EASEL PAINTINGS OF CHILDREN FOUR TO SEVEN YEARS OLD FROM A LOWER SOCIO-ECONOMIC GROUP

by

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CHAPTER I

INTRODUCTION

The agricultural migratory worker has been designated as one of the lower socio-economic class. He has had civilian and governmental attention, legislation, concern, and discrimination. The President's Committee on Migratory Labor was established in 1954 to provide a coordinated approach to the Federal Government's activities concerned with migrant workers and to assist states in similar efforts (U.S. Dept. of Labor, Bureau of Labor Standards, 1960). The mobility and low economic level of migrant workers have deprived their families of adequate diets, clothing, health, education, housing and family security.

The Mexican-American migrants, a group predominately in the southwest and middle United States, were set apart not only because of their socio-economic level, but also because they maintained certain ethnic characteristics. Aspects of the Mexican culture were evident with many of the Mexican-Americans, even though they were second or third generation American citizens.

Although a great deal was written about low wages, child labor, poor health standards, unsafe transportation, inadequate housing, large families, and educational needs of the migrants, a scarcity of material was available which provided information concerning the abilities, goals, and interests found among these children. Fisher (1961), along with other educators

and psychologists, pointed out that commonly used intelligence tests discriminated against the lower-class child because of his small or different vocabulary, poor motivation, and impoverished environment. Also, migrant children frequently received low scores on intelligence tests. Commonly expressed differences between Mexican-American migrant and resident Anglo-American children were the migrant's lack of education, retarded school entrance, lack of success in school and irregular school attendance (Greene, 1954; Kurth, 1960; Metzler and Sargent, 1960).

In a recent article, "Who Is This Lower-Class Child?", (Fisher, 1961) stereotypes of lower-class children held by middle-class teachers were discussed. The author stated that more education and understanding of social classes will make teachers aware of diversities which can exist within a social class. When this happens, they may be able to regard lower-class children in view of these dissimilarities and then provide for the wide range of variation in abilities, interests, and goals which are found among any group of children.

Recently educators, authors, psychologists and sociologists have given attention to the problems encountered by people of the lower socio-economic class, as well as to dissimilarities between the lower class and other socio-economic classes. As the general public has become aware of these areas of difficulty it also has sought answers about the abilities, goals, interests, and desirable characteristics of lower-class children, including the children of migrant parents. The result of the lack of information was an inability to understand and properly help these educationally, culturally, and economically deprived people.

Purpose

This study was undertaken in order to learn more about migrant children. The investigator recognized the difficulty, as well as the necessity of a study of lower socio-economic children. Therefore, a form was utilized which was hampered neither by language difficulties, lack of education, poverty, nor lack of knowledge about a culture.

The purpose of this study was to analyze easel paintings of four- to seven-year-old children from a lower socio-economic background in relation to the following variables: teacher direction, chronological age, days enrolled in day care, and previous public school experience.

Hypotheses

1. There is no difference between the ratings a child receives on free-choice paintings and directed paintings.
2. There is no relationship between the percentages of "Q" free-choice paintings and the age of the children.
3. There is no relationship between the number of days children are enrolled in day care and the ratings of free-choice paintings.
4. There is no relationship between the number of days children are enrolled in day care and the percentages of "Q" free-choice paintings.
5. There is no relationship between the previous school experience of children and the ratings of free-choice paintings.
6. There is no relationship between the previous school experience of children and the ratings of directed paintings.

CHAPTER II

REVIEW OF LITERATURE

Senate Bill 1124 (U.S. Congress. Senate. Committee on Labor and Public Welfare, 1961) described the migrant agricultural employee as an individual who worked during a crop growing season or on a temporary basis in agriculture, and who, for the purpose of this employment, established with his family a temporary residence. The number of migrants influences the urgency of the problems they face and the importance of these problems for the nation. The total number of domestic migrant workers varied with each report, but a 1959 estimate placed the number around 550,000. This represented a 12 per cent increase since 1957 (U.S. Dept. of Agric. Agricultural Marketing Service. Economics Division, 1961).

The number of children below 18 years of age whose parents were migrant workers was estimated recently at between 320,000 and 500,000 (Kurth, 1960; U.S. Congress. House. Committee on Education and Labor, 1962). The U.S. Dept. of Health, Education, and Welfare (1962) reported that approximately one-half of this number migrated with their parents while the other half remained at the home base. More than half of the workers of the farm migratory force were children under 14 years of age. The government initiated study and public comment concerning this problem of child labor, but little legislation has been enacted. A report from the House of Representatives Committee on Education and Labor (1962)

pointed out that under existing Federal law, children of any age were permitted to work on farms outside of school hours. For six- and seven-year-old children to work long, hard hours in the field when school was not in session was neither uncommon nor illegal. These children knew drudgery rather than a carefree childhood. Physicians declared that hard labor in the fields not only deprived children of the joys of childhood, but permanently damaged health. The Committee also pointed out the interrelationship of the problems of child labor, education, and health, and further stated that all of them were tied to the general poverty of migratory farmworkers.

The poverty of migrants resulted mainly from lack of education, large families, and low wages. The United States Department of Agriculture (1961) and a Senate Subcommittee on migratory labor (U.S. Congress. Senate. Committee on Labor and Public Welfare, 1961) reported less than $1000 as the average annual earnings in 1959 and 1960 of domestic agricultural migratory workers. Moving time and expenses, bad weather, poor crops and sickness were among the factors which reduced earnings below this average.

A report to a U.S. Senate Committee on Labor and Public Welfare (1961) stated that a 1960 study in California indicated the average migrant family unit was six persons. Comparison of the six and one-half member-household, the 1957 average family size for South Texas migrant workers (Metzler and Sargent, 1960), with the three and one-third persons per household, the 1960 national average (U.S. Bureau of Census, 1961), emphasized the difference of family size between migrant and non-migrant families.

According to Senate hearings before a subcommittee on migratory labor (U.S. Congress, Senate. Committee on Labor and Public Welfare, 1961) the

migrant agricultural children were the most educationally deprived in the Nation. The migratory way of life disrupted the education of the children, making it difficult to attend school regularly and causing school retardation. Arthur Goldberg, Secretary of Labor, testifying before this subcommittee, stated that thousands of migratory children under 16 years of age were employed in agriculture. Furthermore, in 1960 two-thirds of the farm migratory children violating the child-labor provisions of the Fair Labor Standards Act were enrolled in grades below normal for their ages.

Over one-third of 2093 migrant children, represented in a 1952-1953 study by the Migrant Research Project Board (Greene, 1954), were retarded in their education as early as the second year in school. Also, two-thirds of the children were over-age for their grade. The teachers of these children indicated that in grades two to six, between one-third and one-half were placed in grades higher than their scholastic attainment warranted.

The findings of Metzler and Sargent (1960) from a 1957 survey in South Texas indicated that a third of the migrants contacted had no formal schooling. Usually the younger workers had from three to six years education, but the older workers had no education.

A three year study (Colorado. State Dept. of Education, 1961) of the educational needs of the migrant groups working in the mid-continental states and composed mostly of Spanish-Americans revealed that as the migrant children became older they also were more retarded in age-grade status. A child over 10 years of age was frequently burdened with economic family responsibilities, thus causing him to work in the fields rather than attend

school. This study from 1958 through 1960 indicated that all children of migratory parents were retarded in social maturation, knowledge, and understanding necessary to competent living in a modern society.

Kurth (1960) summarized the education of migrant children as follows: later school entrance; fewer days of attendance; greater retardation; lesser achievement; and earlier drop-outs than the non-migrant school population. The migrants constituted the largest single group of illiterates in American society.

Lower Socio-Economic Class and Ethnic Groups

Available literature concerning lower socio-economic or ethnic groups revealed little beyond descriptive writings based upon personal opinions. Only a limited number of authors, including government publications, reported actual research.

A study by the Migrant Research Project Board, 1952 through 1953, (Greene, 1954), reported personality traits of 2093 migratory children. "Average" and "slightly below average" were the ratings most commonly given migratory children by their teachers and/or principals. The largest number of "above average" ratings were in self-reliance, ability to adjust, self-control, and cooperativeness. The most common problems described by the teachers and principals were retardation, teacher overloads, over-crowding of facilities, and absenteeism.

Greene (1954), directing the Migrant Research Project Board, made a comparison of fifth- and eighth-grade, Negro and Anglo, migrant and resident children in the "Glades" area of Palm Beach County, Florida. Findings indicated that migratory children in school were older than non-migrant

children in the same grade, tended to be retarded in school progress, and tended to drop out of school at a more rapid rate than comparative non-migrant children.

The study failed to reveal significant differences between migrant and non-migrant Negro children in abilities measured by intelligence tests, nor did the study find clear-cut distinctions between the two groups in reading abilities or arithmetic achievement. Both migrant and non-migrant Negro children were seriously retarded, relative to national norms, in reading or arithmetic achievement. Anglo migrant children were definitely retarded in reading or arithmetic achievement, and received significantly lower scores on standard intelligence tests than Anglo non-migrant children. The Mooney Problem Check List (210 items pertaining to adjustment areas) disclosed no clear-cut or consistent pattern of differences between migrant and non-migrant children on the part scores of the test.

One of the few published studies of the Mexican-American migrant family life and customs was that of Metzler and Sargent (1962). The findings were based on a 1957 survey of six cities in South Texas. The survey covered a cross-section of the home base region of migrant workers who moved in a 34-state circuit to harvest crops. Reports were collected from 1334 migrant workers living in 446 households. The authors pointed out that not only was there an economic necessity for migrant children to work in the fields, but that the Latin-American culture also had an influence. Latin-American parents were expected to teach their children habits of work and industry. The survey revealed that school children comprised a fifth of the workers, and that a third of the school youth who worked were under 14 years of age.

Kurth (1960) provided understanding of the migrants through her descriptions. The author stated that an asset of the migrants was their family strength, characterized by warmth and closeness. The Spanish-Americans especially have attempted to retain family unity and cultural customs in family life. Kurth added that the strength of the migrant family was likely to be undermined by the poor conditions under which the majority live. Madsen (1962) named family solidarity with the resulting social and psychological securities as desirable aspects of the Mexican-American culture.

Practically two decades ago Kibbe (1946) was concerned with the education of Latin-American children. Kibbe believed the difficulties and inequalities suffered by the Mexican-Americans in Texas were not problems that occurred overnight. The author continued to state that understanding was needed when studying the reasons Latin-American children enrolled in school but did not progress satisfactorily. Language handicap, periodic employment, illness, inability to dress like other children, attitudes of some children and teachers toward them, indifference on the part of some parents, and nutritional deficiencies were reasons set down by Kibbe.

Children's Art

Children's art was studied as early as the middle of the 19th Century. Read (1945) indicated that John Ruskin's book, The Elements of Drawing, published in 1857, was probably the first scholarly interest in children's drawings and paintings. Goodenough (1928) provided a comprehensive bibliography which covered art research from 1885 through 1927. The characteristics of children's drawings were defined as early as the 1890's (Goodenough, 1928; Hurlock and Thompson, 1934; Gaitskell, 1958).

Goodenough's bibliography (1928) indicated that early studies were mainly descriptive in nature; later, children's drawings were related to their mental development. Children's art work was considered from the standpoint of constructing objective scales investigating achievement, and as opportunities to study educational psychology, special talents, interests, insanity, folk art, and intelligence tests. Eng (1959) reported that early investigations of the comprehension and representation of perspective by children were conducted. Research has continued in many of these areas, confirmed early findings, added new findings, and indicated different interests or approaches by researchers.

Among the later studies were those concerned with children's art and development of creativity, personality, perception, and emotional expression. Eng (1959) analyzed the modes of expression indicated in children's drawings by making exact and complete observations of the development of drawings of a single child. Eng's findings indicated that free drawings of preschool children were from memory. The author agreed with an earlier study by Kerschensteiner (1905) who stated that little children were not affected by the presence or absence of models. Eng stated that rather than exactly copying an object, a child used the array of forms he had mastered, and made suitable modifications to the drawing.

A companion volume to Goodenough's 1928 publication was provided by Goodenough and Harris in 1950. The psychological studies of children's art during the period from 1928 through 1949 were reviewed in a thorough and extensive manner. The authors stated that change in the emphasis of children's form of expression through art had taken place. The earlier studies frequently were based on the statement: "A child draws what he knows,

rather than what he sees." The revised hypothesis read: "A child draws what he feels, rather then what he sees or knows to be true." As indicated by the latter statement many psychologists during this twenty-year period from 1928 through 1948 believed that the spontaneous behavior of children, such as drawings and paintings, revealed feelings and desires. The activity not only expressed dominant needs and emotions, but also personality characteristics. Goodenough and Harris (1950) stated that the change in direction in the study of the psychological aspects of children's drawings was attributed to an upsurge of interest in projective theories and methods.

In the review of personality studies, Goodenough and Harris (1950) reported the child's concept of self had commanded attention in literature. Wolff (1928) suggested that from the age of one or two years graphic movements revealed the child's inner personal dynamics. The author also believed that a child's drawing of his family may show how he felt about his psychological status in that group. Goodenough and Harris (1950) stated that accumulated evidence indicated children's drawings provided significant cues for personality diagnosis. However, no completely developed characterological system based on evidence had appeared. Alschuler and Hattwick (1947) and Wolff (1928), according to Goodenough and Harris, were the authors in this country who came closest to such a system.

An approach to personality study through children's art was made by Waehner (1946). Psychologists and teachers wrote statements concerning personality traits of nursery school children after a study of their drawings and paintings. The statements were successfully matched with the children who did the paintings by persons who knew the children. This blind

matching method also was utilized by Wolff (1928).

Writers (Read, 1945; Lowenfeld, 1954) sometimes classified children into personality types according to their art work. Lowenfeld (1954) believed a child's art expression was a documentation of his personality. If his personality were free, happy, and uninhibited, his art expression would show the same characteristics. Children's drawings were placed into eight categories of personality development by Read (1945). Read supported Lowenfeld's ideas and believed there was a parallel between Lowenfeld's classifications and his own.

During the period from 1928 through 1949 authors indicated interest in the character of changes made when children attempted to reproduce a design from copy, either directly or from memory. Goodenough and Harris (1950) stated that similar experiments in New York City (Hildreth, 1944), Peru (Portocarrero de Lineres, 1948), Europe (Serge, 1940), and Japan (Homme, 1937) were conducted with young children who were asked to draw models. Universal findings indicated a tendency to simplify that which was too difficult or to give meaning to that which was meaningless.

Psychologists were interested in the effect of prescribed drawing situations, models, and instructions upon the improvement of children's art. Gridley (1938) used directed drawing situations with four-year-old children. Results indicated that previous instruction and provision of a copy did not greatly affect their ability to draw better. The review by Goodenough and Harris (1950) of psychological studies indicated that writers on developmental aspects of children's drawings generally believed free expression was better than rigid conformity to rules and principles as a method of cultivating art talent.

Lowenfeld (1957) warned against stifling a child's expression and personality through adult influences. The author commented that most children expressed themselves freely and creatively if adult interferences such as models, images, and coloring books were not used to inhibit them.

Urban and Pease (1960-61) in their study of preschool children's drawings, confirmed the harmful effects of adult influences. They reviewed similar findings of Heilman in 1954 and of Russell and Waugaman in 1952, which concerned workbook effects on young children's art. Gaitskill (1958) discussed directed teaching techniques which caused the loss of originality and creativeness in drawing among children with dictatorial art training.

Alongside research concerning the effects of adult influence upon children's art were studies of free or spontaneous drawings. Ellsworth (1939) surveyed nursery school children's "free" or non-directed easel paintings for the frequency certain characteristics or stages of compositional design appeared. The findings indicated that mass more than line was used in pictures; the element of form most frequently found was repetition; one-fourth of the pictures were titled; and more than one-half of the pictures contained a border around the central parts of the picture.

Douglas (1959) compared young children's easel paintings in free and directed sessions in order to determine whether teacher direction affected children's paintings. The paintings were rated by use of the Easel Age Scale (Lantz, 1955) to determine the emotional qualities and mental maturities of the children. Kindergarten children received higher scores on directed paintings than on free-choice paintings whereas second-graders scored higher on free-choice paintings. The direction to paint was frustrating as indicated by the larger number of "Q" or questionable paintings

during the directed sessions. Consequently, there was a trend from the kindergarten children having less emotional paintings under teacher direction to the first grade children being less emotional when allowed a free-choice painting activity.

There were few studies using the art media to investigate children of the lower socio-economic class or of an ethnic group. Goodenough and Harris (1950) stated that the use of drawings as a means of studying divergences of various cultural or racial groups was a century old, but that latest studies were more sophisticated in methology and conclusions. The comparisons of drawings of modern children with those of prehistoric man disappeared in the 20-year period the authors reviewed. People became more interested in the art products of children of contemporary primitive groups.

Investigators indicated more concern with national and racial groups after 1930. Goodenough and Harris (1950) reported that the Draw-a-Man Test (Goodenough, 1926;1928) was used in a number of comparative studies of these groups. The Goodenough Draw-a-Man Test was used to study at least four groups of American Indians who indicated differences in the test scores according to sex. Graphic art was practiced mainly by the males in the tribes which may explain the higher IQ mean earned by the boys than the girls.

The authors discussed a study published by Manuel and Hughes in 1932 in which two groups of Mexican and non-Mexican children in Texas were compared by intelligence test scores derived from the Goodenough Draw-a-Man Test. The findings indicated a mean difference in IQ of 10 points in favor of the non-Mexican children. Art tests were administered to Mexican and Navaho Indian children, but the investigators failed to discover any

positive relationship between test scores and proficiency in the various arts and crafts practiced by these groups.

Recent studies revealed continued interest in ethnic and socio-economic class differences through children's paintings. Hausman (1954) indicated there was little relationship between art ability and selected factors within homes, ethnic groupings or place of residence.

Freyberger (1956) selected creative drawings of a spontaneous nature from children of grades one through six of different ethnic groups (Italian, Polish, Negro and Anglo-American). The community background of the ethnic groups represented industrial, rural and residential areas in Pennsylvania. The findings centered upon the similarities rather than the differences among the ethnic and socio-economic groups. Freyberger concluded that even though school population and teachers changed, creative drawings of children were basically the same regardless of their backgrounds. The significant deviations that did occur were age-grade differences and not those resulting from socio-economic or ethnic characteristics.

Corcoran (1956), in a test of children's color perceptions, used three types of communities: rural; industrial; and urban-residential. In Corcoran's description of findings more emphasis was given to color usage in relation to the ages of the children, rather than the various community environments from which the children came. It was apparent that a gradual developmental sequence was followed from five until nine or ten years of age in responses to emotional qualities of color. Apparently children were unaware of certain qualities of colors nor did they perceive advancement and recession of colors.

Reactions of middle and lower class children to finger paints (Alper,

Blaine, and Abrams, 1955) were explored in relation to class differences in child-rearing practices. Findings indicated that middle-class subjects tried more frequently to avoid the finger-painting task and to avoid getting dirty; middle-class children were concerned more than lower class children to get clean afterwards. The children also were observed while using crayons. No differences were observed in their behavior when the drawing medium did not necessitate getting dirty.

Art Scales and Tests

Persons interested in rating art products or of testing the art abilities of children were faced with difficulties. Goodenough and Harris (1950) named the greatest difficulties as being lack of suitable criteria for evaluating results, therefore depending too fully on subjective judgments. Lark-Horovitz (1942) compared objective judgments with subjective opinions given by judges of children's drawings. The conclusions indicated that judgments based on objective analyses appeared more reliable. Gaitskell (1958) critized judgment of a particular child's abilities in art as being personal rather than based upon data gathered objectively.

One of the earliest tests used to indicate the art abilities of young children was the Drawing Completion Test devised by Pintner and Toops (1918). This test was similar to the language completion tests and showed a fair correlation to intelligence tests. It was useful in testing foreign subjects, the deaf, and individuals whose language environment had been restricted. An early method for the analysis of children's personality by drawings was proposed by Wolff (1928). The author believed the appearance of graphic elements of children's drawings signified personality traits and prepared a

table to check the characteristics.

Goodenough and Harris (1950) indicated that from 1928 through 1949 there was more concern than formerly over questions of methodology, tests, and measurements in psychological studies. Reports considered such questions as special artistic talent, art education, measurement of abilities, extent of art appreciation, and the relation of talent in art to other abilities or to personality traits. However, much of the treatment of data continued to be descriptive; there were no tables and few quantitative statements. Studies depended upon observation and description as the methods of classifying the data. The investigators were little concerned with questions of the relative merit of drawings they examined; rather, they sought to ascertain how children drew, in what ways their drawings changed with advanced age, and why they drew as they did. Others were interested in the use of drawings to understand the problems of general psychology, particularly those having to do with visual perception and apprehension.

Goodenough and Harris (1950) reported there were teachers and supervisors of art who recognized the fallibility of human judgment and sought to find better and more objective ways of measuring the quality of art products of children. The search led to the development of a number of devices designed not only for measuring achievement in art, but also to predict artistic aptitude and for appraisal of art appreciation. The methods were divided into three categories: (1) objective classification and formalized rating scales for the appraisal of artistic merit or appreciation; (2) the draw-a-man technique; and (3) the new methods of observing, recording, classifying, evaluating work and of scaling art products in an objective manner with a view to learning something about the

personalities or abilities of young artists.

Goodenough (1926) devised the Draw-a-Man Test, after which an increased number of studies were based on the test's principle that a child's mental level could be observed in his drawings. The test used a child's drawing to reveal his mental age. Later authors, including Hurlock and Thompson (1934), indicated that the correlation between general intelligence and artistic talent was positive but low.

Paintings of preschool children who were given art training and children who were not given art training were evaluated by Dubin (1946). The author used categories of art development devised by Marian Monroe for a doctoral dissertation: scribble un-named; scribble named; diagram; design; and representation.

Lowenfeld (1957) and Gaitskell (1928) formulated special evaluation charts or check lists for children's drawings. Brittain (1956) mentioned art tests that attempted to denote creativity and artistic ability. However, these tests were primarily designed for adults rather than preschool children.

Lantz (1955) devised the Easel Age Scale, a rating scale for appraising easel paintings of children. It is a rating scale to aid teachers, psychologists, and guidance personnel in studying and understanding the growth and development of four- to eight-year-old children. The child's score on an easel painting is translated into an easel age which can help provide information valuable to the understanding of the adjustment, maturity level, learning readiness and interests of the child. The scale allows for elimination from scoring the emotional paintings which are "questionable" for securing a child's mental maturity.

CHAPTER III

PROCEDURE

Subjects

Easel paintings completed by 19 four-to seven-year-old children supplied the data analyzed in the study. The 19 children were chosen from a group of 40 migratory children attending a day care center operated by the Department of Family and Child Development, Kansas State University, from June 11 through July 11, 1962, in the Holcomb Consolidated Schools, Holcomb, Kansas. The investigator was the head teacher and was assisted for the five-weeks of day care operation by two undergraduate students from Kansas State University. Twenty-two volunteers from the community also assisted, each working daily for at least one week.

Although 40 children attended the day care center, data for the study were incomplete for 21 children. The data used were from the remaining 19 children who met the following criteria: four years of age or older; attendance of one week or more; and individual completion of two or more paintings.

Children attended the center Monday through Friday from 8:30 A.M. until 4:30 P.M. They participated in a variety of indoor and outdoor play activities, a mid-morning and mid-afternoon snack, a noon lunch, and an afternoon nap. While the younger children (three to seven years old) were at the day care center, the older youngsters (seven to fourteen years old)

attended a Bible school at a church in Holcomb. Previous to the opening of the day care center the investigator, with an interpreter, visited each child's home, met the parents, and secured names and ages of children in the family. Information concerning age, sex, characteristics of the paintings, day care attendance, and previous school experience of the 19 children is presented in Table A (Appendix, pages 57-59). A number was assigned to each child. Table 1 provides data regarding the age range and sex of the 19 children. In the interest of brevity and clarity, ages of the children are presented in months.

TABLE 1

DISTRIBUTION OF SUBJECTS BY AGE AND SEX

Age Range in Months	Sex		Total
	Boys	Girls	
47 - 60	1	5	6
61 - 72	2	2	4
73 - 84	4	3	7
85 - 91	1	1	2
Total	8	11	19

Day care facilities were planned, organized, and operated through the cooperative efforts of the Kansas State University School of Home Economics, State and County Boards of Health, and the Kansas Council of Churches. The

day care center resulted from previous investigation by the Kansas State Board of Health and the desire of churches in the Garden City and Holcomb communities to provide facilities for the education and care of migratory children. Parents of the children were agricultural migrants working in sugar-beet fields of southwestern Kansas. The Kansas State Board of Health (Nov. 1962) reported that 1961 the Kansas migratory worker's living conditions were appalling, health services were lacking, and children were receiving inadequate supervision while mothers worked in the fields.

The children attending the day care center were selected for the study because they represented an ethnic and lower socio-economic population. Common denominator of this group of children was that their parents were Mexican-American agricultural migrants. They lived during the winter (December through April) in Texas or Kansas, but traveled and worked from May through November cultivating and harvesting such crops as cotton, lettuce, cabbage, sugar-beets, cherries, potatoes, cantaloupes, strawberries, and sweet potatoes. Families in the Garden City and Holcomb community of Finney County, Kansas, were hoeing sugar-beets, called "stoop labor" and requiring hours of tedious and tiring work. The average length of time for the crop of sugar-beets to be thinned by hoeing was six weeks, after which the migratory families usually moved to another location.

Housing, provided by farm employers and rented by migrant laborers, was characteristic of that which migratory families frequently endured: inadequate in size, santitation, and plumbing facilities. Often more than one family lived in an old, small, three-room house. Because the homes were scattered among the fields where the parents worked, two school-buses made daily 30-mile round trips to bring the children to Holcomb.

General characteristics of migrants, including the Mexican-Americans in Kansas, were large families, lack of or retarded education, and low income. The 40 children, two to seven years old, attending the day care center represented 20 migratory families; 12 of these families sent two or more children. A study conducted by the School of Home Economics, Kansas State University (1962), involving 17 of these families, yielded background information helpful in understanding the children. The report stated that the average number of children per family was 6.2. Ten fathers averaged 4.1 years of schooling, while eight mothers had attended school an average of 4.2 years. Ten children attending the day care center were enrolled previously in public schools, but none of these children were eligible for entrance into the second grade. Many of their older siblings were retained in grades.

Another characteristic of the migratory workers was low income. Investigators indicated difficulty in making a definite estimation of migratory income, but all agreed migrants would be classified in the lower socio-economic class (Greene, 1954; Metzler and Sargent, 1962; Shaffer, 1955; U.S. House Committee on Education and Labor, 1962).

Materials

A large kindergarten classroom, part of the Holcomb Consolidated Schools, was the main indoor playroom for the day care center. With a variety of play materials the children played approximately two or two and one-half hours in the room each day. Two easels were part of the play equipment and available to the children while they played in the room. The easel equipment followed specifications of Lantz(1955): newsprint paper, 18 inches by 24 inches in size; brushes with handles nine inches long and bristles three-

fourths inches wide; and wooden easels. Tempera paints in red, blue, yellow, black, brown, purple, and orange colors were available on the easels.

Collection of Data

Each easel painting a child completed was collected by the teachers. When a child finished painting, the picture was labeled with the child's name, date, any title or explanation given by the child and information the teachers and investigator believed helpful in analyzing the paintings. If the teacher was free, she asked, "Can you tell me about your picture?" Statements of the child and teacher were recorded on the paintings. To encourage the child's enjoyment of the easel painting activity the teacher praised each picture discriminately.

Paintings were divided into two classifications: free-choice and teacher-directed. "Free-choice" paintings were those completed with no effort on the part of the teacher to direct the specific content or technique of the child's work. The 19 children produced 288 free-choice easel paintings.

"Teacher-directed" paintings, hereafter called "directed" paintings, were those completed in response to a request by the investigator to paint a specific picture. The request was made when the child was unoccupied with another activity. The investigator spoke individually to the child and gave the direction to paint one of the following: (1) your house with trees; (2) a main street in a town with cars and trucks on the street; (3) a farm ("rancho") with two cows and two horses. The three directions were chosen by the investigator because they were considered within the range of

observations and experiences of these children, as well as being utilized previously in a study of paintings of children from a middle socio-economic community (Douglas, 1959).

Fifty-two directed easel paintings were collected from the 19 children. Each painting was labeled as "directed" with the specific type of direction. Occasionally the investigator was assisted by a Spanish-speaking high-school girl who was a volunteer teacher. The child was directed, "(NAME), I would like you to paint a picture for me. Would you please paint a picture." Every child appeared anxious to comply with this request. The majority of the children immediately followed the specific direction which was given.

Instrument

Scales and tests for the measurement of children's mental abilities, interests and achievements commonly involved verbal usage and communication between the child and administrator. Fisher (1961), Stablein, Willey, and Thomson (1961), and other authors indicated that commonly used intelligence tests discriminated against the vocabulary and motivation of lower class children. The child's background usually was different from that of the children investigated to establish popular test norms. Different vocabularies and sometimes a different language, frequent characteristics of these children, necessitated the use of a test which did not rely upon verbal usage. A culture-fair test for children of lower socio-economic and ethnic groups was needed.

The Easel Age Scale (Lantz, 1955) was the instrument used for the analyses of the free-choice and directed easel paintings. Lantz devised the rating scale as an aid to teachers in studying children in the classroom

situation and to psychologists and guidance personnel in a school or clinic. The easel age of the child can help provide information valuable to the understanding of the adjustment, maturity level, learning readiness, intelligence, and interests of children.

The scale removed pressures of a test by using the free paintings of children four to nine years old. Teachers and investigators were instructed to study each child's paintings and score the best paintings or those most indicative of the child's physical and mental maturity. The scale emphasized the fact that children sometimes produce paintings which are primarily emotional or that excessively express the child's feelings. Paintings which were questionable for the purposes of estimating the child's ability or physical and mental maturity were classified as "Q" or questionable paintings and a scale for identifying them was included. The paintings not designated as "Q" paintings were scored by a 30-point scale divided into four developmental sub-scales; form (1 - 7 points); detail (1 - 7 points); meaning (six-point scale ranging from 3 - 8 points); and relatedness (five-point scale ranging from 4 - 8 points). The total score ranged from two to thirty points and could be converted to an easel age. If a painting received a score of two the child was given an easel age of 48 months. While a painting with a score of 30 gave a child an easel age of eight years six months. Lantz (1955) indicated the close correlations of the easel age with mental ages derived from such instruments as the Goodenough Intelligence Test (.90), Pintner-Cunningham Primary Test (.78) and the California Test of Mental Maturity, Primary (.86).

The two groups of paintings, 288 free-choice paintings and 52 directed paintings, first were examined for "Q" or questionable paintings. With the

elimination of the "Q" paintings the remaining paintings were ready to be numerically rated. Each painting to be rated was scored separatedly for form, detail, meaning, and relatedness. The total of these four scores provided the number from which the easel age of each child was determined. Non-"Q" free-choice paintings chosen for rating represented the child's most advanced ability physically and mentally, as measured by the Easel Age Scale, during one or more of the following periods: (1) first seven days; (2) last seven days; (3) entire attendance at the day care center. The paintings rated were chosen by a comparative examination of each child's set of paintings by the administrator and raters. By comparing the non-"Q" paintings of a single child it was a simple task to select his best paintings. After the elimination of "Q" paintings from the group of 52 directed paintings, the directed painting selected for rating was that painting of each child which indicated his best or most advanced development physically and mentally.

Rater Reliability

Three teachers were selected to serve as raters of the easel paintings. All raters had attended college, one was a nursery school teacher, another an elementary teacher, and the third a children's art teacher. A code number was assigned to each painting and the type of painting then obliterated. The raters did not know which paintings were directed and which were free-choice.

Preliminary training sessions for the raters, referred to as A, B, and C, were conducted by the investigator. The easel paintings used in the training sessions were collected from children attending a university nursery school and a kindergarten of an urban elementary school. After

training, the raters independently examined five sets of paintings, with 10 paintings in each set, to establish reliability of agreement in choosing "Q" paintings. The percentage of agreement between two raters was figured according to the formula: 2 (number of agreements) total number of observations. The percentages of agreement reached between raters on the fourth and fifth sets of paintings are presented in Table 2. The .93 denotes a high percentage of agreement among the raters.

TABLE 2

PERCENTAGES OF AGREEMENT BETWEEN RATERS IN CHOOSING "Q" PAINTINGS

Rater	Set 4	Set 5
A with B	.90	.90
A with C	.90	1.00
B with C	1.00	.90
Average	.93	.93

Following the establishment of reliability of raters when choosing "Q" paintings, training sessions were conducted by the investigator for the purpose of learning correct scoring procedures. Fifteen hours of training were held after which sets of paintings, with "Q" paintings eliminated, were rated independently by the three raters. When there was a discrepency in the sub-scores, the differences were discussed until consensus was reached by the three raters.

Analysis

The data or ratings of the easel paintings constituted ordinal scales and measures; therefore, nonparametric statistics were appropriate to test the hypotheses. The Mann-Whitney U Test (Siegel, 1956) appropriate for use with ordinal measurement and which makes use of ranked data, was employed to show the relationship between previous school experience and the ratings of easel paintings of children.

The Median Test (Siegel, 1956), a procedure used to test whether two independent groups or populations differed in central tendency, was used to test the relationship between the frequency of "Q" paintings and the number of days of attendance at the day care center. The test also was utilized to investigate the frequency of "Q" paintings in relation to age of the children.

The Wilcoxon Matched-pairs Signed-rank test (Siegel, 1956), a method of measurement analysis which takes into account direction and magnitude of differences within a pair, was used. The differences between ratings of free-choice paintings and directed paintings, and the relationship between the number of days children attended a day care center and ratings received on free-choice paintings employed this test.

The data for the study were at the ordinal level of measurement; therefore, medians of the scores were used rather than means. The .05 level signifance was accepted as the criterion for rejecting null hypotheses.

CHAPTER IV

RESULTS AND DISCUSSION

Children's paintings were first examined for "Q" and non-"Q" paintings. The statistical analyses of the paintings involved examining the paintings to determine whether there were differences between the scores earned on free-choice paintings and directed paintings. Further analyses tested relationships between children's paintings and chronological age, length of time enrolled in day care, and previous public school experience.

Ratings of Free-Choice and Directed Paintings

The first hypothesis investigated the difference between the ratings of free-choice paintings and directed paintings. There is no difference between the easel age scored of free-choice paintings and directed paintings. The easel age scores of 15 children who completed both free-choice and directed paintings are reported in Table 3. Basis for the selection of each child's best paintings was by the administrator and raters who reviewed the child's set of paintings and selected one non-"Q" free-choice painting and one non-"Q" directed painting which indicated the child's most advanced mental and physical development.

The Wilcoxon Matched-pairs Signed-rank Test (Siegel, 1956) was employed to test the information in Table 3. The analysis indicated no statistical difference between the ratings received by 15 children on free-choice and directed paintings.

TABLE 3

EASEL AGE SCORES OF FREE-CHOICE AND DIRECTED PAINTINGS

Subject		Rating			
		Free-Choice		Directed	
No.[a]	Age in Months	Score	Easel Age in Months	Score	Easel Age in Months
1	48	9	64	4	51
2	52	4	51	16	72
5	60	20	80	20	80
6	61	26	92	20	80
8	68	20	80	19	78
10	72	23	86	21	82
11	75	20	80	17	74
12	77	20	80	20	80
13	79	24	88	20	80
14	79	16	72	20	80
15	82	9	64	6	57
16	82	21	82	20	80
17	84	19	78	17	74
18	85	20	80	23	86
19	92	23	86	21	82

[a] Refers to individual children as listed in Appendix, Table A, pages 57-59.

From Table 3 it will be noted that the difference in easel age scores between the free-choice and directed paintings indicated a tendency for free-choice paintings to receive higher ratings. Eleven children attending the migrant day care center received higher scores on their free-choice paintings than on their directed paintings. The differences in the ratings between the two types of paintings, as well as the number of children, were not great enough to indicate statistically a difference between the two types of paintings.

Findings in a study of free-choice and directed easel paintings of middle socio-economic class children (Douglas, 1959) indicated that teacher direction frustrated the children. The frustration was evident when more "Q" paintings were found among directed paintings and when directed pictures completed by first and second grade subjects received lower scores than did free-choice paintings. There were no indications of frustration from teacher-direction in easel painting among the migrant children in the present study. Not only was there no statistical difference between the ratings of the two types of paintings (Table 3), but the subjects also displayed no "Q" paintings among their sets of directed paintings.

The Mexican-American migrant child grows up in a family culture of patriarchal authority, overt parental display of affection, traditional childrearing practices, early childhood responsibilities and limited experiences for challenging, stimulating play (Metzler, 1962; Kurth, 1960). Because of the large and extended families, characteristic of the migrant culture, a migrant child must care for younger children while at the same time receiving the authority and direction of older siblings, parents, and other adults. Constant and frequent moving of the families demands that the children also must frequently adjust to new and some times unusual surroundings, situations, and living conditions. These factors possibly operate in such a way that the child finds little difficulty in receiving directions from another adult. Consequently, the migrant children evidently felt no more frustration when required to paint a specific teacher-directed picture than when painting a free-choice picture. This in turn resulted in no difference between the ratings of free-choice and directed paintings.

Frequency of "Q" Free-Choice Paintings Completed by Children of Varying Ages

Hypothesis Two concerning the relationship of "Q" free-choice paintings and age: There is no relationship between the percentage of "Q" free-choice paintings and the ages of the children. Three raters individually examined paintings completed during the five-week period and selected the "Q" (questionable for determing a child's mental and physical development) paintings. The 19 children, on the basis of their chronological age, were divided into groups of younger children (48 to 68 months) and older children (72 to 91 months). Percentages of "Q" paintings were calculated for each age group by the number of "Q" paintings in relation to the total number of paintings for that particular group. The percentages of "Q" free-choice paintings of the eight younger children and the eleven older children attending the day care center are presented in Table 4.

TABLE 4

FREQUENCY OF "Q" FREE-CHOICE PAINTINGS IN RELATION TO AGE

Age Range in Months	Subjects	Total No. Free-Choice Paintings	Total No. "Q" Free-Choice Paintings	Percentage "Q" Free-Choice Paintings
48 - 68	8	128	30	23.43
72 - 91	11	160	29	18.12

When the data were analyzed by the Median Test (Siegel, 1956), no difference was found. There was no statistical difference between the older

and younger children in the percentage of "Q" free-choice paintings although the information revealed a smaller percentage of "Q" free-choice paintings by the older children.

Six children who previously had attended public school were included in the sample of eleven older children. The remaining five older children and the eight younger children either had not attended a public school or no information regarding their schooling was available (Appendix, Table A, pages 57-59). When the six school-experienced children were excluded from the sample there remained 95 free-choice paintings and 25 "Q" free-choice paintings with 26.31 percent "Q" free-choice paintings. Analysis by the Median Test (Siegel, 1956) of these figures and the information in Table 4 concerning the eight younger children indicated no statistical difference in the percentage of "Q" free-choice paintings between the older and younger children with no school experience.

Regarding the fact that both younger and older children displayed similar percentages of "Q" free-choice paintings, several assumptions may be made. Occurrence of "Q" free-choice paintings may have resulted from the wide range of children attending the day care center coupled with the Mexican-American family culture. Three- to seven-year-old children attended the day care center with no divisions of groups according to their age and maturity levels other than their own choices while playing. The close ages of children in the large migrant families frequently resulted in two or more siblings attending the day care center. Also, a characteristic of the Mexican-American culture was that children were cared for by older siblings, thus causing all ages to play together rather than with peers. This situation sometimes caused the teachers at the day care center difficulty in administering guidance commensurate with a child's age and maturity level. Children

may have felt the guidance that was directed toward a sibling, whether older or younger, frustrating and hard to understand.

Available at the day care center was a variety of play equipment and materials which allowed children to choose freely play interesting to them. The constant presence of younger playmates did not challenge the play interests and activities of the older children. This interaction of different ages in a large group of children over a period of five weeks may have resulted in unrest and frustration, which in turn resulted in emotional or "Q" paintings.

In an attempt to discover if age affected the children's paintings further analysis was made of the children's paintings in relation to their ages. A comparison between the older and younger children was made based on the difference in chronological age in relation to easel age. The administrator and raters chose one free-choice painting for each child in the two groups (Table 4) which represented the child's most advanced physical and mental development. The easel age derived from the easel scores of these paintings was compared to the respective chronological age of each child. Analysis by the Mann Whitney U Test (Siegel, 1956) of the differences between the chronological age and the easel age of each child revealed that the younger children (48 to 68 months of age) scored higher easel ages in relation to their chronological ages than did the older children (72 to 91 months). This was significant at the .05 level. Only one younger child had an easel score which indicated an easel age lower than his chronological age, whereas four of the eleven older children received such scores. The differences between the two ages, chronological and easel, were also much greater for the younger group, ranging from 7 to 32 months, while the range for the older group was from 3 to 14 months.

Similar findings were indicated when the Mann Whitney U Test (Siegel, 1956) was used to analze the differences between chronological ages and easel ages determined by scores on directed paintings of younger and older children. The 15 children who had completed directed paintings were divided into groups of younger children and older children. The group of younger children again scored higher easel ages in relation to their chronological ages than the group of older children. This was significant at the .05 level.

Several assumptions may be made based upon the statistical findings which revealed differences between older and younger children in relation to the correlation of easel age and chronological age. Younger migrant children seemed more mature for their ages as displayed by their easel paintings, while the older migrant children perhaps were not demonstrating ability and maturity in their easel paintings commensurate with their developmental age level.

Several factors of the home and day care center environment may have caused the differences to exist between chronological and easel ages. Following a review of literature concerning the home environment of migrant children (Greene, 1954; Metzler and Sargent, 1962) and visits by the administrator to the homes of the migrant families in the Holcomb, Kansas area, it was learned that the migrant children came from impoverished backgrounds with limited play experiences. The program of the day care center was based upon current principles of nursery school education which provided interesting and developmental play materials and equipment, as well as flexibility within the schedule of daily activities so as to meet the needs of individual children. The play at the day care center was evidently both enjoyable and a learning process for the children. The younger children likely found the experiences afforded at the day care center more interesting, challenging, and enjoyable

than the older children since the program was designed for preschool youngsters, three to five years old. Adaptations in the program schedule and guidance were necessary for the children five to seven years old. Easel painting was an activity the children four years and older could easily engage in even though they previously may have had no experience with it. On the other hand, the older children possibly found that certain activities lost their challenge as the newness wore off. Six of the children in the older group previously had attended school which likely not only provided some experiences similar to those of the day care program, but perhaps also more stimulating activities.

Another factor, early childhood responsibilities, may have accounted for the lack of maturity displayed by the older children through their easel paintings. Children in migrant families usually are given several forms of responsibility at an early age. Not only do they look after younger siblings, but they also must help with housework and sometimes with the financial support of the family when they are only six and seven years old (U.S. Congress. House. Committee on Education and Labor, 1972). These forms of responsibility reduce the time and opportunities to play and soon become drudgery and hard-work rather than acting as a process in growth and development. These factors may have operated in such a way that more challenging and motivating activities than the activities offered at the day care center were necessary to cause the older children to demonstrate ability and maturity creditable to their chronological age.

Length of Time Enrolled in Day Care in Relation to Kind of Painting

Both non-"Q" and "Q" paintings were examined in order to learn more about

the relation of number of days children attended the day care center to ratings and frequency of such paintings. Children whose paintings were investigated attended the day care center regularly during the five weeks of operation. In order to test any changes over the five-week period, paintings were selected from the first seven days and the last seven days. Table 5 sets forth the data pertaining to 14 children used to test Hypothesis Three: There is no relationship between the number of days children were enrolled in a day care center and the ratings of their non-"Q" free-choice paintings. Paintings selected by the administrator and the raters from the two time periods were those paintings indicating the child's most advanced development mentally and physically.

TABLE 5

EASEL AGE SCORES OF FREE-CHOICE PAINTINGS IN RELATION TO NUMBER OF DAYS ENROLLED IN DAY CARE

Subject		Easel Age Score			
		First 7 Days		Last 7 Days	
No.[a]	Age in Months	Score	Easel Age in Months	Score	Easel Age in Months
1	48	4	51	9	64
3	55	4	51	4	51
4	58	19	78	4	51
7	65	16	72	16	72
8	67	20	80	16	72
11[b]	75	20	80	19	78
12	77	20	80	16	72
13	78	24	88	20	80
14[b]	89	16	72	16	72
15	81	9	64	4	51
16[b]	82	21	82	16	72
17[b]	84	19	78	16	72
18	85	16	72	20	80
19[b]	91	24	88	16	72

[a] Refers to individual children as listed in Appendix, Table A, pages 57-59.
[b] Child previously had attended school from one to nine months.

The Wilcoxon Matched-pairs Signed-rank Test (Siegel, 1956), used to analyze the data in Table 5, indicated there was a statistical difference between the ratings of free-choice paintings completed during the first seven days and the last seven days during five weeks of day care. Therefore, Hypothesis Three was rejected at the .01 level of significance. The scores on pictures painted during the first period received as a group higher scores than paintings selected from the last seven day period.

The fourth hypothesis also investigated free-choice paintings in relation to the number of days children attended the day care center: There is no relationship between the number of days children were enrolled in a day care center and the number of "Q" free-choice paintings. The percentages of "Q" paintings among free-choice paintings completed by 15 children during the first seven days and the last seven days of the five week period are reported in Table 6. The subjects tested in Hypothesis Three and Hypothesis Four are the same with the exception of Subject Nine who had no free-choice paintings completed during the first and last seven days which could be rated.

TABLE 6

FREQUENCY OF "Q" FREE CHOICE PAINTINGS IN RELATION TO NUMBER OF DAYS ENROLLED IN DAY CARE

Subject		First 7 Days			Last 7 Days		
No.[a]	Age in Months	Total Free-Choice	No. "Q"	Percent "Q"	Total Free-Choice	No. "Q"	Percent "Q"
1	48	5	0	0	2	1	50.
3	55	6	2	33.33	4	4	100.
4	58	5	0	0	1	0	0
7	65	5	2	40.	11	6	54.54
8	68	8	1	12.5	2	0	0
9	71	5	3	60.	1	1	100.
11	75	7	0	0	1	0	0
12	77	10	0	0	6	4	66.66
13	79	8	0	0	11	2	18.18
14	79	19	0	0	2	0	0
15	82	3	2	66.66	3	2	66.66
16	82	8	0	0	1	0	0
17	84	3	0	0	1	0	0
18	85	6	0	0	10	1	10
19	92	9	0	0	1	0	0

[a]Refers to individual children as listed in Appendix, Table A, pages 57-59.

Data presented in Table 6 were analyzed by the Wilcoxon Matched-pairs Signed-rank Test (Siegel, 1956). Although there was no significant difference in the percentage of "Q" free-choice paintings completed during the two time periods, there was a tendency for a greater number of "Q" paintings to be produced during the last seven days. A correlation may exist between this tendency and the findings of Hypothesis Three: higher scores were received on paintings completed during the first seven days.

Easel painting was the primary art activity available to the children

during the week following the opening of the day care center. Children were free to paint between two and two and one-half hours daily while they played in the indoor playroom. Also, the administrator conducted few directed easel painting sessions, so the majority of paintings collected during the beginning period were free-choice paintings. The children indicated their enjoyment of the easel painting by their frequent use of the easels and their laughter and comments while painting. Consequently, there were more free-choice paintings and greater opportunities to select a child's painting indicating his most advanced development mentally and physically during the first seven days than during the last seven days.

Not only were there more directed painting activities during the last seven day period, but also art activities other than easel painting. Additional art activities such as play dough, collage, finger-painting, water-play, coloring, cutting, pasting, and potter's clay were gradually introduced as the children became more accustomed to the day care experiences, facilities different from their home play, staff, and visitors. Easel painting remained a constant activity offered at the two different times each day.

During the latter period of day care operation the administrator emphasized the importance of directed sessions by requesting children to paint a greater number of directed pictures than during the first seven days. Thus, there was less time for the completion of free-choice paintings during the last seven days. The administrator refrained from placing pressure upon the children to complete directed paintings as the day care center approached the closing date. However, certain children may have perceived a feeling of pressure, thus causing their emotions to be displayed in their paintings. Paintings revealing a great deal of emotion would have resulted in a greater

number of "Q" free-choice paintings and possibly lower ratings on the non-"Q" free-choice paintings.

In addition to the five weeks of nursery education offered, the children faced numerous experiences which to them were possibly new, unusual and sometimes frightening. These experiences included physical and dental examinations; inoculations; eye, hearing and tuberculosis skin tests; unfamiliar visitors and observers each day; and a change of volunteer teachers each week. Also, because youngsters older than seven years of age attended a Bible School, several smaller children were separated each morning from older siblings who previously had cared for them while their mothers worked in the fields.

Differences of ratings on paintings completed by younger children (Table 6, Subjects 3, 4, 7 and 8) indicated less difference between the first and last seven days than ratings on pictures painted by the older children (Table 6, Subjects 11 to 19). This may indicate that older children were not challenged nor interested in displaying their mental and physical development through their paintings. The constant presence of the younger children may have been a contributing factor to the older children's disinterest in painting pictures commensurate to their level of development.

These factors may explain the tendency for a greater percentage of "Q" free-choice paintings to occur during the last seven day. In addition, they may explain the statistical indication that children's non-"Q" free-choice paintings completed during the last period received lower scores. These conclusions are indecisive with respect to actions of individual children.

Ratings of Paintings in Relation to Previous School Experience of Children

The relationship between previous school experience and the ratings of

free-choice and directed paintings were investigated. Directed and free-choice paintings chosen for rating were those completed at any time during the entire five-week session which the administrator and raters considered as having the highest overall scores on the Easel Age Scale. These scores indicated the free-choice painting and the directed painting which represented children's most advanced development mentally and physically. Children who previously had attended kindergarten or the first grade in a public school were matched with children who previously had not attended a public school on the basis of proximity of chronological age. Each child with no school experience was within two months of the child who had school experience with whom he was matched. Because of sample size there was only one choice in each of five cases who met the criteria set for matching two children. Another subject with school experience (Subject 19) was eliminated from the sample because there was no child with whom he could be matched.

Hypothesis Five examined the relationship between previous school experience and the ratings of non="Q" free-choice paintings of children: There is no relationship between the previous school experience of children and the ratings of their free-choice paintings. Table 7 shows the comparison of ratings of free-choice paintings of the five children who had previous school experience with the five children of comparable ages who had no previous school experience.

From Table 7 it will be noted that there is little difference between the total scores of easel paintings of school-experienced children and of easel paintings by children with no previous school experience. The Mann Whitney U Test, used to analyze the data presented in Table 7, indicated no statistical difference.

TABLE 7

EASEL AGE SCORES ON FREE CHOICE PAINTINGS OF CHILDREN WITH SCHOOL AND CHILDREN WITHOUT SCHOOL EXPERIENCE

School Experience				No School Experience			
Subject		Rating		Subject		Rating	
No.[a]	Age in Months	Score	Easel Age	No.[a]	Age in Months	Score	Easel Age
9	72	17	74	10	72	23	86
11	75	20	80	12	77	20	80
14	79	16	72	13	79	24	88
16	82	21	82	15	82	9	64
17	84	19	78	18	85	20	80
Average		18	76	Average		19	78

[a]Refers to individual children as listed in Appendix, Table A, pages 57-59.

The sixth hypothesis was concerned with the relationship between previous school experience and the ratings of directed paintings of children: There is no relationship between previous school experience of children and the ratings of their directed paintings. The ratings of directed paintings of the four children who had previous school experience and the ratings of the four children who had not attended school previously are presented in Table 8. The same pairs of subjects as in Hypothesis Five are listed in Table 8 with the exception of Subjects Nine and Ten. Subject Nine had no directed painting; consequently, both members of the pair were eliminated from the sample in Hypothesis Six.

TABLE 8

EASEL AGE SCORES OF DIRECTED PAINTINGS OF CHILDREN WITH SCHOOL AND OF CHILDREN WITHOUT SCHOOL EXPERIENCE

School Experience				No School Experience			
Subject		Rating		Subject		Rating	
No.[a]	Age in Months	Score	Easel Age	No.[a]	Age in Months	Score	Easel Age
11	75	17	74	12	77	20	80
14	79	20	80	13	79	20	80
16	82	20	80	15	82	6	57
17	84	17	74	18	85	23	86
Average		18	76	Average		17	74

[a] Refers to individual children as listed in Appendix, Table A, pages 57-59.

The Mann Whitney U Test (Siegel, 1956) indicated no differences between the ratings of directed paintings completed by children having previous school experience and by children having no previous school experience.

This finding may not be unexpected when the nature of the Easel Age Scale is considered. The Scale was designed as a test by which a child's maturity could be estimated from his paintings with reliability. The Easel Age Scale was developed over ten years of research with seven years of this period centralized in various communities in the Los Angeles, California area. The communities consisted primarily of the following populations: rural; partially rural; beach; and motion picture districts. The rapid population growth plus the changing social and economic conditions tended to

create subjects from various backgrounds. Consequently, a scale developed from such a study using these subject's paintings would be in the nature of a culture-fair test which could lend validity when used with diverse racial, ethnic and sub-cultural groups. The bicultural use and validity of the Easel Age Scale may account for no differences between the school-experienced and non school-experienced Mexican-American children involved in the present study.

On the other hand, a factor which may have caused little difference to exist between the two groups of children in the ratings of directed and free-choice paintings was the limited schooling of the school-experienced children. "School-experienced" indicated the child had attended a public school prior to the opening of the day care center. Although parents or older siblings of these migrant children reported the child had attended a public school, the experiences at the school(s) were perhaps limited. The public school attendance of the school-experienced migrant children attending the day care center varied from one to nine months. Frequent moves made by migrant families as well as insufficient interest in education by migrant parents and inadequate transportation to schools would be probable factors causing migrant children not to attend school regularly. Also, schools are generally based upon middle social class values and principles. The practices and experiences offered by school programs may be confusing and of little interest or value to lower socio-economic class families. Considering the impoverished environments and backgrounds of the migrant children it would not be surprising to find they do not approach education nor gain from the school experiences in the same manner as middle socio-economic youngsters to whom the school and teachers usually direct their educational programs. For these reasons, the

Mexican-American migrant attending the day care center may not have been oriented to school in the same manner as a school-experienced, resident, Anglo-American, middle class child.

CHAPTER V

SUMMARY AND CONCLUSION

Summary

The purpose of this study was to determine the relationship between easel paintings of children from the lower socio-economic social class and teacher direction, chronological age, length of time enrolled at a day care center, and previous public school experience.

Nineteen children, between the ages of 48 and 91 months, attending a day care center at Holcomb, Kansas, produced the easel paintings analyzed in the study. The children were Mexican-American agricultural migrants and represented a population from an ethnic group and the lower social class.

Easel paintings collected from the children were classified as either free-choice or directed paintings. The children were free to paint whatever subject they wished for the free-choice paintings. "Directed" paintings were those which resulted from a request by the investigator to paint a specific picture.

Analyses of the paintings were by the Easel Age Scale (Lantz, 1955), a rating scale which provided an easel age for each child. The Easel Age Scale allowed for paintings which were primarily emotional or questionable for estimating the child's physical and mental maturity. There were paintings classified as "Q" by means of a scale and illustrations included for identifying them. The free-choice and directed paintings first were examined for "Q" paintings. After the elimination of the "Q" paintings,

selections were made from the remaining non-"Q" pictures for numerical rating. Non-"Q" paintings were rated by a 30-point developmental scale. Only the paintings displaying a child's most advanced level of physical and mental development were included. Non-"Q" free-choice paintings rated were chosen from either one or more of the following time periods: first seven days; last seven days; entire day care session. Only one directed painting was rated for each child, and represented the highest level of development he displayed by the medium during the entire day-care period.

The group of younger children, aged 48 to 68 months, received higher easel ages on both free-choice and directed paintings in relation to their chronological ages then did the group of older children, aged 72 to 91 months. This relationship between the chronological and easel ages of the children was significant at the .05 level.

Children who regularly attended the five-week session received higher scores on free-choice paintings completed during the first seven days than during the last seven days. This finding was significant at the .01 level.

There was a tendency for a greater number of "Q" free-choice paintings to be completed during the last seven days than the first seven days. Also, a tendency was found for free-choice paintings to receive higher ratings than did the directed paintings. Only one directed painting was classified as a "Q" painting.

Differences between the younger and older children in the percentage of "Q" free-choice paintings were not found to be significant. There also was no statistical difference indicated in a comparison between the ratings of free-choice and directed paintings completed by children having school experience and children having no school experience.

Conclusions

The size of the population used in the study was insufficient to make general conclusions or establish reliability of findings about all children of lower socio-economic groups. However, the Mexican-American migratory population indicates similarities which make it possible to consider the conclusions of the study as pertinent of and common to their group. Although certain children attending the day care center spoke only Spanish and the investigator spoke no Spanish, a high percentage of the children four years and older indicated the ability to speak and understand English. In addition there was the occasional assistance of a high school girl of Spanish descent who spoke the language fluently.

Certain limitations were evident: the short-term session and a select population sample. Only children of migrant families living within eight miles of Holcomb, Kansas, were able to attend the day care center because of the availability of transportation.

The findings indicated that the younger children significantly displayed more maturity in their paintings in relation to their age than did the older children. Children in the older group did not demonstrate ability and maturity through their easel paintings commensurate with their chronological age. Evidently the play experiences offered at the day care center were such that the younger children felt interested and challenged, whereas, the older children did not feel stimulated to do their best. A wide age range was characteristic of the group of children attending the day care center as well as in the large, extended families of the children. Consequently, older and younger children spent much time together and used similar play

equipment and materials.

The children might have found the first seven days at the day care center more relaxing as well as less emotional and frustrating than the last seven days. One indication was a tendency for more "Q" free-choice paintings were found during the last seven day period as compared to the first seven days. Another indication was the significantly higher scores received on non-"Q" free-choice paintings completed during the first seven days in comparison to ratings on pictures painted during the last period.

The fact that there was a tendency for free-choice paintings to receive higher ratings than directed paintings gives some support to this conclusion. The majority of directed paintings were completed during the latter half of the day care operation since the directed painting activity was emphasized at that time. Occurrence of emotional or "Q" paintings, and lower scores on paintings completed at a time when emotional stress may have been evident could be related to the children's experiences. Throughout the five-week session the children faced new, unusual and sometimes frightening experiences. In addition, during the operation of the day care center the older children, aged 72 to 91 months, were in the same group as the younger children, aged 48 to 68 months, rather than in peer groups.

The presence or absence of school experience revealed no measurable differences between the ratings of paintings representing the two groups. Certain factors possibly were related to the lack of differences between the children with school experience and children with no school experience. One was that school experience for these children was limited, and another, the test (Easel Age Scale) used was of a culture fair, bicultural nature the purpose of which was to reveal a true evaluation of children's maturity,

irrespective of their formal education.

With reference to the review of literature and the conclusions, certain recommendations are suggested. Repetition of the present study with other ethnic and racial minority groups as well as additional research about other aspects pertaining to the growth and development of children from the lower social class, would be beneficial in order to clearly understand behavior and attitudes, to eliminate stereotypes and prejudices, and to determine correctly the needs of children from these minority groups.

Teachers may find it helpful to study carefully the culture of a child to better understand his behavior in the classroom. Both individual study by teachers of their pupils and discussion groups by school personnel concerning children of the lower social class would help in furthering education.

Studies are needed which use larger population samples with children and families from the lower social class to gain understanding and insight about group characteristics and also, individual personalities in such groups.

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TABULATION OF SELECTED CHARACTERISTICS OF SUBJECTS AND PAINTINGS COMPLETED BY EACH ONE USED IN THE STUDY

TABLE A

Subject			Total Paintings	Free-Choice Paintings			Directed Paintings		
No.[a]	Sex	Age in Months		Total Free-Choice	"Q" Free-Choice	Non Free-Choice	Total Directed	"Q" Directed	Non-"Q" Directed
1	F	48	17	15	2	13	2	0	2
2	M	51	14	13	0	13	1	0	1
3	F	55	16	15	9	6	1	1	0
4	F	58	6	6	0	6	0	-	-
5	F	60	20	18	4	14	2	0	2
6	F	60	19	17	2	15	2	0	2
7	F	65	24	24	10	14	0	-	-
8	F	67	25	20	3	17	5	0	5
9	M	71	9	9	4	5	0	-	-
10	M	72	9	8	0	8	1	0	1
11	M	75	12	9	0	9	3	0	3
12	M	77	30	25	9	16	5	0	5
13	F	78	25	21	2	19	4	0	4
14	F	79	27	21	0	21	6	0	6
15	M	81	16	15	12	3	1	0	1
16	M	82	12	9	0	9	3	0	3
17	F	84	8	4	0	4	4	0	4
18	F	85	32	26	20	24	6	0	6
19	M	91	19	13	0	13	6	0	6

[a] Refers to individual children used in study.

Subject			No. Free-Choice Paintings First 7 Days	No. Free-Choice Paintings Last 7 Days	Rating[b] First 7 Days		Rating[c] Last 7 Days		Rating[d] Entire Period	
No.[a]	Sex	Age in Months			Score	Easel Age in Months	Score	Easel Age in months	Score	Easel Age in months
1	F	48	5	2	4	51	9	64	9	64
2	M	51	12	0	NOT USED		—	—	4	51
3	F	55	6	4	4	51	4	51	—	—
4	F	58	5	1	19	78	4	51	—	—
5	F	60	1	0	NOT USED		—	—	20	80
6	F	60	-	-	NOT USED		—	—	26	92
7	F	65	5	11	16	72	16	72	—	—
8	F	67	8	2	20	80	16	72	20	80
9	M	71	5	1	NOT USED		—	—	17	74
10	M	72	-	-	NOT USED		—	—	23	86
11	M	75	7	1	20	80	19	78	20	80
12	M	77	10	6	20	80	16	72	20	80
13	F	78	8	11	24	88	20	80	24	88
14	F	79	19	2	16	72	16	72	16	72
15	M	81	3	3	9	64	4	51	9	64
16	M	82	8	1	21	82	16	72	21	82
17	F	84	3	1	19	78	16	72	19	78
18	F	85	6	10	16	72	20	80	20	80
19	M	91	9	1	24	88	16	72	24	88

[a] Refers to individual children used in study.
[b] Rating of the free-choice painting judged as most representative of child's abilities and development completed during first seven days.
[c] Rating of the free-choice painting judged as most representative of child's abilities and development during last seven days.
[d] Rating of the free-choice painting judged as most representative of child's abilities and development and completed during entire session.

TABLE A — Continued

Subject			Rating Directed Paintings[b]		Child's Previous School Experience	Attendance in Days
No.[a]	Sex	Age in Months	Score	Basal Age in Months		
1	F	48	4	51	none	20
2	M	51	16	72	none	13
3	F	55	—	—	none	22
4	F	58	—	—	none	9
5	F	60	20	80	none	22
6	F	60	20	80	no information	14
7	F	65	—	—	none	22
8	F	67	19	78	none	18
9	M	71	—	—	kindergarten	21
10	M	72	21	82	none	15
11	M	75	17	74	first	16
12	M	77	20	80	none	21
13	F	78	20	80	none	22
14	F	79	20	80	kinder. & first	22
15	M	81	6	57	none	22
16	M	82	20	80	first	16
17	F	84	17	74	first	19
18	F	85	23	86	none	22
19	M	91	21	82	first	22

[a] Refers to individual children used in study.
[b] Rating of the directed painting judged as most representative of child's abilities and development completed during entire session.

EASEL PAINTINGS OF CHILDREN FOUR TO SEVEN YEARS OLD FROM A LOWER SOCIO-ECONOMIC GROUP

by

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AN ABSTRACT

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ABSTRACT

The objectives of this study were to analyze easel paintings completed by young children from the lower socio-economic class in relation to four variables: teacher direction, chronological age, days enrolled in day care, and previous public school experience.

Easel paintings analyzed in the study were collected from 19 four- to seven-year-old children attending a migrant day care center at Holcomb, Kansas. The day care center operated eight hours daily for five weeks and was housed in the Holcomb Consolidated Schools. Two painting easels were among the variety of play equipment available to the children in a large indoor playroom. The children had opportunity to paint approximately two or two and one-half hours each day while they played in the room.

Two types of easel paintings were collected: free-choice, denoting no suggestion nor direction from the teachers; and teacher-directed, indicating that the child was requested to complete a specific picture. The 19 children completed 288 free-choice and 52 directed easel paintings during their five weeks of attendance.

Three raters analyzed the paintings by means of the Easel Age Scale (Lantz, 1955). Using the Easel Age Scale the raters first examined the paintings to eliminate the pictures excessively displaying emotion or feeling, designated as "Q" paintings.

Pictures representing each child's most advanced physical and mental maturity were selected from the non-"Q" paintings. These selected paintings were chosen from one or more of the following periods: first seven days;

last seven days; entire five-week period. Each selected painting was numerically rated according to the Easel Age Scale (Lantz, 1955), a rating scale which provided an easel age for each child. The easel age provided indications as to a child's intelligence, interests, adjustments, maturity level, and learning readiness.

After statistical analyses, it was concluded that more maturity was displayed in relation to chronological age in the paintings by the younger group of children (48 to 68 months of age) than by the older children (72 to 91 months of age). Younger children received higher easel ages on both free-choice and directed paintings in relation to their chronological ages than did the older group of children.

Evidence revealed that the first seven days rather than the last seven days seemed to be more relaxing for the children. During this time it appeared they displayed a truer indication of their mental and physical abilities than during the last seven day period. In a comparison of easel age scores of paintings completed during the two time periods, higher scores were received on paintings from the first seven days. This conclusion was further strengthened by the tendency for completion of more "Q" free-choice paintings during the last seven days, and the tendency for free-choice paintings to receive higher easel age scores when compared to directed paintings. The latter statement is in light of the fact that more directed paintings were completed during the last half of the day care session than during the first half.

These findings indicate the need for further accurate, exacting and extensive research of lower socio-economic and ethnic groups. Studies of these sub-cultural groups would provide clearer understanding as well as helping to eliminate prejudice toward and stereotyping of their behavior and attitudes.