In a study of racial preferences, 48 same-sex pairs of first and second grade children played a question and answer game called "Paymaster." Following each of 10 answers by a Receiver (who was black or white), a Paymaster (who was black or white) distributed five chips, which were worth valuable prizes, to bowls for himself and the Receiver or to bowls for his best friend, who was not present, and the Receiver. Following the game each child was asked a series of sociometric questions about the other-child. There was no evidence for differential giving of the chips (i.e., racial preferences) to either black or white Receivers by either black or white Paymasters. It was found that there was a greater number of chips given to both black and white Receivers by black Paymasters than by white Paymasters. Correlational analysis revealed a nonsignificant relationship between number of chips given and answers to the sociometric questions. The implications of the results for research on racial preferences in black and white children were discussed. (Author)
Abstract

48 same-sex pairs of first and second-grade children played a question and answer game called Paymaster. Following each of 10 answers by a Receiver (who was black or white), a Paymaster (who was black or white) distributed five chips, which were worth valuable prizes, to bowls for himself and the Receiver or to bowls for his best friend, who was not present, and the Receiver. Following the game each child was asked a series of sociometric questions about the other child. There was no evidence for differential giving of the chips (i.e., racial preferences) to either black or white Receivers by either black or white Paymasters. It was found that there was a greater number of chips given to both black and white Receivers by black Paymasters than by white Paymasters. Correlational analyses revealed a nonsignificant relationship between number of chips given and answers to the sociometric questions. The implications of the results for research on racial preferences in black and white children were discussed.
Racial Preferences in the Behavior of Black and White Children

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In studies using attitudinal measures to assess young children's racial preferences (e.g., Which doll, black or white, would you like to play with?), it has been found that both black and white children prefer white children and reject black children (Clark & Clark, 1957; Morland, 1966, 1968). Although Harris and Braun (1971) and Hraba and Grant (1970) have questioned the generality of the preference of black children for white children with their finding that black children prefer black dolls, the studies do consistently show that young children have racial preferences.

The existence of racial preferences in black and white children has, however, not been found when the behavior of the two races is observed. Goodman (1952) concluded that friendship and attachment among children in a nursery school group in a northeastern United States town were not affected by racial considerations. Similarly, Stevenson and Stevenson (1960), on the basis of observations in a nursery school in Austin, Texas, concluded that there were no differences between blacks and whites "in the relative amount of time spent in own-race and other-race interaction. . . . As one visitor put it: 'They might as well all be blue.' " (p. 70)
The major purpose of the present study was to determine if there would be racial preferences in the behavior of black and white children on an experimental task developed by Masters (1968, 1969, 1972). If preferences were found, the study could serve as the basis for a large scale project on the determinants of racial preferences in the behavior of black and white children.

Pairs of 1st and 2nd grade children played a question and answer game called Paymaster. This game was chosen because it has been shown to be sensitive to several independent variables in previous research with young children and it is of interest to children (Masters, 1968, 1969, 1972). On each of 10 trials, one of the children (the Receiver) was asked a question by an adult experimenter. After the Receiver had answered the question correctly, the other child (the Paymaster) was to distribute five chips, which were worth valuable prizes, to a bowl for himself and a bowl for the Receiver. If the children had racial preferences, the black and white Paymasters would give a greater number of their chips to either the black or the white Receivers. On the basis of the norms of this society and research on racial preferences with adults (Goldschmidt, 1970; Katz, 1970), it would be expected that the black children would give a greater number of their chips to the black Receivers than to the white Receivers whereas the white children would give a greater number of their chips to the white Receivers than to the black Receivers.

As indicated earlier, dissimilar results have been found with the two measures, attitudinal and behavioral, of racial preferences in black
and white children (Goodman, 1952; Morland, 1958, 1366; Stevenson & Stevenson, 1960). As yet, however, the relation between the two types of measures has not been investigated within a single study. Thus, a second purpose of the present study was to investigate the relation between attitudinal and behavioral measures of racial preferences in black and white children. This can be done by studying the patterning of results for the two measures and by correlating the Paymasters' scores for chips given to the Receivers during the game with their scores for a series of sociometric questions concerning the Receivers (e.g., Would you like _______ to be your friend?). These questions were asked following the Paymaster game.

Method

Subjects

The subjects were 48 pairs of children (24 male pairs and 24 female pairs) from the 1st and 2nd grades of an integrated elementary school in Carrboro, North Carolina. One child in each pair was in the 2nd grade (M age = 8.17 years) and always served as the Paymaster during the Paymaster game. The other member of the pair was in the 1st grade (M age = 7.23 years) and always served as the Receiver during the game.

Three male pairs and three female pairs were randomly assigned to the 8 experimental conditions generated by a 2 (Paymaster—black or white) X 2 (Receiver—black or white) X 2 (the Paymaster distributes the chips to bowls for himself and the Receiver or to bowls for his best friend, who
was not present, and the Receiver design. A randomization procedure was used in generating the pairs such that there was approximately an equal number of pairs from each of the possible combinations of 1st and 2nd grade classes in the school.

Two female undergraduates in psychology served as experimenters.

Procedure

The subjects were brought to the experimental room in same-sex pairs. They were seated across from each other at a table with the two adult experimenters at the ends of the table. Experimenter 1 (Miss Arnstein) then gave the following instructions:

Today we are going to play a game called Paymaster. These bowls are for holding the valuable chips you will be using during the game. The chips are worth valuable prizes at the end of the game. Now, I will put Johnny's name on one bowl and Jimmy's on the other bowl. I will also put your name on these containers. (The experimenter then put the child's name on a bowl. She also put their names on two plastic containers which were used to hold the accumulated chips.)

In this game one of you will be answering questions and the other will be the chips-Paymaster. Before you came, we flipped a coin to decide who will answer the questions and who will be the chips Paymaster. Johnny, I will be asking you 10 questions. Jimmy, you will be the Paymaster. After each question I ask Johnny you will have five chips. You can put all of the chips in your bowl, put all of them in Johnny's bowl, or put some of them in your bowl and some
in Johnny's bowl. You can do it any way you want and remember the chips are worth valuable prizes at the end of the game. Are there any questions?

Appropriate variations in the instructions and labeling of the bowls were made for the pairs in which the Paymaster chose between a bowl for his best friend and a bowl for the Receiver.

The game was then begun. Experimenter 1 asked the Receiver 10 questions. The initial questions were: "What's your name?" "How old are you?" and "Are you a boy or a girl?" The experimenter then presented pictures of common objects which the Receiver was to name. In the order of presentation to the child, the pictures were: bird, flowers, Indian, horse, clown, rooster, and apple. Each of the children had no difficulty in answering the three initial questions and in identifying the seven objects.

Following each answer, the Paymaster distributed five chips to the two bowls. After a few seconds had elapsed, Experimenter 1 transferred the chips to the clear plastic containers for each child.

Sociometric Questions.
To assess the attitudes of the children towards each other, following the Paymaster game each child was asked, in separate rooms, a series of questions about the other child. The questions were:

1. Would you like to have ________ be your friend?
2. Would you like to have ________ be in your class?
3. Would you like to have ________ sit next to you in class?
4. Would you like ________ to play with you?
5. Would you like to have _______ come to your house to play with you?

6. Is _______ a nice person?

7. Is _______ a smart person?

Results and Discussion

The mean number of chips given by the Paymaster to the Receiver for each of the eight experimental groups is shown in Table 1. A 4-way analysis of variance was performed on these data. The factors were race of Paymaster (black or white), race of Receiver (black or white), choice of Paymaster in distributing the chips (Paymaster versus Receiver or friend of Paymaster versus Receiver), and trials (1 through 10). Two significant effects were found: (a) there was a greater number of chips given to both black and white Receivers by black Paymasters than by white Paymasters ($F = 7.58; \text{df} = 1/40, p < .01$); (b) there was a 3-way interaction between race of Receiver, choice of Paymaster, and trials ($F = 2.13, \text{df} = 9/360, p < .05$). This interaction was due to a complicated relation between the experimental groups and trials. As can be seen in Table 1, there was an initial increase in the number of chips given to the Receiver for two groups (black Receiver—choice between Paymaster and Receiver and white Receiver—choice between friend of the Paymaster and the Receiver) and then a decrease in number of chips given. For the other two groups (black Receiver—choice between friend of the Paymaster and the Receiver and white Receiver—choice between the Paymaster and the Receiver) the relation between groups and trials did not change over trials. With these relations, there was a higher number of chips.
given on earlier trials for black Receiver--choice between Paymaster and 
Receiver and white Receiver--choice between friend of Paymaster and 
Receiver; for later trials, however, there was a greater number of chips 
given to the Receiver for the remaining two groups of black Receiver-- 
choice between friend of Paymaster and Receiver and white Receiver-- 
choice between Paymaster and Receiver. There was no evidence in the 
data for differential preference for either black or white Receivers by 
either black or white Paymasters (the F value for the interaction between 
race of Paymaster and race of Receiver was < 1).

The finding of no racial preferences in the behavior of black and 
white children is congruent with the findings of Goodman (1952) and 
Stevenson and Stevenson (1960). Each of these studies used young children; 
the present sample consisted of 6-, 7-, and 8-year-olds, whereas the 
samples in the Goodman, and Stevenson and Stevenson studies consisted of 
4- and 5-year-olds. Since racial preferences have consistently been 
reported in the behavior of black and white adults (e.g., Goldschmid, 
1970; Katz, 1970), a developmental study is needed to determine the age 
at which racial preferences first become evident in the behavior of 
children.

The mean scores for the sociometric question for the eight experimental 
groups are shown in Table 2. The scores are given separately for the
Paymasters' answers to questions about the Receivers and for the Receivers' answers to questions about the Paymasters. It can be seen in the table that there were a large number of "yes" (positive) answers to the seven questions (seven "yes" answers would yield a perfect score of 21). A 2 (race of Paymaster--black or white) X 2 (race of Receiver--black or white) X 2 (choice of Paymaster--Paymaster versus Receiver or friend of Paymaster versus Receiver) analysis of variance was performed on the data, separately for Paymasters' answers about the Receivers and for Receivers' answers about the Paymasters. Only one significant effect was obtained: the black and white Receivers were more positive about the black Paymasters (M = 20.29) than they were about the white Paymasters (M = 18.42) (F = 10.52, df = 1/40, p < .025).

Insert Table 2 about here.

As indicated earlier, results of the investigations of the behavior of black and white children toward each other are at odds with the results of studies of the attitudes of the two races toward each other. The present study provides some evidence on the question of the relationship between behavioral and attitudinal measures of racial preferences. First, the analyses of variance of the number of chips given by the Paymasters to the Receivers and of the Paymasters' answers to the sociometric questions about the Receivers provide evidence for no relationship between the measures. The pattern of results for the two measures was not similar.
For the behavioral measure, there was a greater number of chips given to the Receivers by black Paymasters than by white Paymasters. For the attitudinal measure, however, there was no difference between the two races for Paymasters in the degree of positiveness of their answers to the sociometric questions. Similarly, the pattern of results was not the same for the higher order interactions. A three-way interaction was obtained for number of chips given to the Receiver but not for the sociometric scores. Second, further evidence for no relationship between the measures was found in the correlation between the number of chips given by the Paymasters to the Receivers and the Paymasters' scores for the sociometric questions. If there was a relationship, there would be a high and significant correlation between the measures. Instead, the correlation was .21 (p > .05). Thus, the present results suggest that the two measures may be tapping different processes. The lack of a relationship between the measures should be a caution to investigators who might be interested in using findings on racial preferences in attitudes to predict racial preferences in behavior.
References


Footnotes

1. This research was supported in part by a grant from the University of North Carolina Research Council to Brian Coates. The authors appreciate the cooperation of the staff of the Carrboro Elementary School in conducting the study.

2. Requests for copies of the paper should be sent to Brian Coates, Department of Child and Family Studies, Washington State University, Pullman, Washington 99163.
Table 1

Mean Number of Chips Given to Receiver According to Race of Paymaster, Race of Receiver, Choice of Paymaster, and Trials

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<tr>
<td>Choice (Paymaster versus Receiver)</td>
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Table 1 continued

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Table 2

Mean Scores for Answers to Sociometric Questions According to Person Answering Question, Choice of Paymaster, Race of Paymaster, and Race of Receiver

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<th>Receiver</th>
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