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ABSTRACT

This is a report on a study of racial interrelationships among students in desegregated schools. Sociometric measures of third graders' willingness to play and work with their classmates (indicating cross-race acceptance) showed evidence of racial bias; however, the amount of bias appeared small compared to the findings of earlier studies which used measures of friendship rather than acceptance as indicators of interracial relationships. Significantly, children tended to demonstrate sex bias more than racial bias in interpersonal relationships. Observation of children's classroom interactions corroborated these findings. Follow-up studies of the same group of third graders when they were in the sixth grade and in the tenth grade indicated increasing own-race preference and decreasing own-sex preference over time; comparisons of acceptance and friendship measures suggested similar changes in race and sex preferences with advancing grade levels. Among the reasons given for increasing own-race preference with increases in age were school organizational features which might influence the degree of interracial contact, and the personal identities that each group projects and interprets. It was emphasized that the findings of more positive cross-race relations when the criterion is acceptance rather than friendship provide cause for optimism about integrated education. (Author/MJL)

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Acceptance Versus Friendship:  
A Longitudinal Study of Racial Integration

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UD 022-311

There has been a long-standing research tradition of using sociometric measures to study children's interpersonal relations in racially desegregated schools. Since the 1930's (e.g., Criswell, 1937, 1939) studies have documented the tendency for children to exhibit increasing preference over age for peers of their own race. The typical study in this area involves children who are recently integrated rather than integrated throughout their school careers. Furthermore, these studies have typically used friendship nomination types of sociometric measures which children are asked to nominate a select number of best friends or their most preferred playmates. Not surprisingly such studies find far fewer cross-race friendship choices than would be expected were racial biases absent. A study by Shaw (1973) is illustrative. In this study, fourth-, fifth-, and sixth-grade children were asked whom they preferred to be with. Approximately 80% of the children were white and 20% black. Both blacks and whites overselected members of their own race. About 94% of white children's selections were other white children, and about 67% of black children's selections were other black children.

Studies which use friendship nomination types of sociometric measures provide demanding tests of the effects of desegregation on cross-race relationships. Friendship nomination measures carry with them the implicit assumption that the social goal of desegregation is the development of cross-race friendships. Given the social climate in which desegregation often takes place, few desegregated schools are likely to pass this test. For one thing, busing, as an often necessary means of achieving desegregation, limits children's opportunity for after-school friendship-building contact. Furthermore, the parents of many children are themselves prejudiced and do little to encourage cross-race friendships.

In the research reported in this paper, we have asked the following question: What if the social objectives of desegregation included not just the long-range objective of cross-race friendship but also the more immediate and perhaps more realistic objective of cross-race acceptance? As mentioned before, cross-race friendship is a particularly demanding test for desegregated schools, especially newly desegregated schools, to pass. A fairer test may be whether children come to like and accept one another. Liking or acceptance, although perhaps a prerequisite to friendship, can occur without close relationships actually developing. The longitudinal study described here focuses primarily on children's cross-race acceptance, and the data generally indicate that this more modest goal is being attained in many elementary schools. The picture concerning best friendship patterns, as we shall see, is more complex.

The study began in 1973 at the request of a school district that was interested in monitoring the progress of its desegregation program in the district. We selected third-grade children to study because they were the oldest group of children in the district to have been in desegregated classrooms throughout their school careers. The school district had desegregated in 1968, so our sample had been in racially integrated classrooms for four years and had never been in a racially segregated classroom. Since 1973, when the study began, the proportion of black children in the district has increased from about 21% to about 30%. There have been three waves of testing to date.<sup>1</sup> Figure 1 shows the design of the study. We began in 1973 with 227 children who were in 9 different classrooms in as many schools. Three years later when the children were in sixth grade we surveyed the

154 children remaining in our sample and also tested a new group of third graders (N=205). Finally, four years later in 1980 we tested our original sample in tenth grade, now 84 in number. In addition, we followed up our 1976 third graders, now in seventh grade (N=96), and once again collected data on a new group of third graders (N=191). Thus our design allows us to make longitudinal comparisons, cross-sectional comparisons, and also to make time-lag comparisons to assess possible secular change between 1973 and 1980. Our focus in this paper is on the longitudinal and cross-sectional comparisons. The time-lag comparisons have shown little evidence of secular change.

We will tell the story of our findings as they have emerged over each wave of testing. In 1973, we collected two types of data, both addressed to the issue of how well children accepted cross-race classmates. First, we used sociometric measures focused on acceptance rather than best friendship. Instead of asking children to nominate a select number of classmates as best friends or preferred playmates, we asked children to rate each of their classmates in two ways: how much they would like to play with them and how much they would like to work with them. Children made the ratings on a five-point scale where "1" meant "I don't like to" and "5" meant "I like to a lot." Children were carefully taught how to use the scale before rating each of their classmates, and a series of five faces, ranging in expression from a deep frown to a broad smile, were used to help communicate the meaning of each of the numbers. Figure 2 shows the rating-scale format.

The results concerning the sociometric "play with" ratings are summarized in Figure 3.<sup>2</sup> Children gave fairly high ratings to both own-race classmates

4

and cross-race classmates. Although some degree of race bias is evident, and was statistically significant, the amount of bias appears small compared with the "best friendship" findings of earlier studies.

One interpretation of these results is that children were using the rating scale in an undifferentiated or nondiscriminating fashion. In this regard it is instructive to compare the degree of race bias children exhibited with the degree of sex bias. These results, shown in Figure 4, indicate that children were using the rating scale in a discriminating way. Most discrimination, however, was against members of the opposite sex rather than against members of a different race.

We also measured race relations in third grade by making direct observations in the classroom. The results were similar to the findings from the sociometric part of the study. Children interacted far more with classmates who were their own sex than would be expected from the number of boys and girls within each class. Children interacted with children of their own race, however, no more than would be expected from the number of white and black children in each classroom. Most important, the overwhelming proportion (about 95 percent) of the cross-race interaction that occurred was coded as positive (e.g., cooperative behavior, or quietly talking), as opposed to negative interaction (e.g., physical or verbal abuse, or taking away materials).

These results, then, present a rather positive picture of cross-race acceptance among children who have been in desegregated schools from the beginning of their school careers. Still, the children were only in third

grade and as noted before sociometric studies often find increasing own-race preference in later grade levels. Thus, we were interested in learning how the developmental trend would look when the measure was one of acceptance rather than best friendship. To examine this issue we surveyed the children again when they were in sixth grade (in 1976) and again in tenth grade (in 1980). Before describing the longitudinal findings, it is necessary to point out a procedural change at the high school level. Since students of this age move during the day from class to class we faced the problem of which fellow students should be listed on the sociometric roster. Our solution was to give each student a list of 76 names randomly sampled from all of the tenth graders in the school. Sixty percent of the names were of white students and 40% of black students. Students were asked to rate how much they would like being in school activities with each person listed.<sup>3</sup> If they didn't know a person well enough to make a rating they were instructed to check a separate "don't know" column on the rating sheet and to skip that person's name.

The children's acceptance ratings were analyzed using a  $2 \times 2 \times 2 \times 2 \times 3$  (Race of Giver x Sex of Giver x Race of Receiver x Sex of Receiver x Grade) analysis of variance. Race and sex of giver refer to the race and sex of the child doing the rating. Race and sex of receiver refer to the race and sex of the child who is being rated. Race bias in peer ratings would be reflected in a significant Race of Giver x Race of Receiver interaction. Sex bias would be reflected in a significant Sex of Giver x Sex of Receiver interaction.

In these analyses, the interaction of Race of Giver x Race of Receiver was significant,  $F(1,80) = 50.90$ ,  $p < .001$ , as was the three-way interaction

of Race of Giver x Race of Receiver x Grade,  $F(2,79) = 9.65, p < .001$ .

Thus, there was race bias in children's ratings and the degree of bias changed as the children went from third to sixth to tenth grade. Figure 5a graphs this trend. As can be seen, a shift took place particularly between third and sixth grades in children's own-race preference. Children's preference for own-race peers increased significantly. The tenth-grade data are similar to the sixth-grade picture.

There was also sex bias in children's ratings and the degree of bias changed over grade level. The interaction of Sex of Giver x Sex of Receiver was significant,  $F(1,80) = 448.72, p < .001$ , as was the three way interaction of Sex of Giver x Sex of Receiver x Grade,  $F(2,79) = 115.01, p < .001$ .

Figure 5b shows the data for children's own-sex versus cross-sex preferences. Here a different grade-level pattern is evident. Third- and sixth-grade children show considerable own-sex preference but this decreases considerably in tenth grade.

To provide some indication of the relative magnitude of the race and sex bias at each grade level, additional 2x2x2x2 (Race of Giver x Sex of Giver x Race of Receiver x Sex of Receiver) analyses of variance were done separately for each of the three grade levels. These analyses are summarized in Table 1. There is an arrow next to the Race of Giver x Race of Receiver interaction term in the source table, and another arrow next to the Sex of Giver x Sex of Receiver interaction term. Again, these interactions can be used as indicators of the degree of race bias and sex bias, respectively, in children's sociometric ratings. Note the relative magnitude of the race versus sex bias  $F$  ratios across the three grade levels in our longitudinal sample. The  $F$  ratio for sex bias is quite large in third and sixth grade



but decreases substantially in tenth grade. The  $F$  ratio for race is relatively small in third grade, increases markedly in sixth grade, and increases again somewhat in tenth grade. It is of interest, however, that even in high school the amount of race bias in children's acceptance of one another is quite small compared to the considerable sex bias evident in the earlier years.

Thus far we have focused exclusively on whether children accept one another. How do children's friendship choices change over grade level? In 1980, we administered a best-friendship nomination measure as well as a rating-scale measure to each grade level that we tested. Thus, cross-sectional comparisons can be made of children's acceptance ratings and of their best-friendship choices. Looking first at the cross-sectional acceptance data (Figures 6a and 6b),<sup>4</sup> it can be seen that the data replicate in fairly close fashion the results from our longitudinal sample. In the analysis of variance, there was a significant Race of Giver x Race of Receiver interaction,  $F(1,360) = 61.83$ ,  $p < .001$ , and a significant three-way interaction of Race of Giver x Race of Receiver x Grade,  $F(2,360) = 17.20$ ,  $p < .001$ , indicating a change in children's own-race preferences over grade level. There was also a significant Sex of Giver x Sex of Receiver interaction,  $F(1,360) = 437.79$ ,  $p < .001$ , and a significant three-way interaction of Sex of Giver x Sex of Receiver x Grade,  $F(2,360) = 50.57$ ,  $p < .001$ , indicating a change in children's own-sex preferences over grade. Again, as a means of comparing the relative magnitude of the race and sex effects across the three grade levels for the cross-sectional sample, separate analyses of variance were done for each grade level. Table 2 summarizes these data. Similar to the longitudinal sample, the  $F$  ratio for race is very small in the third grade

and shows the greatest increase between third and seventh grade. The F ratio for sex is largest in the third and seventh grades but decreases substantially in the tenth grade.

Figure 7, by contrast, indicates the proportion of own-race versus other-race peers children nominated as their best friends at each grade level. Looking first at third grade, the data are fairly encouraging even with respect to the friendship criterion. Twenty-four percent of white children's friendship choices were of blacks. Thirty-seven percent of black children's choices were of whites. With increasing grade level, however, the degree of race cleavage on the friendship measure increases rather dramatically. Indeed, by tenth grade only 8% of white children's best friend nominations were black. For black children, own-race preference had increased to 96%. Thus the tenth-grade friendship data reveal a far less positive picture than the cross-race acceptance data described earlier.

The pattern with respect to own-sex friendship preference shows decreasing sex bias at the older grade levels (Figure 8). Still, own-sex friendship choices strongly predominate even in tenth grade. However, as with the rating-scale data, sex bias appears to be smaller than race bias in the tenth grade.

What accounts for the increase over age in own-race preference? Data from our 1980 cross-sectional sample provide one possible clue. Recall that children were asked not to rate a fellow student if they didn't know that student well enough. In third grade, all children were together for the full school day, thus this measure wasn't relevant. However, in seventh grade and tenth grade the matter of degree of knowledge does become relevant. The data depicted in Figures 9 and 10 show both race and sex influence on children's

familiarity with others. Children know their own race and sex groups best, and this is especially true in tenth grade.

It seems plausible that various organizational features of the school may influence the degree to which white and black students come to know each other. Different curricular and extra-curricular emphases as well as relatively little time in any particular class together may conspire against black and white students getting to know each other very well. This is especially important since black and white students come from different neighborhoods and to a large extent different social classes, thereby reducing the possibility for after-school contact.

Still, organizational features of the school do not tell the whole story. Even in seventh grade when the students knew nearly everyone else well enough to do the ratings, own-race preference was stronger than in third grade. Our guess is that the phenomenon of increasing race cleavage over age can be partly understood in terms of the personal identities that each group projects and interprets of the other as they work, play, and converse together in school. Schofield (1981) has written insightfully about the way identities get played out in desegregated schools. Black children often come to interpret the white children's behavior as aloof, conceited, and academically "show-offish." Whites often perceive blacks as aggressive and threatening. Increasing racial cleavage over age may also be mediated by the growing gap in school achievement that develops between whites and blacks over the school years. And then, of course, there is the issue of dating as it emerges in early adolescence.

In closing we would like to make several points. First, our discussion of increasing race bias over age should not detract from our main point:

Children's cross-race relations are found to be considerably more positive when the criterion is children's acceptance of one another rather than best friendship. We believe that our data, especially the elementary-school data, provide cause for optimism about integrated education.

Second, our conclusions are not based on sociometric data alone. The direct behavioral observations we've made in third-grade classrooms also provide a positive picture. Although a different pattern might emerge if we observed in less structured or less supervised settings (e.g., the playground), the classroom observational data do suggest that elementary-school children, at least, are behaving as accepting colleagues vis-a-vis one another.

Third, the relatively positive pattern we have observed in the elementary school does not seem to be restricted to middle-sized, midwestern communities such as the one we studied. Schofield and Francis (in press) have recently reported a similar pattern in a desegregated magnet middle school in Pittsburgh.

Finally, we believe that the distinction we are making here between acceptance and friendship has utility in evaluating the outcomes of mainstreaming as well as racial integration. Evidence recently reviewed by Asher and Taylor (1981) suggests that handicapped youngsters are better integrated into classroom life than has been suggested by friendship nomination type data. We hope the findings we've presented here encourage others to include the criterion of intergroup acceptance when evaluating the social outcomes of racial desegregation and mainstreaming.

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## Footnote

1. Detailed results for the first two waves of testing are presented in Singleton and Asher (1977, 1979).
2. Results for the "work with" question were similar to those for the "play with" question (see Singleton and Asher, 1977, 1979).
3. For purposes of the longitudinal comparison, it was necessary to make the separate "play with" and "work with" questions used in 1973 and 1976 equivalent to the more general "being in school activities" question employed in 1980. To accomplish this, each child's "play with" and "work with" ratings were averaged together. Thus, the sociometric ratings for the 1973 and 1976 testing periods in the longitudinal comparison represent averages of the two ratings (play and work) given by each child to each race/sex group.
4. On the 1980 rating-scale measure, the third- and seventh-grade students in the cross-sectional sample were given the same sociometric question as the tenth-graders--i.e., "How much would you like being in school activities with this person?" Since the seventh graders were organized into teams (of 23 to 76 children) instead of classes, these children rated each of the other students in their team. In addition, the seventh graders (like the tenth grade students) were given the option of indicating the name of any student on the list they didn't know well enough to rate. The "don't know" option was not provided in the third-grade testing, since third graders generally know all of their classmates.

Figure 1. Design of the Study

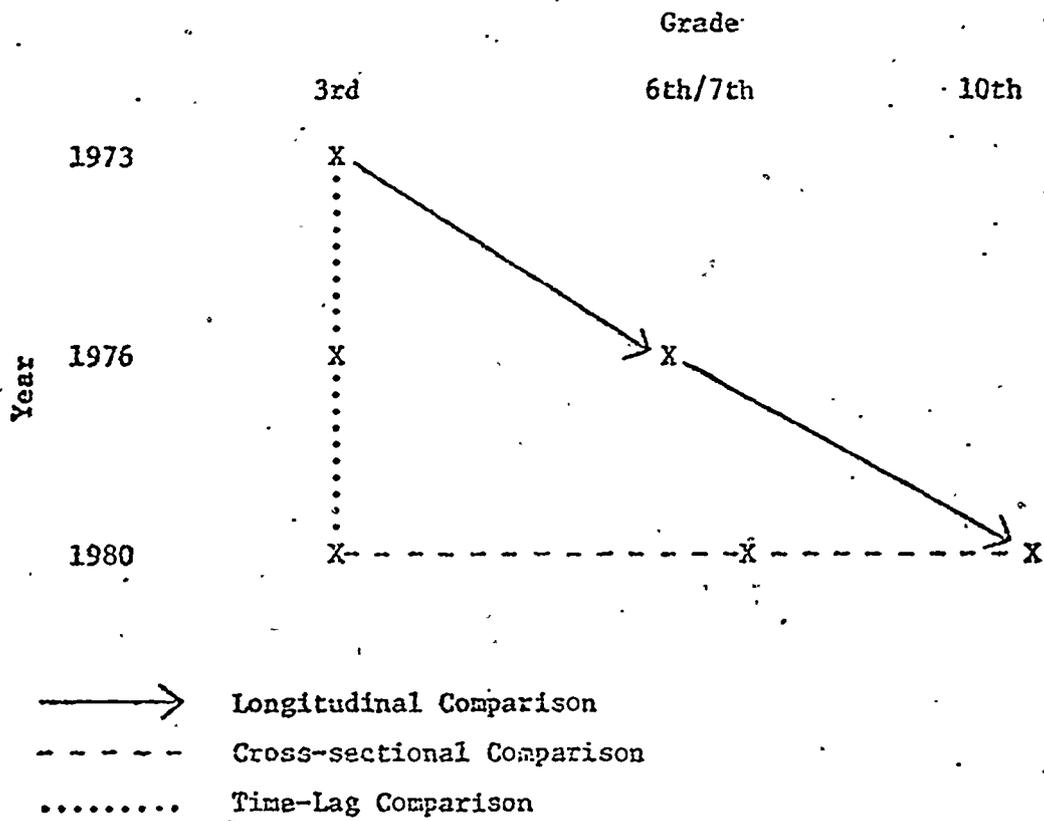


Figure 2. Sociometric Rating Scale Format

Name \_\_\_\_\_

EXAMPLES:

How much do you like to play with this person at school?

	I don't like to	1	2	3	4	I like to a lot
Louise Blue	1	2	3	4	5	
Russell Grey	1	2	3	4	5	

John Armon	1	2	3	4	5
Andrea Brandt	1	2	3	4	5
Sue Curtis	1	2	3	4	5
Sandra Drexel	1	2	3	4	5
Jeff Ellis	1	2	3	4	5
Bill Fox	1	2	3	4	5
Diane Higgins	1	2	3	4	5
Harry Jones	1	2	3	4	5
Jill Lamb	1	2	3	4	5
Steve Murray	1	2	3	4	5
Jo Anne Norman	1	2	3	4	5
Pam Riley	1	2	3	4	5
Jim Stevens	1	2	3	4	5

HOW MUCH DO YOU LIKE TO PLAY WITH



THIS PERSON AT SCHOOL?

1 2 3 4 5

I don't  
like to

I like  
to a lot

Figure 3. Own-Race versus Cross-Race Play Ratings in the 1973 Third-Grade Sample

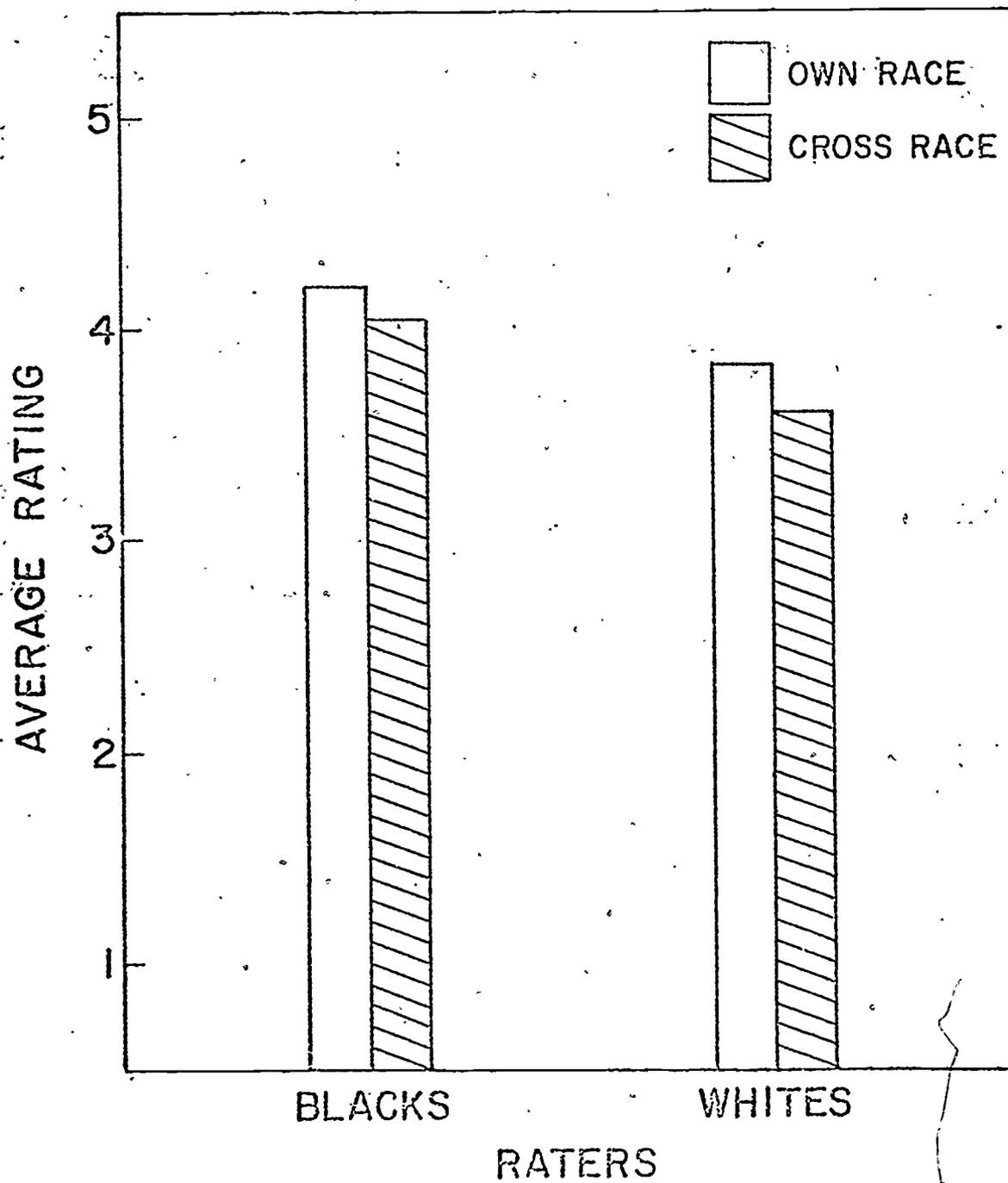


Figure 4. Own-Sex versus Cross-Sex Play Ratings in the 1973 Third-Grade Sample

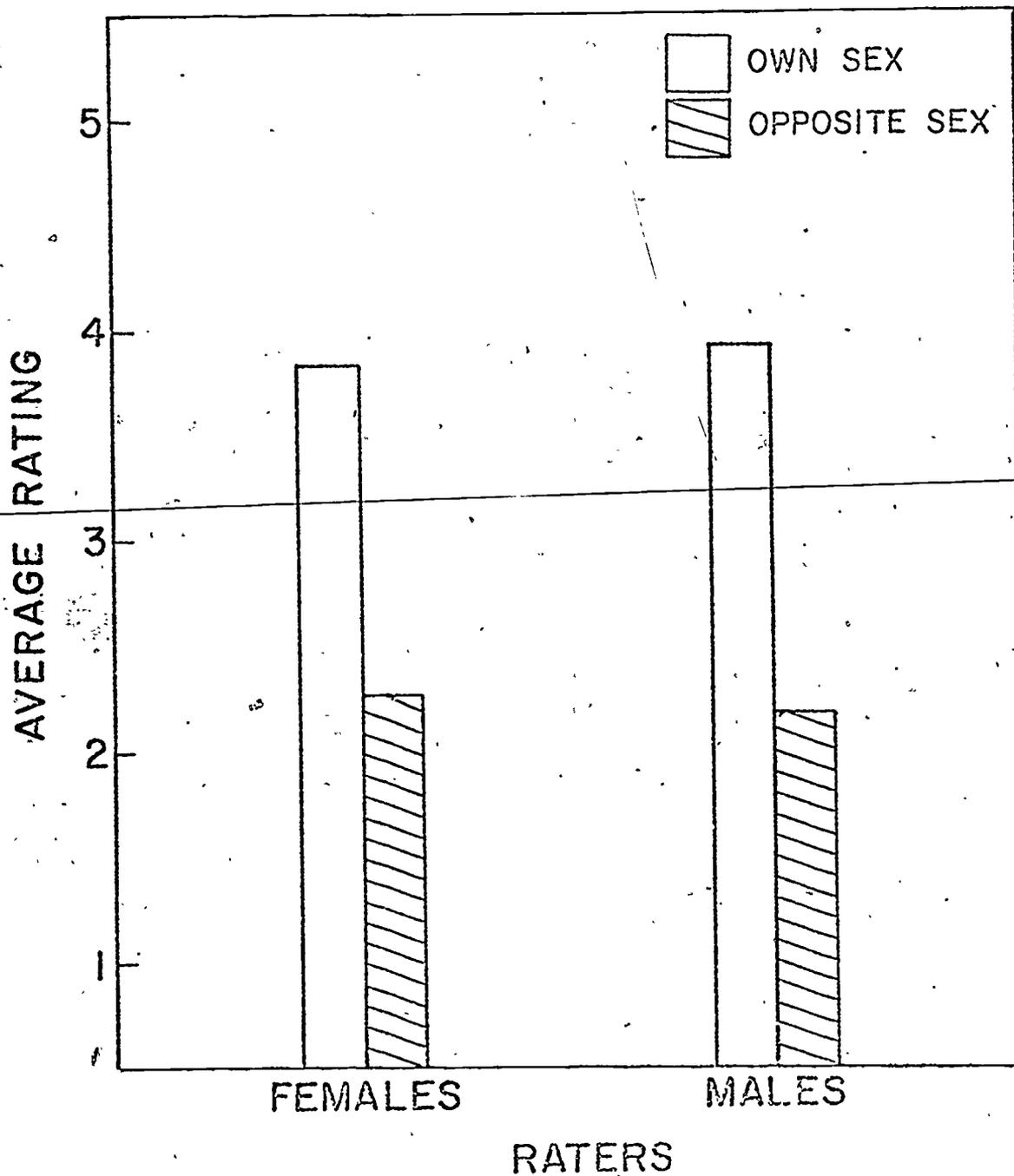
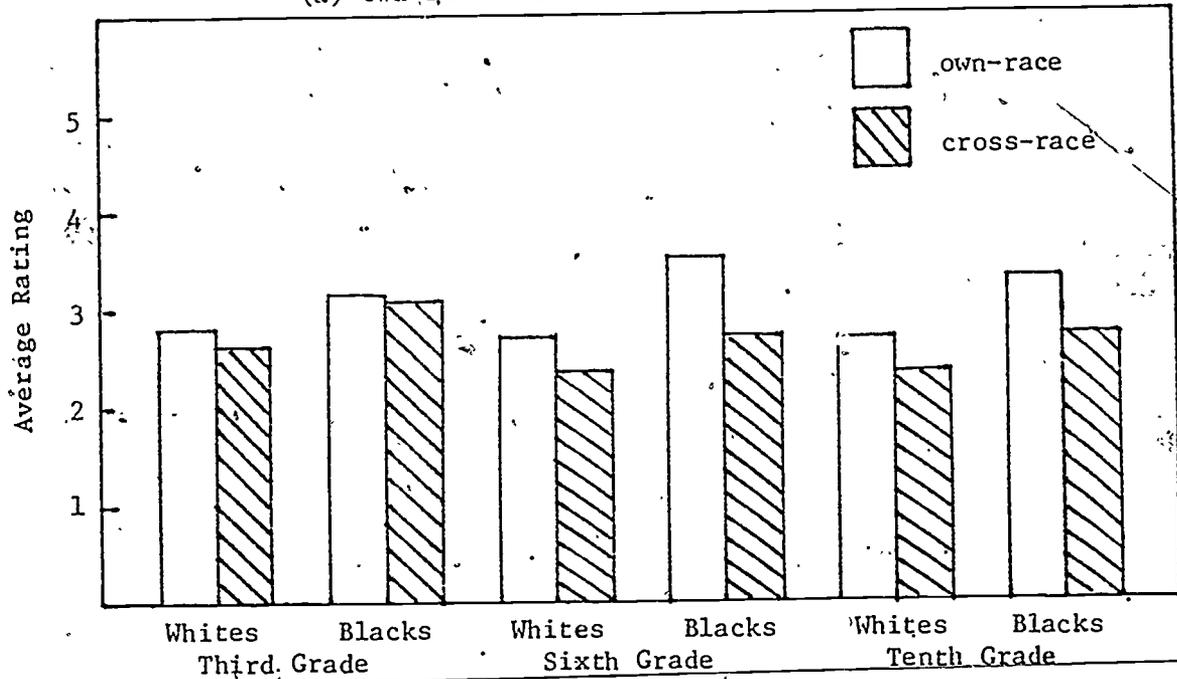


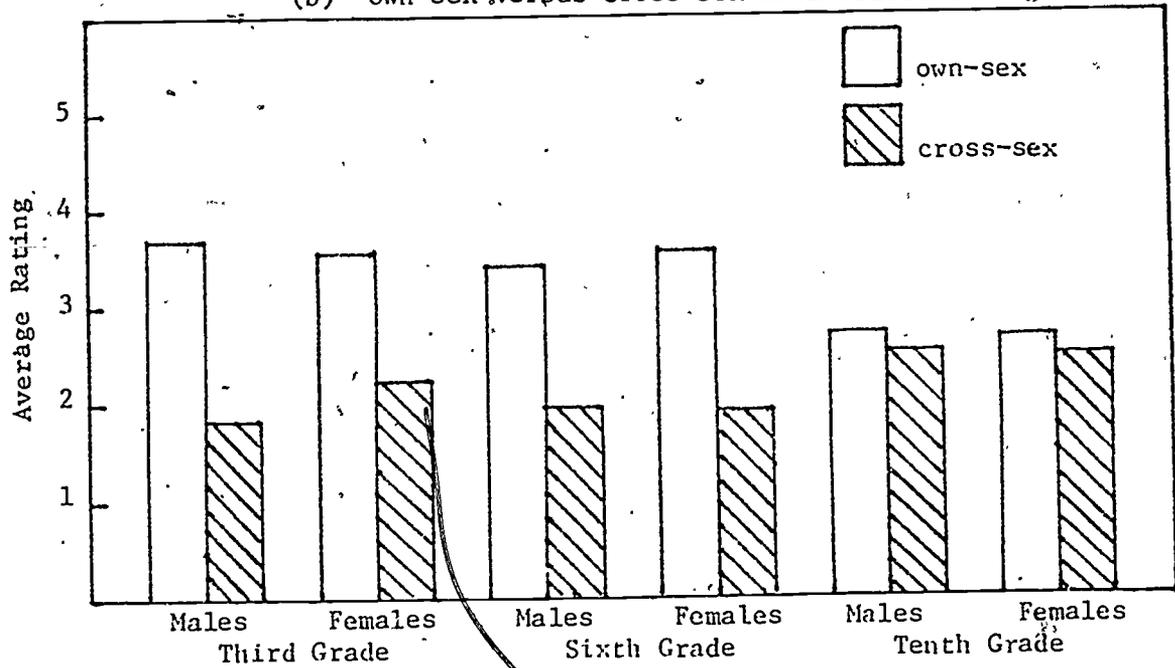
Figure 5. Sociometric Ratings Given in the 1973-1980 Longitudinal Sample

(a) Own-race versus cross-race sociometric ratings



Raters

(b) Own-sex versus cross-sex sociometric ratings



Raters

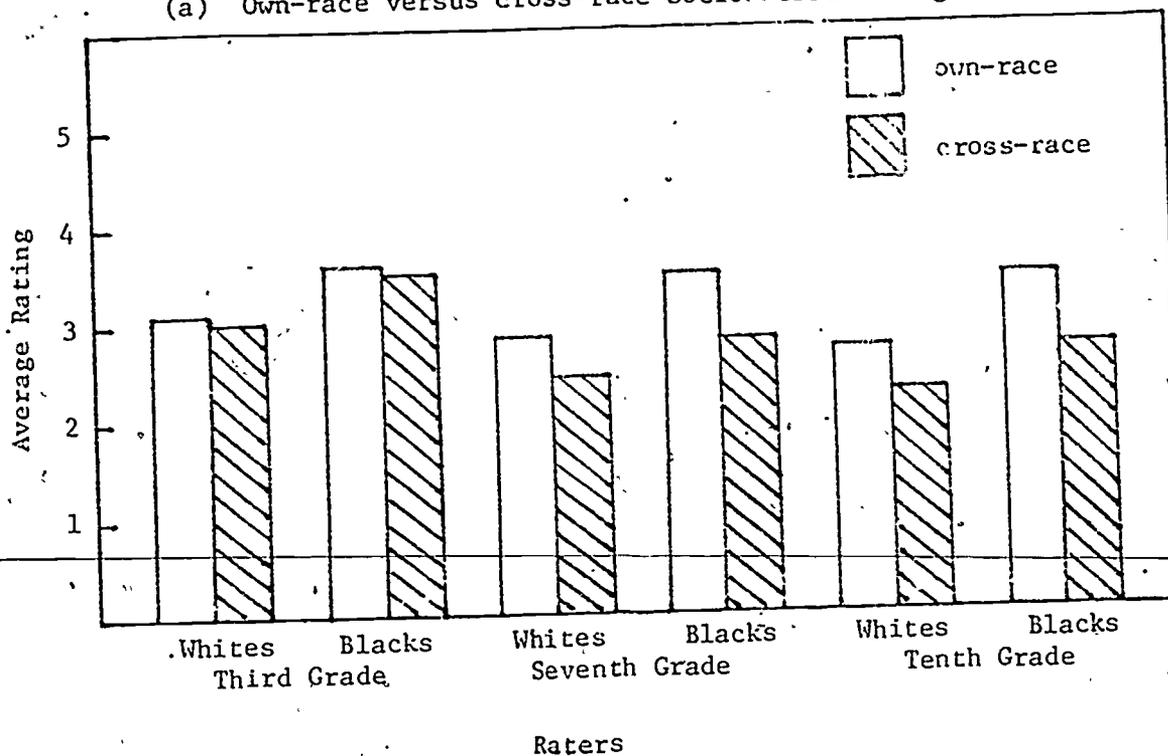
Table 1

F-Values of Various Effects for Each Grade Level  
in the Longitudinal Sample

Effect	<u>Third Grade</u>			<u>Sixth Grade</u>		<u>Tenth Grade</u>	
	df	F	p	F	p	F	p
R(R)	1,80	4.03	.0481	1.97	.1642	7.06	.0096
S(R)	1,80	6.47	.0129	0.36	.5501	0.35	.5559
R(G)	1,80	7.72	.0069	16.32	.0002	10.25	.0020
S(G)	1,80	0.79	.3771	0.07	.7986	0.69	.4101
R(R) x S(R)	1,80	0.86	.3556	0.89	.3471	5.73	.0191
→ R(R) x R(G)	1,80	2.95	.0897	34.96	.0001	44.32	.0001
R(R) x S(G)	1,80	2.06	.1552	0.41	.5263	4.54	.0361
S(R) x R(G)	1,80	0.63	.4287	0.27	.6047	1.22	.2736
→ S(R) x S(G)	1,80	264.57	.0001	271.98	.0001	10.41	.0919
<del>R(G) x S(G)</del>	<del>1,80</del>	<del>0.20</del>	<del>.6551</del>	<del>0.68</del>	<del>.4104</del>	<del>0.12</del>	<del>.7269</del>
R(R) x S(R) x R(G)	1,80	1.48	.2271	0.95	.3304	1.48	.2278
R(R) x S(R) x S(G)	1,80	0.28	.5998	0.24	.6278	0.42	.5187
R(R) x R(G) x S(G)	1,80	0.31	.5767	3.23	.0761	7.24	.0087
S(R) x R(G) x S(G)	1,80	0.14	.7081	0.22	.6411	2.56	.1136
R(R) x S(R) x R(G) x S(G)	1,80	1.16	.2853	4.19	.0440	1.14	.2894

Figure 6. Sociometric Ratings Given in the Cross-Sectional Sample

(a) Own-race versus cross-race sociometric ratings



(b) Own-sex versus cross-sex sociometric ratings

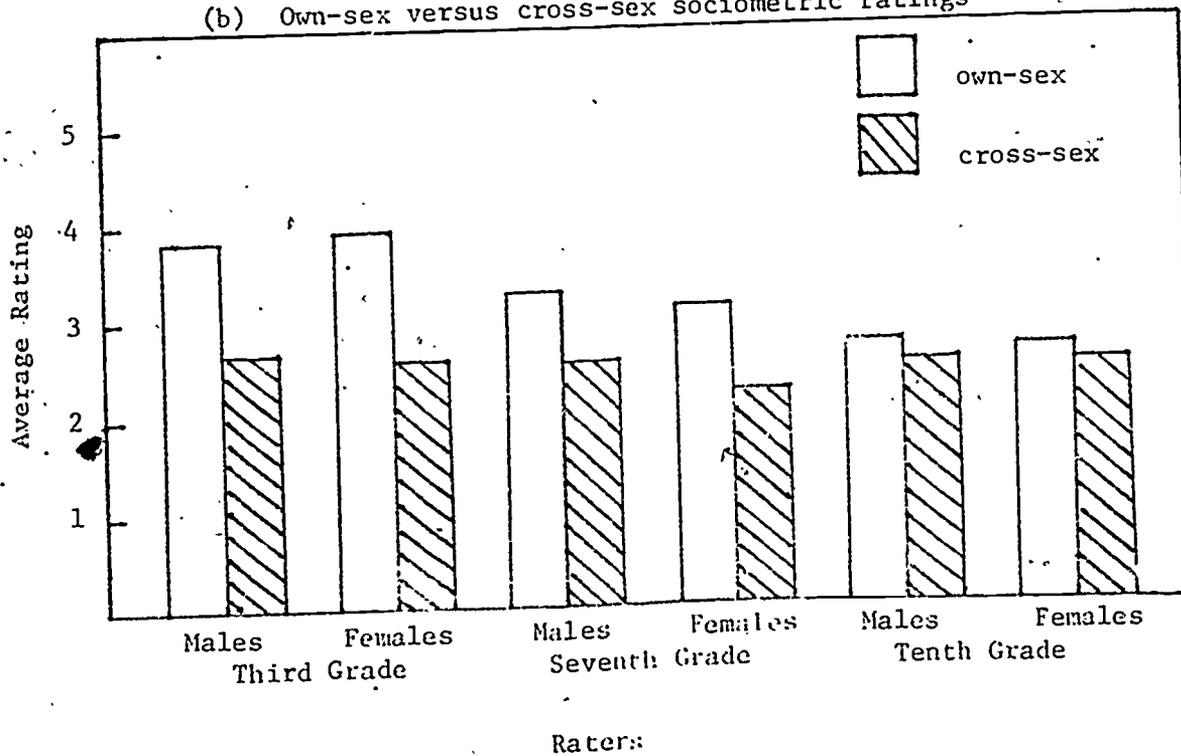


Table 2

F-Values of Various Effects for  
Each Grade Level in the 1980 Cross-Sectional Sample

Effect	3rd Grade			7th Grade			10th Grade		
	df	F	P	df	F	P	df	F	P
Race (R)	1,187	1.31	.2546	1,92	1.45	.2316	1,81	8.50	.0046
Sex (R)	1,187	6.17	.0139	1,92	6.82	.0106	1,81	0.34	.5593
Race (G)	1,187	22.90	.0001	1,92	17.63	.0001	1,81	15.17	.0003
Sex (G)	1,187	0.00	.9800	1,92	4.86	.0300	1,81	1.02	.3161
R(R) X S(R)	1,187	0.06	.8057	1,92	0.02	.8964	1,81	5.77	.0186
→ R(R) X R(G)	1,187	2.95	.0876	1,92	70.18	.0001	1,81	56.83	.0001
R(R) X S(G)	1,187	0.44	.5074	1,92	1.55	.2166	1,81	4.04	.0479
S(R) X R(G)	1,187	4.74	.0308	1,92	14.24	.0003	1,81	1.27	.2634
→ S(R) X S(G)	1,187	335.34	.0001	1,92	104.57	.0001	1,81	10.17	.0021
R(G) X S(G)	1,187	1.08	.3005	1,92	1.06	.3054	1,81	1.40	.2399
R(R) X S(R) X R(G)	1,187	9.95	.0019	1,92	11.50	.0011	1,81	1.42	.2363
R(R) X S(R) X S(G)	1,187	0.09	.7630	1,92	1.79	.1840	1,81	0.51	.4773
R(R) X R(G) X S(G)	1,187	0.41	.5238	1,92	4.15	.0446	1,81	12.73	.0007
S(R) X R(G) X S(G)	1,187	2.09	.1502	1,92	4.82	.0306	1,81	3.09	.0828
R(R) X S(R) X R(G) X S(G)	1,187	0.69	.4067	1,92	6.23	.0144	1,81	1.28	.2604

Figure 7. Friendship Nominations Given to Own-Race and Cross-Race Peers in the Cross-Sectional Sample

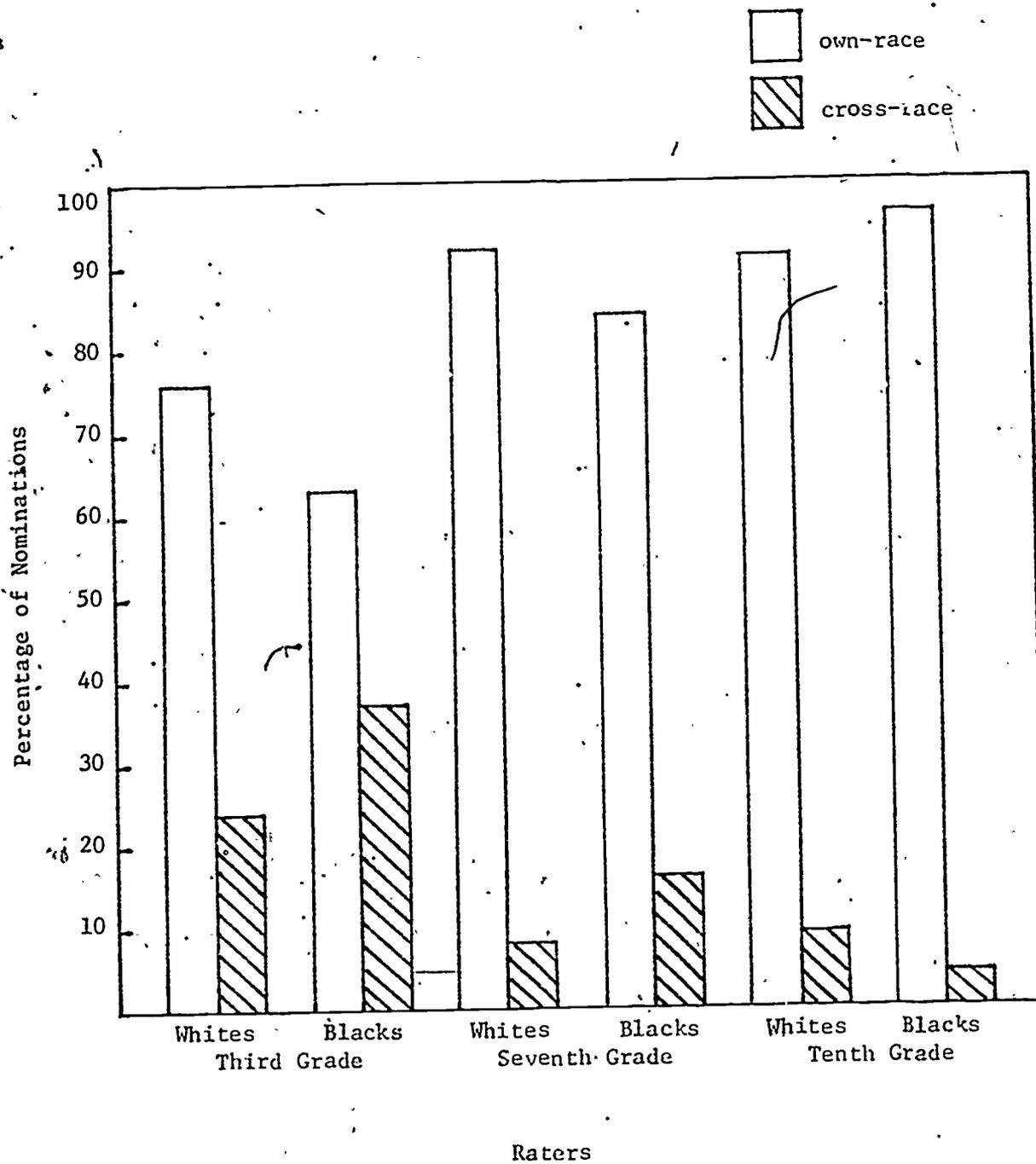


Figure 8. Friendship Nominations Given to Own-Sex and Cross-Sex Peers in the Cross-Sectional Sample

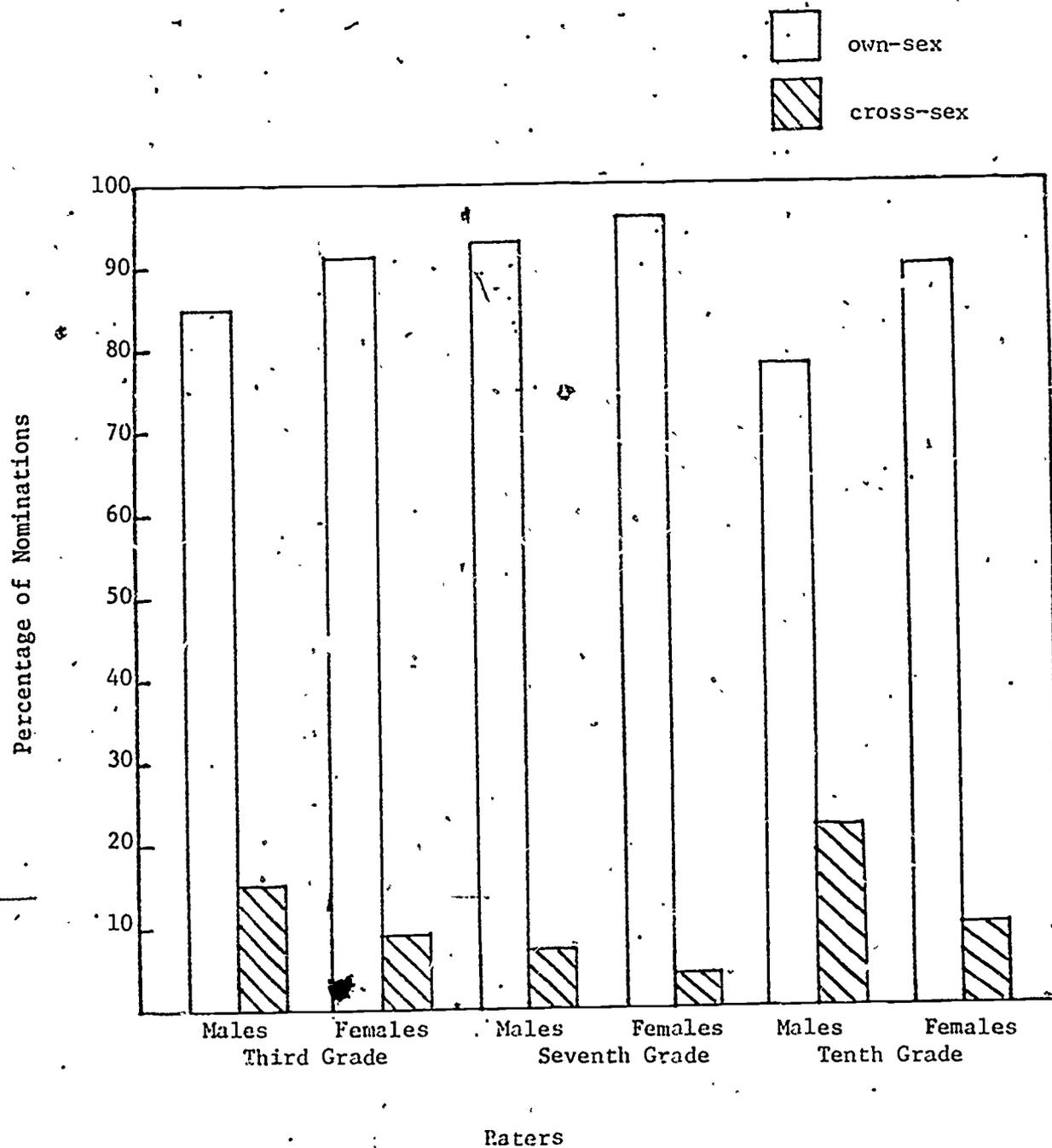


Figure 9. Proportions of Own-Race and Cross-Race Peers Rated by Seventh- and Tenth-Grade Children in the Cross-Sectional Sample

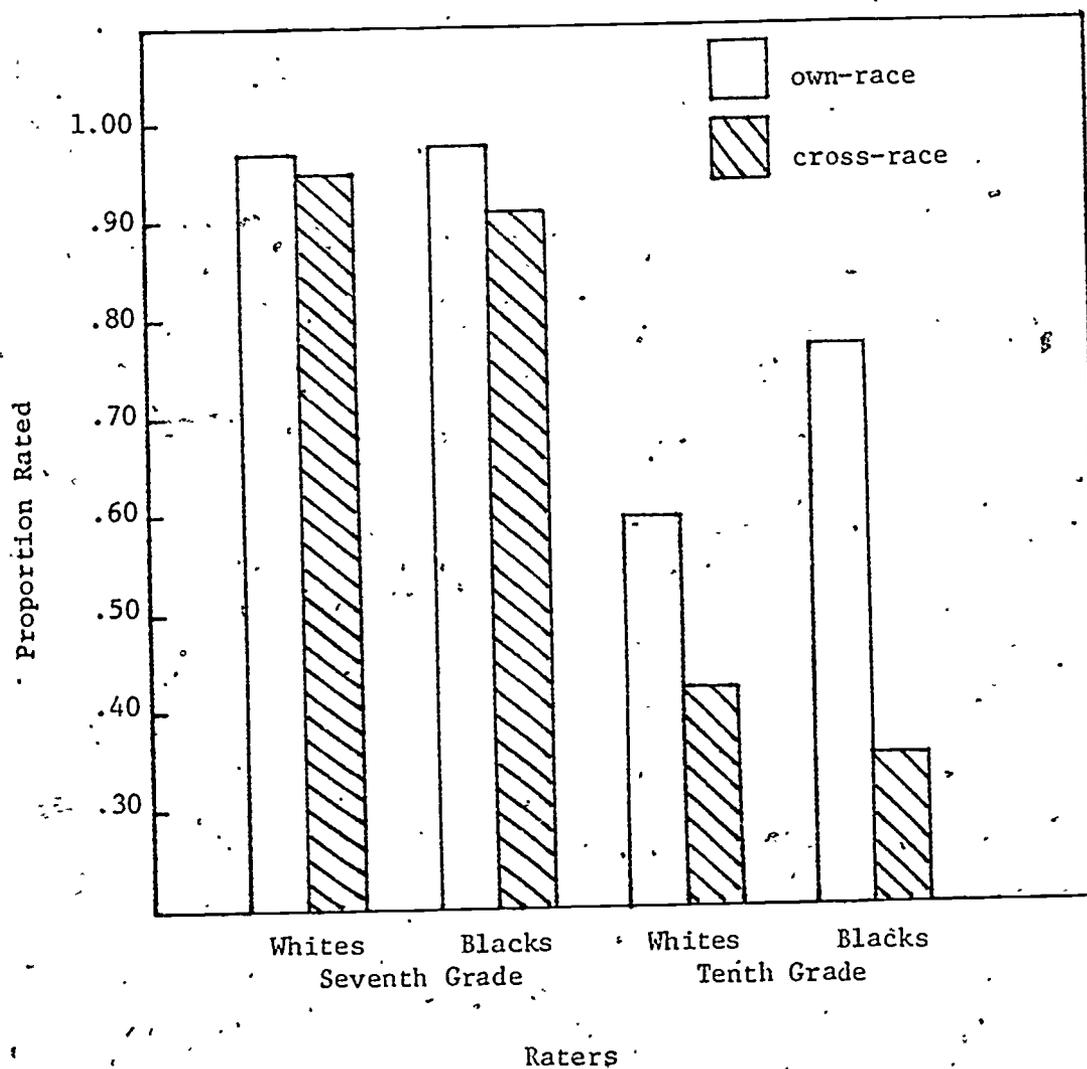


Figure 10. Proportions of Own-Sex and Cross-Sex Peers Rated by Seventh- and Tenth-Grade Children in the Cross-Sectional Sample

