AN ABSTRACT OF THE THESIS OF

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Title: THE EMERGENCE OF RACIAL AND SEXUAL PRE	FERENCE		
IN THE CHOICE OF PLAYMATES BY PRESCHOOL	CHIL-		
DREN AS RELATED TO SEX, SOCIOECONOMIC ST	CATUS		
AND RACE			
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The primary purpose of this study was to replicate a study of Abel and Sahinkaya which investigated the emergence of race and sex preferences of upper middle socioeconomic status Caucasian children. This study provided a good match with respect to socioeconomic status, race, and sex; however, the number of subjects in the replication group was lower than in the Abel and Sahikaya study. In addition to the Abel and Sahinkaya comparison, the study was extended to examine preference of lower socioeconomic status Caucasian children and lower socioeconomic status Negro children. In addition to the data provided for the replication comparisons three hypotheses were tested: Hypothesis I: The incidence of race preference in preschool children will not differ significantly from

chance expectation; Hypothesis II: The incidence of sex preference in preschool children will not differ significantly from chance expectation; Hypothesis III: For preschool children no significant difference will exist in the incidence of racial or sexual preference. Each hypothesis was considered with respect to age, sex, socioeconomic status, and race of the subject.

A Picture Preference Test designed to replicate as closely as possible the one used by Abel and Sahinkaya was used to collect data on race and sex preferences. The test included 16 black and white smiling facial photographs, 3 1/2" x 5", of children 3.5 to 5.5 years of age. Sixteen photographs were paired to make 32 pairs in which race was controlled and sex varied and 32 pairs in which sex was controlled and race varied.

The statistical analysis included comparison of average group choices with a hypothetical average of 16 by means of the t-test.

Results of the analysis indicated that the replication did not support the Abel and Sahinkaya study in all respects, particularly since no incidence of race preference was found in either the younger or older children, and sex preference emergence was later in the present study than the Abel study. The earlier study found that boys showed both race and sex preference and this study found neither. Both studies found sex preference by girls. In the extension test results of Hypothesis I showed only white lower status male had race

preference while Hypothesis II test results showed the girls from every group, upper white, lower white, and lower Negro, showed preference for their same sex as did the older upper and lower white children and the younger lower status Negro children. The test results of Hypothesis III showed sex choices were stronger than race choices in all three groups for girls and for the younger children of both sexes in the Negro group. The socioeconomic comparisons, Group I with Group II, indicated that only the boys in the lower socioeconomic status group evidenced a race preference. With regard to sex preference the older children and the girls in both Group I and Group II showed a significant difference. The race comparison, Group II and Group III, revealed that only white boys showed race preference, Negro children did not. In race choice Negro and white younger children, older children, and girls showed no race preference. Sex preferences were observed for both Negro and white girls, but not for Negro or white boys. In addition younger Negro children showed sex preference, but the findings regarding sex preference were reversed for the older groups; white children showed a sex preference, but Negro children did not.

In general the replication attempt produced some conflicting results, however, the difference in sample size probably precludes the direct comparison. In addition data for this study were collected in the Northwest, and other literature in this area suggests

geographic differences may play a role in the emergence and intensity of race and sex preference.

The Emergence of Racial and Sexual Preference in the Choice of Playmates by Preschool Children as Related to Sex, Socioeconomic Status, and Race

bу

Lesley Frances Moore Morris

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THE EMERGENCE OF RACIAL AND SEXUAL PREFERENCE IN THE CHOICE OF PLAYMATES BY PRESCHOOL CHILDREN AS RELATED TO SEX, SOCIOECONOMIC STATUS AND RACE

INTRODUCTION

According to law the United States has officially been moving toward equality for all its citizens for a long time. The Negro was granted suffrage in 1870 and women were granted suffrage in 1920 by amendments to the constitution. The next great milestone in civil rights legislation included the Voting Rights Acts in 1965 and the Civil Rights Acts of 1960, 1964, and 1967. This legislation on civil rights was long overdue to make an 1870 amendment effective. same situation seems to exist with regard to rights for women and although they have been able to vote since 1920 executive orders of the past decade have created councils, committees, and commissions to study "the status of women" (U.S. General Science Administration, 1968). That ten of the 37 pages of Publication of the U.S. Department of Labor dealt with women and aimed to achieve national objectives related to the status of women (U.S. Dept. of Labor, 1968) indicates again that there is a problem and it is receiving official attention.

Clearly the decade has been marked by enormous changes in national policy and in public interests and attitudes as well. Knowledge concerning prejudice and its genesis is greater; concern for the realization of democratic ideals is stronger. A great surge towards this realization is in progress. Relevant research has been contributed to and been stimulated by these changes (Goodman, 1964, p. 249).

However, there is still evidence that a discrepancy exists between legislation and action. True equality may be decreed for all citizens but implementation must involve changing attitudes for control and/or prevention of intergroup tension. Clearly then, additional knowledge is needed regarding the when, how, and why of these attitudes. In addition Ammons (1950) points out that control and/or prevention of intergroup tensions involves understanding of how and when the tensions develop.

In light of this a logical point of focus investigations concerned with the development of these attitudes and tensions would seem to be the preschool years for as Radke, Trager, and Davis point out:

The child entering school already has a long past of social learning. He brings with him perception of the self and differentiations of his social environment. Both may be unstable and in some respects, indefinite; nevertheless, to many parts of self and environment there may be affixed strong affects.

The social learning in these early years has taken place mainly within the family and play groups of children. Through these agents the child becomes aware of and reacts to social forces which constitute culture; through their content, structuring, and attitudes concerning his social-psychological environment are conveyed to him; and cultural standards and mores begin to have consequences for his personality and behavior (1949, p. 331).

Radke and Trager (1950) indicate that the experiences and learnings of young children must be consciously designed to develop

attitudes for good relations. They also believe that the learning of realities about equality takes place in a context of democratic values that contradict many of the realities. We must know when actual attitudes are developed.

The present study is an attempt to investigate the emergence of preference for race and sex particularly as that preference is associated with the sex, race, and socioeconomic status of the individual. Hopefully, as more knowledge is accumulated regarding the factors related to and the dynamics involved in the emergence of these preferences, conditions may be identified which will assist in implementing a broader base of preference.

The Purpose of the Study

The purpose of this study was to investigate the emergence of sex and race preference in preschool children. A more adequate description of the timing and the factors related to the development of these preferences seems to be basic to any attempts to guide these processes.

More specifically, the present study replicated the Abel and Sahinkaya (1962) study and extended the question of sex and race choices to children from a white lower socioeconomic group and a Negro lower socioeconomic group. Addition of these groups allowed a much needed comparison across racial and socioeconomic grouping.

Although a number of studies in this general area have used preschool children as subjects apparently only one (Abel and Sahinkaya, 1962) had focused directly on the question of the emergence of sex and race preferences. Their study used white upper middle status preschool children as subjects and directed the analysis of data toward the emergence of sex and race choices as they related to the sex of the subject.

Definition of Terms

Because of the generality of statements such as older and younger children, and the various indices available on computing socioeconomic status, the following list of operational definitions is offered for clarification:

- 1) Older children defined as those children between the ages of 4.51 years to 5.50 years and will be referred to as older.
- 2) Younger children defined as those children between the ages of 3.51 to 4.50 years and will be referred to as younger.
- 3) Friendship preference defined as choices on the Picture

 Preference Test designed for this study.
- 4) Socioeconomic status:
 - a) Upper middle as defined by Warner's seven point scale
 (Warner, 1949, p. 140-141) (see Appendix G) and will be
 referred to as upper.

b) Lower - as defined by Warner's seven point scale and will be referred to as lower.

Because certain assumptions must be made as a basis for this investigation the researcher assumes:

- 1. Most preschool children are aware of differences between their race and other races (Allport, 1954; Clark and Clark, 1939a; Goodman, 1964; Horowitz, 1938; Lasker, 1929; Lippitt, 1941).
- 2. Most preschool children are aware of differences between their sex and the opposite sex (Allport, 1954; Challman, 1932; Koch, 1944; Lippitt, 1941).
- 3. The Picture Preference Test designed for this study replicating as near as possible the instrument used by Abel and Sahinkaya (1962) is an effective means of obtaining data from preschool children (Helgerson, 1943).

Hypotheses and Analysis

Analysis of data for this study was divided into two parts: comparison of data from white middle class subjects of this study with the Abel and Sahinkaya (1962) study and tests of hypotheses directly related to this study.

Tables of means, variances, and t-tests are provided to facilitate direct comparison of the data from the white upper middle status sample in this study with those of the Abel and Sahinkaya (1962)

study.

In addition the following hypotheses specific to this study were tested:

Hypothesis 1: The incidence of race preference in preschool children will not differ significantly from chance expectation.

Hypothesis 2: The incidence of sex preference in preschool children will not differ significantly from chance expectation.

Hypothesis 3: For preschool children no significant difference will exist in the incidence of racial or sexual preference.

Each of these hypotheses was considered with respect to age, sex, socioeconomic grouping, and race of the subject.

For the test of Hypothesis I and II tests of significant differences were run using a hypothetical mean of 16. This hypothetical mean represents "chance expectation" in the context of the 32 possible own race or same sex choices.

REVIEW OF LITERATURE

Because of the complexity of subject matter related to the emergence of sex and race preferences in young children the Review of Literature is organized around the following subheadings: Race Awareness, Sex Awareness, Methods of Studying Preference, Emergence of Racial and Sexual Preference, Preference as Related to Sex of the Subject, Race and Friendship Preference Related to Race of the Subjects, Race Preference Related to Socioeconomic Status of Subject, and The Relative Strength of Race Versus Sex Choices.

Within a given segment of research literature it is often difficult to compare studies. The primary difficulties in this review involved use of different measuring instruments, quite diverse analyses applied to the data, and the apparent ambiguity of such terms as awareness and preference. In addition, some authors develop the idea of trends in data while others adhere rather closely to statistically significant findings only. For instance in the Horowitz and Horowitz (1938) study the results did not specifically indicate that boys and girls express the same degree of preference, but on consulting the chart of results it can be seen that boys and girls chose their own race 100% of the time; obviously it can be said that they chose with the same degree of preference. Also, Sugawara (1967) found preference equal for boys and girls for sex and race when only one variable was varied, but when he

varied two, he obtained quite different results: the first choice scores for boy and girl subjects on sex and race were all significant at the .01 level. On the task in which both sex and race were varied the boys then prefered their own sex and girls chose their own race.

Attempts to discuss all of these differences become unwieldy, therefore the researcher will interpret as accurately as possible the confusing elements so there is some similarity of studies. Also, preference is often studied as a small part of very large studies, and examples of this situation will be reviewed.

Race Awareness

Age Differences

Awareness among preschool children was inferred at one year of age by Lasker (1929). His inferences were drawn from an analysis of records written on children. At age two and a half, others had found evidence of race awareness; Ammons (1950) used interviews; Horowitz (1932) used the Horowitz Picture Test; Goodman (1964) used interviews with mothers, and Stevenson and Stevenson (1960) used observational records of both Negro and white children.

At age three, the majority of children are aware of race differences; Clark and Clark (1939a, 1939b, 1947, 1962), Goodman

(1946), Greagor and McPherson (1966b), Lasker (1929), Renninger and Williams (1966), Springer (1950), Stevenson and Stewart (1958) studies. In the Clark and Clark studies (1939a, 1939b, 1947, 1964) 75% of three year old Negro children from both Northern and Southern communities showed they were aware of differences between "white" and "colored" - clearly showing race awareness is present in Negro children at three. Goodman (1946), Gregor and McPherson (1966b), Landreth and Johnson (1953), Stevenson and Stevenson (1960) all showed that white children were aware of race difference at three years of age. The data for these studies were secured by various means: dolls, pictures, photographs, interviews, observations, puzzles, and clay.

By four, all the children studied showed awareness of race differences; Clark and Clark (1939a, 1939b, 1947, 1962), Goodman (1946, 1964), R. E. Horowitz (1932), Lasker (1929), Morland (1962), Radke and Trager (1950), Radke, Trager, and Davis (1949), Stevenson and Stevenson (1960), Vaughn (1964a, 1964b), Vaughn and Thompson (1961). Thus the assumption that most children of preschool age are aware of race differences is documented.

Race Differences

Race awareness and age relationship has been fairly well established, but conflicting evidence exists when the variable of race

is present (Goodman, 1964; Greagor and McPherson, 1966b; R. E. Horowitz, 1932; Springer, 1950; Stevenson and Stewart, 1958; Vaughn, 1964a). It has not been clearly established if Negro children develop race awareness before white children.

R. E. Horowitz (1932) in her study of both Negro and white preschool children found Negro children more aware of race than white children in choice situations. Goodman's study (1964) supported this in her findings in that 24% of her white subjects were highly aware and 40% of Negro subjects were highly aware; however, 85% of both races were of high and medium awareness.

Other studies such as Stevenson and Stewart (1960) indicated that white children were more aware than were Negro children. However, they reported only a tendency in this direction, not a significant difference. They also found both white and Negro children could make correct identification on a Picture Discrimination Test, a Doll Assembly Test, a Doll Selection Test, and an Incomplete Stories Test. Morland (1964) found more white children made correct identification than did Negro children.

The conflicts from these studies may be a function of the geographic location of the study since the R. E. Horowitz (1932) study and the Goodman (1964) study were done in the North and the Stevenson and Stewart (1960) and Morland (1962) studies were done in the South.

Three studies of race awareness were done in different cultures. Springer (1950) found both Oriental and non-Oriental groups aware of race differences at a significant level in Hawaii. Greagor and McPherson (1966b) in the Republic of South Africa found subjects Bantu (Negroid) and white identified themselves and the social groups equally well. Vaughn (1964) found his white subjects made more correct identifications than the Maori (Negroid) subjects. Springer used a series of photographs of Oriental Filipinos and non-Orientals, identifying the pictures as Japanese, Chinese, etc. Greagor and McPherson used the Clark Doll Test and Vaughn used a Doll Test.

Skin Color Differences

In studies of Negro children controlling for skin color, Clark and Clark (1939a, 1939b, 1947) and Goodman (1964) reported dark Negro children were more accurate in their choice of own race groups than were medium and light colored children. Goodman accounted for this difference in that dark-skinned Negroes are visually a dramatic contrast to the white skin color.

North and South Differences

Clark and Clark (1962) did the only study to be found on relationship of geographical location and race awareness. Their subjects were all Negroes and they found no significant differences in

race awareness between the Northern and Southern Negroes.

Socioeconomic Status Differences

Morland's study (1962) of Negro children showed no significant differences in race awareness for the upper and lower backgrounds.

Landreth and Johnson (1953) studied upper white and lower white and Negro socioeconomic backgrounds and found that upper status group children were more aware of race differences than children from the lower status groups. Substantiating Landreth and Johnson's findings, Morland (1962) studied only white children and found the same result.

Sex Differences

In this section sex differences in studies of Negro children's race and sex awareness (Clark and Clark, 1939a; Greagor and McPherson, 1966a; Morland, 1962); sex differences in the studies of white children's race and sex awareness (Morland, 1962; Springer, 1950) and in Negro and white studies (Landreth and Johnson, 1953; Goodman, 1964) will be examined.

Morland (1962) and Springer (1950) found no differences in awareness for boys and girls in their studies of white children. Clark and Clark (1939), Morland (1962), and Greagor and McPherson (1966a) found no differences between the choices Negro boys and girls made.

On the other hand, differences were found by Goodman (1964):

girls were more highly aware than boys for both Negro and white children. Landreth and Johnson (1953) found their upper status white girls more aware than upper-status white boys, which supports the Goodman study. However, the Landreth study disagrees with Goodman on the lower class children's choices; Negro and white boys were more aware of race differences than Negro and white girls.

Sex Awareness

The studies of sex awareness reviewed all agreed that the youngest child observed of both boys and girls showed sex awareness. For example, Horowitz and Horowitz (1938) and Lippit (1941) both found evidence of sex awareness at 38 months of age and Challman (1932) reported awareness as early as 27 months of age. The Challman study was done in Michigan and the Lippit study in Iowa, while Horowitz and Horowitz collected data in a "border" state neither North nor South.

The McCandless and Hoyt (1961) study differed from the majority in that it finds there is a higher awareness in boys than girls in their University of Hawaii sample; both were aware.

Koch (1944) found white children had a higher awareness of sex than Negro children, but Negro children still had a high level of awareness.

Even though there are few studies dealing with sex awareness,

they do seem to indicate the existence of awareness at the preschool level.

Methods of Study of Preference

The researcher explored the methodology involved in the various means of determining race and sex preferences in order to justify the replications of the Abel and Sahinkaya method (1962). Four major approaches to measurement are discernable: picture preference tests, sociometric tests, interview schedules, and various observational schemes.

The Picture Preference Test Technique

Abel and Sahinkaya (1962), Helgerson (1943), Springer (1950), and Sugawara (1967) all used picture preference tests. Facial photographs (smiling) of various race children were used. In the Abel and Sahinkaya study photographs of Negro boys were matched with Negro girls and white boys were matched with white girls in the sex choice series. In the race choice series photographs of white boys were matched with photographs of Negro boys and photographs of white girls were matched with photographs of Negro girls. Fourand five-year-old boys and girls preferred their own sex but only boys preferred members of their own race. The findings were limited since they applied only to the upper middle class socioeconomic

status and white race.

Helgerson (1943) used pictures of Negro and white children, sober and laughing, to test white and Negro subjects. She paired photographs so that when sex was a variant race and facial expressions were held constant; when race was a variant sex and facial expression were held constant; and when facial expression was varied race and sex were held constant. She found girls chose their own sex more frequently than boys chose their own sex; that older children chose boys more than younger children. She concluded the sex factor was of greatest significance in choice of playmates and that older children both Negro and white chose Negro playmates less often but Negro children chose less often than white children.

In the Springer (1950) study the pictures were of Chinese,

Japanese, Caucasian, Filipino, and part Hawaiian. The paired pictures of the boys and girls of the same racial background and whose national background was identified by the experimenter were controlled for race and age but sex and facial expression were uncontrolled. Springer found Orientals chose Orientals alike in the heterogenous and homogenous groups while Caucasians chose their own race group 75% in heterogenous and 80% in homogenous group.

The Orientals chose their own race more often than did non-Orientals but not at a significant level. Springer found no significant differences in age levels choosing their own race; there was a small

difference, but no consistent trend was evident.

Sugawara presented a picture preference test of 12 photographs to upper middle status Caucasian preschool children presenting six tasks: 1) white girl and white boy choice, 2) Negro boy and Negro girl choice, 3) white boy and Negro boy choice, 4) white girl and Negro girl choice, 5) a choice between a white boy and a Negro girl for boys, for girls a choice between a Negro boy and a white girl for boys, 6) a choice between a Negro boy and a white girl for boys, and a white boy and a Negro girl for girls. After each test was administered the S's were asked why they chose the child they chose and were encouraged twice to tell more. Sugawara found that children of preschool age preferred 1) friends of their own sex when race was held constant, 2) white children of preschool age preferred firends of their own race when the variable of sex was held constant, 3) white boys of preschool age preferred friends of their own sex when the variables of race and sex were varied, 4) white girls of preschool age preferred friends of their own race when the variables of race and sex varied.

Sociometric Test and Interview Technique

Moreno (1934) and Criswell (1937) employed the standard sociometric questions: 1) "Which child in the group would you like to sit next to?" or 2) "Which child would you choose to sit next to?". Since neither study provided evidence of racial cleavage until the age of ten, Lambert and Taguchi (1962) assumed the questions used by Moreno (1934) and Criswell (1937) were inappropriate to preschool children. Lambert and Taguchi (1962) felt young children do not discriminate favored associates on the basis of sitting next to them since they "liked everyone" and "didn't mind" who sat next to them. Lambert and Taguchi (1962) modified the procedure by producing "significant to preschool children" values. The choices involved choosing an associate; (a) to give candy to and receive candy from, (b) to choose someone to have your picture taken with, and (c) which picture of all the children (including their own) they liked best and would like to own. The S's were Caucasian and Oriental children in Montreal. The ethnic cleavage is clearly apparent and significant in the Oriental preschool children while the own race choice of Caucasian children is not significant. The Caucasian children were three and a half through six while the Oriental children were five through six so age factors may have influenced significance.

Horowitz as a part of a larger interview study found race more pronounced in "who would you rather play with?" interview choices in children in a fixed study in a small rural southern community.

Picture and Inset Test Design Technique

Landreth and Johnson (1953) and Radke and Trager (1950)

employed an inset test. The Landreth and Johnson (1953) test consisted of two series of pictures one for boys and one for girls. When completed each showed two persons playing, eating, bathing, riding, walking, and waking up in the morning. The possible insets were identical except for skin color with Negro facial characteristics suggested. The subjects were upper and lower socioeconomic white preschool children and lower socioeconomic Negro preschool children in the San Francisco Bay region. The researchers pointed out in their analysis that the inset pictures test for many was a problem in matching instead of a measure of friendship preference.

Radke and Trager (1950) used plywood formboards with cut out figures of a man or woman, plywood clothing to fit the figure, and plywood forms of houses. The human figures varied only in skin color; the clothes were dressup, work, and shabby; and the houses were one-family houses with lawn and trees, and a multiple dwelling with clotheslines and overflowing garbage cans. The male figures were used to test the boys and the female figures to test the girls. The S's were kindergarten, first, and second grade children from middle and lower socioeconomic levels both white and Negro. Radke and Trager (1950) felt the restricted choice situation ignored many variations in attitude and understanding possible to get an open end interview or observation, but losing this data is justified by a highly structured and direct situation in order to study in greater detail

some special aspect of the problem.

Observational Techniques

McCandless and Hoyt (1961) and Stevenson and Stevenson (1960) used observational techniques to investigate interaction situations in integrated nursery schools. McCandless and Hoyt (1961) studied Oriental and Caucasian preschool children in the University of Hawaii nursery school. The children were observed 15 five-minute periods in which the duration and type of interaction was recorded. The reliability of observers was very high but there were only three observers. This kind of reliability becomes increasingly difficult to maintain with the large number of observers required for a large group of children. The conclusion was that boys showed more marked cleavage to their own sex than girls but both exhibited high cleavage. The race cleavage for Orientals and Caucasians was high. Since certain behavior in social interaction indicated race and sex cleavage the complex dynamic variables of interaction between humans were completely ignored.

Stevenson and Stevenson (1961) observed two and three year olds in an interracial nursery in Austin, Texas. There were 14 45-minute observations of each child at the beginning of the year and six at the end of the year. The parents were reager for an interracial experinece for their children and the white teacher maintained

a racially neutral atmosphere (avoided teaching of race, no reference to race, no introduction of the difference, no approval or disapproval to any racially oriented situation or comment, no interference in conflict related to racial matters, but distraction was used). The five observers were not tested for reliability. The researchers concluded there was no difference in behavior shown or relative amounts of time spent on own race or other race interaction.

In addition to the limitations of establishing reliability of observers in the observational method and the ignoring of interpersonal dynamics in choices of observable behavior as indicative of racial or sexual cleavage, Stevenson and Stevenson (1961) pointed out that the method is expensive and time consuming.

Landreth and Johnson (1953) noted their Picture Inset Technique was for many children a matching test rather than a preference test so that approach was discarded. The Picture Preference Test made a matching interpretation impossible. Observational, sociometric, and interview techniques were discarded since the methods were unable to deal adequately with the problem of the unknown variables involved in the personal dynamics among the subjects. The Picture Preference Test's hypothetical interaction takes the personal dynamics out of consideration. In addition to the problem of personal dynamics in the observational method, the reliability problem of the greater required number of observers made it unusable. The Picture

Preference Test's administration required one experimenter.

The Abel and Sahinkaya (1962) study was chosen for replication since it seemed to fulfill Radke and Trager's (1950) requirements of a good restricted choice situation. Even though many variations in attitude and understanding concerning Negro and white races are lost, the loss of data is justified by a highly structured and direct situation which makes possible a study in greater detail of some special aspect of a problem.

Also, R. E. Horowitz (1932) pointed out that the picture technique gets below the level of active language to utilize reservoirs of understanding before organization of verbal expression; this technique taps the fund of passive languages. All the child needs is to understand the investigator, to be willing to cooperate, to be able to make the choice requested, and to point.

The problem to be investigated in this study also lent itself to sufficient precision to permit experimental tests of hypotheses and to achieve vigor and still be significant as Patterson (1966) suggests.

The researcher felt justified in choosing Abel and Sahinkaya

(1962) to replicate and extend their investigation of emergence of race
and sex preference.

In summary, a picture preference test with reasonable validity and reliability seemed to be the best choice for the type of study under consideration here.

Emergence of Racial and Sexual Preference

Only one study dealt with emergence of racial and sexual preference. In this study the researcher will replicate the Abel-Sahinkaya (1962) study to seek to confirm or explain the possible differences in results for the upper status white child, younger, older, boys, and girls. Abel and Sahinkaya found sex preferences emerge earlier than race preference; race preferences emerge at five while sex preferences emerge at four. Abel and Sahinkaya did their study in Nebraska so may show differences from a study done in the Northwest.

Although one study spoke specifically of emergence, other studies dealt with sex and race preference as related to age.

Lambert and Taguchi (1962) found race cleavage at preschool in both Oriental and white children. Stevenson and Stewart (1959) found race cleavage in both white and Negro, but greater in the white children as young as three. However, the cleavage for Negro children decreased at .02 level from three to seven and cleavage increased for white children from three to seven.

Sex cleavage was found by Springer (1950) at every age studied and her subjects ranged from three through six.

Two studies show colored children xenocentric (preferring majority race). Clark and Clark (1947) gave a preferred doll test in

both Northern and Southern United States and found two-thirds of the children preferring the white doll - this other-race preference decreased gradually from four to seven. The Greagor and McPherson (1966) study showed Bantu children xenocentric as early as three years of age diminishing somewhat to seven.

Preference as Related to Sex of the Subject

The literature dealing with the relationship of the sex of the subject to their own race preference choice of friends is unclear.

Results have varied from both boys and girls choosing their own race equally to boys choosing their own race more than girls and girls choosing their own race more than boys.

The studies of white children in Michigan (Sugawara, 1967), white children in a rural "border" state between North and South (Horowitz and Horowitz, 1938), white children in Winston Salem, North Carolina (Renninger and Williams, 1966), and a study of both Oriental and white children in Hawaii (Springer, 1950), and the Moreno (1934) study of both Negro and white children found boys and girls chose their own race equally. In a Nebraska study (Abel and Sahinkaya, 1962) boys chose their own race more than girls and in Vaughn's New Zealand study (1964) Negroid (Maori) children, the boys also chose their own race more than girls, however, in the same study, Vaughn found white children (pahika) chose in the opposite

direction in that the girls chose their own race more than the boys.

In the Republic of South Africa, Greagor and McPherson (1966)
Bantu (Negro) boys chose their own race more than girls. Abel and
Sahinkaya (1962) found only boys prefer their own race. Landreth and
Johnson (1953) noted more race cleavage in upper white girls than
upper white boys, but lower white boys showed more race cleavage
than lower white girls; Negro girls showed less cleavage than white
girls lower or upper; Negro boys showed less race cleavage than
upper white boys, but more than lower white boys.

It seems that the majority of studies in this area suggest an equality of preference choices between boys and girls. There is also some indication that sex and race when varied together may change these preference decisions. Part of the analysis in the present study focuses on the combination of variables.

Only one study, McCandles and Hoyt (1961), noted a difference in sex preference between boys and girls. They noted that boys showed more sex cleavage than girls.

Preference as Related to Race of Subject

Studies reviewed in this section have subject groups of Negro children, Negro and white children, and Oriental and white children with a variety of complicating variables such as socioeconomic status, and location of the study.

The Negro children make white friendship preferences in Clark's (1947) study in both North and South, but the Negro children in segregated schools showed less xenocentricity. Greagor and McPherson (1966) found in the Republic of South Africa the Bantu (Negro) xenocentric and the white children ethnocentric. Morland (1962) found the same thing in a southern city that Negro children were xenocentric and white children ethnocentric. Vaughn (1964) found the same thing in New Zealand: paheka (whites) chose own race at .001 and Maori (Negroid) chose white or other race at .05. Stevenson and Stewart (1958) in Texas found white own race cleavage higher than Negro.

Lambert and Taguchi (1964) in a study in Canada of Oriental and non-Oriental children found the Oriental ethnocentric at a significant level and non-Oriental ethnocentric at a non-significant level. Springer (1950) also studying Oriental and non-Oriental, but in Hawaii, found both Oriental and non-Oriental tend to choose their own race, but non-Orientals chose their own race more than Orientals, the opposite of Lambert and Taguchi (1964). Springer found also that mixed Oriental and non-Oriental chose more non-Oriental.

Landreth and Johnson (1953) results were complicated by socioeconomic status. They found Negro girls made significantly fewer matching choices than upper or lower white girls, while Negro boys made significantly fewer matching choices than upper white boys,

but not significantly less than lower white boys.

One study dealt with sex cleavage as related to race. Koch (1944) in an Illinois study, found white boys and girls showed stronger own sex preference than Negro children.

Race Preference Related to Socioeconomic Status

Two studies indicated lower status whites favored their own race more than upper status whites but a third study found upper girls and lower boys show more race cleavage than upper boys and lower girls.

Morland (1962), in the study of racially segregated schools in Lynchburg, Virginia, (white subjects) using picture situation with questions about playing with children of Negro or white race lower status whites exhibited more racial cleavage than upper status whites. Vaughn (1964b) inhis New Zealand study showed pakeha lower status groups had marked tendency to favor own race over high status pakeha; however the preference was not significant.

Landreth and Johnson (1953) in their inset picture study found upper status children perceived the figure selection task as a problem in matching rather than racial choice. They found white upper status girls and lower status boys showed more preference for own race than white lower status girls and upper status boys.

The Relative Strength of Race Versus Sex Choices

The literature shows a difference in strength of race versus sex choices. Several studies show greater emphasis on sex than race, Moreno (1934), Criswell (1937, 1939), Helgerson (1943), Abel and Sahinkaya (1962); but Lambert and Taguchi (1962), McCandless and Hoyt (1961), and Springer (1950) showed a greater emphasis on race than sex. Landreth and Johnson (1953), and Stevenson and Stewart (1958) showed no consistent pattern, and Sugawara (1967) showed no consistent pattern.

No clear cut pattern emerges from the literature with respect to the relative strength of race versus sex choices at the preschool level.

METHOD

This chapter is divided into three sections beginning with Subjects, then Instrument, and finally Procedure.

Subjects

Seventy-nine children ranging in age from 3.51 to 5.50 years were subjects for this study. This total was comprised of three separate groups as follows:

- Group I: Upper white Caucasian children from upper middle status
 socioeconomic backgrounds attending the laboratory nursery
 schools at Oregon State University (N = 27).
- Group II: Lower white Caucasian children from lower socioeconomic backgrounds attending the summer Head Start programs in Monroe and Philomath, Oregon (N = 25).
- Group III: Lower Negro from lower socioeconomic backgrounds attending a year round Head Start program in the Albina Day Care Center in Portland, Oregon (N = 27).

Table 1. Age and sex distribution comparisons for replication study.

	Abel and	Sahinkaya	Group I - Upper White		
\mathbf{Age}	S	ex	Se	<u></u>	
	Boys	Girls	Boys	Girls	
4(3.51-4.50)	7	9	4	6	
5(4.51-5.50)	19	13	7	10	
Total	26	22	11	16	

As can be seen from this table the present study is somewhat comparable with respect to number of girls but is more than 50% below strength in the number of boys available for comparison.

Table 2 presents the average I.Q. scores for the Abel and Sahinkaya study and all sample groups from this study. Of primary concern here is the comparison of the scores from the Abel and Sahinkaya study with those of Group I. While a discrepancy of 7.7 points is apparent it must be mentioned that the scores are derived from two different standardized tests. The subjects in the Abel and Sahinkaya study were tested with the Stanford-Binet (1937 revision) while the subjects in Group I were tested with the Peabody Picture Vocabulary Test (Dunn, 1965). Dunn indicates that the comparisons of mental age computation for the 1937 Stanford-Binet and the Peabody Picture Vocabulary Test indicates a possible higher evaluation of mental age by the Peabody Picture Vocabulary Test. However, Peabody Picture Vocabulary Test I.Q. correlations with the Stanford-Binet 1937 test produce a median of 0.71.

Table 2. Average I.Q. scores for sample groups.

Abel & Sahinkaya	Group I -	Group II -	Group III -
Study	Upper White	Lower White	Lower Negro
123. 1	115.4	90.9	84.3

Table 3 provides a breakdown of age and sex distributions for the total sample. The totals for males and females in each of the groups is somewhat comparable but specific sex disproportions such as those in the older age range of Group III and possibly that in the younger age range of Group II could cause problems in those sex comparisons. These problems will be offset to a large degree, however, by combining age groups for certain analyses and by using the hypothetical mean comparisons for judgements of preference.

Table 3. The total sample classified in age and sex groups.

Age	Group I Upper White Sex		Group II Lower White Sex		Group III Lower Negro Sex	
	Boy s	Girls	Boys	Girls	Boys	Girls
4(3.51-4.50)	4	6	3	5	7	11
5(4.51-5.50)	7	10	7	10	7	2
Totals	11	16	10	15	14	13

Group I - Upper White

Of the 33 children attending Oregon State University

Nursery Schools, 27 were subjects in this study. One

child moved and was dropped from the study and four children were

Oriental and one Negro so were not used in this sample of Caucasian

children, leaving 27 subjects from the 33 attending.

A letter of permission (see Appendix D) to test the children was sent to all parents whose children attended nursery school. Permission was granted by all the parents. See Table 1 for distribution of the sample according to age and sex.

The children in the laboratory nursery schools were considered for the purpose of this study, upper middle status. Like the Abel and Sahinkaya study upper middle status group, most of the parents owned their own homes; only a few of the mothers were employed, and the majority of the fathers were engaged in professional or higher level occupations. The occupations of the fathers were also considered in light of the Warner scale and their occupations fell in rating groups one or two. See Appendix G for Warner Revised Scale for Rating Occupations.

The sample falls in the upper-middle socioeconomic range in the "above average intellectual range", the applicability of the conclusions are limited to this extent (see Table 2).

Group II - Lower White

There were 75 children attending the Monroe and Philomath

Head Start programs. Of these 75 children there were 30 in the age
groups represented in this sample. One child became ill, one child
moved, and three were unable to respond, so 25 subjects remained.

Children attending both of these centers were all Caucasian; the

Monroe center had eight Spanish speaking children. For distribution of age and sex of the subjects see Table 3.

With regard to the socioeconomic status of the subjects the qualifications for Head Start placed them in lower socioeconomic groups. By Warner's scale most of the fathers' occupations were group six and seven. See Appendix G for Warner scale, and Appendix F for specific occupation in this group.

Permission for testing was obtained in conjunction with permission for the children to go on field trips. The parents signed a page when they registered their children.

This group fell in lower socioeconomic range, was white, and was in the average range of intelligence (see Table 2). The applicability of the conclusions are limited to this extent.

Group III - Lower Negro

Twenty-seven of the 100 children attending the Albina Day Care

Center in Portland, Oregon were subjects in this study. Of the

children attending there were 56 in the age range. Of the 100 children

14 were white, 79 were Negro, one Indian, six "other". Permission

slips (see Appendix E) were sent home over the Memorial Day week
end with the children who were bussed to the center. Thirty-seven

permission slips were returned. Nine turned out to be excluded by our

categories and five did not return to the center after public schools

closed for the summer. See Table 5 for distribution of sample by age and sex.

The socioeconomic status by virtue of requirements of being in Head Start Day Care was lower socioeconomic status. By the Warner scale the occupations of the fathers were in the group six and seven. See Appendix G for Warner scale and Appendix F for specific occupations in the group.

This group fell in lower socioeconomic range, was Negro, and was of lower average intelligence (see Table 2). The applicability of the conclusions are limited to this extent.

Permission to conduct this study at the Oregon State University Nursery Schools was granted by the Department of Family Life in the School of Home Economics. The Director of Albina Day Care Center, Sam Granato, gave permission to the researcher to conduct this study in their center. The directors of the Monroe Head Start, Mrs. Georgia Martin, and Philomath Head Start, Mrs. Penny Christenson, gave the researcher permission to conduct this study in their centers.

Procedure

The Establishment of Rapport

In order to facilitate a successful presentation of the tests involved in this study, time was spent in establishing rapport with the

subjects. Participation in preschool groups from which the subjects were selected occurred over a period of at least a week at each center. Consequently, most of the subjects were willing to participate in the study and seemed to emjoy individual attention from an adult.

In approaching the subjects the teacher sometimes accompanied the researcher and said:

(Child's name) you may have your turn to play the picture game with (experimenter's name). Would you like to see the pictures now?

Often the children approached the researcher and asked if it were their turn yet. If a child was involved in some other activity he was asked at a later time. If a child refused to participate the researcher said:

Oh, you're not ready for your turn yet, maybe later on or another day.

Only those subjects who were willing were used in the study.

Three subjects in the lower white sample refused to participate.

The Test Rooms

Orchard Street Nursery School. A small room adjoining the nursery proper was used to test the subjects.

Park Terrace Nursery School. The office was used for testing

the subjects. The office was in the southwest corner of the converted house and adjoining the areas used by the children.

Monroe Head Start. The eighth grade room was used for the testing. The corner by the door was bare except for the table and two chairs used by the researcher and the subject. The room was down the hall from the covered play area, the preschool classrooms adjoined. The room was used for parent meetings and movies and the children were accumstomed to it.

Philomath Head Start. The small room in the administrative end of the building was used. The children were taken down a short hall and through three doors to reach the room. The researcher found having the doors propped open helped the children accept the new place. Sometimes if the children seemed frightened they visited the room once before the testing occurred.

Albina Day Care Center. The testing was done in a screened section of the stage in the gymnasium. The stage was a forbidden area and the children considered it a special treat to go on the stage. The gymnasium was usually empty except for people passing from the office to the classroom section.

Presentation of the Picture Preference Test

One subject and the reseracher were in the test situation during testing. The subject was seated to the left of the researcher on

child sized card table chairs. The table was of the collapsible type but oblong instead of the usual square shape. The same table and chairs were used in all the centers. In front of the subject was placed the booklet of matched pictures.

The presentation of the Picture Preference Test, the Peabody
Picture Vocabulary Inventory, and the validity test were the same as
described. The researcher sat on the right of the subject and
unobtrusively recorded data in a manila folder right side up toward the
child.

Collection of Data

The collection of data occurred whenever the children were free of a structured activity mostly during free play when the children were at a stopping place. When a child asked for a turn, he was taken next. The children at the Day Care Center were tested morning and afternoon (lunch or nap). The data was collected in May, June, and July of 1968.

The Picture Preference Test

A Picture Preference Test was designed for this study as directed by Dr. Harold Abel by telephone. The instrument used in his study was unavailable and out of the country. His directions were to use a standard sized polaroid black and white film, to use plain

background, to take pictures outdoors in natural sunlight. The background in the original study was a concrete wall but since the photographs were taken at two different day care centers in Portland, Oregon, a white sheet was used as a background to lessen bias effect of environmental conditions. The photographs were of Negro children from Saint Martin's Day Care Center and white children from Fruit and Flower Day Care Center. Ten photographs were taken of each of four groups; Negro girls, Negro boys, white girls, and white boys. The children were four or five years of age. The tests consist of randomly arranged combinations of sixteen 3 1/2" x 5" photographs. The 16 photographs used in the test were chosen by a panel of eight judges from the original 40 photographs.

The criteria for choosing the photographs were: 1) average attractiveness, 2) distinguishable by race, 3) distinguishable by sex, 4) smiling faces (see Appendix, A).

After the judges made their choices the photographs were paired randomly following the scheme in the Abel and Sahinkaya study (1962) from reprints of the 16 photographs. These photographs were arranged in two series, one for determining sex preference and one for determining race preference. Each series contained 16 photographs and 32 pairs of pictures. In the sex choice series white boys were matched with white girls and Negro boys with Negro girls. In the race choice series, white boyswere matched with Negro boys and

white girls with Negro girls. These paired photographs were mounted in two 6" x 9" spiral booklets. The scheme for this picture arrangement is contained in Appendix B.

An attempt was made to control all known sources of bias. For example, in order to hold constant the influence of place preference, each individual picture in a series was presented twice on the left side on twice on the right side. To control further the effect of response-set and biases resulting from fatique factors, the series and pictures were reversed for every second child.

Each series was presented once to each subject and three sessions were used to complete the testing. The sex choice series was presented first, the Peabody Picture Vocabulary Test second, and the race choice series was presented last. The interval between the sessions was at least a day and not more than 14 days.

Beginning the interview of each series the examiner presented the unopened booklet of photographs and said:

These are pictures of children you do not know. I want you to tell me which child you would like to play with. Turn the pages one at a time and choose the one you would like for a friend. Remember, choose a friend (Abel and Shinkaya, 1962).

Toward the end of the statement the examiner opened the booklet to the first or last pair of pictures. If the child did not respond, the examiner asked: "Which one would you choose as a friend? Choose

one." After the choice was made the child was instructed to turn the page and choose again. With the younger children and the lower class children the examiner would say: "Point to the child you would like for a friend," and received an immediate response after being totally ignored when saying choose a friend. This procedure was set forth by Abel and duplicated except for the substitution of "point to" a friend for "choose a friend". The examiner unobtrusively recorded each response on the sheet shielded from the child's sight (see Appendix C).

Validity of Attractiveness Between Individual Pictures

As in the Abel and Sahinkaya (1962) study it was established that no picture differed significantly in attractiveness from others in its photographic group (white boys, white girls, Negro boys, Negro girls). As in the Abel and Sahinkaya study (1962) Chi square tests were used to determine if a significant difference existed in the choice of any photograph. In all cases probabilities were greater than .50, suggesting attractiveness of picture did not significantly affect the choice, but were the result of random variation. The Chi square results are presented in Table 4.

Table 4.	Chi-square values for attractiveness between individual
	photographs.

Photographic Groups	N	Chi-square values	Degree s of freedom	P
White Boys	4	.0196	3	.50
White Girls	4	.0138	3	.50
Negro Boys	$\overline{4}$.0097	3	.50
Negro Girls	$ar{f 4}$.0431	3	.50

The Reliability of the Picture Preference Test

The split half reliability test was used to determine the reliability of tasks in the Picture Preference Test. The reliability of the instrument refers to the extent repeated applications of the same test to the same population yields the same scores.

The split half method, a special case of alternate forms administered at the same time procedure, involves dividing the items on the test into two halves and the scores on the two halves are correlated to provide an estimate of the extent to which they are equivalent. In the case of this research instrument, each photograph had to appear on left and right in each half to make the halves equivalent. The resulting coefficient is an indication of the internal consistency of the test. The Spearman Brown formula was then applied to the data:

$$\mathbf{r}_{\mathbf{NN}} = \frac{\mathbf{Nr}}{1(\mathbf{N} - 1) \mathbf{r}}$$

where

r = corrleation between parts

N = number of measurements operations

r is correlation between sum or average of N measurement operations of this particular sort and the sum or average of another N operations of the same sort (Seltiz, 1964, p. 183).

The test was set up to control right and left hand bias effect on results when the test was split for the split half reliability test the built in bias control was eliminated so the ten tests were eliminated at the suggestion of the statistician. The reliability for sex preference was .758 and for race preference .698.

The Validity of the Picture Preference Test

The validity of an instrument involves asking what does it measure? Are the data relevant to the characteristics in which one is interested? Do the differences in the scores represent true differences on the characteristics one is trying to measure or do they reflect the influence of other factors?

Validity means the measuring instrument measures true differences in that the instrument is intended to measure in the subjects. Measures that focus on behavior of a kind in which the tester is interested are said to have "face validity". Two major questions must be answered: 1) whether the instrument is measuring

the kind of behavior that the investigator assumes it is and 2) whether it provides an adequate sample of that kind of behavior (Seltiz, 1964).

The 16 photographs were divided into the four groups: white boys, white girls, Negro boys, and Negro girls. Each group was shuffled and one from each group was mounted randomly on white paper 9" x 12". These sheets were shuffled before each child was tested so a semi-random procedure was used to assure as nearly as possible a selection of every possible combination of the photographs involved.

The test for validity was administered to children in Orchard

Street Nursery School spring term, 1969, following the gathering of
the data. The subjects were not involved in the testing for this study.

The subjects for the validity test ranged from three years ten months
to four years four months while the subjects for the study ranged
from three years six months to five years six months. These questions
were asked each subject: 1) to show the test can measure sex
identification: "Which two children are boys? Which two children
are girls?"; 2) race identification: "Which two children are Negro
(colored or black)?" and "Which two children are white?". Subjects
were able to identify photographs of both their own and opposite sex
and racial groups used in the Picture Preference Test.

Of the 11 subjects all were able to identify sex and racial group pictures in the test. Of the 88 chances to choose girls as

girls, 87 were chosen or 99 percent; of the 88 chances to choose boys as boys, 87 were chosen; of the 88 chances to choose Negro, colored, black children as Negro, colored, or black children, 86 were chosen or 98 percent; of the 88 chances to choose white children as white children, 86 were chosen or 98 percent. The children able to identify Negro children was N = 2; the rest identified Negro children as black. This provided the basis for the assumption that the Picture Preference Test is effective as a research instrument for understanding the race and sex factors in the friendship preferences of white preschool aged children.

RESULTS

The data collected for this study were analyzed by computing the mean choice frequencies within each of the groups and comparing this frequency to a hypothetical mean of 16.00. This hypothetical mean represents the average number of choices if no preference is operative. The statistic used was the t-test. This analysis allows a direct comparison of the results from Group I of this with the Abel-Sahinkaya study. Since these data deal directly with the attempt to replicate the earlier study, they are presented separately and then are followed by the results of the tests of hypotheses.

Replication Study

Table 5 presents the means and variances of the preference choices for the subjects own race and own sex. These are presented for the four group classifications younger, older, boys, and girls.

Table 6 presents t-scores for the age and sex choices in the Abel and Sahinkaya study and Group I: upper middle socioeconomic status white children for preferences for own race and same sex.

The comparison of t-values for race preferences indicates that the Group I replication found no significant differences whereas the Abel study reported significant findings with respect to both the older group and the boys.

Table 5. Means and variances of age and sex group choices in Abel & Sahinkaya study and Group I: Upper White for preferences for own race and same sex.

	Abel	& Sahinl	caya Study	Gro	oup I: Up	pper White		
Group		Choice of own race						
	N	Mean	Variance	N	Mean	Variance		
Younger	16	 16. 4	32. 1	10	17.1	31.2		
Older	32	21.3	66. 1	17	16.8	36. 1		
Boys	26	21.3	54. 6	11	18.7	34.2		
Girls	22	17.6	60.0	16	15.6	30.3		
			Choice of	same se	<u>x</u>			
Younger	16	18.6	23.8	10	19.7	38.7		
Older	32	21.4	36.7	17	20.6	39.3		
Boys	26	20.6	46.8	11	17.1	25.7		
Girls	22	20.1	23.9	16	22.4	35.9		

Table 6. t-Scores of age and sex choices in Abel & Sahinkaya study and Group I: Upper White for preferences for own race and same sex.

	Abel & S	ahinkaya Study	Group I:	Upper White				
Group		Choice of own race						
	N	t-value	N	t-value				
Younger	16	0.26	10	0.62				
Older	32	2.60*	17	0.53				
Boys	26	2.90**	11	1.55				
Girls	22	0.84	16	-0.27				
		Choice of	same sex					
Younger	16	2.14*	11	1.88				
Older	32	3.57**	17	3.02**				
Boy s	26	2.70*	11	0.71				
Girls	22	3.35 [*] *	16	4.30**				

^{*}Significant at the 5% level.
**Significant at the 1% level.

The comparison of results of sex preference choices indicates agreement with respect to significant findings in both studies for the older group and the girls, however, the Abel study also reported significant choice t-values for the younger group and the boys while the Group I replication found no differences in these groups.

Tests of Hypotheses

Table 7 presents the means and variances of the preference choices for the subject's own race and same sex. These are presented for Group I: Upper white; Group II: Lower white; Group III: Lower Negro; and for each of the sub-groups: Younger, Older, Boys, and Girls.

The results of test of hypotheses which follow represent the testing of each hypothesis with respect to four groupings: younger children, older children, boys, and girls.

Hypothesis I

Hypothesis I: The incidence of race preference in preschool children will not differ significantly from choice expectation.

Table 8 presents t-scores of choice frequencies analyzed against a hypothetical mean of 16 for the subjects! own race choices for each of the groups.

Group I - Upper White: The null hypothesis cannot be rejected

Table 7. Means and variances of age and sex group choices in Group I: Upper White, Group II: Lower White, Group III: Lower Negro for preference for own race and same sex.

	Gro	Group I: Upper White			Group II: Lower White			Group III: Lower Negro		
Group	N	Mean	Variance	$\frac{Ch}{N}$	oice of c	Variance	N	Mean	Variance	
Younger	10.	17.1	31.2	8	18.0	52.3	18	14.3	72.6	
Older	17	16.8	36.0	17	19. 1	5.3.9	9	15.9	45.4	
Boys	11	18.7	34.2	10	22.8	3.0.6	14	16.7	81.5	
Girls	16	15.6	30.3	15	16.0	4.8.7	13	12.8	37.6	
				<u>C1</u>	oice of	own sex				
Younger	10	19.7	38.7	8	19.9	46.4	18	22.1	90.1	
Older	17	20.6	39.3	17	22.5	34. 1	9	16.9	44.6	
Boys	11	17.1	25.7	10	21.4	71.6	14	17.8	109.4	
Girls	16	22.4	35.9	15	21.9	18.8	13	23.1	36.4	

Table 8. t-scores of age and sex choices in Group I: Upper White, Group II: Lower White, Group III: Lower Negro for preferences for own race.

Group	Group I: Upper White		-	Lower White of own race	Group III: Lower Negro	
	N	t-value	N	t-value_	<u> </u>	t-value_
Younger	10	0.62	8	0.78	18	-0.83
Older	17	0.53	17	1.72	9	-0.05
Boy s	11	1.55	10	3.89**	14	0.30
Girls	16	-0.27	15	0.00	13	-1.85

^{**}Significant at the 1% level.

for any of the sub-groups; Younger, Older, Boys, or Girls, indicating that racial preference at a significant level does not exist to a significant degree.

Group II - Lower White: The null hypothesis is rejected for only the sub-group Boys, substantiating that social preference does exist for lower white boys. Inability to reject the hypothesis for any of the other sub-groups indicates that racial preference does not exist for younger children, older children, or girls.

Group III - Lower Negro: The null hypothesis fails to be rejected for any of the sub-groups Younger, Older, Boys, or Girls indicating that racial preference at a significant level does not exist.

Hypothesis II

Hypothesis II: The incidence of sex preference in preschool children will not differ significantly from chance expectation.

Table 9 presents t-scores of choice frequencies analyzed against a hypothetical mean of 16 for the subjects' same sex choices for each of the groups.

Group I - Upper White. The null hypothesis is rejected for sub-groups Older and Girls, signifying sexual preference does exist for the 4.51-5.50 year group and for girls. The null hypothesis is not rejected for the other sub-groups Younger and Boys denoting a lack of same sex preference for younger children and for boys.

Table 9. t-Scores of age and sex choices in Group I: Upper White, Group II: Lower White, and Group III: Lower Negro for preferences for same sex.

			Choice	of same sex			
	Upper White		Lov	ver White	Low	Lower Negro	
	N	t-value	N	t-value	N	t-value	
Younger	10	1.88	8	1.61	18	2.71	
Older	17	3.02**	17	4.61**	9	0.40	
Boys	11	0.71	10	2.02	14	0.64	
Girls	16	4.30**	15	5.24**	13	4. 23**	

^{*}Significant at the 5% level.

Group II - Lower White. The null hypothesis was rejected for sub-groups Older and Girls denoting a sex preference in the 4.51 - 5.50 sub-group and Girls sub-group. The null hypothesis was not rejected for sub-groups Younger and Boys showing no significant sex preference by 3.51 - 4.50 sub-group and Boys sub-group.

Group III - Lower Negro. The null hypothesis was rejected for sub-groups Younger and Girls denoting a sex preference for younger children and for Girls. The null hypothesis was not rejected for sub-groups Older and Boys suggesting no sex preference for the older children and boys.

Hypothesis III

Hypothesis III: For preschool children no significant difference will exist in the incidence of racial or sexual preference.

Table 10 lists the t-scores for age and sex choices in relative

^{**}Significant at the 1% level.

Table 10.	t-Scores of relative strength of race/sex choices for age
	and sex subgroups.

	Upper White		Lov	wer White	Lower Negro	
Group	N	t-value	N	t-value	N	t-value
Younger	10	-1.65	8	-0.43	18	-2,45*
Older	17	-1.58	17	-1.67	9	-0.34
Boys	11	. 75	10	.50	14	-0.30
Girls	16	-3.64**	15	-2.43*	13	-3.90**

^{*}Significant at 5% level.

strength of race/sex choices for the three groups Upper White, Lower White, and Lower Negro.

Group I - Upper White. The null hypothesis is rejected for one sub-groups, Girls, which indicates girls of upper socioeconomic status chose friends on the basis of same sex significantly more than own race. The null hypothesis is not rejected for the other three sub-groups Younger, Older, and Boys, giving evidence that younger children, older children, and boys do not choose friends more on the basis of same sex than own race.

Group II - Lower White. The null hypothesis is rejected for the same sub-group as the Group I sub-group, Girls, indicating lower socioeconomic status white girls also make friendship choices on the basis of sex more than on the basis of race. The null hypothesis was not rejected in the sub-groups Younger, Older, and Boys, revealing that younger children, older children, and male children do not choose friends more on the basis of same sex than on the basis

^{**}Significant at 1% level.

of own race.

Group III - Lower Negro. The null hypothesis was rejected in two sub-groups, Younger and Girls, indicating that the younger and female children in this group chose friends more on the basis of sex than own race at a significant level. The null hypothesis failed to be rejected in two sub-groups, the Older and Boys, giving evidence that older children and male children do not show a significant friendship preference on the basis of same sex over own race choice.

Socioeconomic Status of Subject as Related to Choice

In the socioeconomic status group comparison Group I - Upper White and Group II - Lower White was compared, therefore only one factor is varied.

Race Choice

Lower White socioeconomic status group sub-group Boys was the only sub-group that made significant race friendship choices in all eight of the sub-groups of lower and upper socioeconomic white groups. This suggests that in both lower and upper socioeconomic groups only lower socioeconomic status boys chose friends on the basis of own race. The upper and lower status groups only differ in the sub-group Boys.

Sex Choice

Lower White socioeconomic status groups and Upper White socioeconomic status groups both have two sub-groups that are statistically significant, the older children and the girls, and the two groups have the same sub-groups that did not choose same sex at a significant level, the younger children and boys. In essence, the upper and lower socioeconomic groups do not differ in choice of playmates on the basis of sex.

Race/Sex Choice Strength

Lower White does not differ from Upper White in choosing friends on the basis of same sex more than own race. The Girls subgroups both chose on the basis of same sex more than on the basis of own race, but Younger, Older, and Boys fail to choose friends more on the basis of same sex rather than own race.

Race of Subject as Related to Choice

In comparing the race groups the same socioeconomic group,

Lower, was used so only one factors, race, was varied, Group II

compared to Group III.

Race Choice

The only sub-group that differed in significance is the boys and the white boys chose on the basis of own race at a significant level while Negro boys did not. All other sub-groups: Younger, Older, Girls, in both Negro and white groups, fail to choose friends on the basis of own race at a significant level.

Sex Choice

The Boys sub-group is the same for both races and both fail to choose friends on the basis of sex at a significant level. The girls from both Negro and white groups chose friends on the basis of sex.

The white younger children do not choose on the basis of sex but the Negro younger children do choose friends on the basis of sex. The Older sub-group differs in sex friendship choice frequency: the Negro older group does not choose friends on the basis of sex, but the white older group does.

Race/Sex Choice Strength

The sub-groups Older and Boys in both Negro and white groups did not choose on the basis of sex more than on the basis of race.

The Younger sub-groups for Negro and white chose differently; the white younger children do not choose on the basis of sex more than

the basis of race, but the Negro younger children do. Both the Negro and white groups sub-group Girls chose on the basis of sex more than on the basis of race.

SUMMARY AND CONCLUSIONS

Summary

Of the studies done on race awareness, the review of literature has pointed out that an awareness of race and sex differences exists at the preschool level. There is, however, controversy about how the racial and sexual preferences of preschool children is related to their age, sex, socioeconomic status, and race. There is also controversy concerning the relative strength of racial and sex preference for the preschool child as related to age, sex, socioeconomic status, and race. The controversy continues without any definite solution.

The primary focus of this thesis was to replicate Abel and Sahinkaya's study which investigated race and sex preference relative to age and sex in upper middle status white children, and also, this study extended the questions of race and sex choices to children from a white lower socioeconomic status group and a Negro lower socioeconomic status group. Data on race and sex choices from these groups (Upper White, Lower White, Lower Negro) were then used to test the following hypotheses.

- Hypothesis I: The incidence of race preference in preschool children will not differ significantly from chance expectation.
- Hypothesis II: The incidence of sex preference in preschool children will not differ significantly from chance expectation.
- Hypothesis III: For preschool children, no significant difference

will exist in the incidence of racial or sexual preference.

Each hypothesis was considered with respect to age, sex, socioeconomic status, and race of the subject.

Seventy-nine children of preschool age were subjects for the study: upper middle status white children (11 boys, 16 girls); 25 lower status white children (10 boys, 15 girls); lower status Negro children (14 boys, 13 girls); the subjects ranged in age from 3.5 to 5.5. The upper middle status whites were from Oregon State University laboratory nursery schools, lower status whites were from Monroe, and Philomath, Oregon summer Head Start programs, and the lower status Negro children were from a Head Start Day Care program at Albina Day Care Center in Portland, Oregon.

A picture preference test duplicating as nearly as possible the one used in Abel and Sahinkaya's study (1962) was used as the research instrument. The test consisted of sixteen 3 1/2" x 5" black and white smiling facial photographs of children 3.5 to 5.5 years of age. Of the 16 photographs, four were of white boys, four were of white girls, four were of Negro boys, and four were of Negro girls. These photographs were chosen by a panel of eight judges from a larger sample according to criteria described earlier in this thesis.

After the selection was made, the photographs were paired to make 32 pair, in which race was controlled and sex varied, and 32

pair in which sex was controlled and race varied. The children were asked to choose a friend they would like to play with. Duplicate photographs were made and two pamphlets were constructed. The arrangement in one pamphlet was prepared to test race preference and the arrangement in the other, tested sex preference. The pamphlets were administered in separate sessions and the PPVT was administered between these sessions.

Results of the analysis indicated that the replication did not support the Abel and Sahinkaya study in all respects particularly since no incidence of race preference was found for either the younger or older children and sex preference emergence was later in the present study than the Abel study. The earlier study found that boys showed both race and sex preferences and this study found neither. Both studies found sex preference for girls. In the extension test results of Hypothesis I showed that only white lower status males had race preference while Hypothesis II test results showed the girls from every group, Upper White, Lower White, and Lower Negro, showed preference for their same sex as did the older upper and lower white children and the younger lower status Negro children. The test results of Hypothesis III showed sex choices were stronger than race choices in all three groups for girls and for the younger children of both sexes in the Negro group. The socioeconomic comparisons, Group I with Group II, indicated that only the boys in

the lower socioeconomic status group evidenced a race preference.

When sex preference was tested in Group I and Group II the results indicated the presence of such a preference in the older children and girls in both groups. The race comparison, Group II and Group III, revealed that only white boys showed race preference, Negro children did not. In race choice Negro and white younger children, older children, and girls showed no race preference. Sex preferences were observed for both Negro and white girls, but not for Negro or white boys. In addition, younger Negro children showed sex preference, but the findings regarding sex preference were reversed for the older groups; white children showed a sex preference, but Negro children did not.

In general, the replication attempt produced some conflicting results, however, the difference in sample size probably precludes a direct comparison. In addition, data for this study were collected in the Northwest and other literature in this area suggests geographic differences may play a role in the emergence and intensity of race and sex preference.

Implications

Implications of the findings of this study add further to the controversy regarding race and sex preferences in preschool children. The replication study will be considered in the sections on

preferences as related to age of the subject and preferences as related to sex of the subject; the extended study will then be considered, preferences related to race of the subjects, preferences as related to socioeconomic status of the subject and finally the relative strength of race versus sex choices.

Emergence of Racial and Sexual Preferences

Race Preference. Only one study dealt specifically with emergence; the Abel and Sahinkaya study (1962) found sex differences emerging earlier than race differences, race preferences emerging at five and sex preferences emerging at four. Race cleavage was found by Lambert and Taguchi (1956) in both Oriental and white children and by Stevenson and Stewart (1958) in both Negro and white as young as three. The present study did not find race cleavage in the replicated study. However, in the extension the replication study was supported but only for lower status white males.

Sex Preference. Springer (1950) reported sex cleavage in children as young as three years of age and Abel and Sahinkaya (1962) in the age range 3.51 to 4.50 years. Results in the present study indicate that in the upper middle status white children sex cleavage existed only in the older children; that is 4.51 to 5.50, and in addition the results indicated that sex cleavage existed for girls and not for boys. Considering the results from lower socioeconomic groups

both Negro and white children, sex cleavage existed for lower white older children and lower white girls, for lower Negro younger children and for Negro girls. These results at least for lower status Negro would support the presence of sex cleavage at an earlier age, one which corresponds more directly to ages suggested by Springer and Abel. One needs to remember, however, that this confirmation comes from a different race and different socioeconomic combination.

Preference as Related to Sex of the Subject

Race Preference. Race preference as related to sex of the subject was investigated in each of the three groups but only one significant finding was noted and that was in respect to the lower status white children where boys chose their own race more often than did girls. All other tests of race preferences as related to sex were not significant. In general, the studies attempting to relate race preferences to sex have been unsuccessful. Those which have reported significant findings have been in the direction of boys prefering their own sex more often than do the girls; therefore, the definitive statements regarding concurrence of this study with previous literature are difficult. One can see an agreement regarding the trend for boys to select their own race more often than girls but it must be noted that this trend was only true in one of the three groups in which this comparison was made.

Sex Preference. The incidence of sex preference as related to the sex of the subject seems much clearer with respect to the subjects of this study; each group of girls, Upper White, Lower White, and Lower Negro, showed more sex cleavage than did boys. These findings are in general agreement with previous research literature which indicates that there is more sex cleavage for girls than for boys.

There are only two studies which provide results for a direct comparison with previous literature and these are McCandless and Hoyt (1961) where both boys and girls presented sex cleavage. The trend in the Abel and Sahinkaya (1962) study, however, was for boys a higher incidence as judged by significance levels. This study concurs that sex preference is related to sex of the subjects for females.

Preference as Related to Race of the Subject

Race Preference. Previous literature indicates strongly that one would expect to find white children choosing their own race more often and Negro children choosing outside their own race more often. This study concurs at least for white lower status boys that white children choose their own race. However, the Negro children in this study did not choose outside their own race at a significant level.

Sex Preference. One study dealt with sex cleavage as related to

race: Koch found white boys and girls had stronger sex cleavage than Negro children. In the present study, Upper White, Lower White, and Lower Negro girls showed sex cleavage and the boys did not.

Preference as Related to Socioeconomic Status

Race Preference. Although two studies, Morland and Vaughn, found lower status whites showed more race leeavage than upper status whites, a third study, Landreth, found upper white girls, and lower white boys showed more race cleavage than upper white boys and lower white girls. This study found no race cleavage in either upper or lower white groups except lower lower white subgroup Boys.

Sex Preference. No studies were reviewed that dealt with differences in sex preference between upper and lower status children. In this study both lower and upper status girls preferred their own sex but both upper and lower status boys did not.

Relative Strength of Race Versus Sex Choices

The literature shows a difference in strength of race versus sex choices. More of the studies show greater emphasis on sex than race in friendship preference: Moreno (1934), Criswell (1939), Helgerson (1943), and Abel and Sahinkaya (1962). Three studies showed greater emphasis on race than sex: Lambert and Taguchi (1962), McCandless and Hoyt (1961), and Springer (1950). Landreth and

Johnson (1953), Stevenson and Stewart (1958), and Sugawara (1967) show no consistent pattern. In general, this study concurs with the presence of stronger sex than race preferences for lower Negro younger children and for upper white, lower white, and Negro girls.

Limitations Encountered in the Study

A number of problems exist in a study of this kind that are very difficult to overcome so limit the generalizations possible.

Limitations of the Sample

The major limitations encountered relative to the sample were 1) representations of only white and Negro race, 2) representation of only lower status Negro children, 3) of the individual groups, the upper white and Negro groups had some other race children, but the lower white group had only white children, 4) lack of control for variables of interracial contacts outside of the preschool situation and lack of control of parental attitudes toward race, 5) the sample was from the Northwestern United States, 6) the sample individual groups were rural urban, and sub-urban, 7) I.Q. was not controlled within groups, 8) variation in skin color of Negro subjects was not controlled, 9) the sample size limitations.

All of these limitations place restrictions on the generalizations possible from this study.

Since the sample was from the Northwest and the only study found in the literature from this area and its conclusions were quite different from those of other regions of the United States, and from foreign countries, this study may add to the fund of knowledge, but only as representative of this area.

Since each socioeconomic group was from a different size community, results may be attributed to rural versus small urban and large or metropolitan areas. Group I was from Corvallis, Oregon, population 31,350; Group II, from Philomath, Oregon, population 1,600, and Monroe, Oregon, population 380; Group III was from Portland, Oregon, population 372-676.

Since the I.Q. scores for the groups were so different, results could be attributed to this difference. The subjects from Group I had 115.4 average; Group II, 90.9 average; Group III, 84.3 average, while a random sample of the replicated study had an I.Q. of 123.1.

All these limitations must be recognized when considering the results of this study.

Limitations of the Picture Preference Test

The major limitation was the use of black and white photographs instead of color, and the lack of a third racial group,
Orientals.

The lack of ability of the researcher with the Polaroid camera

made the Negro children very dark and the white children very light which surely made them distinguishable by race, but hardly an accurate sample of the variety of skin colors actually existing.

The findings of this study must be considered in light of the limitations of both the sample and the instrument.

Limitation of Race and Sex of the Researcher

Rankin and Campbell (1955) found differences in galvanic skin response to Negro and white experimenters so race as a variable to control should not be overlooked and if children chose own sex surely sex of researcher should be controlled as well.

Recommendations for Further Study

As a result of the present study of race and sex preference of preschool children, several recommendations for further study have emerged.

First, a larger sample would reduce type I and type II errors (type I error is rejection of a true hypothesis, while type II error is the acceptance of a false hypothesis).

Second, a study which included Oriental children upper and lower socioeconomic status and Negro children of upper socioeconomic status as well as the groups encountered in this study would perhaps be more meaningful.

Third, the groups studied have children in all three races. Studies are lacking in which Orientals, Negroes, and whites are studied.

Fourth, the variable of interracial contacts outside the preschool and parental racial attitudes should be of major concern in future studies.

Fifth, variations in skin color should be controlled in subjects this could have been done in this study, but the sample size would
have been reduced even further.

Sixth, a Picture Preference Test in color of the variations of skin color existing and the addition of Orientals to the choice possibilities would add to the present body of knowledge.

Summarizing briefly, this study found agreement with the replicated study in that younger children and girls showed no race preference and that older children and girls showed sex preference. This study disagreed with the replicated study in race preference subgroups Older Children and Boys. The replicated study showed cleavage, the present study did not.

The test of Hypothesis I showed no significant race friendship preference in any of the groups sub-groups except for the Lower White Group sub-group Boys.

The test of Hypothesis II showed a significant sex friendship preference in Group I - Upper White, Older and Girls sub-groups; in

Group II - Lower White, Older and Girls sub-groups; in the Group
III - Lower Negro, Younger and Girls sub-groups.

The test of Hypothesis III found Group I - Upper White sub-group Girls; Group II - Lower White sub-group Girls; and Group III - Lower Negro sub-groups Younger and Girls made sex preferences more than race preferences.

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APPENDIX A

Directions for Judging Photos Used in Picture Preference Test

Each of eight judges were asked to select the 16 final photographs in the Picture Preference Test according to the following criteria:

- 1. Average attractiveness
- 2. The photographs should be distinguishable by race
- 3. The photographs should be distinguishable by sex
- 4. The photographs should have smiling faces
- 5. There should be three white boys, three white girls, three Negro boys and three Negro girls.

APPENDIX B

Scheme of the Picture Arrangement*

	e Girl e Boy	Negro Negro			o Girl e Girl	Negro White	
Α	E	I	M	${f E}$	M	Α	I
F	Α	N	I	N	E	J	A
Α	G	I	0	\mathbf{E}	0	Α	K
Н	Α	P	I	P	${f E}$	L	A
В	F	J	P	F	N	В	J
E	В	M	J	M	F	I	В
В	Н	J	N	F	P	В	L
G	В	0	J	0	${f F}$	K	В
С	${f E}$	K	M	G	M	С	I
F	С	N	K	N	G	J	С
С	G	K	0	G	0	С	K
Н	С	P	K	P	G	L	С
D	Н	L	P	Н	P	D	L
${f E}$	D	M	L	M	H	I	D
D	F	L	N	H	N	D	J
G	D	0	L	0	H	K	D

^{*}A-D white boys
E-H white girls
I-L Negro boys
M-P Negro girls

APPENDIX C

Scoring Sheet

Name			agesex						
Prete s	t			Final					
Sex Choice Cards			F	d s					
White Boy	White Girl	Negro Boy	Negro Girl	Negro Girl	White Girl	Negro Boy	White Boy		
A	E	I	M	${f E}$	M	A	I		
F	A	N	I	N	${f E}$	J	Α		
A	G	I	0	\mathbf{E}	0	A	K		
Н	A	P	I	P	E	L	A		
В	F	J	P	\mathbf{F}	N	В	J		
${f E}$	В	M	J	M	\mathbf{F}	I	В		
В	Н	J	N	\mathbf{F}	P	В	L		
G	В	0	J	0	F	K	В		
С	${f E}$	K	M	G	M	C	I		
\mathbf{F}	С	N	K	N	G	J	С		
С	G	K	0	G	0	C	K		
Н	C	P	K	P	G	L	С		
D	Н	L	P	H	P	D	L		
E	D	M	L	M	Н	I	D		
D	F	L	N	H	N	D	J		
G	D	0	L	0	Н	K	D		

APPENDIX D

Dear Parents,

Recently the staff of the Family Life Department reviewed and accepted the graduate research proposal of Mrs. Lesley Morris. She will be administering tests to all of the children in Orchard Street and Park Terrace Nursery Schools before the end of this term. She will be investigating patterns of play and playmates.

Would you please indicate your approval by signing below. Thank you for your cooperation.

 (Signature)	

APPENDIX E

Albina Child Care Services

May 28, 1968

Dear Parents:

Mrs. Leslie Morris from Oregon State University will be administering tests to the children enrolled in the Center beginning June 3rd. The tests are not complicated, takes only 15 minutes, and are fun for the children. They are designed to determine vocabulary level and to provide information regarding how early (what age) children begin to select their playmates.

Would you please indicate approval for your child to participate in this study by signing below.

Sincerely,

Sam J. Granato
Project Director

My child(ren),	, may
participate in the study t	o determine children's choice of playmates.
	(Signature of Parent)

Please give to Teacher

APPENDIX F

Occupations of Parents

Lower White	Upper Middle White	Lower Negro 1
Carpenter	College teacher	Separated
In prison	Graduate assistant	Machinist
Sheet metal	Army Major	Athletic director, Seacamp Unemployed Seaman
Mechanic	Draftsman OSU	Transmission shop
Cook unknown	Cold Mill operator	-
Forest products	Wah Chang Professor	Mail carrier
Welder	Professor	Water Bureau 2
Parts department	Undergraduate	Hospital attendant
Unemployed	Professor	Waiter
Lumber mill	Professor	waiter 2
Laborer	Cascade Appliance	Seaman
Laborer at mill	Orthodontist	Air Force
Sawmill worker	Chemist	
Sawmill worker	2	Unemployed 2 Separated
Father? Welfare	Ph. D. student	_
Milker	Research engineer	Grocery store clerk Widow, Textronics
Mill worker	Ph. D. student	2
Welder	Asst. Principal, High School	Separated
Maintenance man	Professor	Unknown whereabouts
Custodian	Professor	
Millworker	Ph. D. student	
Car checker, Plywood worker	Advertising manager Junior High teacher	
	Master's student	
	President of firm	
	Professor	
	Army officer	

 $^{^{1}}$ More than one child from family accounts for fewer listed occupations.

² Left application slip blank; sometimes divorced, separated, or father unknown.

Appendix G. Revised scale for rating occupation.

Rating Assigned to Occupation	Professionals	Proprietors and Managers	Business Men	Clerks and Kindred Workers, Etc.	Manual Workers	Protective and Service Workers	Farmers
1	Lawyers, doctors, dentists, engineers, judges, high- school superintendents, veterinarians, ministers (graduated from divinity school), chemists, etc. with post-graduate train- ing, architects	Businesses valued at \$75,000 and over	Regional and divisional managers of large financial and industrial enterprises	Certified Public Accountants			Gentleman farmers
2	High-school teachers, trained nurses, chiropodists, chiropractors, undertakers, ministers (some training), newspaper editors, librarians (graduate)	Businesses valued at \$20,000 to \$75,000	Assistant managers and office and department managers of large businesses, assistants to executives, etc.	Accountants, salesmen of real estate, of insurance, postmasters			Large farm owners, fare owners
3	Social workers, grade-school teachers, optometrists, librarians (not graduate), undertaker's assistants. ministers (no training)	Businesses valued at \$5,000 to \$20,000	All minor officials of businesses	Auto salesmen, bank clerks and cashiers, postal clerks, secretaries to executives, supervisors of railroad, tele- phone, etc., justices of the peace	Contractors		
4		Businesses valued at \$2,000 to \$5,000		Stenographers, bookkeepers, rural mail clerks, railroad ticket agents, sales people in dry goods store, etc.	Factory foremen electricians) plumbers) own business carpenters) watchmakers)	Dry cleaners, butchers, sheriffs, railroad engineers and conductors	
5		Businesses valued at \$500 to \$2,000		Dime store clerks, hardware salesmen, beauty operators, telephone operators	Carpenters, plumbers, elec- tricians (apprentice), time- keepers, linemen, telephone or telegraph, radio repairmen, medium-skill workers	Barbers, firemen, butcher's apprentices, practical nurses, policemen, seam- stresses, cooks in restaur- ant, bartenders	Tenant farmers
6		Businesses valued at less than \$500			Moulders, semi-skilled workers, assistants to car- penter, etc.	Baggage men, night police- men and watchmen, taxi and truck drivers, gas sta- tion attendants, waitresses in restaurant	Small tenant farmers
. 7					Heavy labor, migrant work, odd-job men, miners	Janitors, scrubwomen, newsboys	Migrant farm laborers

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