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ABSTRACT

In a newly desegregated school, sixth graders with varying degrees of previous interracial contact were asked to rate their classmates as preferred work or play partners. Results indicated that: (1) there were no differences in cross-race ratings made by students with a great deal of prior interracial contact and those with little prior interracial contact; (2) there were no increases in cross-race ratings between the beginning and the end of the desegregation year during which the study was made; and (3) similarity of sex was a more powerful determinant of peer preferences than similarity of race. The study suggested that desegregation has no effect on cross-race preferences. (MJL)

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The Influence of Sex, Race, and Prior Interracial Contact
on Children's Peer Preferences in a New Desegregated School

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The Influence of Sex, Race, and Prior Interracial Contact
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One of the social goals of school desegregation is the elimination, or at least the reduction, of intergroup prejudice (e.g., Cook, 1979; St. John, 1975; Stephan, 1978). The theoretical basis for this goal is the contact hypothesis, which holds that better interpersonal understanding, the discovery that people of different races have more similarities than differences, and a consequent reduction of negative stereotypes and beliefs will result from interracial contact under supportive conditions (Allport, 1954; Amir, 1976; Cook, 1969). A good indicator of this outcome is the degree to which racial in-group and out-group members are equally preferred as partners for activities such as work or play. However, a number of studies have found strong preferences to interact with in-group members among children in desegregated schools (see reviews by St. John, 1975; Schofield, 1978; Stephan, 1978), leading Stephan to conclude that "desegregation generally does not reduce the prejudice of whites toward blacks" and that it "leads to increases in black prejudice toward whites about as frequently as it leads to decreases" (p. 217).

A common feature of many of the studies leading to this pessimistic conclusion is the use of the traditional sociometric peer nomination method to measure peer preferences: each child is asked to list a few (usually three to five) classmates who are friends or best friends. Such a procedure severely restricts the number of others a child can

choose. If no out-group members are included among these choices, one might conclude that out-group members are not accepted. It is possible, however, that students have favorable attitudes toward the out-group members, but do not consider them to be close enough friends to be included in their limited number of choices. Studies using the traditional sociometric method do tend to find strong in-group peer preferences; similarity of race accounted for an average of 17.1% of the choice variance in a review of the studies for which that statistic could be calculated (Schofield & Whitley, Note 1).

The strong race effects found using the peer nomination technique stand in sharp contrast to some more recent studies of peer preferences in desegregated settings which have used the roster-and-rating assessment technique (Singleton & Asher, 1977, 1979). This technique has each child rate all of his or her classmates on an interval preference scale. These studies have found that similarity of race accounts for considerably less of the preference variance than the earlier studies, averaging less than 1%. Similarity of sex, on the other hand, accounted for an average of about 40% of the variance in these two recent studies.

The striking difference in the amount of variance accounted for by race in studies using these two somewhat different methodologies raises the question of whether the exclusive, restricted choices used as data by the peer nomination method might obscure real changes over time in peer preferences in children attending desegregated schools that would be found with the more inclusive roster-and-rating method. Although the

roster-and-rating studies cited above found no changes in preferences over time, the children participating in them had attended desegregated schools for several years before the studies were conducted. Thus, it is not clear whether the small effects of racial similarity and time were due to the children's extensive experience with desegregated environments before the beginning of the studies or to a pre-existing lack of prejudice.

The present study investigated the effect of desegregation on peer preference ratings by focusing on ratings made during the first year of operation of a new desegregated school which drew pupils from schools which had provided varying degrees of interracial contact. If desegregation does have an effect on peer preferences, it would be shown in two ways. First, students coming from schools providing a high degree of interracial contact should show more cross-race preference than students from schools providing less opportunity for interracial contact. However, it is possible that these schools did not implement the conditions necessary for change under the contact hypothesis (Cook, 1979; Pettigrew, 1973; Schofield, 1978). Since the school involved in the present study came close to meeting many of those conditions, a second desegregation effect should appear: the cross-race preference of students should increase from the beginning to the end of their first year in a desegregated school. In addition, the research of Singleton and Asher (1977, 1979) suggests that sex will have a much greater effect on peer preference than will race.

Method

Subjects

Subjects were 39 black male, 51 black female, 39 white male, and 28 white female sixth-graders who were members of several classrooms randomly selected for study as part of a larger research project on school desegregation. The school in which the classrooms were located and the demographic characteristics of its students are described in Schofield and Sagar (1977). The students' prior schools were classified as providing high or low interracial contact on the basis of school board records of their racial composition. A student was considered to have attended a high contact school if that school had more than the median percentage of students of the other race. For black students, this was a school that was at least 47% white, and for white students, a school that was at least 38% black. The high prior contact group consisted of 15 black male, 15 black female, 13 white male, and 12 white female students.

Procedures

At both the beginning and the end of the school year the students completed two questionnaires on which they rated, on 5-point scales, the degree to which they would like to have each of their classmates as (a) a work partner and (b) a play partner. The order of presentation of the questionnaires was counterbalanced at each administration. Each child's preference score for work or play with a race-sex group (e.g., black males) was his or her mean rating of all members of that group.

Results

Data Analysis

The children's work and play ratings of their classmates were analyzed by separate 2 (race of subject) x 2 (sex of subject) x 2 (prior interracial contact) x 2 (similarity of rater's and ratee's race) x 2 (similarity of rater's and ratee's sex) x 2 (time) ANOVAs, with the latter three variables treated as within-subjects factors. Percentages of variance accounted for (pv) were calculated using the formulas provided by Dodd and Schultz (1973). Because six black males and one black female did not complete the play questionnaire and one white male did not complete the work questionnaire, the F-tests for the play data had 1 and 142 degrees of freedom, and those for the work data had 1 and 148 degrees of freedom. For an effect to be considered significant, it had both to reach conventional levels of statistical significance and to account for at least 1% of the variance in the dependent variable (cf. J. Cohen, 1977). This dual criterion helps to insure that the effects to be regarded as significant could be of some practical as well as statistical significance (S. A. Cohen & Hyman, 1979).

In order to insure that the results of the study were not contaminated by extraneous variables, student socioeconomic status characteristics (participation in school lunch program, community income and education) and ability characteristics (IQ, math and reading achievement scores) were correlated with the peer ratings. No correlation having an absolute value greater than .16 was found in the present sample, so it was not considered necessary to control for these

variables' effects.

Desegregation and Peer Preferences

The only significant effect that either prior interracial contact or the year's experience with desegregation had on peer preferences was that the play ratings made by students with high prior interracial contact ($\bar{M} = 2.36$) were somewhat lower than those made by students from low contact schools ($\bar{M} = 2.75$), $F = 10.45$, $p = .002$, $pv = 1.0$. Since the interaction of prior interracial experience with similarity of race was not significant, $F = 1.33$, $p = .25$, this effect applied equally to ratings of students of both the rater's race and the other race. Thus, while it might be interesting to speculate why the experience of interracial contact would lead to lower ratings of peers, it could easily be a random effect. The overall conclusion must be that the experiences of prior interracial contact and a year's desegregation do not alter cross-race peer preferences.

Similarity of Race and Sex

Race. Slight same-race preferences were reflected in both the work ratings, $F = 27.30$, $p < .0001$, $pv = 1.0$, and the play ratings, $F = 40.07$, $p < .0001$, $pv = 1.1$. Work ratings of members of one's race ($\bar{M} = 2.75$) were higher than those of the other race ($\bar{M} = 2.54$), as were play ratings (Means: same race = 2.68; other race = 2.40). Despite the fact that it accounted for about 1% of the rating variance, similarity of race led to only about a 0.25 point difference on the 5-point scale, a very small absolute difference of perhaps little psychological meaning.

Sex. Similarity of sex had the largest effect of any factor on

both the work ratings, $F = 482.64$, $p < .0001$, $pv = 36.7$, and the play ratings, $F = 517.15$, $p < .0001$, $pv = 40.7$. Work ratings of members of one's own sex ($M = 3.39$) were higher than those of the other sex ($M = 1.52$), as were play ratings (Means: same sex = 3.37, other sex = 1.71). These differences were large in absolute as well as relative size, averaging about 1.75 points on the 5-point scale.

There were also sex of subject by similarity of sex interactions for both the work ratings, $F = 15.53$, $p = .0001$, $pv = 1.1$, and the play ratings, $F = 12.14$, $p = .0007$, $pv = 1.0$. Post-hoc comparisons using Tukey's HSD test showed that for work, males' ratings of males ($M = 3.21$) and females' ratings of females ($M = 3.57$) were essentially equal, whereas males' ratings of females ($M = 1.21$) were lower than females' ratings of males ($M = 1.82$), $p < .05$. These results suggest that girls dislike boys somewhat less than boys dislike girls as work partners, perhaps because math is perceived as a masculine task (cf. Unger, 1979). No post-hoc comparisons of the play ratings were significant.

Relative importance of race and sex. The relative importance of race and sex was assessed by treating pvs as squared correlations, and testing for differences in dependent correlations (J. Cohen & Cohen, 1975). Sex of rater had a significantly stronger relationship than did race of rater with both work ratings, $t(153) = 5.579$, $p < .001$, and play ratings, $t(147) = 5.850$, $p < .001$.

Race of Subject

One additional significant finding was that white students made somewhat lower overall ratings than did black students on both the work

scale, $F = 12.57$, $p = .0005$, $pv = 1.4$, and the play scale, $F = 20.23$, $p < .0001$, $pv = 1.9$. Blacks' work ratings averaged 2.81 and whites' 2.42; their play ratings averaged 2.74 and 2.29, respectively. Although one might speculate that the two groups used the rating scales differently, the absolute magnitudes of the differences are not large, and could be random effects. In addition, these differences had no effect on cross-race ratings.

Discussion

It was hypothesized that if desegregation had an effect on peer preferences, this effect would be shown by higher cross-race ratings being made by students having high prior interracial contact and by increases in cross-race ratings over the year of desegregation in the new school. Neither of these effects was found.

These negative findings using the newer roster-and-rating method are in line with earlier studies which used the traditional sociometric technique to measure peer preferences (see reviews by St. John, 1975; Schofield, 1978; Stephan, 1978). However, it should be noted that there was little difference in same-race and cross-race ratings at the beginning of the school year. Thus the children were as favorably disposed to members of the other racial group as they were to members of their own group, leaving little room for change. This ceiling effect could be the result of either a generally favorable interracial environment in the community (cf. Stephan & Rosenfield, 1978) or of the use of the roster-and-rating technique.

In regard to the techniques, it was found that the magnitude of the

differences in cross-race as compared to same-race ratings was much smaller in the present study as compared to the traditional sociometric studies. Similarity of race accounted for only about 1% of the preference variance in the present study, compared to about 17% of the variance in traditional sociometric studies (Schofield & Whitley, Note 1). It is possible that these differences are a function of the more restricted range of choices allowed by the traditional nomination technique, and this possibility is now under investigation (Schofield & Whitley, Note 1).

Another finding of the present study is that similarity of sex is a much more powerful influence than similarity of race in determining peer preferences. Similar results were found in an observational study of interpersonal behavior in the same school (Schofield & Sagar, 1977), and have been noted in a more-or-less off-hand manner during the past 40 years of desegregation research, starting with Criswell in 1939. Rather than being a minor adjunct to desegregation research, however, this very strong homosociality is an important point--to primary school children, at least, sex is much more important than race in forming peer preferences. Within the sexes, personal factors, such as perceived academic ability (e.g., St. John & Lewis, 1975) or interpersonal attraction factors (cf. Berscheid & Walster, 1978), may account for more preference variance than does race. In some cases, therefore, there may be no social effects of desegregation at the group level of analysis because there is little ground to be gained; individual-level factors such as those just cited may be more important. In this regard,

the interpersonal processes which are postulated to lead to reduced prejudice may be analyzable only by new statistical techniques such as round robin analysis of variance (Kenny & Nasby, 1980; Warner, Kenny & Stoto, 1979) which is designed to test for interpersonal effects at the individual level. Such techniques offer fertile ground for future research.

In sum, the present research suggests that desegregation has little effect on cross-race peer preferences, and that sex is a much more important factor than race in peer preferences. Thus, attempts to change cross-race preferences may be faced with a ceiling effect.

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