INFORMATION TO USERS

This was produced from a copy of a document sent to us for microfilming. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help you understand markings or notations which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting through an image and duplicating adjacent pages to assure you of complete continuity.

2. When an image on the film is obliterated with a round black mark it is an indication that the film inspector noticed either blurred copy because of movement during exposure, or duplicate copy. Unless we meant to delete copyrighted materials that should not have been filmed, you will find a good image of the page in the adjacent frame. If copyrighted materials were deleted you will find a target note listing the pages in the adjacent frame.

3. When a map, drawing or chart, etc., is part of the material being photographed the photographer has followed a definite method in "sectioning" the material. It is customary to begin filming at the upper left hand corner of a large sheet and to continue from left to right in equal sections with small overlaps. If necessary, sectioning is continued again—beginning below the first row and continuing on until complete.

4. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to our Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases we have filmed the best available copy.
MUNOZ, MILLIE CARIDAD

AN EXPLORATORY STUDY OF THE EFFECTS OF YOUNG CHILDREN'S COLOR BIASES, RACIAL ATTITUDES, AND RACIAL PREFERENCES ON THEIR SHARING BEHAVIOR

The University of North Carolina at Greensboro

University Microfilms International

University of North Carolina at Greensboro  Ph.D.  1981

300 N. Zeeb Road, Ann Arbor, MI 48106
AN EXPLORATORY STUDY OF THE EFFECTS OF YOUNG CHILDREN'S COLOR BIASES, RACIAL ATTITUDES, AND RACIAL PREFERENCES ON THEIR SHARING BEHAVIOR

by

Millie Munoz

A Dissertation Submitted to the Faculty of the Graduate School at The University of North Carolina at Greensboro in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

Greensboro 1981

Approved by

[Signature]
Dissertation Adviser
This dissertation has been approved by the following committee of the Faculty of the Graduate School at the University of North Carolina at Greensboro.

Dissertation Adviser
Nancy White

Committee Members
J. Allen Watson
Helen Cassidy
William A. Brown

June 9, 1981
Date of Acceptance by Committee

June 9, 1981
Date of Final Oral Examination
The primary purpose of this study was to assess the relationship between children's color/race biases and preferences and their sharing behaviors toward children of similar and differing races. A secondary, but nevertheless important, purpose was to determine if a white color/race bias and preference continues to exist among the majority of both black and white preschoolers as has been suggested by the bulk of the current literature. The investigation also attempted to determine if color bias was an influencing factor in the development of racial attitude and racial preference.

Subjects consisted of 40 low-income black and white males, ages three to five years, attending various federal, community, and privately sponsored day-care centers in the metropolitan city of Greensboro, North Carolina. Only children whose day-care fees were subsidized, at least in part, by a social agency were selected as subjects.

The research presented a design in which each of the 20 black and 20 white preschoolers was administered individually four racial concept measures during two testing sessions. At the end of the second testing session, each child was asked to share one of the nickels, received for participation, with either a white or black hypothetical preschooler presented in the form of a painted facial
profile. Color bias was measured by the Color Meaning Test (CMT), racial attitude by the Preschool Racial Attitude Measure (PRAM), and racial preference by the preference subscales of the Morland Picture Interview (MPI), and the Clark Doll Test (CDT).

Three major hypotheses were tested: (1) that there would be no significant differences in the color biases, racial attitudes, and racial preferences of the black and white subjects; (2) that color/race biases and preferences would directly influence sharing behavior; and (3) that color biases would be directly related to racial attitudes and preferences. The data supported all three hypotheses. It was found that there were no significant differences in the responses of both racial groups on the four racial concept measures administered. The numbers, although not statistically significant, seemed to cautiously suggest that the majority of both black and white subjects evidenced an overall white color/race bias and preference. Color bias, racial attitude, and racial preference also seemed to influence directly sharing preference. That is, the majority of subjects who evidenced a white race/color bias and preference chose to share with the white recipient, and those displaying a black race/color bias and preference chose to share with the black recipient. It was also found that color bias was directly related to racial attitude and racial preference. The CMT, PRAM, and CDT as racial concept measures were found to be significantly interrelated and to be predictive of sharing behavior within the design constraints of the investigation.
ACKNOWLEDGMENTS

The writer wishes to express a deep appreciation for the many helpful suggestions and advice offered by the following committee members: Dr. Nancy White, Associate Professor of the Department of Child Development and Family Relations; Dr. Helen Canaday, Professor and Administrator of the Child Development Laboratories; Dr. James Watson, Professor and Chairman of the Department of Child Development and Family Relations; and Dr. William Powers, Associate Professor of Mathematics. A special thanks is also expressed to Dr. Angela Pope of the Statistical Consulting Center of the Department of Mathematics, University of North Carolina at Greensboro.

In addition to the excellent support received from the committee members, the writer wishes to acknowledge the American Nurses Association's Ethnic/Racial Minority Fellowship Program for its role in helping finance the project. The writer is also deeply indebted to the children and staff members of the Ray Warren Day Center, the Morningside Day-Care Center, Hester's Creative Schools, and Guilford Technical Institute's Child Care Center for their consistent cooperation and helpfulness throughout the study. A "thank you" is also extended to Mrs. Patty Herring for all her typing and editing assistance.
Lastly, I wish to thank three very special people without whose emotional support this research could not have been completed. To my husband, Dr. Luis Munoz, my deepest love and gratitude for his enduring confidence, patience, wonderful pep talks, and overall support during this endeavor. Finally, to my parents, I convey my eternal gratitude for all the unconditional love and dedication they provided me in my younger years. Without this, successes such as these would never have been possible.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>APPROVAL PAGE</td>
<td>ii</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>viii</td>
</tr>
<tr>
<td><strong>CHAPTER</strong></td>
<td></td>
</tr>
<tr>
<td><strong>I. INTRODUCTION</strong></td>
<td>1</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>1</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>3</td>
</tr>
<tr>
<td>Scope of the Study</td>
<td>9</td>
</tr>
<tr>
<td>Assumptions</td>
<td>10</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>11</td>
</tr>
<tr>
<td>Hypotheses</td>
<td>12</td>
</tr>
<tr>
<td>Strengths and Limitations</td>
<td>14</td>
</tr>
<tr>
<td><strong>II. REVIEW OF RELATED LITERATURE</strong></td>
<td>17</td>
</tr>
<tr>
<td>Young Children's Development of Race/Color Bias</td>
<td>17</td>
</tr>
<tr>
<td>Summary of the Research on Color Biases, Racial</td>
<td>37</td>
</tr>
<tr>
<td>Attitudes and Racial Preferences in Children</td>
<td>37</td>
</tr>
<tr>
<td>Research on Sharing Behavior in Children:</td>
<td>38</td>
</tr>
<tr>
<td>A Brief Overview</td>
<td>38</td>
</tr>
<tr>
<td>Summary of Research Relating Sharing Behavior</td>
<td>45</td>
</tr>
<tr>
<td>And Racial Variables</td>
<td>45</td>
</tr>
<tr>
<td><strong>III. METHODOLOGY</strong></td>
<td>46</td>
</tr>
<tr>
<td>The Sample</td>
<td>46</td>
</tr>
<tr>
<td>Experimental Design</td>
<td>47</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>53</td>
</tr>
<tr>
<td>Methods of Data Analysis</td>
<td>60</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>-------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>IV. RESULTS</td>
<td>62</td>
</tr>
<tr>
<td>Additional Analyses</td>
<td>74</td>
</tr>
<tr>
<td>Discussion of Results</td>
<td>75</td>
</tr>
<tr>
<td>V. SUMMARY AND CONCLUSIONS</td>
<td>87</td>
</tr>
<tr>
<td>The Research Design</td>
<td>88</td>
</tr>
<tr>
<td>Conclusions</td>
<td>89</td>
</tr>
<tr>
<td>Recommendations for Future Research</td>
<td>90</td>
</tr>
<tr>
<td>Implications</td>
<td>91</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>93</td>
</tr>
<tr>
<td>APPENDIX A</td>
<td>98</td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Man-Whitney U Test by Subjects' Race</td>
<td>66</td>
</tr>
<tr>
<td>2. Chi-Square Analysis of Composite Racial Preference Scores (MPI-CDT) by Race</td>
<td>65</td>
</tr>
<tr>
<td>3. Mann-Whitney U Test by Sharing Preference</td>
<td>67</td>
</tr>
<tr>
<td>4. Chi-Square Analysis of CMT Scores by Sharing Preference</td>
<td>69</td>
</tr>
<tr>
<td>5. Chi-Square Analysis of PRAM Scores by Sharing Preference</td>
<td>70</td>
</tr>
<tr>
<td>6. Chi-Square Analysis of Composite Racial Preference Scores (MPI-CDT) by Sharing Preference</td>
<td>72</td>
</tr>
<tr>
<td>7. Chi-Square Analysis of CDT Preferences and Sharing Preference</td>
<td>73</td>
</tr>
<tr>
<td>8. Chi-Square Analysis of CMT Scores by CDT Preferences</td>
<td>76</td>
</tr>
<tr>
<td>9. Chi-Square Analysis of PRAM Scores by CDT Preferences</td>
<td>77</td>
</tr>
</tbody>
</table>
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>FIGURE</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Racial Developmental Theory Model</td>
<td>22</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

Statement of the Problem

Past decades of research dealing with the concept of race and color in American society have revealed that the development of racial awareness in children begins at a very early age. More specifically, experts conceive that the formation of racial concepts based on perceived differences in race and color begins in the early preschool years (Allport, 1954; Katz, 1976; Williams & Morland, 1976). However, there are two important yet largely ignored groups of research problems in this area: (1) those which deal with what children's racial concepts mean in terms of other socially exhibited behavior, and consequently, how it translates into actions toward others; and (2) those which focus on the interrelationship among the various racial concepts denoted in the literature.

The large body of knowledge dealing with racial notions in children which has emerged in the past decade has frequently dealt with single, isolated racial concepts (e.g., color preference and meaning, racial preference, racial acceptance, racial identification, and racial attitude), and has failed to look at the responses of young children to racial stimuli from a multi-concept perspective—i.e., one in which several racial concept measures are employed simultaneously (Williams & Morland, 1976). At the same time, virtually no research
has focused on the relationship between racial multi-concepts and other social behaviors exhibited by children, particularly prosocial behaviors such as sharing (Mussen & Eisenberg-Berg, 1977). Williams and Morland (1976), in their book, Race, Color and the Young Child, reiterated the need for future investigations in this area. They stated in their chapter on substantive questions for future research that "one important line of investigation would involve the study of other behaviors of the child in relationship to the racial/color concepts he displays" (p. 307). They also suggested that few studies have attempted to investigate the interrelationship among several racial concepts and ask such questions as whether a child's racial/color bias in one direction or another results in the tendency to display racial preference in any one particular direction. The few studies conducted which have attempted to elucidate more clearly an interrelationship among racial concepts measures, however, have shown positive correlations between a child's tendency toward a clear directional bias on one measure and the same directional bias on another (Best, 1972; Boswell, 1974; Boswell & Williams, 1975; H. McAdoo, 1970; Mabe & Williams, 1975). Williams and Morland (1976) also pointed out that most studies which have looked at interrelationships between measures have not given adequate attention to possible order and sequence effects.

In relation to research in the area of altruistic behaviors in children, Mussen and Eisenberg-Berg (1977), in the concluding comments of their comprehensive book, Roots of Caring, Sharing and Helping, also touched upon the research gaps. They commented that while a
large volume of literature has been accumulated in the area of pro-social behaviors, it is only a very small fraction of what needs to be known. They suggested a research emphasis on isolating more antecedent and determinant variables which might contribute to a more complete picture. Their extensive review of the literature through 1977, and the present investigator's from 1977 through December 1980 revealed no studies in which children's sharing behavior was studied directly in terms of face, racial/color bias, and preference.

Purpose of the Study

Based on the research needs outlined by Williams and Morland (1976) and Mussen and Eisenberg-Berg (1977), the purpose of the present study was to assess the effects of several of a child's racial concepts (i.e., color bias, racial attitude, and racial preference) on his sharing behavior toward another child of the same or differing race. The study, therefore, used a racial multi-concept approach to the question: Is there differential sharing among children as a function of their racial/color bias and preference? The study also attempted to look at the relationship between the different measures included in the scope of the research.

The following is a brief synopsis of research findings, using the racial concepts measures employed in the present study, and of those studies indirectly relating sharing and racial variables. Major studies conducted which looked at racial concepts on young children have stemmed primarily from the work of three researchers, namely,
Kenneth Clark, Kenneth Morland, and John Williams. Their research constitutes the bulk of studies to date attempting to investigate color bias, racial attitude, and racial preference in preschoolers.

The earliest of these racial concepts studies were the classic investigations of Negro children conducted by Clark and Clark (1939, 1947) in which these children were shown dolls intended to represent Negro and white children. The subjects were asked to respond to a series of eight requests which required the children to choose among dolls. Their studies, which attempted to tap at racial identification and preference, suggested the presence of a pro-white/anti-Negro bias which was evident as early as three years of age. More recent investigations have revealed a similar finding showing that a majority of Negro preschool children do not express a strong positive attitude toward Negro dolls (Greenwald & Oppenheim, 1968; J. McAdoo, 1970). At the same time, these same studies have found that an overwhelming majority of young white preschoolers showed a strong positive bias toward the white doll and a strong negative bias toward the Negro doll. In general, the findings of the Clark Doll Test (CDT) studies of white and Negro children at the preschool-age level have found an associated positive evaluation with white dolls and negative association with Negro dolls for both racial groups. Concommitantly, other studies have shown that in the early school years, this trend continues among white children, while decreasing and sometimes reversing itself among Negro children (Fox & Jordan, 1973; Gregor & McPherson, 1966).

Although the racial concepts studies by Clark and Clark in the late 1930's and early 1940's have been helpful in pinpointing some of
the major determinants regarding racial bias in young children, more refined measurement procedures were developed from the work of Williams which started in the 1960's. The development of the Color Meaning Test (CMT) was prompted by the general hypothesis that the pervasive use of the colors white and black as cultural symbols with definite negative and positive associated connotations could have implications toward the development of definite color biases early in childhood. The CMT then attempted to measure the evaluative meanings associated with the colors black and white by children who were not capable of taking a pencil-and-paper test. In the CMT procedure the child is presented with a picture displaying the drawings of two animals, one colored white and one colored black, and identical in all other respects. The child is then told a story in which an evaluative adjective is used, and is asked to indicate which animal is the one described in the story (Renninger & Williams, 1966). The results of a large number of studies employing the CMT have shown that for both European-American (Euro-American) and African-American (Afro-American) children, as early as age three and through the early school-age years, there was a strong tendency to associate the color white with positive adjectives and the color black with negative adjectives, although the degree of white color bias of the Afro-American children was not as strong (Best, Naylor, & Williams; 1975; Boswell, 1973; Iwawaki, Sonoo, Williams, & Best, 1978; Shanahan, 1972; Williams, Boswell, & Best, 1975; Williams & Morland, 1976; Williams & Roberson, 1967; Williams & Rousseau, 1971). These studies represented results based on differing geographic regions, children of other cultures, and
children of varying ages, and therefore showed the consistency of the findings across varying demographic criteria.

A second measure seen as a subsequent complement to the CMT is the Preschool Racial Attitude Measure (PRAM), which involves the application of the method used in the CMT to assess a child's tendency to choose light-skinned (Euro-American) or dark-skinned (Afro-American) figures in response to stories containing positive and negative evaluative adjectives (Williams, Best, Boswell, Mattson, & Graves, 1975; Williams & Roberson, 1967). As was seen with the results of the CMT, a large number of studies using the PRAM with both Euro-American and Afro-American children revealed that there was evidence of a pro-Euro and anti-Afro bias for both groups, therefore, showing a tendency to associate positive evaluations with light-skinned figures and negative evaluations with dark-skinned figures, even though the E+/A- bias among Afro-American children was not as strong as that found by Clark and Clark in 1947 (Best, Naylor, & Williams, 1975; J. McAdoo, 1970; Williams, Best, Boswell, Mattson, & Graves, 1975).

A final group of studies using a racial concepts approach was conducted by Kenneth Morland. These included measures of racial response, not as direct as those of the CMT and PRAM, but which, nevertheless, appeared to depend heavily on the child's feelings about racial figures. The Morland Picture Interview (MPI) is a measurement procedure which involves the use of color photographs about which questions are asked. It consists of a series of six pictures, and includes items which measure racial preference, racial acceptance,
racial bias, perception of racial similarity, and classification. Because the present study concerned itself only with the racial preference subscale of the MPI, only the findings related to this construct were discussed briefly. Again, for both Euro-American and Afro-American preschool children, a pro-Euro preference bias emerged when subjects were asked with which children they would rather play (Morland, 1962, 1965, 1972; Williams & Morland, 1976). These research findings represented studies of various geographic regions within the United States, and subjects of varying ages from early preschool to early school age. It is interesting to note, however, that the studies revealed the racial preference of school-age Afro-American subjects to be in the direction of a pro-Afro bias. This perhaps suggests that the effects of a black-power ideology and a black-is-beautiful movement do not begin to show until after the early school-age period (Katz, 1976; Williams & Morland, 1976).

In summary, the findings of the research using the CDT, the CMT, the PRAM, and the MPI have indicated that, as early as the preschool years, the majority of both white and Negro children exhibited a strong tendency toward a pro-white/anti-Negro bias which seemed to last at least until the early school-age years. These findings seemed consistent both across differing geographic regions, cultures, and varying early-age groups.

In terms of sharing, only four related studies with contradictory findings (Meltzer, 1970; Panofsky, 1976; Zinser, Bailey, & Edgar, 1976; Zinser, Perry, Bailey, & Lydiatt, 1976) were found which looked at the effects of the race (either of the donor or the recipient) on sharing
behavior in children. All four studies used white middle- and upper-class children. Panofsky (1976), employing second graders, found no significant effect on sharing as a function of race. Meltzer (1970), using school-age females, found similar nonsignificant results. Zinser, Perry, Bailey, and Lydiatt (1976), using second- and third-graders and preschoolers, found significant differences in sharing as a function of the race of the recipient with the school-age children in the sample, and none with the preschoolers. The school-age children preferred the black and Indian recipients. On the other hand, Zinser, Bailey, and Edgar (1976) found significant differences in the sharing behavior of both preschool and school-age children toward recipients of different races. The preschoolers preferred the white recipient most, and the black least, while the school-age children preferred the Indian recipient over the black and white recipients. The results of this latter investigation and those of the previously cited research findings suggested that the influence of the race of the recipient on sharing behavior varied with experimental design used. In both the Zinser et al., studies, only white children were the donors. Again, while these studies investigated the effects of race of either the donor or the recipient on sharing, they failed to look directly at the subjects' racial concepts. Both the paucity of research and the contradictions of the findings were obvious, and perhaps a direct look at the subjects' racial concepts could allow for more consistent generalizations and findings.
Scope of the Study

Based on the racial concepts approach of the Clark Doll Test (CDT), the Color Meaning Test (CMT), the Preschool Racial Attitude Measure (PRAM), and the Morland Picture Interview Test (MPI), the present study investigated the effects of black and white preschool children's racial concepts on their sharing behavior toward children of the same or differing race. The study raised the following questions:

1. Is there a measurable difference between black and white children's preferences for the color white, as measured by the CMT?
2. Is there a measurable difference between black and white children's preferences for light- versus dark-skinned human figures as measured by the PRAM?
3. Is there a measurable difference between black and white children's preferences for white dolls as measured by the CDT?
4. Is there a measurable difference between black and white children's preferences for white children as measured by the MPI?
5. Is there a measurable difference in the sharing behavior of black and white children toward other children of the same or differing race?
6. If there is a difference, is the sharing behavior related to the subject's color/racial bias and preference as measured by the CMT, PRAM, MPI, CDT?
7. Is there an interrelationship between the various race and color concepts employed in the study (i.e., color bias, racial attitude, and racial preference)?

The research project presented a design in which the subjects (20 black and 20 white, low-socioeconomic class, male preschoolers, aged three to five years) were administered by white, female, independent experimenters, the Color Meaning Test (CMT), the Preschool Racial Attitude Measure (PRAM), the racial preference subscales of the Morland Picture Interview (MPI), and the Clark Doll Test (CDT). These measures were used as representative dimensions of the broader notion of the child's racial concept. The CMT and the PRAM were given as measures depicting color bias and racial attitude respectively; preference subscales of the MPI and CDT were given as measures of racial preference. The measures were randomly assigned in order to control for possible order and sequencing effects. At the end of the second testing session, the children had the opportunity to share nickels received for participation in the study with either a white or black male preschool figure presented to them.

Assumptions

The present study was based on the following assumptions:

1. That the subjects could discriminate between color.

2. That the subjects had preferences for either white or black colored animals and human figures.

3. That when subjects showed preference for animals and human figures of either white or black color, they were not indicating aversion to those not selected.
4. That the four measures employed were independent enough from each other to measure differing racial concepts.

5. That three-, four-, and five-year-old preschoolers were able to understand the adjectives employed in the measures.

6. That the subjects would share their nickels when asked by the experimenter.

**Definition of Terms**

The following is a list of term abbreviations used throughout the context of the study.

**CMT.** Refers to the Color Meaning Test used to assess black/white color bias.

**PRAM.** Refers to the Preschool Racial Attitude Measure used to assess racial attitudes.

**MPI.** Refers to Morland Picture Interview Test used to assess racial preference.

**CDT.** Refers to the Clark Doll Test used to assess racial preference.

**Afro.** Refers to a member of the Negro race.

**Euro.** Refers to a member of the Caucasian race.

b+/w-. Indicates a black bias, and therefore, a preference for the color black on the CMT.

w+/b-. Indicates a white bias, and therefore, a preference for the color white on the CMT.

E+/A-. Indicates an Euro bias, and therefore, a preference for light-skinned human figures on the PRAM.
A+/E-. Indicates an Afro bias, and therefore, a preference for dark-skinned human figures on the PRAM.

Pro-white/Anti-Negro. Indicates a white bias, and therefore, a preference for the white doll on the CDT, and for white children on the MPI.

Pro-Negro/Anti-white. Indicates a Negro bias, and therefore, a preference for the black doll on the CDT, and for black children on the MPI.

No Bias. Indicates there is no preference for either black or white colored animals or human figures as determined by the levels stated on the CMT and PRAM scoring categories.

Hypotheses

Independent variables used in the analyses included the race, and racial preferences of the subjects. In order to test several of the proposed hypotheses, color bias (CMT) and racial attitude (PRAM) measures were considered as dependent variables in order to look at possible race group differences in racial concepts. Sharing preference served both as an independent and dependent measure depending on the statistical analysis employed to test the related hypotheses.

Hypothesis 1. When race is the independent variable, there will be no significant differences in the black/white color bias (CMT), racial attitude (PRAM), and racial preference scores (MPI, CDT) of subjects.

Hypothesis 1a. When race is the independent variable, a significant number of both black and white subjects will exhibit a white
color bias on the CMT measure, and an Euro-American bias on the PRAM measure.

**Hypothesis 1b.** When race is the independent variable, a significant number of both black and white subjects will exhibit a pro-white/anti-Negro bias on their composite scores of racial preference as measured by the MPI and CDT.

**Hypothesis 2.** When color bias scores (CMT) and racial attitude scores (PRAM) are used as dependent variables (considered separately), there will be a significant difference in the sharing preferences exhibited by subjects.

**Hypothesis 2a & b.** When color bias and racial attitude scores are the dependent variables, subjects exhibiting a black color bias score on the CMT and an Afro-American bias on the PRAM will choose to share with the black recipient, while subjects exhibiting a white color bias score on the CMT and Euro-American bias on the PRAM will choose to share with the white recipient.

**Hypothesis 3.** When composite racial preference scores (MPI and CDT) are the independent variables, there will be significant differences in the sharing preferences of subjects.

**Hypothesis 3a & b.** When the composite racial preference scores from the CDT and MPI are the independent variables, subjects exhibiting a pro-white/anti-Negro bias will choose to share with the white recipient, and subjects exhibiting a pro-Negro/anti-white bias will choose to share with the black recipient.

**Hypothesis 4.** There will be a significant positive correlation between subjects' black/white color biases on the CMT and their Euro/Afro-American biases on the PRAM.
Hypothesis 5. There will be a significant positive relationship between subjects' white/Negro biases on the preference measures of the MPI and their white/Negro biases on the preference measure of the CDT.

Strengths and Limitations

Strengths

The two major strengths of the present investigation were: (1) its multi-concepts approach, and (2) its focus on the relationship between attitude and behavior. Consequently, the study included a multi-concepts approach to the investigation of preschool children's racial notions and attempted to look at the relationship between young children's color biases, racial attitudes, and racial preferences, and other forms of social behavior, i.e., prosocial sharing. Other strengths of the study included its focus on the interrelationships among the four major racial concept measures. As was pointed out previously, this was a much needed dimension of study in the area of racial concepts in children.

Methodological strengths of the study also included several control dimensions that were employed. For example, important variables which were controlled included sex of the donor, race and sex of the experimenter-examiner, sex of the recipient, items to be donated, socioeconomic status of the donors and recipients, and the sequencing and ordering effects of the test administration. With respect to the sample, the fact that black and white children were used as subjects allowed for a look at differences across racial groups. Also, since
only children from low socioeconomic backgrounds were included in the study, the scope of the present research literature in this area was expanded and generalizations could be made about children other than those from typical, experimental, model university-based centers.

In terms of the instruments employed, there were several advantages. First, all the facial concept measures employed had been used frequently in other research designs and the reliability and validity, in particular of the CMT, PRAM and MPI, were well established. Second, the multiple-item procedure used by the CMT and the PRAM measures allowed not only assessment of significant bias but also degrees of significance. Finally, the measures employed were considered related enough so as to provide a broader picture of children's racial concepts, and at the same time independent enough to be measuring different ideas.

Limitations

The major limitations of the present investigation included: (1) the necessary use of a nonprobability sampling technique in order to meet the experimental and control criteria of the study, and (2) the small sample size employed. This not only limited generalizability, but also the power of the statistical techniques employed to analyze the data. Also, because of the categorical nature of the sharing variable (preferring to share with either a white or Negro child) and of two of the four independent racial concept measures used (MPI and CDT), less powerful, nonparametric statistical techniques were used for data analyses. Therefore, the data could not be
analyzed in a multivariate manner, and only two variables at a time could be entered in the analyses.

With respect to the measures being employed, there were two specific limitations: (1) not all of the racial concept measures delineated in the literature were employed (e.g., racial self-identification, and racial acceptance), and (2) the forced choice nature of the racial concept measures used required the child to make some response to every test item; thus the scores generated could easily be misinterpreted as an absolute bias or preference, and perhaps even as a total rejection of one race or another. The appropriate interpretation of the scores on these measures was one in which the bias or preference was viewed as a relative one.

Other limitations of the study included the fact that because the design was limited in terms of the age dimension, developmental trends could not be assessed. The type of sharing task and the items to be shared (nickels) also limited the generalizability of the findings since the use of money may have a differential impact on children from other socioeconomic levels. Therefore, in general, the control restraints necessary for a valid research design also limited the generalizability of the findings.
CHAPTER II
REVIEW OF RELATED LITERATURE

The review of literature presented in this chapter will be in two distinct areas of study, yet related by the scope of inquiry of the present investigation. First, recent and related research regarding the development of race and color bias in young children will be presented; then a brief review of the research findings on altruistic behavior in children will follow. The studies presented will focus primarily on (1) research conducted with the Color Meaning Test, Preschool Racial Attitude Measure Test, Morland Picture Interview, and the Clark Doll Test, and (2) the scant research which looks at sharing behavior as a function of racial variables.

Young Children's Development of Race/Color Bias

Theoretical Perspectives

The age at which children begin to acquire racial attitudes and biases continues to be a question of theoretical and research interest. Available evidence continues to suggest that as early as ages three and four, children make differential responses to skin color and to other skin clues. These differential behavioral responses based on such racial variables are perhaps closely related to the development of racism since racism, by definition, is considered to be the differential treatment of individuals on the basis of their racial group memberships (Crosby, Bromley, & Saxe, 1980; Feagin & Feagin, 1978;
Jones, 1972; Katz, 1976). More specifically, according to Crosby et al. (1980), racism may be examined at two levels: (1) at the level of the discriminatory behavior itself, and (2) through the inferences of prejudicial attitudes. Research examining both of these levels is scarce, particularly with the methodological and ethical problems involved when looking at attitude and behavior together (e.g., subject deception and effects of attitudinal measures on experimental outcome, etc.). The need for more well designed studies which attempt to look at the relationship between attitude and behavior is, therefore, welcomed (Katz, 1976).

The dawning of racial awareness in children at one time was thought to follow a period of supposed color-blindness. A few recent studies, however, have contributed empirical evidence to show that the development of color bias in children perhaps may begin well before the age of three. Boswell (1973) and May (1977) have attempted to explore black/white color bias among children younger than three years of age. Boswell (1973), using Euro-American children in the two-year-old range, found a slight color preference tendency toward the color white. Boswell (1973) clearly reported, however, that the tendency found was a weak one, and that in her opinion, color bias was still developing at the toddler age level. This finding was hypothesized to be a direct consequence of two-year-olds' tendency to respond to an object's form and not color; while beginning at the three-year-old level and continuing through the preschool years, the tendency is for color to dominate form (Ausubel & Sullivan, 1970). On the other hand, May (1977) found strong statistically significant differences in color
preference as a function of age. While in the Boswell study, the tendency, though weak, was in the direction of a white color bias, in the May study, the statistically significant tendency was in the direction of a black color bias. Although this bias seemed to shift with increasing age, this discrepancy can be explained perhaps in part by the extreme incongruency in sample size between the two studies (25's in the Boswell study, and 160's in the May study). Nevertheless, these findings of a black color preference in the May study contradict the findings of numerous other studies which suggest the very opposite to be true (Adams & Osgood, 1973; Clark & Clark, 1958, Morland, 1962; Williams, Morland, & Underwood, 1970). All of these studies have reported strong tendencies for the color white to be more preferred and positively evaluated than the color black across races and across cultures. Again, the seemingly surprising results of the May study could be in part a result of the very few number of studies conducted with subjects under the age of three, as well as methodological design differences.

Regardless of the discrepant findings at very early age levels, there appears to be general agreement among experts that racial awareness begins to take shape during the nursery school years. In other words, by this age have the capability to discriminate among racial stimuli (Goodman, 1964; Katz, 1976; Williams & Morland, 1976).

Some theorists view the development of racial attitudes as closely related to the establishment of children's self-identity. The assumption is that children must necessarily learn about which groups they do or do not belong to as part of their self-discovery process. Katz
(1976) summarized the research findings as follows: (1) racial awareness appears in both black and white children at about the age of three; (2) racial awareness increases rapidly for the next several years; (3) racial awareness is well established by school-age; and (4) black children achieve racial awareness earlier and seem more sensitive to racial clues.

According to Williams and Morland (1976) and Katz (1976), the fact that racial awareness and attitudes exist by the age of three suggests perhaps that their antecedents come at an earlier age. Williams and Morland (1976) are in accordance with this view, and have postulated that while cultural messages are important factors in shaping children's concepts of color and race, strict cultural-influence theory is inadequate in explaining all of the observed phenomena, particularly in light of the evidence showing low correlations between race/color attitudes and age and I.Q. (Williams & Morland, 1976). In effect, they have proposed a theoretical model on the development of racial awareness and attitudes in children that incorporates the nature-nurture-interaction which has come to characterize theories of human development in recent years. In this model, color and race biases may originate in children's natural tendencies to develop general preferences for light over dark based on their biological statuses as diurnal animals. Therefore, in addition to a learned preference for the color white, Williams and Morland (1976) postulated that the young human may have an innate aversion to darkness, perhaps based on an evolutionary history in which an avoidance of darkness was an adaptive characteristic. They supported this
contention based primarily on empirical findings from studies of non-human primates which suggested the operation of an innate aversion to darkness and to the color black (Parker, 1966; Zimmermann, 1973). Experimental human studies in this area are scarce for obvious ethical reasons. Some correlational studies have found a statistically significant correlation (.40) between a subject's CMT score and measures assessing aversion to darkness (Boswell, 1974; Boswell & Williams, 1975).

Figure 1 summarizes Williams and Morland's Racial Developmental Theory. According to this model, children begin by displaying a preference for light over dark which develops initially as the result of aversive experiences with darkness and positive experiences with light. General cultural influences begin to support the innate preference for light by equating light and the color white with good and dark and the color black with evil. Once established, this bias may generalize directly to light and dark human figures and continues to be strengthened by general cultural symbols which equate white with goodness and black with badness. Subcultural and familial influences can act to strengthen or weaken the race/color attitudes effect.

Katz (1976) argued against Williams and Morland's theoretical model by raising the question that if the assumption is that all children irrespective of racial group exhibit fear of the dark, how can black children's positive association with dark-skinned adults develop? Williams and Morland indirectly attacked this argument by stating that their model not only indirectly explained why most preschoolers exhibit a pro-Euro bias, and the degree of bias difference
Figure 1

Racial Developmental Theory Model

found between Afro- and Euro-children, but also the individual bias
differences among children. According to them, children's differen­
tial encounters with various cultural, subcultural, and familial mes­
sages regarding racial differences are what determine how children
view themselves, their racial group, other races, and ultimately, the
development of a true racial bias. Consequently, color/race biases
exhibited by young children are not considered primarily racial in
nature until children learn about race and their own racial identity
through cultural, subcultural, and familial messages—an impact
thought to be well engraved by the preschool years.

Research on Color Preference
In Young Children

Common usage of the colors black and white as cultural symbols
have consequently led to questions concerning the development of color
bias in young children. The majority of the studies reviewed in this
section will be those which employed the Color Meaning Test (CMT).
As mentioned before, the CMT was developed for the assessment of
evaluative meanings associated with the colors black and white
(Renninger & Williams, 1966). An initial twelve-item test (CMT-I)
was originally described by Williams and Roberson (1967), and the
revised 24-item test (CMT-II) was described by Williams, Boswell,
and Best (1975).

The first study employing the CMT-I was conducted in North
Carolina in 1966, and involved 111 Euro-American preschoolers
(\( \bar{x} = \) five years, four months) tested by female Euro-examiners. This
investigation showed 74 percent of the children exhibiting a white
color bias (W+/B− score of 9-12), 24 percent showing no bias (scores of 4-8), and only two percent showing a black color bias (B+/W− scores 0-3). The data provided significant evidence of positive evaluative association with the color white and negative evaluative association with the color black among the tested preschoolers. Other studies have shown that these findings are not related to region, age, I.Q., and race of the experimenter (Williams & Morland, 1976).

Studies conducted with the CMT-II have reported similar findings as with the CMT-I. The first data from the 320 subject CMT-II standardization study conducted in Winston-Salem, North Carolina in 1972, employed 160 male and female Euro-preschoolers. The children ranged in age from three years and four months to seven years and one month, with the mean age being five years and one month. Half of the children were Afro-American, and half were Euro-American. Of these, half were examined by Afro-American females, and half, by Euro-American females. Data analyses revealed that neither sex of the subject nor race of the examiner had a significant effect on the scores. The frequency distribution of the CMT-II scores for all Euro-American subjects fell into a symmetrical distribution centering toward a white color bias (W+/B−). The large majority of the subjects showed at least a probable white color bias with 74 percent of subjects receiving scores of 15 or above, 24 percent receiving no-bias scores (10-14), and only two children showing a black color bias (Williams, Boswell, & Best, 1975).
The findings of a high degree of white color bias among Euro-American children have been confirmed by several other studies (Boswell, 1974; Shanahan, 1972). These showed mean CMT-II scores between 16 and 18, exemplifying a probable-to-definite white color bias (W+/B-). These CMT scores were not found to correlate significantly with vocabulary I.Q. as measured by the Peabody Picture Vocabulary Test—IQ and with chronological age.

Studies using the CMT have also been used with Afro-American subjects. Williams and Rousseau (1971) completed a CMT-I study involving 89 Afro-American children with a mean age of five years and two months using young Euro-American women as examiners. The subjects were also given the Peabody Picture Vocabulary Test (PPVT), and an interview procedure which examined the ability of the subjects to name the colors black and white and their tendency to identify personally with the black and white colors used in the test procedure. The mean CMT-I score was found to be 8.9 with 64 percent of the children displaying a W+/B- bias (scores of 9-12), three percent showing a B+/W- bias (scores of 0-3), and 33 percent showing no bias (scores of 4-8). Again, with this sample the tendency was for the subjects to choose white animals in response to positive adjectives and black animals in response to negative adjectives. The overall results showed that Afro-children also displayed a clear evidence of W+/B- bias, yet the degree of bias appeared less than among Euro-children of comparable age.

No significant correlations were found between I.Q. and CMT scores. Although the Williams and Rosseau study employed only Euro-
American examiners, other studies which have investigated directly the effects examiners' race have on the CMT-II scores indicated that race of the examiner was not a variable of statistically significant consequence (Williams & Morland, 1976).

Standardization studies employing the CMT-II with Afro-American children consisted of 160 subjects also given the PPVT (Williams, Boswell, & Best, 1975). The children's ages ranged from three years and four months to seven years and seven months. Again, half of the subjects were male and half female with half being tested by examiners of the white race, and half by examiners of the Negro race. The results of the findings were similar to that of CMT-I studies, except that the degree of W+/B- bias among the Afro-American subjects was not as high. Fifty percent of the subjects scored 15 or above, indicating evidence of a W+/B- bias; 44 percent scored 10-14, indicating no consistent bias; and six percent scored nine or less, indicating a B+/W- bias. Again, no significant correlations were found between CMT-II scores and either IQ, age, or race of the examiner.

Cross-cultural studies using the CMT-II procedure have found added documentation to the tendency of children from European and Asian countries to associate positive evaluations to the color white and negative evaluations to black (Adams & Osgood, 1973; Best, Naylor, & Williams, 1975; Williams, Morland, & Underwood, 1970). Color attitudes in very young Euro- and Afro-children (toddlers) and older Euro- and Afro-children (school-age and teen-age) have also been studied using the CMT-II. In younger children ages two and three, a W+/B- has been reported (Boswell, 1975; May, 1977). With school-age
children and teen-age Euro-subjects, the tendency for a W+/B- bias was found to remain even through college years (Morland, 1972; Williams & McMurtry, 1970). On the other hand, in Afro-subjects, the tendency to exhibit a W+/B- was found to be on the decrease from studies conducted in the 1960's. The data showed Negro teen-agers were displaying a tendency to rate the color black somewhat more positively than white although, in general, both colors were rated positively (Morland, 1972). This juxtaposition of the findings from the 1960's studies with Afro-preschoolers suggests that their W+/B- bias is later reversed, perhaps by subsequent cultural, subcultural, and familial influences.

The established evidence of the development of a W+/B- concept in children using the CMT-I and CMT-II has been substantial. The W+/B- phenomenon, however, has been established by more than one research method. John Stabler and his associates set out to investigate the W+/B- phenomenon via several different routes. In their study, Euro-American children were asked to classify a number of small objects in order to determine which objects were positively and negatively evaluated. It was found that lollipops, toys, watches, balloons, and nickels were found to be "good" objects; a rubber snake, a plastic skull, a spider, and a cigarette butt were found to be "bad" objects. After the objects had been categorized, the authors hypothesized that good objects would be associated with the color white and bad objects with black. The researchers then asked the subjects to tell them which of two boxes (a black one and a white one) contained a duplicate of each of the categorized items placed
before them. The results showed that the preschool subjects tended
to say the good objects were in the white box and the bad objects in
the black box (Stabler, Johnson, Berke, & Baker, 1969). Stabler and
his associates have used a similar method employing talking boxes,
one colored black and one colored white. The subjects, Euro-pre-
schoolers, heard stories which seemingly were being emitted from the
boxes themselves. The subjects were asked to decide whether good
and bad self-concept comments such as, "I am good" or "I am bad,"
were being emitted by the black or white box (Stabler, Johnson, &
Jordan, 1971, p. 2095). Not surprisingly, it was found that positive
comments were attributed to the white box, and negative comments to
the black box. In another similar set of studies, Stabler and
Johnson (1972), using boxes and other black and white objects, found
that (1) when subjects were asked which box (black, white, or neu-
tral) contained prizes, the white box was chosen 60 percent of the
time, and the black box only 10 percent of the time; and (2) when
given the opportunity to hit black or white cardboard boxes and Bobo
dolls, the black objects were attacked and destroyed first. Stabler
and Johnson (1972) considered these findings important, because
they suggest a link between negative evaluation and aggression.

In summary, when the findings of the Stabler et al. (1969, 1971,
1972) studies are combined with the research findings from the CMT
studies, there is a significant amount of evidence suggesting a per-
sistent tendency for both Negro and white young American children, as
well as children from other cultures, to positively evaluate the
color white and negatively evaluate the color black. IQ and race of
the examiner have not been shown to effect this bias.
Research on Racial Attitudes in Young Children

As Williams and Morland (1976) were quick to point out, positive and negative evaluations toward the colors white and black, respectively, do not necessarily mean the same implications for responses to light and dark-skinned persons. Consequently, the Preschool Racial Attitude Measures (PRAM) was developed in order to indirectly assess the way in which young children respond to persons of different racial groups since most preschoolers are thought capable of demonstrating racial awareness based on discrimination of racial stimuli. Therefore, in order to capture the concept of racial attitudes in children, an attempt was made to assess the evaluative responses of children toward humans differing in racial stimuli. The PRAM also yields a measure of awareness of sex-typed measures which is thought to serve as a useful control measure of conceptual development, since sex-role scores have been found to correlate positively with both IQ and age in preschoolers. The racial attitude scores and the sex-role scores, however, are considered independent measures, and have yielded nonsignificant correlations (H. McAdoo, 1970; J. McAdoo, 1970; Williams, Best, Boswell, Mattson, & Graves, 1975).

Williams and Roberson (1967) developed the original version of the PRAM-I. The PRAM-II, which is the current measure being used, is a more refined multi-items test devised by Williams, Best, Boswell, Mattson, and Graves (1975). The first study employing the PRAM-I was conducted in North Carolina in 1966. The 111 Euro-American preschoolers had a mean age of five years and four months, and were
tested with Euro-examiners. The findings of this study revealed 86 percent showing an Euro-American bias (E+/A- scores of 9-12), 14 percent showing no bias (scores of 4-8), and zero percent showing an Afro-American bias (A+/E- scores of 0-9). The evidence of this study clearly suggested that preschool Euro-American children showed a clear evidence of bias toward the positive evaluation of light-skinned persons rather than dark-skinned persons. Other studies using the PRAM-I with subjects from different regions of the United States have shown similar findings (Walker, 1971; Williams & Edwards, 1969; Williams & Morland, 1976).

The standardization data for the PRAM-II were completed in 1972, and the investigation's attempts were to administer the PRAM-II and PPVT to both Euro- and Afro-preschoolers by using female Euro- and Afro-examiners (Williams, Best, Boswell, Mattson, & Graves, 1975). There were 272 male and female, preschool Euro- and Afro-children used as subjects with ages ranging from three to seven years, and with a mean age of five years and four months. Again, half of the subjects were tested by Euro-examiners, and half by Afro-examiners. The results revealed 73 percent of the subjects showed evidence of an E+/A- bias, while only seven percent showed an A+/E- bias. Race of experimenter was found only to influence slightly the scores of the children characterized by a definite E+/A- bias (scores of 17 or greater). More Euro-children showed a definite E+/A- bias when examined by an Euro-American experimenter than with the Afro-examiners.
Data based on the use of Afro-subjects with the PRAM-I and PRAM-II showed similar findings. Most Afro-children, like most Euro-children, displayed an E+/A- bias in which they tended to associate positive evaluations to light-skinned figures and negative evaluations to dark-skinned figures. This discrimination between light and dark-colored figures has also been shown to exist on a color gradient continuum when using different shades of light and dark colors. When a light brown shade was paired with a dark brown color, it was positively evaluated, but when the same light brown shade was paired with a light pinkish-tan color, it was evaluated negatively (Williams & Morland, 1976). The degree of E+/A- bias, however, has not been found to be as strong among Afro-children, and the degree expressed is only slightly affected by the race of the examiner (Williams & Morland, 1976). Various regional studies have shown the E+/A- bias to be similar among Afro-children of differing regional and racial environments (H. McAdoo, 1970; J. McAdoo, 1970; Walker, 1971). Studies which have tried to assess racial attitude changes from the 1960's to the present have yielded mixed results and because of various methodological differences in the studies, the data do not support the idea that an E+/A- bias has declined significantly in young Afro-children.

Cross-cultural studies using the PRAM with European and Asian children have found the typical E+/A- bias described by other studies already presented. It has been found, however, that the degree of E+/A- bias among Italian, French, and Japanese children was higher than those of Afro-American, but lower than Euro-American and other
European children, with Japanese showing the lowest of all the E+/A-biases among the non-American children tested (Adams & Osgood, 1973; Best, Naylor, & Williams, 1975; Iwawaki, Sonoo, Williams, & Best, 1978; Williams & Morland, 1976).

Investigations of racial attitudes in the early school years have shown a tendency for the E+/A- bias exhibited in preschool Euro-Americans to remain and for race of the examiner to continue to have a negligible impact on scores. The degree of the E+/A- bias has been found to fluctuate across age groups (e.g., preschool through fourth grade) for both Euro-American and Afro-American children. The general findings, however, were as follows:

(1) Euro-American children's pro-Euro bias appeared to increase until the second-grade level, and then to decline somewhat.

(2) Afro-children maintained a moderate degree of pro-Euro bias through the early school years.

(3) Afro-children, showing a pro-Afro bias, did not show a systematic increase in this bias. (Williams & Morland, 1976)

Studies looking at racial attitudes in the late school years showed the E+/A- to continue among Euro-American junior- and senior-high schoolers, and to reverse itself to an A+/E- bias with Afro-American children. Although the cross-sectional findings of this research must be cautiously interpreted, it seems that during the early junior and high-school years period, young Euro- and in particular Afro-Americans seem to more firmly establish feelings of positive identification with their own racial group (Morland, 1972).
In general, a review of the research using the PRAM has found evidence showing that both Euro- and Afro-American preschoolers display a bias favoring light-skinned persons over dark-skinned persons with the degree of this bias being somewhat less among Afro-children. The E+/A- bias continues through the early school years for both Euro- and Afro-children, and significantly reverses itself only among Afro-American children during the late school years. The effects of IQ and race of the experimenter on PRAM-II scores have not been shown to be significant.

Research on Racial Preferences
In Young Children

Studies using the Morland Picture Interview (MPI). In this section research on racial preference using the MPI and the CDT will be combined since the preference items from both of the measures will be used to form a composite racial preference categorization score for use in the data analysis.

On the MPI, questions about racial preference immediately follow the racial acceptance questions. After the subjects are asked if they would like to play with the children in the first two pictures, then they are asked with which children they would rather play. This forces the subjects to choose from pictures one and two, one showing a group of black models, and one showing a group of white models. A series of three questions referring to play preference make up the items. Depending on the most frequent response, the subjects' answers are classified as "prefers Afro-American" or "prefers Euro-American." Children who fail to show any preference are classified as "preference not clear."
Studies conducted in the past 15 years and in six different states have revealed, on the average, that two-thirds of the Afro-preschoolers preferred Euro-children, while only one-third expressed a preference for Afro-children (Morland, 1962, 1966, 1972; Westie, 1964; Williams & Morland, 1976). Among school-age Afro-children, preference was expressed for Afro-American children in the photographs. Euro-American subjects also expressed a clear, pro-Euro-preference throughout the preschool years with almost three-fourths of the subjects showing an E+/A⁻ bias. The responses of the Euro-subjects, moreover, showed great consistency during the 15-year span covered at both the preschool and school-age levels and across all states studied. The pro-Euro preference among Euro- and Afro-American subjects was parallel until the school-age period, and then reversed itself for the Afro-subjects. In summary, it was also found with the preference measures of the MPI that preschoolers of both races displayed a pro-Euro bias, but the degree of bias among Afro-subjects was not as strong as among Euro-subjects. This pro-Euro bias of the Afro-preschoolers shifted to pro-Afro following entry into interracial school situations.

Studies in which both Euro- and Afro-subjects are given three-way preference choices have supported the finding of a continued pro-Euro bias in young children. In a three-way choice of Euro-, Afro-, and Chinese models, Euro-models were preferred over both Chinese and Afro-models and Afro-models were preferred the least (Williams & Morland, 1976). This finding is congruent with the light-dark skin color gradient findings of a previously mentioned study, which found
that lighter-skinned human figures tended to be evaluated more positively than dark-skinned human figures regardless of the particular skin colors involved.

Correlations of MPI preference scores with other variables such as sex, age, socioeconomic level, and race of interviewer have varied. In terms of sex as the variable of interest, no correlations have been found. Age as a relevant factor has not been shown to be a significantly differentiating variable on the MPI preference scores of either Afro- or Euro-preschool and school-aged children. Significant correlations have been found with Afro-children in the later school-age groups—grades 9 through 12 (Morland, 1972). Socioeconomic status, when correlated with MPI preference scores, has shown no significant correlation with Afro-American subjects. Euro-American subjects' scores, however, have statistically varied according to socioeconomic status. Lower status subjects have often preferred Euro- to Afro-American children more than upper-status subjects (Morland, 1958, 1969; Porter, 1971). Although comparative analyses based on socioeconomic status or social class can be misleading, the above cited studies consistently used the Revised Scale for Rating Occupation devised by Warner, Meeker, and Eels (1949). Studies on the effects of examiner's race on MPI scores are scarce and limited to master's theses. Nevertheless, the few which have investigated this effect have found no significant influence (K. Morland, personal communication, October 1980).
Studies using the Clark Doll Test and similar doll procedures. According to Williams and Morland (1976), only the first of eight request items of the CDT measures preference as defined by most measures of preference. Racial preference in young children has been defined in the literature as preference related to play activities. Therefore, only the request, "Give me the doll that you like to play with--like best," on the CDT qualifies as a preference measure.

Earlier studies using the CDT with preschoolers and early school-aged children have shown a pro-white/anti-Negro bias in both Negro and white subjects (Asher & Allen, 1969; Clark & Clark, 1947; Goodman, 1964; Greenwald & Oppenheim, 1968; Gregor & McPherson, 1966; Renninger & Williams, 1966; Stevenson & Stewart, 1958). On the other hand, some more recent studies, including both preschool and early school-aged subjects, have shown a shift in this trend with both races having a greater preference for their respective races (Fox & Jordan, 1973; Hraba & Grant, 1970; Katz & Zalk, 1974; Mabe & Williams, 1975; Mahan, 1976; Porter, 1971). In these latter studies, the majority of both Euro- and Afro-children chose to play with models of their own race, but the choice for children of the other race was greater among Afro-children than Euro-children just as in the MPI studies of preference. Katz (1976) suggested that these recent racial preference changes found among Afro-preschoolers have not clearly been attributed to attitude changes, but perhaps methodological differences in sampling.

Some studies relating the racial identification and preference concepts measured by the CDT to other variables such as IQ have found
significantly positive correlations between subjects' preferences and IQ (Moore, 1978). This, however, is an isolated finding and contradicts the results of many other more rigorously designed studies using other racial concept measures. At the same time, again, in accordance with the results of numerous previously mentioned studies, using other racial concept measures, the effects of examiner's race on children's racial preference as measured by the CDT appear nonsignificant (Moore, 1976).

**Summary of the Research on Color Biases, Racial Attitudes and Racial Preferences in Children**

A composite view of the recent literature on racial concepts in children, using the CMT-II, PRAM-II, MPI, and CDT as instrument measures, have reported similar findings. Using a variety of subjects from different geographic regions throughout the United States and the world, the overwhelming conclusion was that a majority of young preschool children, whether white or Negro, shows a tendency to prefer the color white over black and light-skinned persons over dark-skinned ones. This preference was also found to generalize to dolls and other objects such as boxes, Bobo dolls, lollipops, balloons, and toy watches. The pro-white and pro-Euro preference has been shown to remain relatively consistent throughout the early school-age years, and begins to reverse itself only for Afro-American children, beginning in the later school-age and teen-age years. While the degree of pro-white, pro-Euro bias for Afro-preschoolers has not been found to be as strong as that of Euro-preschoolers, the degree of pro-white
and Euro-bias among Euro-Americans appears to remain at a high level from the preschool years throughout the school-age and teen-age periods. Correlational studies looking at the variables of sex, race of the experimenter, and IQ, have generally not found them to be of any statistical significance in determining the various racial concept scores.

Research on Sharing Behavior in Children: A Brief Overview

The literature on altruistic behaviors in children is massive. This section will present only a brief synopsis of the general findings of the literature in order to provide adequate background information. Only those scarce studies which have looked at the altruistic behavior of sharing in relation to such racial variables as race of the donor and recipient, will be discussed in detail.

Altruistic or prosocial behaviors have been defined in a variety of ways, but general expert consensus agrees on the following:

Prosocial behavior refers to actions that are intended to aid or benefit another person or group of people without the actor's anticipation of external reward. (Mussen-Eisenberg-Berg, 1976, p. 4)

From a theoretical standpoint, the study of altruistic behaviors in humans has attempted to draw from the major grand theories typically used to approach the study of human behavior: Psychoanalytic, Social Learning, and Cognitive Developmental theories. Psychoanalytic theory's emphasis on the enduring effects of early training and experiences in shaping later behavior and its emphasis on the
role of identification and internalization of humanistic values and social prohibitions yields a perspective on the development of pro-social actions which claims if parents are nurturant, generous, and altruistic, their children will develop these characteristics through the process of identification.

The development of altruistic behavior from a social learning perspective does not stress internal motives, emotions, instincts, and identification. Instead, social learning theory emphasizes the acquisition and development of external motives and maintains that human behavior is learned, almost in its entirety. Consequently, the development of altruistic behaviors becomes largely contingent on such environmental effects as rewards, punishments, and modeling. Prosocial responses, therefore, are interpreted as consequences of direct reinforcement or rewards.

Cognitive development theory's conceptualization of the nature of development does not depend on those concepts outlined by psychoanalytic and social learning theories. With its emphasis on children's actions on the environment and the cognitive processes that parallel age changes, prosocial behaviors from a cognitive-structuralist point of view are seen as representations of the child's moral reasoning and judgment.

In the study of altruism, no one theory is thought to be adequate enough to explain the phenomenon in its entirety. The bulk of the studies, however, has concentrated on the fact that a large portion of social behavior is learned through active participation in the environment and therefore, primarily has used social learning
theory and cognitive structuralist theory as broad theoretical frames of reference. In general, although hundreds of studies have been done in the past on altruistic behavior in children, few of the findings are well established, many are only suggestive and subject to replication, and some studies have yielded contradictory findings.

A summary of the data on personality, socialization, and cognitive variables has indicated that relatively self-confident and active children with advanced moral reasoning, as well as role-taking skills and empathy, are those children most likely to share spontaneously some of their own possessions, and to assist those who are injured or upset. It has been found also that mood predisposes the willingness of children to exhibit prosocial behaviors. For instance, children are more prosocial in their actions when they feel happy, receive direct rewards for their actions, and have been exposed to prosocial models. Other mediating variables such as socioeconomic status, age, sex, family size, and ordinal position have been studied. Generally, it has been found that neither socioeconomic class nor sex significantly influences prosocial responses. Nurturance, sharing, and helping have been found to be generally unrelated during the preschool years, but increase significantly with advancing age. With respect to family size and ordinal position, no clear-cut or easily interpreted patterns of relationship have been found (Bryan, 1970; Krebs, 1970; Mussen, Eisenberg-Berg, 1976). The effects of racial variables such as race of the recipient or the donor on prosocial acts have scarcely been studied, and the few investigations conducted have yielded contradictory findings. Concomitantly,
children's race and color bias, racial attitudes, and racial preferences have been ignored completely as possible cultural mediators of prosocial behaviors, particularly toward children perceived as different.

In a thorough review of the literature available on children's sharing behavior as a function of racial variables, only four major investigations studied the effects of either race of the recipient or donor on sharing behavior in children. The studies have drawn from differing demographic variables, and the sharing task procedures were different. Two of the investigations are published studies and the other two, unpublished doctoral dissertations.

The first of these to be discussed in detail are the two studies conducted by Zinser, Bailey, and Edgar (1976), and Zinser, Perry, Bailey, and Lydiatt (1976). In the first of these investigations (Zinser, Bailey, & Edgar, 1976), the purpose was to explore several dimensions of recipient characteristics on the sharing behavior of children. Thirty-six preschoolers and 41 second-grade children were asked to (1) rank, in order of preference, a white, black, and Indian child as a recipient of sharing; (2) share with the preferred recipient candy items of low and high value; and (3) rank the recipients as companions in several hypothetical social interactions varying in social distance. In the results of the study, there were significant differences in preferred sharing among the preschoolers as well as the second graders. The distributions of the first choice sharing indicated that preschoolers preferred the white recipient most, the Indian next, and the black recipient the least. With the second-grade
subjects, the Indian recipient was preferred over the white and black recipients. Those second-grade subjects preferring to share with the black recipient, shared a larger number of items with them than did those subjects sharing with the other two recipients. The distribution for preferred choices in relation to the social distance items was consistent with the sharing preference choices (Zinser, Bailey, & Edgar, 1976).

In the second of these studies (Zinser, Perry, Bailey, & Lydiatt, 1976), the purpose was to research the effects of race of the recipient and value of donation on children's sharing behavior. Sixty-six preschoolers and 66 second- and third-grade children were asked to make donations to an assigned needy boy from two types of candy, one rated low and a second rated high in attractiveness. The subjects were equally distributed by sex and came mainly from upper-lower to middle-upper class homes in East Tennessee. In the procedure, the subjects were randomly assigned to one of three racial recipient conditions (black, white, or Indian child). The treatment groups within each school and age grouping were matched as closely as possible with regard to sex and social class. Each of the three treatment groups of the two age levels was composed of 22 subjects. Each subject brought the ranked experimental tokens (candy and bubble gum) received for participation in the investigation to the experimental room where they were read a short passage in which the experimenter asked the child to share a low or high rated item with a needy child (either black, Indian, or white). A three-way analysis of variance (recipients x age x value) with a repeated measure on value
was conducted on the donation scores. The results showed that the preschoolers did not show a race recipient preference, but the school-aged subjects made larger donations to the black and Indian recipients than to the white recipient. All the subjects, regardless of age, donated more of the low-rated items, and the preschoolers donated less of both types of items (Zinser, Perry, Bailey, & Lydiatt, 1976).

The third study found to relate sharing with racial variables was one in which the effects of similarity and dissimilarity of race and personal interest on empathy and altruism in second graders were investigated (Panosky, 1976). Forty-eight male and female white middle- and upper-middle class second graders from a religious school were given a questionnaire (related to the subjects' interest and family background), an empathetic task, altruistic task (e.g., sharing and helping), and a set of four additional tasks. The empathy tasks included viewing the experiences of stimulus children which were either black or white. The sharing task consisted of sharing peanuts with the empathy task stimulus children, and the helping task consisted of helping the same stimulus children stack picture slides. This study reported that similarity and dissimilarity of race did not significantly affect the subjects' empathetic sharing or helping behavior. On the other hand, similarity of interest did affect sharing and empathetic behavior. Sex differences in sharing and empathy as a function of personal interest were also significant. Females shared more with those having dissimilar interests. Across experimental conditions, empathy was found to be positively related to sharing, but negatively related to helping.
The last of the studies to be cited which investigated the effects of recipients' race on the sharing behavior of children was a study conducted by Meltzer in 1970. In this investigation the effects of age, race of victim, and ability to take another's role on helpfulness and sharing in children were assessed. A 3 x 2 x 2 factorial design (grade level, role-taking ability levels, and race of victim) was used. Helping in an emergency situation, and the sharing of candy were the main dependent variables. Ninety white girls of either kindergarten, second- or sixth-grade age, then heard tape-recorded sounds of a girl in severe distress from an adjoining room. The subjects' behavior during the distressed sounds was assessed, and this, along with what the subjects said upon returning to the room, were the behaviors used to assess helpfulness. The subjects then had the opportunity to share candy with the supposed victims. Similarity and dissimilarity of race were manipulated by taking the subjects' photographs and placing them in an album next to a photograph of the supposed victim.

The results of the study indicated that the race of the victim had no clear effect on potential helpfulness or the number of candies shared. There was no relationship found between helping and sharing. It was also found that there was an incremental relationship between age and the number of subjects exhibiting sharing and helpful behavior.
Summary of Research Relating Sharing Behavior
And Racial Variables

It is obvious from the scarcity of studies and from the gross methodological differences that no definitive conclusions can be drawn on the question of what are the effects of racial variables on the sharing behavior of young children. Even in the Zinser et al., studies which used similar methodologies, the findings were discrepant, not only in relation to the age variables studied, but also in the direction of sharing preference within the age variables. Perhaps at this point, with the little amount of research that has been conducted, the only reasonable conclusion which can be drawn is that the influence of racial variables on sharing behavior varies with the experimental design used.
CHAPTER III

METHODOLOGY

Research in the area of race/color concepts in children has led to a considerable amount of knowledge on several of the dimensions thought to be implicated in the broader notion of a child's overall racial concept. The present investigation, however, added to the existing body of knowledge in two ways: (1) by placing emphasis on a multi-concepts approach employing several racial concepts measures; and (2) by focusing on the relationship between attitude and behavior.

The Sample

Subjects included a total of 40 three-, four-, and five-year-old black and white males of low socioeconomic status from various community day-care and nursery school centers (e.g., United Day Care Services Centers; Headstart; franchised commercial centers) in the metropolitan city of Greensboro, North Carolina, which has an approximate population of 150,000. Only children whose day-care fees were sponsored by social agencies (e.g., Division of Social Services) were included in the study. The sample was purposive, and therefore, not entirely random in nature, in order to meet the established experimental and control criteria of race, sex, and socioeconomic status. The subject selection was limited specifically to 20 black and 20 white males of low socioeconomic class for the following
reasons: (1) much of the research in the area of racial concepts in children has been done with upper- and middle-class subjects drawn from experimental model university-based centers; and (2) the vast majority of investigations on altruistic behavior in children have failed to find significant sex differences in prosocial orientation and responses.

Only those subjects whose parents and teachers gave permission for participation in the study were included, and permission from the directors of the various centers was secured (Appendix A). Information regarding the subjects' known history of experimental participation was secured from teachers in order to assess subject naivety.

**Experimental Design**

The basic design was one in which each of the 40 subjects (20 black and 20 white male preschoolers, aged three to five years) were given four racial concept measures—CMT-II, PRAM-II, MPI, and CDT—during a two-day testing period. At the end of the second testing period, the subjects were asked to share money with either a black or white male hypothetical preschooler presented in the form of a painted facial profile. The tokens the subjects were asked to share were those received for participation in the study. The experiment was conducted primarily to determine what relationship, if any, existed between subjects' color biases, racial attitudes, and racial preferences, and their sharing behavior toward children of the same or differing race.
Testing Procedure

The testing occurred in separate, undistracting rooms within each center, containing an adequate table and low chairs. Two young, white, female, independent experimenters with extensive experience in dealing with children were used to administer the racial measures and conduct the sharing task with each child individually. They attended each of the centers at least once before the experiment began and engaged in approximately one hour of play activity with the children in order to help establish rapport. The experimenters, however, had no knowledge of the study's purposes and hypotheses, and had only the minimum knowledge necessary to help conduct the experiment. This technique was employed to simulate a single-blind design as closely as possible and thus control for the possibility of experimenter bias.

Each of the two testing sessions lasted approximately 10 to 15 minutes, and did not continue if the child exhibited any significant signs of fear, aggressiveness, or general noncompliance. The testing sessions each consisted of one complete test and a short series of preference items. The CMT and the PRAM were the tests given in their entirety, and only the preference subscale items of the MPI (three items) and CDT (one item) were administered. The grouping of a long and short test together on each testing session was done so as to reduce the effects of fatigue and boredom. The two test groupings were as follows: CMT paired with the MPI (Series A), and the PRAM paired with the CDT (Series B).
In order to control for possible order and sequence effects of the measures as they were grouped for feasibility of administration, the children in the sample were randomly assigned to either Series A or Series B on day one of testing. The order of the tests administered within a particular series was also randomly assigned. This randomization procedure controlled for the effects of ordering and sequencing between two measures at a time, but did not control for the full effects of ordering and sequencing when all measures were taken into consideration simultaneously. The testing was completed within a six-week period, and the approximate time interval between testing sessions was one week.

With respect to the tokens received for participation in the experiment, money was chosen because it was hypothesized to have similar motivating power among children of this age group, and in particular, a high motivating power with children of lower socioeconomic status. At the beginning of the first testing session, the children were told they would receive ten nickels for participation in the study. The money was counted out loud in front of them and was placed in small baby-food jars with the subjects' names on them. The children were told they would not receive the nickels until they were through looking at all the pictures, and all the children participating in their respective centers had played the game.

At the beginning of the first testing session, each child received the following introductory passage:

I am here to ask you to look at some pictures and dolls with me and talk about them. I will tell you stories with some of the
pictures and the dolls. We're going to look at some of the pictures and dolls today, and we'll look at some others on another day soon when I come back to see you. For your help in looking at these pictures and dolls with me, you will get ten nickels. Here (the experimenter counts them out loud and shows the child that it is as many nickels as the child has fingers), I will keep them in this jar for you, and I will put your name on them. When we're all through looking at the pictures and the dolls, and all the other children who are playing the game are also through, I will give you the nickels. Do you understand what I am saying? Tell me how we'll play.

This passage was intended not only to introduce the procedure to the subjects, but was purposively vague and evasive concerning the sharing situation in order to maintain high motivation for successful completion of the testing sessions, and to take care not to lead the subject to believe he would be rewarded for sharing. It was felt that this evasiveness was necessary for the effective completion of the experiment, and was not felt in any way to cause psychological harm to the subjects. The introduction was also intended to help assess the child's willingness to participate in the experiment and his general understanding of the procedure.

Depending on the order in which the child was to receive the measures on the first testing session, these instructions followed:

CMT and MPI combination. Okay, let's start today with these pictures (the experimenter shows either MPI or CMT pictures). As I
told you before, I want you to look at some pictures with me and talk about them . . . .

**Standard instructions for the CMT.** I want you to help me by pointing to the animal in each picture that the story is about. Here, I'll show you what I mean. (The experimenter then places the notebook flat on the table in front of the child, opens it to the first picture, and reads the first story, ending with the key question. For example, "Here are two lambs. One of them is a good lamb. She does what her mother tells her to do. Which is the good lamb?")

**Standard instructions for the MPI.** All right, here are some of the pictures I would like to talk about with you. (The experimenter now begins to ask a series of three preference questions, each to corresponding pictures. For example: Pointing to pictures one and two, the experimenter asks, "Would you like to play with these children or with these?")

**PRAM and CDT combination.** Okay, let's start today with these pictures and dolls.

**Standard instructions for the CDT.** Experimenter lays out two dolls identical in all respects except for skin color. The dolls are intended to represent Negro and white children. Since only one item from the CDT represents racial preference in the same terms that the MPI does, only one question from this test will be employed. The child is then told, "Now I want you to show me the doll that you like to play with and like the best."
Standard instructions for the PRAM. I would like to show you these pictures and a story goes with each one. I want you to help me by pointing to the person in each picture that the story is about. Here, I'll show you what I mean. (The examiner then opens the notebook to the first story and reads the first story ending with the key question. For example, "Here are two little boys. One of them is a kind little boy. Once he saw a kitten fall into a lake and he picked the kitten up to save it from drowning. Which is the kind little boy?")

For all four measures, the child's response was immediately recorded after each item was presented.

Sharing-Task Procedure

At the end of the second testing session, the experimenter thanked the child for his participation in the study and said the following:

Here are the nickels I promised you for your help in looking at the pictures and dolls. You know, I get to meet many children when I go to other school, and many of them have lots of brothers and sisters and have mommies and daddies who don't have much money. Here, let me show you a picture of two of them. (Experimenter presents the Negro and white child facial profiles. The pictures are held upright on the table, and two small baby food jars, identical to the subject's, are placed in front of each picture.) Well, I would like to ask you to help one of these little boys by sharing one of your nickels with him. Which one will you share your nickels with?
After the child made his choice, the experimenter asked the child to put the money in the corresponding jar. Regardless of the child's choice, after the task was completed, the experimenter told the subject that the little boy would be very happy and grateful that he (the subject) shared his nickels with him. The experimenter then reassured the subject that he would get to keep the remaining nickels as soon as all the children in his school who were participating had played the game. The child was thanked for playing the game, and was asked not to talk to the other children about it so the game would be new to the other children also. The subject was then escorted back to the classroom to join his peers.

**Instrumentation**

**Color Meaning Test (CMT)**

This was an individually administered picture story procedure for the assessment of young children's (approximately three to nine years) attitudes toward the colors white and black (Williams, Boswell, & Best, 1975). Test administration time was approximately 15 minutes. The test consisted of two parallel forms, and therefore, could be administered on two different occasions.

The test materials included 12, 8" x 10" colored photographs with 24 associated stories. Each picture showed a drawing of two animals identical in every respect except color (black and white). The animals represented were: horses, dogs, kittens, rabbits, cows, bears, ducks, pigs, chicks, mice, sheep, and squirrels.
Test administration included a standard set of instructions in which the subject was asked to look at some pictures and help point to the animal in each picture that the story was about. After the subject responded to each of the first twelve stories, the examiner started the pictures again with the next set of 12 stories.

The scoring procedure was based on counting one point for the selection of the white animal in response to a positive adjective, and one point for the selection of the black animal in response to a negative adjective. The scoring range was zero to 24 with high scores being indicative of a pro-white/anti-black bias (W+/B-), low scores of a pro-black/anti-white bias (B+/W-), and midrange scores representing no consistent color bias. The scores of the CMT were categorized as follows:

- 0-7 definite B+/W- bias
- 8-9 probable B+/W- bias
- 10-14 no bias
- 15-16 probable W+/B- bias
- 17-24 definite W+/B- bias.

Williams and Morland (1976) cautioned that the above categories apply only to individual subjects, and should not be applied to the interpretation of group means. Internal consistency measures of the CMT items have shown a split-half reliability measure of .63.

**Preschool Racial Attitudes Measure (PRAM)**

This was also an individually administered picture story procedure like the CMT that attempted to assess racial attitudes in young children. The procedure also yielded a measure of a child’s awareness
of sex-typed measures which the authors claim serves as a useful control measure of general conceptual development (Williams, Best, Boswell, Mattson, & Graves, 1975). However, sex-role scores and racial attitude scores have been found to be essentially independent of each other with correlations of .16. The age range for administration of the PRAM is three to nine years of age, and the measure takes approximately 20 minutes. The procedure was also designed to provide two parallel short forms.

The test materials included 36 8" x 10" colored photographs and 36 associated stories. Twenty-four of the items assessed racial attitude, while the other 12 were used as a controlling sex-role score. The 24 racial attitude pictures consisted of drawings of two dark-haired human figures which were identical in all respects, except one had a pinkish-tan color (representing an Euro-American figure) and the other had a medium-brown skin color (representing an Afro-American figure). The 24 racial attitude pictures represented a mixture of age groups from young children to grandparents. The figures were in sitting, standing, and walking positions, but the general activities were otherwise ambiguous. The 12 pictured sex-role items showed male and female figures of the same general age and race with half representing Euro-Americans and half Afro-Americans.

The administration included a standard set of instructions in which the child was asked to help point to the person in each picture whom the story was about. The responses of the child were recorded on a special recording sheet after each item was presented.
The scoring procedure of the PRAM was similar to that of the CMT. The racial attitude score was determined by counting one point for the selection of a light-skinned figure in response to a positive adjective, and one point for the selection of a dark-skinned figure in response to a negative adjective. The racial attitude score, based on all items, had a possible range of zero to 24 with high scores indicating a pro-Euro/anti-Afro bias (E+/A−), low scores indicating a pro-Afro/anti-Euro bias (A+/E−), and midrange scores (around 12) indicating no bias. Sex-role attitude was not considered to be directly related to the present investigations; therefore, the sex-role items were not administered to the subjects. The scores of the PRAM were categorized as follows:

- 17-24 definite E+/A− bias
- 15-16 probable E+/A− bias
- 10-14 unbiased
- 8-9 probable A+/E− bias
- 0-7 definite A+/E− bias.

Again, the authors cautioned against applying the categorization scoring to group means. Like the CMT, internal consistency measures on the PRAM items were high (split-half reliability measures of .80). Test and retest reliability estimates for one year were reported at .55.

**Morland Picture Interview (MPI)**

This test was designed to measure racial acceptance, racial preference, racial bias, perception of racial similarity, and racial
classification ability in young children. The MPI also attempted to measure these concepts through the use of color photographs about which questions asked. The interview had two parts. In the first there was no mention of race, and it was designed to find out if the children accepted, preferred, and perceived themselves as familiar to the photographed models. The second part attempted to measure the ability of respondents to apply racial terms correctly to the persons in the picture, to the interviewer, and to themselves.

The measure consisted of six, 8" x 10" color photographs of children and adults with a variety of skin colors and hair forms meant to represent whites and Negroes. All other nonracial characteristics appeared relatively similar although not identical. The children were ages four to seven years, and the adults' ages were similar to those of parents of children. The models were engaged in a variety of activities such as sitting around a table drinking punch and eating cookies, holding cups and looking at books. All the preference items on the MPI asked with which of the child models the subject preferred to play.

The MPI, like the CMT and PRAM, also included a standard administration procedure in which the subject was asked to play a picture game. The initial question asked about each picture was, "What do you see in this picture?" Morland (1966) suggested that this question served to reveal any spontaneous use of racial terms. The rest of the questions could be answered by pointing to the persons in the photograph so that even very shy children could respond.
The scoring method of the MPI allowed the children's answers to be placed in one or more categories for each racial concept. The three preference measures were scored either as "prefers own race," or "prefers other race." If two or more of the items received the same response, the subject was so classified. If there were not at least two consistent responses on two out of three of the items, the preferred classification was categorized as "not clear."

The MPI was developed in the mid-1950's, and tests of validity and reliability have been performed. Split-half reliability methods have shown a correlation of .98 (Morland, 1958).

Clark Doll Test (CDT)

This was a measure of children's racial identification and preference. The original test devised by Clark and Clark (1939) employed the use of four dolls, identical in all respects except for skin color. Two were brown dolls with black hair, and two were white with yellow hair. The subjects were presented the dolls with the positions of the hands and legs identical in all four, and were asked to respond to the following requests by choosing one of the dolls and giving it to the experimenter:

1. Give me the doll you like to play with--like best.
2. Give me the doll that is a nice doll.
3. Give me the doll that looks bad.
4. Give me the doll that is a nice color.
5. Give me the doll that looks like a white child.
6. Give me the doll that looks like a colored child.
7. Give me the doll that looks like a Negro child.
8. Give me the doll that looks like you.

Requests one through four were designed to reveal preference; requests five through seven, to indicate knowledge of racial differences; and request eight, to show self-identification. Morland and Williams (1976) have disagreed with Clark and Clark's grouping of responses. They argued that response one is the only true measure of preference, and inclusion of responses two through four as preference items confounds the preference concept with racial attitude concepts.

The present investigator was in conceptual agreement with Williams and Morland's argument, and therefore, only item one responses on the CDT were considered as preference measures in the data analysis. The three preference items on the MPI and the one preference item on the CDT were combined to form a racial preference composite score for each subject. The present investigation also modified the original Clark and Clark instrument in three ways: (1) by using more contemporary black and white dolls which depicted racial representations more effectively, and were identical also in hair color; (2) by only using two dolls of differing races; and (3) by changing the requests from, "Give me the doll . . ." to "Show me the doll . . ." in order to avoid manipulation, and maintain continuity in test administration instruction.

Racial Recipient Profiles

The racial profiles consisted of two facial shadow profiles (cut off at the shoulders) of a white male and a Negro male preschooler. The two versions were identical except for skin color. The skin
color of the Negro profile was medium-brown, and for the white profile, pinkish-tan. The hair was drawn black in both versions, and both profiles were mounted on white background material (Zinser, Bailey, & Edgar, 1976; Zinser, Perry, Bailey, & Lydiatt, 1976).

**Methods of Data Analysis**

The statistical methods used in analyzing the data included the nonparametric procedures of chi-square analysis, Mann-Whitney U Test and the Kendall's tau test. The chi-square test of independence was used to measure the relationship between the categorical racial measures employed in the study (i.e., the CDT and MPI), as well as the relationship between these and the variable of sharing preference. The Mann-Whitney U Test was employed to measure group differences in location parameters based on the ordinal measure scales employed in the study (i.e., CMT and PRAM). This test helped assess differences in CMT and PRAM scores as a function of race, and sharing preference. The Kendall's tau test of association was employed to look at the relationship between ordinal racial measures. There were five major hypotheses in all, several of these having been broken down into component parts.

Consequently, hypotheses 1, 1b, 3, 3a, 3b, and 5 were tested using chi-square tests of independence in order to assess the association between variables. Hypotheses 1, 1a, 2, 2a, and 2b were tested using the Mann-Whitney U Test in order to conclude whether the two represented populations differed with respect to parameter location. And finally, hypothesis 4 was tested through the use of
Kendall's tau-test of association in order to assess the relationship between ordinal variables used in the investigation (Daniel, 1978).

In order to statistically test all the stated hypotheses, race, racial preference (MPI and CDT) scores, and sharing preference were used as independent variables. Concomitantly, sharing preference also served as a dependent measure as well as color bias and racial attitude scores (CMT and PRAM).
CHAPTER IV

RESULTS

This chapter describes the statistical analyses of the data, and presents a discussion of the findings of the investigation. The findings will be reported in reference to each of the five major hypotheses tested; therefore, each hypothesis is presented with a description of the statistical method used to test it, and a statement of the results is given with each.

Hypotheses 1, 2, and 3 have been broken down into component parts for the sake of specificity and clarity. The Statistical Package for the Social Sciences was used to perform the needed computations and all hypotheses were tested at the .05 level of significance. The major statistical procedures used to analyze the data were: the chi-square test of independence, the Mann-Whitney U test of location parameters, and the Kendall's tau test of association.

**Hypothesis 1:** When race is the independent variable, there will be no significant differences in the black/white color bias (CMT), racial attitude (PRAM), and racial preference scores (MPI-CDT) of subjects.

The Mann-Whitney U test was used to test the null hypothesis of equal population parameters on CMT and PRAM scores. The computed U test for the CMT scores equaled 198.5. Using a two-tailed probability test, the value was highly nonsignificant (p = .9860). For the PRAM scores, the computed U test equaled 188.0 with an equally nonsignificant probability (p = .7584).
A chi-square test analysis by race was used to test the null hypotheses of equal distributions on the MPI; CDT racial preference composite scores. The chi-square test yielded a test statistic of \( \chi^2 = 0.41558 \) which was also highly nonsignificant \( (p = 0.8124) \). Also, when CMT and PRAM scores were categorized, again, a chi-square analysis revealed no significant differences in scores as a function of race. For CMT scores the chi-square statistic equaled \( \chi^2 = 0.466 \) \( (p = 0.791) \), and for PRAM scores the test statistic equaled \( \chi^2 = 2.102 \) \( (p = 0.349) \). In general, the findings of both the Mann-Whitney and chi-square analyses did not allow rejection of the null hypothesis that there were no differences in CMT, PRAM, MPI, and CDT scores as a function of subjects' race.

**Hypothesis 1a:** When race is the independent variable, a significant number of both black and white subjects will exhibit a white color bias on the CMT measure and an Euro-American bias on the PRAM measure.

As shown in Table 1, a closer look at the results of the Mann-Whitney U test revealed a mean rank of 20.58 for the white subjects on the CMT, and a mean rank of 20.42 for the black subjects. For the PRAM the mean rank for white subjects was 21.10 and 19.90 for black subjects. Since this test statistic was based on the ranking of all sample observations scores from the smallest to the largest, large mean ranks such as these could infer that both groups of subjects were displaying a tendency toward a white color bias and an Euro-American bias on the CMT and PRAM scores. Consequently, since no statistically significant differences were found between groups by
Table 1

Mann-Whitney U Test by Subjects' Race

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Rank</th>
<th>U Statistic</th>
<th>p Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>20</td>
<td>20.58</td>
<td>198.5</td>
<td>0.9680</td>
</tr>
<tr>
<td>Black</td>
<td>20</td>
<td>20.42</td>
<td>188.0</td>
<td>0.7584</td>
</tr>
<tr>
<td>PRAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>20</td>
<td>21.10</td>
<td>188.0</td>
<td>0.7584</td>
</tr>
<tr>
<td>Black</td>
<td>20</td>
<td>19.90</td>
<td>188.0</td>
<td>0.7584</td>
</tr>
</tbody>
</table>

Neither significant at $p < .05$.

Race, hypothesis 1a seemed to be supported by the data findings which showed both racial groups performing similarly on the CMT and PRAM measures.

**Hypothesis 1b:** When race is the independent variable, a significant number of both black and white subjects will exhibit a pro-white/anti-Negro bias on their composite scores of racial preference as measured by the MPI and CDT.

The chi-square analysis revealed no significant differences in racial preference categories by race. In other words, statistically there were just as many white and black subjects falling within each of the three racial preference categories (white preference, black preference, and no preference). For example, as shown in Table 2, 12 whites and 10 blacks revealed a white racial preference on the CDT and MPI composite scores; five whites and six blacks revealed a black
Table 2

Chi-Square Analysis of Composite Racial Preference Scores (MPI-CDT) by Race

<table>
<thead>
<tr>
<th>Preference Categories</th>
<th>Subjects' Race</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>Black</td>
<td>Totals</td>
</tr>
<tr>
<td>White Racial Preference</td>
<td>Frequency</td>
<td>12</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>54.5</td>
<td>45.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>60.0</td>
<td>50.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>30.0</td>
<td>25.0</td>
<td>55.0</td>
</tr>
<tr>
<td>No Racial Preference</td>
<td>Frequency</td>
<td>3</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>42.9</td>
<td>57.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>15.0</td>
<td>20.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>7.5</td>
<td>10.0</td>
<td>17.5</td>
</tr>
<tr>
<td>Black Racial Preference</td>
<td>Frequency</td>
<td>5</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>45.5</td>
<td>54.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>25.0</td>
<td>30.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>12.5</td>
<td>15.0</td>
<td>27.5</td>
</tr>
<tr>
<td>Column Totals</td>
<td>Frequency</td>
<td>20</td>
<td>20</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>50.0</td>
<td>50.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Chi-square = .41558, df = 2, p = .8124 - not significant.

 racial preference; and three whites and four blacks displayed no racial preference.

However, row totals show that 22 out of 40 subjects (55 percent) had an overall white racial preference, and 11 out of 40 (27.5 percent) exhibited a black racial preference. Seven out of the total number of subjects (17.5 percent) showed no racial preference. Also, 50 percent (10 out of 20) of the black subjects revealed a white preference, while 60 percent (12 out of 20) of the white subjects showed a white racial preference. These numbers appeared to show a 2:1 white
over black racial preference, and that a large percentage of subjects within both racial groups showed a white racial preference. Never­theless, inferences made based on these percentages should be cautious since the numbers were not statistically significant. In general, hypothesis 1b was not supported.

**Hypothesis 2:** When color bias scores (CMT) and racial attitude scores (PRAM) are used as dependent variables (considered separately), there will be a significant difference in the sharing preferences exhibited by subjects.

The Mann-Whitney U test was also used to test the hypothesis of unequal population parameters for both the CMT and PRAM scores in relation to the sharing variable (see Table 3). The computed U test for CMT scores equals 80.5. Again, using a two-tailed probability test, this value was highly significant ($p = .003$). For the PRAM scores, the computed U test was 81 with an equally significant probability ($p = .003$). Based on CMT scores, the mean rank of those subjects sharing with the white recipient was 24.40, while that of subjects sharing with the black recipient was 13.25. For PRAM scores, the mean rank for subjects sharing with the white recipient was 24.38, and for those sharing with the black recipient, 13.29. Again, cautious inferences could be made from the mean ranks. It appeared from the mean rank differences between groups that the subjects sharing with the white recipient displayed higher mean ranks, and therefore, possibly a higher white color/race bias than those subjects choosing to share with the black recipient. Nevertheless, the basic findings of the data supported hypothesis 2, suggesting a relationship between color/racial bias scores and sharing preference.
Table 3
Mann-Whitney  U Test by Sharing Preference

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean Rank</th>
<th>U Statistic</th>
<th>p  Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CMT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Recipient</td>
<td>26</td>
<td>24.40</td>
<td>80.5</td>
<td>.0031*</td>
</tr>
<tr>
<td>Black Recipient</td>
<td>14</td>
<td>13.25</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>PRAM</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White Recipient</td>
<td>26</td>
<td>24.38</td>
<td>81.0</td>
<td>.0035*</td>
</tr>
<tr>
<td>Black Recipient</td>
<td>14</td>
<td>13.29</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Significant at p < .05.

**Hypothesis 2a & b:** When color bias and racial attitude scores are the dependent variables, subjects exhibiting a black color bias score on the CMT and an Afro-American bias on the PRAM will choose to share with the black recipient, while subjects exhibiting a white color bias score on the CMT and an Euro-American bias on the PRAM will choose to share with the white recipient.

The highly significant results of the Mann-Whitney  U test for both the CMT and PRAM scores as described in relation to hypothesis 2 revealed a significant relationship between the direction of the subjects' biases on the measures and the direction of their sharing preferences. In addition, when the CMT and PRAM scores were categorized, a chi-square analysis also revealed a significant relationship between color bias and racial attitude categories and sharing preferences.
As Tables 4 and 5 show, the scores were collapsed into the following three categories for both the CMT and PRAM measures:

- 0-9    B+/W- or A+/E- bias
- 10-14  No bias
- 15-24  W+/B- or E+/A- bias.

The computed chi-square value for the CMT was 12.96 ($p = .002$). Total percentages revealed that 85 percent (17 out of 20) of the subjects showing a white color bias (W+/B-) chose to share with the white recipient. All of the subjects (five out of five subjects) showing a black color bias (B+/W-) chose to share with the black recipient. Sixty percent (nine out of 15) of the subjects showing no color bias chose to share with the white recipient.

The chi-square statistic for the PRAM was equally significant ($X^2 = 12.41; p = .002$). Again, the relationship between racial attitude categories and sharing preference was evident. Eighty-four percent of the subjects exhibiting an E+/A- bias (16 out of 19) chose to share with the white recipient, while 100 percent of the subjects exhibiting an A+/E- bias (five out of five) chose to share with the black recipient. Sixty-three percent of the subjects displaying no racial bias preferred to share with the white subjects.

Column totals for both the CMT and PRAM show that 65 percent of the subjects (26 out of 40) chose to share with the white recipient. Row totals reveal that approximately 50 percent of the subjects (20 out of 40) exhibited a white color/race bias, while only 13 percent (five out of 40) of the subjects showed a black color/race bias. At the same time, almost 40 percent of the subjects (15 out of 40)
Table 4

Chi-Square Analyses of CMT Scores by Sharing Preference

<table>
<thead>
<tr>
<th>Color Bias Categories</th>
<th>Sharing Preference</th>
<th>White Recipient</th>
<th>Black Recipient</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>(W+/B-)</td>
<td>Frequency</td>
<td>17</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>White Color Bias</td>
<td>Row Percent</td>
<td>85.0</td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td>15-24 (Score)</td>
<td>Column Percent</td>
<td>65.4</td>
<td>21.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>42.5</td>
<td>7.5</td>
<td>50.0</td>
</tr>
<tr>
<td>No Color Bias</td>
<td>Frequency</td>
<td>9</td>
<td>6</td>
<td>15</td>
</tr>
<tr>
<td>10-14 (Score)</td>
<td>Row Percent</td>
<td>60.0</td>
<td>40.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>34.6</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>22.5</td>
<td>15.0</td>
<td>37.5</td>
</tr>
<tr>
<td>(B+/W-)</td>
<td>Frequency</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Black Color Bias</td>
<td>Row Percent</td>
<td>0.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td>0-9 (Score)</td>
<td>Column Percent</td>
<td>0.0</td>
<td>35.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>0.0</td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td>Column Totals</td>
<td>Frequency</td>
<td>26</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>65.0</td>
<td>35.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Chi-Square = 12.96703, df = 2, p = .0015 - Significant.
Table 5
Chi-Square Analysis of PRAM Scores by Sharing Preference

<table>
<thead>
<tr>
<th>Racial Bias Categories</th>
<th>Sharing Preference</th>
<th>White Recipient</th>
<th>Black Recipient</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>16</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>84.2</td>
<td>15.8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>61.5</td>
<td>21.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>40.0</td>
<td>7.5</td>
<td>47.5</td>
</tr>
<tr>
<td>Euro-American Bias</td>
<td>Frequency</td>
<td>10</td>
<td>6</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>62.5</td>
<td>37.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>38.5</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>25.0</td>
<td>15.0</td>
<td>40.0</td>
</tr>
<tr>
<td>15-24 (Score)</td>
<td>Frequency</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>0.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>0.0</td>
<td>35.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>0.0</td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td>No Racial Bias</td>
<td>Frequency</td>
<td>26</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>65.0</td>
<td>35.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Chi-square = 12.41180, df = 2, p = .0020 - Significant.

revealed no color/race biases. Determinations made concerning overall color/race biases must be made, however, by taking into consideration the small numbers involved.

In general, on the basis of the Mann-Whitney U-test and the chi-square analysis, hypotheses 2a and 2b were supported, suggesting a relationship between color/race bias and attitude and sharing behavior.

Hypothesis 3: When composite racial preference scores (MPI and CDT) are the independent variables, there will be significant differences in the sharing preferences of subjects.
A chi-square analysis investigating the relationship between subjects' racial preference composite scores and sharing preferences was nonsignificant ($\chi^2 = 1.295; p = .5231$). Consequently, hypothesis 3 was not supported. Again, it is cautiously pointed out that while not statistically significant, overall row and column percent totals seem to suggest a possible white racial preference among subjects. Table 6 reveals that 65 percent of the subjects (26 out of 40) preferred to share with the white recipient. Twenty-two out of 40 subjects showed a white racial preference (55 percent), while 11 out of 40 (28 percent) evidenced a black racial preference. Only seven out of 40 (18 percent) displayed no racial preference.

**Hypothesis 3a & b:** When the composite racial preference scores from the CDT and MPI are the independent variables, subjects exhibiting a pro-white/anti-Negro bias will choose to share with the white recipient, and subjects exhibiting a pro-Negro/anti-white bias will choose to share with the black recipient.

While the chi-square analysis using the combined scores of the MPI and CDT did not reveal a significant relationship with sharing preference, separate analyses of the MPI and CDT suggested an interesting finding. When the MPI scores alone were looked at in relation to sharing, again no statistical significance was found ($\chi^2 = .0932; p = .7866$). However, when a chi-square analysis was performed looking at CDT scores separately in relation to sharing preference, a statistically significant relationship was found. In this case, the computed chi-square value was $7.556 (p = .006)$. Table 7 reveals that 78.6 percent (22 out of 28) of the subjects who
Table 6
Chi-Square Analysis of Composite Racial Preference Scores (MPI-CDT) by Sharing Preference

<table>
<thead>
<tr>
<th>Preference Categories</th>
<th>Sharing Preference</th>
<th>White Recipient</th>
<th>Black Recipient</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>White</td>
<td>Black</td>
<td></td>
</tr>
<tr>
<td>White Racial Preference</td>
<td>Frequency</td>
<td>16</td>
<td>6</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>72.7</td>
<td>27.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>61.5</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>40.0</td>
<td>15.0</td>
<td>55.0</td>
</tr>
<tr>
<td>No Racial Preference</td>
<td>Frequency</td>
<td>4</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>57.1</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>15.4</td>
<td>21.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>10.0</td>
<td>7.5</td>
<td>17.5</td>
</tr>
<tr>
<td>Black Racial Preference</td>
<td>Frequency</td>
<td>6</td>
<td>5</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>54.5</td>
<td>45.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>23.1</td>
<td>35.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>15.0</td>
<td>12.5</td>
<td>27.5</td>
</tr>
<tr>
<td>Column Totals</td>
<td>Frequency</td>
<td>26</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>65.0</td>
<td>35.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Chi-Square = 1.29585, df = 2, p = .5231 - Not Significant.
Table 7
Chi-Square Analysis of CDT Preferences and Sharing Preferences

<table>
<thead>
<tr>
<th>Doll Preference</th>
<th>Sharing Preference</th>
<th>White Recipient</th>
<th>Black Recipient</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>Frequency</td>
<td>22</td>
<td>6</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>78.6</td>
<td>21.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>84.6</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>55.0</td>
<td>15.0</td>
<td>70.0</td>
</tr>
<tr>
<td>Black</td>
<td>Frequency</td>
<td>4</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>33.3</td>
<td>66.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>15.4</td>
<td>57.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>10.0</td>
<td>20.0</td>
<td>30.0</td>
</tr>
<tr>
<td>Column Totals</td>
<td>Frequency</td>
<td>26</td>
<td>14</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>65.0</td>
<td>35.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Chi-Square = 7.55625, df = 1, \( p = .0060 \) - Significant.

preferred to play with the white doll chose to share with the white recipient. Concomitantly, 66 percent (eight out of 12) of those subjects preferring a black doll shared with the black recipient.

Both row and column percent totals reveal that a majority of the subjects had a preference for the white doll and the white recipient. Seventy percent of the subjects (28 out of 40) preferred to play with the white doll, while 65 percent (26 out of 40) chose to share with the white recipient. Specifically, however, hypotheses 3a and 3b testing the relationship between racial preference and sharing preference were not supported using a composite MPI-CDT racial
preference score, but were supported when using the CDT racial preference measure alone. Therefore, separate analyses of the relationship between sharing preference and MPI and CDT measures suggested the CDT alone to be predictive of sharing behavior.

**Hypothesis 4:** There will be a significant positive correlation between subjects' black/white color biases on the CMT and their Euro-Afro-American biases on the PRAM.

A Kendall tau-test of association was performed in order to test the above hypothesis. The correlation coefficient of .5316 was statistically significant, with a $p = .001$, suggesting a direct relationship between CMT scores and PRAM scores. Hypothesis 4 was supported by the data.

**Hypothesis 5:** There will be a significant positive relationship between subjects' white/Negro biases on the preference measures of the MPI and their white/Negro biases on the preference measure of the CDT.

A chi-square analysis revealed no significant relationship between racial preferences on the MPI and the CDT. The chi-square statistic equals 2.4 ($p = .1213$) and therefore, hypothesis 5 was not supported.

**Additional Analyses**

In an attempt to investigate the relationship between all measures used in the study, chi-square analyses were performed after categorizing the CMT and PRAM scores. Consequently, chi-square analyses of the following pairs were performed: CMT x CDT;
CMT x MPI; PRAM x CDT; PRAM x MPI. No significant relationship was found between the MPI preferences and the CMT and PRAM categories. A significant relationship, however, was found between the CDT preferences and the CMT and PRAM categories. Chi-square analyses of the CDT preferences by the CMT scores yielded a test statistic equaling 8.174 ($p = .0168$). By the same token a chi-square analysis of the CDT preferences by the PRAM scores yielded a test statistic equaling 15.109 ($p = .0005$). However, it is important to note that both of these analyses could be unreliable because of some small expected cell frequencies (Tables 8 and 9).

Discussion of Results

The following section presents an interpretation of the findings in relation to each of the stated hypotheses as well as in relation to the questions and problems addressed by previous research. While this investigation explored a relationship between attitude and behavior not previously cited in the literature, it did draw from the findings of several related studies dealing with racial concepts in children. Only the five major hypotheses will be restated; however, the discussion related to each will incorporate the findings associated with the subhypotheses tested.

**Hypothesis 1:** When race is the independent variable, there will be no significant differences in the black/white color bias (CMT), racial attitude (PRAM), and racial preference scores (MPI, CDT) of subjects.
Table 8

Chi-Square Analysis of CMT Scores

By CDT Preferences

<table>
<thead>
<tr>
<th>Color Bias Categories</th>
<th>Doll Preference</th>
<th>White Doll</th>
<th>Black Doll</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>(W+/B-)</td>
<td>Frequency</td>
<td>17</td>
<td>3</td>
<td>20</td>
</tr>
<tr>
<td>White Color Bias</td>
<td>Row Percent</td>
<td>85.0</td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>60.7</td>
<td>25.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>42.5</td>
<td>7.5</td>
<td>50.0</td>
</tr>
<tr>
<td>No Color Bias</td>
<td>Frequency</td>
<td>10</td>
<td>5</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Row Percent</td>
<td>66.7</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>35.7</td>
<td>41.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>25.0</td>
<td>12.5</td>
<td>37.5</td>
</tr>
<tr>
<td>(B+/W-)</td>
<td>Frequency</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Black Color Bias</td>
<td>Row Percent</td>
<td>20.0</td>
<td>80.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>3.6</td>
<td>33.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>2.5</td>
<td>10.0</td>
<td>12.5</td>
</tr>
<tr>
<td>Column Totals</td>
<td>Frequency</td>
<td>28</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>70.0</td>
<td>30.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Chi-square = 8.17460, df = 2, p = .0168 - Significant.
Table 9
Chi-Square Analysis of PRAM Scores
By CDT Preferences

<table>
<thead>
<tr>
<th>Racial Bias Categories</th>
<th>Doll Preference</th>
<th>White Doll</th>
<th>Black Doll</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>17</td>
<td>2</td>
<td>19</td>
</tr>
<tr>
<td>(E+/A-) Euro-American Bias</td>
<td>Row Percent</td>
<td>89.5</td>
<td>10.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>60.7</td>
<td>16.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>42.5</td>
<td>5.0</td>
<td>47.5</td>
</tr>
<tr>
<td>No Racial Bias</td>
<td>Frequency</td>
<td>11</td>
<td>5</td>
<td>16</td>
</tr>
<tr>
<td>10-14 (Score)</td>
<td>Row Percent</td>
<td>68.8</td>
<td>31.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>39.3</td>
<td>41.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>27.5</td>
<td>12.5</td>
<td>40.0</td>
</tr>
<tr>
<td>(A+/E-) Afro-American Bias</td>
<td>Frequency</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>0-9 (Score)</td>
<td>Row Percent</td>
<td>0.0</td>
<td>100.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Column Percent</td>
<td>0.0</td>
<td>41.7</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total Percent</td>
<td>0.0</td>
<td>12.5</td>
<td>12.5</td>
</tr>
<tr>
<td>Column Totals</td>
<td>Frequency</td>
<td>28</td>
<td>12</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>Percent</td>
<td>70.0</td>
<td>30.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Chi-Square = 15.10965, df = 2, p = .0005 - Significant.

Failure to reject the null hypothesis suggested that no significant differences in the subjects' color biases, racial attitudes, and racial preferences could be attributed to race. In other words, statistically, just as many black as white children were showing white color/race biases and preferences, black color/race biases and preferences, and no color/race biases and preferences. However, although not statistically significant, the possibility of an overall white color/race bias and preference among the majority of both
racial groups seemed to be suggested by some of the row and column percent totals shown by the chi-square analyses and by the mean ranks established by the Mann-Whitney U test.

This seems to support that which has been previously reported in the literature employing larger sample sizes. Williams, Boswell, and Best (1975), using chi-square analyses on CMT scores, found a significant tendency toward high (W+/B−) scores among both Euro- and Afro-children tested. Williams, Best, Boswell, Mattson, and Graves (1975) found similar tendencies on PRAM scores for both racial groups. Many studies employing the MPI and CDT have also found statistically significant tendencies for white racial preferences among the majority of both black and white preschoolers (Greenwald & Oppenheim, 1968; Gregor & McPherson, 1966; J. McAdoo, 1970; Morland, 1962, 1966, 1972; Renninger & Williams, 1966; Williams & Roberson, 1967; Westie, 1964). All of these studies have also reported that the white color/race biases and preferences were not as strong for black subjects as they were for white subjects. Again, while not statistically significant, high mean ranks for the CMT and the PRAM found in this investigation may suggest that both black and white subjects were responding similarly on both measures, that is, in the direction of a white color/race bias. The chi-square analyses for both the categorized CMT and PRAM color/race bias scores and the CDT and MPI racial preference scores also suggested the possibility of an overall white race/color bias and preference tendency by the majority of subjects in both races. The majority of both black and white children showed a white color bias on the CMT, an Euro-American bias on the
PRAM, and a white racial preference on both the CDT and MPI. Even though the majority of both racial groups seemed to display these biases and tendencies, a greater number of white subjects appeared to do so. It was also noted that a much greater gap existed between the number of subjects displaying white biases and those displaying black biases than existed between those showing white biases and no biases and preferences. This wide split between bias/preference categories has also been previously suggested (Williams & Morland, 1976).

Nonetheless, any statements relating the findings of the present investigation to those of previous research are reported cautiously since some of these were not statistically significant. However, in the investigator's estimation, the pattern of congruency in the findings was noteworthy in spite of the small sample size employed in the present study. Perhaps the issue of statistical significance was partially related to sample size differences between studies, or perhaps to the possibility that more children from both racial groups were showing neutrality in their color/race biases and preferences. This could not be clearly perceived from the findings of this investigation, and other studies employing the CMT, PRAM, CDT, and MPI have also not yielded clear findings related to this issue. The evidence is particularly mixed with respect to whether or not there is a move toward a decline in the white color/race biases and preferences of black children. On the reverse side, the question of whether the strong white color/race biases and preferences found in white children has declined in the past two decades has also not been clearly
established by previous research. For example, Greenwald and Oppenheim (1968), Gregor and McPherson (1968), and J. McAdoo (1970) have reported that while the majority of both black and white children showed an overall white racial preference, a greater number of black children were exhibiting an overall black preference than had been reported by earlier studies such as those of Clark and Clark (1939, 1947). Other studies have actually reported a trend where subjects showed a greater preference for their respective races (Fox & Jordan, 1973; Hraba & Grant, 1970; Katz & Zalk, 1974). At the same time, others have suggested that there is only minimal evidence to support any significant decline in the white color/race biases and preferences of black and white preschool children in recent years (Williams & Morland, 1976). Consequently, in light of the large number of ambiguities present in the findings, further reexamination of color/race biases and preferences among black and white children seems implicit.

Hypothesis 2: When color bias scores (CMT), and racial attitude scores (PRAM) are used as dependent variables (considered separately), there will be a significant difference in the sharing preferences exhibited by subjects.

Separate analyses on the CMT and PRAM revealed statistical support for this hypothesis. More specifically, there was a statistically significant relationship between the direction of subjects' color biases and racial attitudes and the direction of their sharing preferences. Those subjects scoring high on the CMT and the PRAM, therefore displaying a W+/B− bias and an E+/A− bias, preferred to
share with the white recipient. Conversely, those subjects scoring low on the CMT and the PRAM, which represented a B+/W- bias and an A+/E- bias, preferred to share with the black recipient. Again, a closer look at the analyses revealed a white sharing preference among the majority of subjects in both races.

This relationship between color/race biases and preferences and sharing behavior has not been previously tested in the literature. Consequently, direct associations between the findings of the present study and previous research were not possible. However, the present findings observing a relationship between attitude and behavior have not been reported by other studies attempting to test a similar association. Porter (1971) found that play patterns were unrelated to doll preference. Hraba and Grant (1970) found no relation between doll task performance and stated friendship choices. These studies, however, employed CDT measures alone and did not use the CMT and PRAM which, perhaps because of their greater multiple-item diversity, could be more sensitive predictors of color/race biases and preferences. Nevertheless, the highly significant findings of the present investigation seemed to support the idea that a one-to-one correspondence existed between subjects' responses to color/race attitudinal measures and their sharing preferences toward differing racial recipients.

With respect to evidence of a white sharing preference, the findings of this research were consistent with some previous research findings. Zinser, Bailey, and Edgar (1976) in an effort to explore the effects of several dimensions of recipient characteristics on the
sharing behavior of children also found a white sharing preference among the preschool subjects in their sample. The order of sharing preference showed white recipients being preferred the most, then Indian recipients, and then black recipients. However, only white preschoolers were represented in the sample, so racial preferences among black subjects could not be determined. At the same time, Zinser, Perry, Bailey, and Lydiatt (1976), studying the effects of race of the recipient and value of donation on children's sharing behavior, failed to find race recipient preferences among the preschoolers tested. Panofsky (1976) and Meltzer (1970) also failed to find any significant racial preference directions in subjects' sharing. These studies differed from the present investigation in many ways, but particularly in type of sample employed. The children in the present investigation represent both black and white racial groups, and all were of lower socioeconomic status. The other studies did not tap both racial groups, and employed middle to upper-middle-class children only.

In general, the scarcity of studies investigating the effects of racial variables on the sharing behavior of young children, as well as the gross methodological differences existing between these, suggested that the influence of racial variables on sharing behavior varied with the experimental design used. The present investigation's attempt to assess racial concepts more directly could have, in part, accounted for the attributed relationship between attitude and behavior. The socio-demographic profiles of the subjects tested could also have accounted for the direction of sharing preference
among both racial groups. Even though socioeconomic status has not been found to influence prosocial responses, its role in relation to color/race biases and preferences is still unclear (Mussen-Eisenberg, 1976; Porter, 1971; Williams & Morland, 1976).

Hypothesis 3: When composite racial preference scores (MPI and CDT) are the independent variables, there will be significant differences in the sharing preferences of subjects.

The data findings did not support this hypothesis. Statistical analysis suggested no relationship between subjects' composite racial preference scores and sharing preferences. However, as was reported in the previous results section, when MPI and CDT scores were looked at separately, a significant relationship emerged between CDT preferences and sharing. This relationship contradicts Porter's (1971) and Hraba and Grant's (1970) findings of no relation between doll preference and other social behavior. The nonsignificant findings of the separate MPI analyses suggested that the MPI had little predictive power in reference to the sharing preference of subjects. It appeared that the combining of the MPI and CDT scores in order to achieve a composite racial preference score was of little value. One possible explanation could stem from the fact that the MPI consisted of actual human pictures which were similar in most respects, but not identical. As a result, subjects could have been responding to stimuli other than race.

Again, while not statistically significant, row and column percentage totals based on the MPI-CDT findings suggested an overall white preference by subjects. The possibility of a white racial
preference, shown by the majority of both black and white preschoolers, is consistent with the findings of previous research using the two measures (Clark & Clark, 1939, 1947; J. McAdoo, 1970; Morland, 1958, 1962, 1966, 1972). However, in light of the possibility that stimuli other than skin color could have been determining racial preferences on the MPI items, overall group racial preferences based on these could not be truly substantiated.

Hypothesis 4: There will be a significant positive correlation between subjects' black/white color biases on the CMT and their Euro/Afro-American biases on the PRAM.

Statistically significant correlations between CDT scores and PRAM scores have been frequently reported (Best, Naylor, & Williams, 1975; Boswell, 1974; Shanahan, 1972; Williams & Roberson, 1967). The moderately positive correlation found in the present investigation suggested that there was a discernible tendency for children with a strong positive attitude toward the color white to have a more positive attitude toward light-skinned individuals. Consequently, hypothesis 4 was supported. It is important to note, however, that while the CMT and PRAM scores did to a degree measure the same phenomenon, each measure also assessed something which the other measure did not. A correlation coefficient of .532 suggested that the two measures were sufficiently independent from one another to indicate that the degree of color bias shown by a subject could not be fully explained by the direction of his racial attitude and vice versa.
A significant positive correlation between CMT scores and PRAM scores seems conceptually likely since a child's attitude toward the colors black and white has been found to generalize across such figure forms as boxes, dolls, animals, and humans (Stabler et al., 1969, 1971, 1972; Williams & Morland, 1976). Theoretically, this lends support to the general contention that the pervasive use of the colors white and black as cultural symbols with definite negative and positive associated connotations could influence the development of racial biases, attitudes, and preferences in young children.

**Hypothesis 5:** There will be a significant relationship between subjects' white/Negro biases on the preference measures of the MPI and their white/Negro biases on the preference measure of the CDT.

This hypothesis was rejected, and therefore, no significant relationship was found between racial preference scores on the MPI and the CDT. This finding is in contradiction with previous research findings suggesting a relationship between measures in spite of their differences in research techniques (Williams & Morland, 1976).

The lack of relationship between measures could have been the direct result of the unreliability of basing a judgment of racial preference on just a few items. As mentioned previously, however, the CDT, in spite of its single-item response, was found to be statistically related to sharing preference and to CMT and PRAM scores, while the MPI was not found to relate to any of these variables. However, the relationship between CDT preferences and CMT and PRAM biases is also cautiously stated since the analyses revealed some small expected cell frequencies. In general, it is important to
reiterate the inherent risk associated with basing a judgment of racial preference on a small number of items.
CHAPTER V
SUMMARY AND CONCLUSIONS

The major purpose of this study was to investigate the relationship between young children's racial concepts and their sharing behavior toward children of similar or differing races. Basically, the study raised the following two questions: (1) Are there differences in the color biases, racial attitudes, and racial preferences of white and black preschoolers? and (2) Do young children's color/race biases and preferences influence their social behavior toward others?

Previous studies have indicated that the color/race biases of the majority of black and white preschoolers are in the direction of a white racial preference, although the strength of this preference appears more prominent among white children. Research indirectly focusing on the effects of recent social changes on the racial attitudes of young black children has yielded mixed results. Some investigators have reported a decrease in the proportion of young black children still showing white color/race biases and preferences. In a few instances, results have shown that both white and black children prefer their respective racial groups. The issue of whether these findings represent actual attitudinal changes and not methodological differences has been challenged by experts since most of the findings continue to reveal a tendency for the majority of both young white and black preschoolers to prefer the color white over the color
black, and to prefer light-skinned figures over dark ones. Until this study was conducted, no research had been reported that focused directly on the relationship between young children’s color/race biases and preferences and their prosocial actions toward others.

The Research Design

The basic design was one in which forty subjects (20 black and 20 white, male preschoolers, aged three to five years) were administered four racial concept measures during a two-day testing period. At the end of the second testing session, the subjects were asked to share nickels received for participation in the study with either a black or a white male hypothetical preschooler, presented in the form of a painted facial profile.

The testing involved the presentation of various white and black figure forms, and asked the subjects to choose between figures and dolls based on stories containing positive and negative evaluative adjectives. Subjects included only children of low socioeconomic status whose day-care fees were being subsidized, at least in part, by some social agency. All four measures were administered individually by young white female experimenters. Color bias was measured by the Color Meaning Test (CMT), racial attitude by the Preschool Racial Attitude Measure (PRAM), and racial preference by the preference subscales of the Morland Picture Interview (MPI) and the Clark Doll Test (CDT).

Based on the literature findings, it was hypothesized: (1) that there would be no significant differences in the color biases, racial
attitudes, and racial preferences of the white and black subjects; (2) that color/race biases, attitudes, and preferences would directly influence prosocial behavior; and (3) that color bias would be directly related to racial attitude and racial preference. The data were analyzed by various nonparametric statistical procedures, including the Mann-Whitney U test of location parameters, the chi-square test of independence, and the Kendall tau-test of association.

Conclusions

The results of the data revealed the following:

1. There were no significant differences in the color biases, racial attitudes, and racial preferences of black and white subjects. That is, both racial groups appeared to be responding similarly to all measures. Although not statistically significant, the numbers seemed to suggest that the majority of both racial groups were exhibiting a white color/race bias and preference even though the degree of this bias was more evident among the white subjects.

2. There was a statistically significant relationship between the direction of subjects' color biases, racial attitudes, and racial preferences, and the direction of their sharing preferences. In other words, color/race biases and preferences were predictive factors. Those children showing an overall white color/race bias and preference tended to share with the white recipient, and those showing an overall black color/race bias and preference tended to share with the
black recipient. A tendency for preference toward the white recipient was also found among the majority of subjects.

3. Subjects' color biases were directly related to racial attitudes and racial preferences as measured by the CMT, PRAM, and CDT. Racial preference as measured by the MPI did not appear related to color bias, racial attitude, or doll preference. There also did not appear to be a relationship between MPI racial preference items and sharing preferences.

Recommendations for Future Research

The findings of the present investigation point to several areas of potential for future research. Based on these results, and subsequent questions raised by the findings, the following recommendations are made:

1. The suggested relationship between color/race biases and preferences and sharing behavior should be further tested using a larger, more diverse sample of subjects. In order to add further support to this new finding, the same study should be replicated using subjects representing various socio-cultural and demographic criteria.

2. Because of the mixed findings reported in the literature regarding racial group differences in color/race biases and preferences, and because of the limited conclusions that could be drawn from the present investigation, further research employing the four racial concept measures should be conducted using, again, larger and more randomly chosen samples.
3. In order to assess developmental trends, age as a variable should be reexamined, both in relation to color/race biases and preferences, and prosocial behaviors, particularly toward those perceived as different. This would be of special importance, since the literature suggests that age influences both racial concept development and altruism.

In general, the findings suggested that the present investigation seems worthy of replication in order to determine the reliability of the results. Variations in subject characteristics, along with a larger sample size and a broader random sampling procedure, would allow generalizations to much larger and more varied populations.

Implications

It has long been recognized that young children have a remarkable ability to learn from experience. Because of this fact, it is not surprising that children begin to differentiate based on racial stimuli at an early age. The development of color and race awareness is largely due to direct and indirect social, cultural, and familial influences. Attitudes about race and color are transmitted to young children via a large social milieu composed of parents, teachers, playmates, and the mass media. What is known about these influences is massive, yet the interrelationship among them is unclear.

The present research has attempted to contribute to the large yet highly dispersive body of knowledge related to the development of
young children's racial concepts. More important, its unique contribution rests with its focus on how children's color/race biases and preferences translate into social actions. Gaining more knowledge about the way in which children learn to show kindness and consideration for others, particularly those who are perceived as different, plays an important and crucial part in the understanding of children's attitudes toward others in their social environment. If, indeed, as the findings of the present investigation suggest, young children's color/race biases and preferences have a direct influence on their social behavior, then much more attention needs to be placed on the kinds of messages about race and color American society is giving its children.
BIBLIOGRAPHY


Morland, K. Personal communication, October 1980.


Parker, C. E. Total darkness as an aversive stimulus condition for the squirrel monkey. Psychonomic Science, 1966, 6, 111-112.


APPENDIX A

LETTERS AND CONSENT FORM
Dear Parents:

As a member of the Department of Child Development and Family Relations at the University of North Carolina at Greensboro, I am interested in finding out more about the way in which children learn to share with others who are from similar or different ethnic backgrounds. This plays an important part in the understanding of children's attitudes toward others in their social environment.

You as parents are being asked permission to have your children participate in a study in which young children's ideas about sharing will be explored. The study will take place during regular school hours, and will be incorporated into the daily routine of the centers. Your participation is not required in any way other than in giving permission (consent), and the children will not be forced to participate if they choose not to. Those children who do take part in the study will be asked to look at a series of pictures and dolls and listen to stories that go with these. They will also be asked to talk about them. The children will not be required to use any of their personal possessions (things) in the study and those who participate will receive nickels for their cooperation.

Both the children's teacher and the director of the center (school) were informed about the study and have given their permission. Attached to this letter is a permission slip for you to sign if you are willing to allow your child to be considered for participation in the study. Your decision either way will have no effect on your child's continued participation in the center. However, your cooperation in this matter would be greatly appreciated. I am hopeful that with your child's cooperation, those of us who work closely with children will be better able to understand more about how young children learn and show kindness and consideration for others.

Thank you,

Millie Munoz
Doctoral Candidate

PS: If you agree to have your child take part in this study, please sign the attached slip and leave it with your child's teacher.
PARENTAL CONSENT FORM

I agree to allow my child ______________________ to participate in the present study being conducted under the supervision of Dr. Nancy White, a faculty member of the Department of Child Development and Family Relations of the University of North Carolina at Greensboro. I have been informed, either orally or in writing or both, about the procedures to be followed and about any discomforts or risks which may be involved. I understand that my child is free to terminate his participation at any time without penalty or prejudice. I am aware that further information about the conduct and review of human research at the University of North Carolina at Greensboro can be obtained by calling 379-5878, the Office for Sponsored Programs.

day  month  year  
Signature of Parent/Guardian
TO: Personnel of Child-Care Centers
FROM: Millie Munoz, Nancy Wight, and Jennie Betton

We wish to thank you all for your interest in and help with the study. Jennie, Nancy, and I will soon be coming to each of your centers and spending several days with you while we conduct our study. Jenny and Nancy are my research assistants, and they will be helping me collect the information needed for the study. The research is part of my work toward a doctoral degree in Child Development at the University of North Carolina at Greensboro.

Basically, we are interested in finding out more about the way in which children learn to share with others who are from similar and different ethnic backgrounds. This plays an important part in the understanding of children's attitudes toward others in their social environment.

Specifically, what we will be doing is to take each child individually and administer four racial concepts tests during two testing periods lasting 10 to 15 minutes each. At the end of the second testing session, the children will be asked to share nickels received for participation in the study with hypothetical male preschoolers of differing races. Enclosed with this letter is a brief outline of the research.

Clearly, it would be useful to us if you do not share with the children the study's purpose. We do not want to influence the children in any direct way. We also have a problem with what a child, who has just returned from the testing room, tells his classmates. It would be best, until all the children have finished the study, not to encourage the children to talk about what went on. Your cooperation in this matter will be crucial to the study's success, and therefore, very much appreciated.

We will let you know the results of the study just as soon as the research is fully completed this summer. Needless to say, the names of the children will not be used. We hope that our results will lead to information that will be of assistance in understanding more about how young children learn and show kindness and consideration for others.

We look forward to seeing each of you again soon. Thank you again.