average
	20 to 34	Accelerated
5-0 to 5-5	0 to 10	Below average
	11 to 12	Questionable
	13 to 17	Low average
	18 to 22	High average
	23 to 34	Accelerated
5-6 to 5-11	0 to 12	Below average
	13 to 14	Questionable
	15 to 20	Low average
	21 to 26	High Average
	27 to 34	Accelerated
6-0 to 6-9	0 to 15	Below average
	16 to 17	Questionable
	18 to 22	Low average
	23 to 27	High average
	28. to 34	Accelerated

Test Results

Following is a sample of the information received about each child:

NAME	SCREENER'S COMMENTS	EVALUATOR'S RECOMMENDATIONS
Brown, Rod Age: 5-10 Raw Score: 21 Dev. Level: High Ave.	Low in steps 3, 8; seems to think be- fore responding; talks easily; full cooperation	Rod needs encourage- ment and praise

APPENDIX B APPENDIX B APPENDIX B

FACE SHEET

Child's Name		Birth Date		
Address	Sex	Telephone		
Father's Name	_ Occupa	ation		
Mother's Name	Occupa	ation		
Does the child make his home with both parents?				
If not, with whom?				
Date of Sprigle School Readiness Screening	<u>Test</u>	·		
Raw Score				
Developmental Level				
Did the child attend the pre-kindergarten	program	?		

APPENDIX C APPENDIX C APPENDIX C

July 24, 1973

Dr. Paul I. McCloud Director of Instructional Research Educational Service Center Tulsa, Oklahoma

Dear Dr. McCloud:

This is to request permission to gather data in the Tulsa Public School Kindergartens, specifically the background data of the children. The study will be concerned with the relationship between children's preschool experience at the Early Childhood Development Center and their readiness for formal learning in kindergarten as measured by the <u>Sprigle School Readiness Screening Test</u>.

This research would be used for my master's thesis which, if this request is granted, could be completed in the fall session at Oklahoma State University in the field of early childhood education. A copy of the proposal is attached.

If additional information is needed for you to make a decision, we will be glad to furnish such at your request.

Results of this study will be available for you to use as you wish.

Sincerely yours,

Paula Carreiro Teacher, Tulsa Public Schools

Josephine Hoffer, Adviser Department of Family Relations and Child Development

December 7, 1973

Dr. Josephine Hoffer Department of Family Relations and Child Development Oklahoma State University Stillwater, Oklahoma 74074

Dear Dr. Hoffer:

The Research Review Committee has approved your request for Mrs. Paula Carreiro to gather information from the Kindergarten Information sheets (Form EL. 63) in four elementary schools. We understand these data will be used in the writing of her master's thesis which is a study of the differences, as measured by the <u>Sprigle School Readiness</u> <u>Screening Test</u>, between 100 children who attended the Early Childhood Development Center in 1971-72 and a like number who were eligible but did not attend the Center.

The Kindergarten Information sheets for children who attended kindergarten in Burroughs, Frost and Hawthorne in 1972-73 should be available in those school offices. The records for the Woods pupils have been sent to Springdale where they are now first graders.

We will be interested to know the results of Mrs. Carreiro's research. We therefore request that when she has completed her study, a copy of the abstract of her findings be forwarded to the Superintendent and one copy to each of the participating principals.

Sincerely,

Paul I. McCloud, Assistant to Superintendent Research, Planning and Development

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PIM:bjb

cc: Mr. Cecil Benson

Dr. John Dewell

Mr. Johnson Lee

Dr. George Truka

Mr. Elmer Jenkins, Principal, Burroughs Elementary School

Mr. W. F. Garrett, Principal, Frost Elementary School

Mr. William Z. Duncan, Principal, Hawthorne Elementary School Mrs. Naomi Wilkerson, Principal, Springdale Elementary School ر VITA

Paula J. Carreiro

Candidate for the Degree of

Master of Science

Thesis: THE RELATIONSHIP BETWEEN CHILDREN'S PRESCHOOL EXPERIENCE AND THEIR READINESS FOR FORMAL LEARNING

Major Field: Family Relations and Child Development

Biographical:

- Personal Data: Born in Tulsa, Oklahoma, December 29, 1947, the daughter of Mr. and Mrs. Gene Bronaugh.
- Education: Graduated from Tulsa McLain High School, Tulsa, Oklahoma, in May, 1966; received Bachelor of Science degree in Elementary Education from Northeastern State College, Tahlequah, Oklahoma, in January, 1970; completed requirements for the Master of Science degree in Family Relations and Child Development in May, 1974, from Oklahoma State University, Stillwater, Oklahoma.
- Professional Experience: Kindergarten teacher, Tulsa Public Schools, 1970-74; Headstart teacher, Tulsa, Oklahoma, 1970.
- Professional Organizations: National Education Association, Oklahoma Education Association, Tulsa Classroom Teachers Association, Southern Association for Children Under Six, Oklahoma Association for Children Under Six, Alpha Delta Kappa, Kappa Delta Pi, Omicron Nu.