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ABSTRACT

A total of 192 kindergarten children were randomly chosen from an urban school district. The pupils were divided equally between 5- and 6-year-olds, males and females, and blacks and whites. The four experimenters--a black female, a black male, a white female and a white male--presented five photographs to the children. The number of pictures correctly identified on a "something like me" basis, were entered in a 2x2x2x2x2 factorial analysis of variance. The only significant difference (p=.003) was the interaction between the child's race and the experimenter's sex. (Author/CS)

EXPERIMENTER EFFECT IN A STUDY OF RACIAL IDENTIFICATION BY URBAN KINDERGARTEN CHILDREN

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ABSTRACT

A total of 192 kindergarten children from an urban school district were randomly assigned to treatment groups. The pupils were divided equally between five and six year olds, males and females, and black and white races. The four experimenters--a black female, a black male, a white female and a white male--presented five photographs to the children. The number of pictures correctly identified on a "something like me" basis were entered in a factorial analysis of variance. The only significant difference ($p=.003$) was the interaction between the experimenter's race and the experimenter's sex.

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Racial awareness of racial identification seems to occur at an early age with a sharp increase in awareness around four years of age (Stevenson and Stewart, 1958). In a 1939 study Clark and Clark (1) found that sixty five percent of children correctly identified with their own race when presented pictures of a black and white pair. Raymer (1969) found that four-year old black and white children both preferred the white race as evidenced by responses on a paired picture selection task. A black examiner did not change the preference choices. In addition Morland (1966) found both black and white nursery school children identified a white woman in a picture as looking most like their own mother. Morland's study found no sex differences in racial identification.

Recently more blacks appear to have accepted their skin color as an asset (Ogletree, 1969). Based on these studies the following hypotheses were proposed

1. There should be no difference in racial identification scores between black and white children.
2. There should be no difference in racial identification scores between five and six year olds and
3. The race of the experimenter should have no affect on the racial identification scores of the children.
4. The sex of the experimenter was also entered as a factor in the analysis but with no a priori hypothesis as to the possible effect the sex of the experimenter might have. If anything, it was anticipated that females of both races would be likely to have higher racial identification scores from their subjects.

Methods and Procedures

The Subjects

One hundred and ninety-two kindergarten children were chosen from four elementary schools in an urban school district of over 10,000 pupils. Light skinned black children and special handicapped children were excluded from the study. Children were not less than five years old and not more than six years and eleven months old. The children were equally divided according to age, race, and sex. Subjects for the study were selected at random from the alphabetical listings in the above categories.

The four experimenters were a black female, a black male, a white female, and a white male. Each experimenter worked with children divided equally on three factors.

Table I

Number of Subjects for One Experimenters

Age	Sex	Female	Male
Five-year old	Same race	6	6
	Opposite race	6	6
Six-year old	Same race	6	6
	Opposite race	6	6

Five pictures were presented to each child. Six-year old children were photographed in a classroom, seated at a table with folded hands, and with a smiling expression. The pictures were the following:

1. one white male and one black male
2. two white males
3. two black males
4. one white male
5. one black male

For female subjects the pictures were the same kind but of girls. Children were asked "Does this look something like you?" If the children answered "yes", then she/he was asked, "Why does it look something like you?" For a negative answer the negative of the question was asked.

A correct response was recorded when the child chose his own race or did not choose the opposite race. A total score of five was possible. In addition the first reason the pupil gave his choice was recorded and categorized. The first response was used since it should be most "free" of experimenter prompting. Each reason was counted in one of nine categories: hair, dress, eyes, smile, folded hands, black race, white race, no reason or other. The reasons for choices were analyzed on a chi square table for differences by children's ages, races, and sex.

The number of correct identifications was entered as the score in a factorial analysis of variance design (α=.01).

Table 2

Factorial Design

Experimenter (Race, Sex)		Subject (Age, Race, Sex)							
		5 year old				6 year old			
		Black		White		Black		White	
		F	M	F	M	F	M	F	M
Black	Female								
	Male								
White	Female								
	Male								

RESULTS

Table 3

Analysis of Variance Summary Table

Source	df	Mean Square	F Ratio	Probability
Child's Age	1	33.33	.24	
Child's Race	1	52.08	.37	
Child's Sex	1	49.91	.34	
Exp.'s Race	1	4.69	3.34	
Exp.'s Sex	1	11.02	7.85	.057
Error	160	1.404		

The first three hypotheses were as expected. There seems to be no difference among children's responses: five and six year olds, blacks and whites, females and males respond similarly to the identification task. Neither the experimenter's race nor sex appears to make a difference.

In the summary table only one interaction reaches a probability level less than .01, the chosen significance level.

Table 4

Table of Means

Experimenter's Race by Experimenter's Sex

	Sex	
Race	Female	Male
Black	3.10	3.15
White	3.94	2.94

While black experimenters got about the same responses whichever their sex, there is a clear difference in the effect of the experimenter's sex for the white experimenters. The female experimenter's subjects responded better. Since the study was done at the end of the school year, this may be a result of most of the children being in class with white female teachers. Why this effect does not generalize to black female teachers may be due to little experience working with blacks of either sex in kindergarten.

In the chi square analysis of percentage of correct choices no significant differences appeared. However it was important to have an idea of the percentages to compare with the older Clark and Clark study.

Table 5

Percentage of Correct Choices

Children	Percent Correct
Five-year olds	66.4
Six-year olds	66.7
Black	64.8
White	66.3
Male	64.4
Female	66.7
Total	65.5

It is clear that there has been no dramatic increase in the percent of students correctly identifying pictures of different races since this percentage for the total correct responses is almost the same as that found in the 1939 Clark and Clark study.

The percentage of reasons given is an interesting comparison. How often do pupils identify using race as their reason?

Table 6

Percentage of Reasons for Choice

Reasons	Correct Choice	Incorrect Choice
Black Race	23.8	8.2
White Race	22.4	7.6
No Reason	22.4	36.6
Hair	10.0	11.5
Dress	8.7	16.3
Other	6.7	13.3
Smile	2.7	3.3
Eyes	2.2	1.5
Folded Hands	1.0	1.8

Race is correctly given as the reason for choices only 46.2% of the time and it is incorrectly given 15.8% of the time. It appears that about an equal percentage correctly identify race and a lesser but still almost equal percentage "cross identify" races. Hair which would appear to be a next most obvious identifier for blacks is given as a correct and incorrect choice about an equal percentage of times. The main distractors for incorrect identification are No Reason, Dress, Other and Hair. Apparently Smiling and Folded Hands had little influence on decision making.

Table 7

Percentage of Reasons for Choice

by Child's Age

Reasons	Correct Choice		Incorrect Choice	
	Five years	Six years	Five years	Six years
No Reason	23.8	21.2	40.8	32.1
Black Race	23.5	24.2	8.9	7.4
White Race	20.3	24.5	9.5	5.6
Other	9.6	3.8	13.6	13.0
Dress	9.6	7.9	14.2	18.5
Hair	8.7	11.3	6.5	16.7
Eyes	2.3	2.2	0.6	2.5
Smile	1.6	3.8	3.6	3.1
Folded Hands	0.6	1.3	2.4	1.2

Not much new appears on this table except the fact that incorrect identification by reason of Hair seems to increase from age five to six. Perhaps children are more conscious of their hair as they get older since they also make more correct choices by reason of Hair.

Table 8

Percentage of Reasons for Choice

by Child's Sex

Reasons	Correct Choice		Incorrect Choice	
	Female	Male	Female	Male
Black Race	20.6	27.2	6.3	9.9
White Race	22.2	22.7	3.7	11.1
No Reason	22.2	22.7	36.9	36.3
Hair	15.3	4.5	12.5	10.5
Dress	9.7	7.8	20.6	12.3
Other	4.1	9.4	11.2	15.2
Eyes	3.1	1.3	2.5	0.6
Smile	2.5	2.9	4.4	2.3
Folded Hands	0.3	1.6	1.9	1.8

Black males show the highest percentage of correct choices by race. And it is interesting to note that males are more often racially "cross identified" than females. Dress is clearly a greater distractor for females.

Table 9

Percentage of Reasons for Choice

by Child's Race

Reasons	Correct Choice		Incorrect Choice	
	Black	White	Black	White
Black Race	26.2	21.6	9.9	6.3
White Race	25.2	19.7	11.1	3.7
No Reason	21.7	23.1	33.9	39.4
Other	8.7	4.7	15.8	10.6
Dress	8.4	9.1	15.2	17.5
Smile	4.5	0.9	3.5	3.1
Hair	2.9	16.9	7.8	16.2
Folded Hands	1.3	0.6	2.9	0.6
Eyes	1.0	3.4	0.6	2.5

Nothing much of interest occurs in this table except that Hair is a correct identifying reason more often for whites than for blacks. We can't tell from the analysis whether they are identifying like or unlike race.

Discussion and Summary

This study found no differences in racial identification scores between five and six year olds, black and white children, or between females and males. Children chose correct pictures 65.5% of the time but only 46.2% of the time was race given as the reason. The only significant result found in the study was interaction between the experimenter's race and sex with the white female experimenter's subjects scoring highest and the white males the lowest. This may be explained as a result of spending the kindergarten year with all white female teachers.

Previous studies have not included an analysis of reason for the choices of pictures. Springer (1950) did conclude that physical factors were a determinant of choice. If reasons of choice on all physical factors are summed, nearly all the correct choices are accounted for in this study.

Further study on racial identification might include the variables of socioeconomic level and what type of household the children live in - a one parent of either sex household or a two parent household.

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