

## DOCUMENT RESUME

ED 074 165

UD 013 317

AUTHOR Entwisle, Doris R.; Webster, Murray, Jr.  
TITLE Expectations in Mixed Racial Groups.  
SPONS AGENCY Office of Education (DHEW), Washington, D.C.  
PUB DATE Feb 73  
NOTE 19p.; Paper presented at the American Educational Research Association annual meeting, New Orleans, La., February 1973

EDRS PRICE MF-\$0.65 HC-\$3.29

DESCRIPTORS Caucasian Students; Changing Attitudes; \*Elementary School Students; \*Expectation; \*Group Status; Inner City; Integration Effects; \*Intervention; Negro Students; \*Racial Integration; School Integration; Self Evaluation; Social Status; Student Attitudes

IDENTIFIERS Maryland

## ABSTRACT

The research reported in this document studies how status characteristics of adults and children affect adults' ability to raise a child's expectations for his own performance at school-like tasks. This paper focuses upon racial characteristics of both adults and children. The experimental procedure is as follows. An adult works with one child selected from a four-child group following a prescribed pattern to raise that child's expectations. The experiments reported here involve children in mixed race groups, two black children and two white children per group, with either black or white experimenters. Children in second, third, and fourth grades who attended an integrated school in Baltimore served as subjects. Middle-class young adult women, some black and some white, served as experimenters. When the race of the experimenter matches the race of the treated child, significant increases in the expectations of the treated child occur. But when race of the experimenter differs from that of the treated child, significant increases occur for black children interacting with white adults, but not for white children interacting with black adults. These effects for children in racially-mixed groups disagree with earlier work on single-race groups. (Author/JM)

EXPECTATIONS IN MIXED RACIAL GROUPS<sup>1, 2</sup>

Doris R. Entwisle

Murray Webster, Jr.

The Johns Hopkins University

February, 1973

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
OFFICE OF EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL OFFICE OF EDUCATION POSITION OR POLICY.

<sup>1</sup>Presented at the meetings of the American Educational Research Association, New Orleans, La., February, 1973.

<sup>2</sup>This research has been supported by Office of Education Grant OEG-3-71-0122.

ED 074165

ED 013317

## EXPECTATIONS IN MIXED RACIAL GROUPS

### Abstract

This research studies how status characteristics of adults and children affect adults' ability to raise a child's expectations for his own performance at school-like tasks. White adults are effective at raising expectations of white children or black children in mixed racial work groups; black adults are effective with black children but apparently not with white. These results, both consistent and inconsistent with previous findings, are interpreted in light of children's relative position in SES with respect to members of their own race. Unlike most research related to effects of desegregation, this research examines both black children's and white children's reactions to black adults.

A child builds performance expectations for himself on the basis of responses supplied him by significant others; these expectations then persist as more or less stable parts of his ability self-concept, and affect his behavior in future task performance situations. Some of our research (Entwisle & Webster, 1973), as well as that of others (e.g. Brophy & Good, 1970), indicates that the expectations teachers hold for their students may be potent determinants of students' actual performances because teachers translate their expectations into responses that affect the child's own expectations for himself. So far, however, we know little about the conditions affecting teachers' or other adults' influence upon children's expectations. How do children actually form expectations about their own ability to do schoolwork, and when are these expectations altered as a consequence of actions taken by others? What set of persons--parents, peers, teachers, others--constitute the set of significant others for this process? We are currently studying, in short experiments in elementary schools, adult-child interaction patterns that can cause a child to raise his expectations for his own future performance. Among other factors, the research examines how status characteristics of adults

and of children affect the raising of children's expectations. This paper focuses upon racial characteristics of both adults and children.

The research employs an experimental procedure previously developed (Entwisle & Webster, 1972a) to raise a selected child's expectations for his own performance. An adult works with one child selected from a four-child group following a prescribed pattern to raise that child's expectations (see below). Previously four-child groups studied experimentally have been homogeneous with respect to race and sex; that is, groups of black children or white children met with adult experimenters who were black or white. Children from grades one through four and from a variety of economic and geographical backgrounds generally respond significantly to the expectation-raising treatment (Entwisle & Webster, 1972a; 1972b; 1973 forthcoming). The only noteworthy exception is that black inner-city fourth-graders were not responsive to white middle-class adults, though younger black inner-city children did respond. The experiments reported here differ from previous ones in that they involve children in mixed race groups, two black children and two white children per group, with either black or white experimenters.

### The Experiments

Children in second, third, and fourth grades who attended an integrated school in Baltimore served as subjects. Middle-class young adult women, some black and some white, served as experimenters. At the outset the children met together and groups containing two black and two white children, all of the same second grade, were formed and designated as "Team 1," "Team 2," etc. Children were told that their team was about

"to play a game making up stories," and that the teams would be competing for a prize: everyone on the winning team would get a prize. Insofar as possible, members of a team came from different classrooms. The teams then went to separate rooms, with one experimenter accompanying each team.

The experiment consists of three phases. (See Entwisle & Webster, 1972a for a more detailed description of the experimental procedure.) In Phase I each team supplies 12 words to fill in a story skeleton. The story skeleton consists of incomplete sentences: "Once upon a time there was a \_\_\_\_." Children are instructed to raise their hands if they can think of a word(s) to complete the sentence. The experimenter cautions the children not to raise hands to volunteer a word unless "you are sure you have a very good word--one that will help the team score." Given this emphasis on task performance, hand raising is taken as an operational measure of each child's level of performance expectations for himself. The experimenter notes unobtrusively how often each child volunteers (raises his hand), then chooses one child to give the "team's word," being careful to choose each child equally often as a respondent. The experimenter is businesslike and does not praise or otherwise reinforce or evaluate responses in Phase I, merely noting them down.

In Phase II one child (whose rate of volunteering in Phase I is near the median for the group), is selected for the expectation raising treatment. In Phase II the selected child makes up a story by himself using a new story skeleton. Every word he gives, as well as the overall story, receives strong praise and positive evaluation from the experimenter--a treatment which our analysis indicates (see Entwisle & Webster, 1972a, 1973) should raise his performance expectations, and later, his rate of group

participation. Note that the treatment to raise the child's expectations involves praise of responses, not of hand-raising; when a child is completing a story by himself he does not, of course, need to volunteer.

In the series of experiments reported here, the child was chosen for the expectation-raising treatment in Phase II either to match or to differ from the experimenter in terms of race. This gives four sets of experiments, with a 2 X 2 factorial design containing race-of-experimenter and race-of-child. Since the school had about 60% black and 40% white children, the carrying out of the experiments led to exhaustive sampling of white children enrolled in grades 2, 3, and 4 and an 80% sample of black children.

In advance one could not give completely determinate predictions about the effect of adult-child racial mix or consistency, nor of interactions between such effects and the racially mixed group of children. However previous experiments (Entwisle & Webster, 1972c) showed that white adults were ineffective as expectation raisers for black, inner city children; and also (Entwisle & Webster, 1972d) that black adults were effective with white rural children. The effectiveness of an adult at raising children's expectations depends upon whether he is accepted as a "significant other," and we expect acceptance to vary with the adult's perceived status, friendliness or hostility, and perhaps with the child's amount of previous contact with adults of the experimenter's race.

In Phase II the three children not selected from each team for expectation-raising treatment leave the room where Phase I is carried out. These untreated children of each team constitute a control group,

and spend Phase II in the central room listening to a story being read. (Other experiments (Entwisle & Webster, 1972d) have established that this story-listening control treatment is equivalent in its effect to a control treatment in which an individual control child fills a story skeleton with an experimenter but the experimenter remains neutral. This equivalence points to the raising of expectations, as a consequence of positive feedback from the experimenter, as the crucial part of the Phase II treatment rather than to such things as telling a second story, isolation with an adult, or other incidental accompaniments of the Phase II treatment as the crucial factors.)

Phase III is a repetition of Phase I. The original teams reassemble in the experimental rooms and use a third story skeleton to produce a new story. The experimenter again remains neutral, calling upon each child an equal number of times, and noting how many times each child raises his hand. Experimenters are rotated between Phases II and III so that during Phase III they do not know the identity of the child who received the expectation-raising treatment in Phase II.

### Results

The analysis focuses upon changes in the rate of hand raising. The question at issue is whether the child who received the Phase II treatment raises his hand more in Phase III than in Phase I. His change between Phase I and III is compared to changes between Phases I and III for a selected child from each control treatment in Phase II.

A word is needed about the choice of an individual control child whose gain is used as the baseline against which to measure gain by the experimental child from the same group. First, group climate in mixed-racial



groups is probably important in its impact on volunteering, so the identity of groups is preserved in the analysis. Second, close matching of experimental and control children was undertaken to guard against biasing of results in favor of predictions. Biasing can occur in three ways:

(a) through the mean score for three control children tending to exceed the average score of experimental group children in Phase I, because although children occasionally volunteer 11 or 12 responses in Phase I, it rarely happens that a child volunteers once or not at all; (b) through ceiling effects when scores in Phase I are close to the maximum possible score (12); or (c) through regression effects, where disparate Phase I scores might lead to regression effects either through the experimental child's score regressing upward if his score in Phase I is relatively low, or through the control child's score regressing downward if his score in Phase I is relatively high.

For these reasons, the following rigorous procedure for screening experiments was adopted. First, a particular control child rather than the mean of three control children was taken as the baseline. Second, the criteria for selecting children who are closely matched, led to selecting only certain experiments for analysis. They are as follows: (a) if the Phase I score for the experimental child or the child selected to be his control were 11 or 12, the experiment is discarded (ceiling-effects); (b) unless the experimental child's Phase I score and the control child's Phase I score can be matched within 2 units or less, the experiment is discarded (regression effects). (The closest of possible matches was taken when more than one control child met the 2-unit separation criterion. If two control-group children are tied in terms of closeness to the experimental child, the control child whose race matched the



experimental child's is selected.) Using these criteria 29 of the 54 experiments conducted have been included in the analysis. Ceiling and regression effects should be minimal for these 29 groups.

The gains in volunteering for the treated child compared to gain for the control child are presented in Table 1. The identity of each

-----  
 Table 1 about here  
 -----

team is preserved in this analysis. For example, in 14 experiments where the experimenter was white and the treated child was black, the treated child on the average gained 2 more units between Phase I and III than the control child. Other mean gains listed in the second row of Table 1 show analogous treated-child versus control-child comparisons for other combinations of experimenter's race and child's race. One-sided t-tests appropriate for matched groups show significant differences favoring treated children for three experimenter-subject combinations (white E with white S's, white E with black S's, and black E with black S's) but not for black E and white S's. Variances associated with these means are relatively homogeneous.

For the black E-white S groups, with only 8 groups the danger of a type II error is substantial. However relaxing our exclusion criteria to permit examination of more cases does nothing to change the conclusion. If we include 3 more groups (for a total of 11 groups) where matching is not within 2 units but where ceiling effects are guarded against and use as the control child the other child of the same race, the mean gain score (experimental > control) drops to near zero (.09). These results

increase our confidence in the "no difference" conclusion for this condition, especially because the same criteria for selecting experiments were used for all other combinations but in all other cases positive results emerged.

The matched-race experiments (white E-white S and black E-black S) show statistically significant gains, but the numbers are small and further replications of these conditions would be desirable. The differences observed here are consistent with previous findings for matched-race E's and S's where members of teams were homogeneous with respect to race.

Table 2 shows the mean initial (Phase I) rank in group of experimental and control children. In all groups, white and black children

-----  
Table 2 about here  
-----

volunteer about the same amount in Phase I, but with black children volunteering slightly more than white. These results will be discussed more fully in the following section.

### Discussion

The pattern of results with mixed racial groups of children both reproduces our previous findings for single-race groups of children and extends the body of findings to different conditions. As in all previous work with homogeneous race groups of children, when the race of the experimenter matches the race of the treated child, significant increases

in the expectations of the treated child occur. Although the number of experiments of this type reported here is few, in the past black experimenters have been uniformly effective in raising the expectations of black children, and white experimenters have been uniformly effective with white children.

But when race of the experimenter differs from that of the treated child, significant increases occur for black children interacting with white adults but not for white children interacting with black adults. These effects for children in racially-mixed groups disagree with earlier work on single-race groups. Earlier, white adults were ineffective with fourth-grade inner-city blacks, and black adults were effective with white rural and white suburban children. Effects of racial mismatch are apparently complex. Two possible explanations are suggested, the second more appealing than the first.

(1) Racially Mixed Groups

A white child encouraged by a black experimenter may feel he faces "stiff competition" when he is placed back in an integrated group (Phase III) led by a black experimenter; for instance, he might expect the black experimenter to favor black children. But it is hard to see why this same explanation would not apply equally well to the black child encouraged by a white experimenter, who competes against white children in Phase III. Also an analysis of variance performed on rates of volunteering in Phase I where race-of-experimenter and race-of-children are two fixed-effect factors shows no significant main effects or interaction effects. This asymmetry leads us to discount simply the racial mix or the group as an explanatory factor. In Phase I white children volunteer somewhat

more for black E's (7.71) than for white E's (6.71), although not significantly more in 28 and 26 experiments respectively. This suggests that initially at least, white children respond at about the same level to both types of experimenters, and are somewhat more responsive to black adults.

## (2) SES Level

Social class or SES level is a major point of difference between children in the present study and those in previous studies. The children of the present experiments lived at the black-white interface in Baltimore. Blocks tend to be segregated by race, but blocks are intermingled so the boundary is irregular. Public places in this neighborhood--schools, stores, parks--are patronized by both races, and the school which the children attended, about 60% black and 40% white, has maintained its integrated character over a period of years. Blacks in this area are considerably higher up the SES ladder than blacks in completely segregated ghetto neighborhoods in east and west Baltimore where children of our previous studies lived. On the other hand, whites of the present study are much below the SES level of whites in previous studies, being at the low extreme of white SES in Baltimore.

This suggests that children of very low SES relative to others of their own racial group--whites of the present study and inner-city blacks of the previous study--may perceive adults of the opposite race as hostile. Opposite-race adults, if they are perceived as hostile, would not be "credible" as expectation-raisers for such children. The "hostility" interpretation of earlier results with white E's and black S's was supported by the successful results achieved by black E's with black S's

(Entwisle & Webster, 1972d). Precisely why low SES children of both races should be most likely to perceive hostility from other-race adults, however, remains to be established.

The two explanations proposed here are closely related to Katz' (1968; 1970) observations that blacks are sensitive to the reference group with which they are being compared (the racial-mix explanation) and that white adults are seen as hostile by black children. From the present experiments it may be possible to refine Katz' idea as follows: "Children of very low status in any group are apt to perceive adults as hostile if adults belong to a different racial group from the child."

Results are interesting for the light they throw on effects of integration of schools. It is often speculated that children of different races in integrated schools are likely to regard each other with suspicion or hostility, and one effect of this might be to depress volunteering rates in this experiment, especially the rates of black children. From another point of view, expectation states theory asserts that if children perceive race as a relevant status characteristic, then they will form expectations for each other based upon their respective races (see Berger et al., 1972). The effect of this process also would be to depress expectations black children hold for themselves--especially in Phase I--and thus, their volunteering rates.

The fact that black children do not have lower volunteering rates in Phase I than whites in any of our conditions suggests that neither of these processes occurred. There is no evidence that racial tensions between children depressed blacks' volunteering in Phase I, and there is an indication that children at this school do not perceive race as a

relevant status characteristic in forming performance expectations for themselves and each other. More research would be needed to investigate these suggestions systematically, but the fact that this school (unlike most schools in Baltimore) has remained successfully integrated for several years may have contributed to breaking down of some "interaction disabilities" based upon race.

#### Other Experimental Research in Mixed Groups

Related to this point, in the only other work bearing a close resemblance to work reported here, Cohen and her associates (1970, 1971) tried to increase performance expectations of black children participating in biracial work teams. Children of both races from segregated backgrounds were brought together for these experiments. In Cohen's research it appeared as though all children formed low expectations for blacks and relatively high expectations for whites, on the basis of the race status characteristic. To overcome the effects of race, thus raising blacks' performance outputs, the expectations of white children for black children had to be changed as well as expectations of black children for themselves. The large amounts of effort necessary to accomplish this in Cohen's work shows clearly the force and the persistence of racial bases for performance expectations.

The black children in our experiments came from an integrated background and apparently neither they nor their white classmates held low expectations for blacks' performance--black children's rates of volunteering in Phase I, prior to any treatment were somewhat higher, although not significantly higher than white children's rates. History of previous contact, particularly equal-status contact between schoolchildren, across



racess may best explain the difference between our findings and Cohen's. The same general effects would also help explain the complex interactions we find between race of adult, race of child, and child's social class level.

### Some Implications

Most previous research on performance in mixed racial groups has involved college students. There is very little experimental research on mixed racial groups involving children of elementary school age, or even survey research on desegregation effects for younger children (see Cohen, Pettigrew, & Riley, 1972). The work reported here may have some relevance to desegregation strategies. Discussions of desegregation effects concern mainly reactions of blacks in schools where some classmates and teachers are white (see e.g. Katz, 1968). The issues involving white children's reactions to black teachers, or black students' reactions to black teachers, remain virtually unexplored. In racially mixed classes, for example, will a black teacher or a white teacher be more effective? Are there beneficial effects in terms of positive intergroup relations from having first- and second-graders in white segregated neighborhoods taught by black rather than white teachers? Compared to the efforts necessary to bus children between schools, it would be relatively easy to "bus" teachers. Or what are the effects upon inner-city black children of white middle-class teachers? This aspect of school integration, the deployment of black or white teachers, although easily manipulable, has been little investigated. Most studies so far concern "racial balance" where racial balance has to do only with the racial



mix of students. This research begins to broaden research along the teacher dimension and suggests how complex interactions may be in terms of racial mix and social class.

Table 1

Gains in Volunteering for Mixed Racial Groups  
(n in parentheses)

	<u>White Experimenter</u>		<u>Black Experimenter</u>	
	White Treated Child	Black Treated Child	White Treated Child	Black Treated Child
Mean Gain	4.16 (3)	2.00 (14)	1.00 (8)	1.75 (4)
t-values	2.93*	2.53**	0.97	1.70*

\*  $p < .05$

\*\*  $p < .01$

Table 2

Volunteering Ranks for Mixed Racial Groups  
(rank 1 high; rank 4 low)

	<u>White Experimenter</u>		<u>Black Experimenter</u>	
	White Treated Child	Black Treated Child	White Treated Child	Black Treated Child
Average Initial Rank in Group				
Exper. Child	3.00	2.69	3.25	2.62
Control Child	2.83	2.40	3.00	2.62

## References

- Berger, J., Cohen, B., & Zelditch, M. Status characteristics and social interaction. American Sociological Review, 1972, 37, 241-255.
- Brophy, J. E., & Good, T. L. Teachers' communication of differential expectations for children's classroom performance. The Journal of Educational Psychology, 1970, 61, 367-374.
- Cohen, D. K., Pettigrew, T. F., & Riley, R. T. Race and outcomes of schooling. In F. Mosteller & D. P. Moynihan (Eds.), On Equality of Educational Opportunity. New York: Random House, 1972. Pp. 343-370.
- Cohen, E. G., Lohmann, M., Hall, K., Lucero, D., & Roper, S. Expectation training I: Altering the effects of a racial status characteristic. Technical Report No. 2, School of Education, Stanford University, January 1970.
- Cohen, E. G., Roper, S. S., & Lucero, D. Modification of interracial interaction disability. Paper presented at the meeting of the American Educational Research Association, New York, February 1971.
- Entwisle, D. R., & Webster, M. Raising children's performance expectations. Social Science Research, 1972a, 1, 147-158.
- Entwisle, D. R., & Webster, M. Raising expectations in the classroom. Paper presented at the meeting of the Eastern Sociological Society, Boston, April 1972b.
- Entwisle, D. R., & Webster, M. Status factors in expectation raising. Sociology of Education, 1972c, in press.
- Entwisle, D. R., & Webster, M. Teacher expectancies and student expectation states. Paper presented at the meeting of the Pacific Sociological Association, Portland, Oregon, April 1972d.

## References (Continued)

- Entwisle, D. R., & Webster, M. Raising children's expectations for their own performance: A classroom application. In J. Berger & T. Conner (Eds.), Expectation States Theory. Cambridge: Winthrop Publishers, 1973 forthcoming. Chapter 7.
- Katz, I. Factors influencing Negro performance in the desegregated school. In M. Deutsch, I. Katz, & A. Jensen (Eds.), Social Class, Race, and Psychological Development. New York: Holt, Rinehart, & Winston, 1968. Pp. 254-289.
- Katz, I. Experimental studies in Negro-White relationships. In L. Berkowitz (Ed.), Advances in Experimental Social Psychology. New York: Academic Press, 1970. Pp. 71-118.