

DOCUMENT RESUME

ED 132 215

UD 016 556

AUTHOR Schofield, Janet W.; Sagar, Andrew
 TITLE Interracial Interaction in a New "Magnet"
 Desegregated School.
 PUB DATE Sep 76
 NOTE 28p.; Paper presented at Annual Convention of the
 American Psychological Association (84th, Washington,
 D. C., September 1976); Best copy available

EDRS PRICE MF-\$0.83 HC-\$2.06 Plus Postage.
 DESCRIPTORS Ability Grouping; Dining Facilities; Grade 6; Grade
 7; Grade 8; *Integration Effects; *Interaction
 Process Analysis; *Middle Schools; *Peer
 Relationship; Race Relations; Racial Integration;
 *School Integration; Statistical Analysis; Student
 Attitudes; Voluntary Integration

ABSTRACT

Equal status within the contact situation, shared goals, cooperate dependence in reaching these goals, and the support of authorities, law or custom are the criteria which Allport (1954) argued were vital for promoting positive interracial attitudes and behavior. The study reported here investigates the development of interracial interaction patterns in a public school which approaches the Allport criteria. The study utilized a behavioral measure of the amount of voluntary association between students--student seating patterns in the school cafeteria--to assess interracial interaction patterns. Wexler Middle School, which serves 1500 students in grades six through eight, opened in the fall of 1976. The student body, which is 48 percent black, was obtained through open enrollment of students from a large district in a Northeastern industrial city. Analysis of seating patterns suggested the following: (a) race is an extremely important grouping criterion; (b) however, in the sixth and seventh grades, sex is an even more important grouping criterion; (c) racial aggregation decreased over time in the sixth and seventh grades but increased in the eighth grade which had a predominantly white accelerated academic track and a predominantly black regular track, and (d) changes in racial aggregation over time, both positive and negative, were stronger among males than females. (Author/JM)

 * Documents acquired by ERIC include many informal unpublished *
 * materials not available from other sources. ERIC makes every effort *
 * to obtain the best copy available. Nevertheless, items of marginal *
 * reproducibility are often encountered and this affects the quality *
 * of the microfiche and hardcopy reproductions ERIC makes available *
 * via the ERIC Document Reproduction Service (EDRS). EDRS is not *
 * responsible for the quality of the original document. Reproductions *
 * supplied by EDRS are the best that can be made from the original. *

4
ED132215

Interracial Interaction in a New "Magnet" Desegregated School

Janet W. Schofield and Andrew Sagar

University of Pittsburgh

U S DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE 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 NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY.

Presented at the 84th Convention of the American Psychological Association, Washington, D.C., 1976

UD 016556

BEST COPY AVAILABLE

Abstract

Interracial Interaction in a New "Magnet" Desegregated School

The interaction of black and white students in a new open enrollment desegregated middle school which meets many of the criteria Allport (1954) specified as important in fostering positive intergroup relations was studied. Seating patterns in the cafeteria were observed during the school's first year of operation. Analysis of these patterns using indices based on Campbell, Kruskal and Wallace's (1972) formula for analyzing racial aggregation suggested: (a) race is an extremely important grouping criterion even for these students who have chosen a desegregated school, (b) however, in the sixth and seventh grades sex is an even more important grouping criterion, (c) racial aggregation decreased over time in the sixth and seventh grades but increased in the eighth grade which had a predominately white accelerated academic track and a predominately black regular track, and (d) changes in racial aggregation over time, both positive and negative, were stronger among males than females.

The effect of school desegregation on the interracial attitudes and behavior of black and white children has been the focus of great controversy and considerable research during the last two decades. The rather naive optimism which led many to believe that desegregation would almost automatically improve intergroup relations has been shown to be unfounded in fact. Although numerous studies suggest that school desegregation can have a positive impact on intergroup attitudes and behavior, a greater number reveal no effect or even a negative effect. (For reviews of the literature on this subject see Carithers, 1970; St. John, 1975; Cohen, 1975; Schofield, in press). Indeed, Gerard and Miller's (1975) recent massive longitudinal study of elementary school desegregation shows increased ethnic encapsulation in sociometric choice over time.

However, as Pettigrew (1967, 1973) has noted, most of the research on the effects of school desegregation has been conducted in schools which do not even begin to meet the criteria which Allport (1954) long ago argued were vital for promoting positive interracial attitudes and behavior: equal status within the contact situation, shared goals, cooperative dependence in reaching these goals, and the support of authorities, law, or custom. Pettigrew (1967) calls the mere mixing of students "desegregation" and distinguishes it from "integration", mixing under the circumstances specified by Allport's (1954) contact theory. There is a great deal of evidence supporting Allport's contention that mere desegregation does not necessarily result in more positive intergroup attitudes (Amir, 1969). However, there are relatively few studies of integrated schools which test contact theory's prediction that, if certain conditions are met, a positive change in intergroup relations will result.

The study reported here investigates the development of interracial interaction patterns in a public school which comes perhaps as close as we can realistically expect, at this point in our society's history, to meeting the Allport criteria. The following questions were raised about student interaction within this relatively ideal context:

1. Is race a significant determinant of the amount of student interaction? Previous studies suggest that race is an extremely important grouping criterion in desegregated schools (Carithers, 1970; Cusisk and Ayling, 1971; Silverman and Shaw, 1973). Hence, it was hypothesized that in spite of the school's special efforts to foster positive relations between blacks and whites, students would tend to interact with others of their own racial group with greater than chance frequency.

2. Does grade level (6th, 7th, 8th) or sex influence the amount of interracial interaction which occurs? Previous work suggests that racial aggregation generally increases with age. For example, Aronson and Nobel (1966) found more interracial seating at the elementary school level than in high school. However, there is conflicting data about the precise nature of the age trends that can be expected with middle school children. For example, Criswell's (1937) classic work suggests that racial cleavage increases until fifth grade after which it may decline. On the other hand, Deutschberger (1946) found that voluntary interracial association continues until about thirteen when it drops off sharply. Further study of age trends in racial aggregation may help to clarify the presently conflicting findings.

It is generally accepted that black girls and white boys tend

to have a somewhat more difficult time adjusting to a desegregated situation than black boys and white girls (St. John, 1975.) However, the implications of this for interracial interaction at the middle school age when children tend to interact primarily with others of their own sex are very unclear. Hence, this study investigated sex differences in the absolute amount of interracial interaction occurring and in changes in interaction levels over time.

3. How does sex compare to race as a grouping criterion within the three grade levels studied? The few studies which have examined this question generally support Criswell's (1937) early finding of even greater aggregation by sex than by race, at least in the lower grades. However, there is very little data on the comparative strength of sex and race as grouping criteria for middle school students. Since the fairly strict informal sexual segregation of the elementary years generally begins to break down as children become adolescents, the relative amount of sexual and racial segregation might well shift at this time.

4. Finally, and most importantly: does the amount of interaction between black and white children increase over time? Although Shaw (1973) reports no such increase in his study of a nearly integrated elementary school, contact theory would lead one to expect increased interaction in a school which provides an integrated experience for its students. Hence, it was hypothesized that interracial interaction would increase over the course of the year in the two grades (6th and 7th) which appeared to meet Allport's conditions quite fully. No prediction about the direction of changes in interracial interaction was made for the eighth grade

since it failed in one major way to satisfy Allport's condition of equal status for black and white students. (See p. 5).

Previous research has, with few exceptions, relied upon sociometric techniques to gauge changes in intergroup behavior associated with interracial schooling. St. John's (1975) review summarizes nineteen studies in this area. Only two of these studies directly observed intergroup behavior; the rest used traditional sociometric techniques or questionnaires. Use of sociometric techniques for such purposes presents three major problems. First, the validation studies which suggest that sociometric choices actually reflect behavioral choices have been conducted in all-white classrooms (Biehler, 1954; Bonney and Powell, 1953; Byrd, 1951). Whether the factor of race affects sociometric and behavioral choice patterns in an equivalent manner has yet to be determined. Second, the most frequently used sociometric techniques tend to tap behaviors which are relatively unlikely to change over short periods of time. Typically, sociometric measures require the child to give the names of a very small number of other children who are the most preferred companions for various types of activities. There is evidence suggesting that new children in a school, regardless of their race, do not immediately become fully integrated into the peer network (Willie, 1973). Hence, it seems unrealistic to expect that sociometric techniques would indicate marked changes in interracial behavior in the short time period covered by most desegregation studies even if the school came close to meeting Allport's (1954) criteria. →

Third, changes in the relatively intense relationships typically measured by sociometric techniques may well be less crucial from a social policy viewpoint than changes in less intense but nonetheless important behaviors such as mere willingness to associate with members of the other group in public places.

In light of the above considerations, the present study utilized a behavioral measure of the amount of voluntary association between students--student seating patterns in the school cafeteria--rather than sociometric techniques to assess interracial interaction patterns.

METHOD

The School

Wexler Middle School, which serves 1500 students in grades 6 through 8, first opened its doors in the fall of 1976. The student body, which is 48% black, was obtained through open enrollment of students from a large district in the Northeastern industrial city in which the school is located. Almost without exception, the students had previously attended de facto segregated schools. The white students typically come from middle or upper-middle class homes. Although a few of the black children are middle class, the majority are from working or lower class homes. A wide variety of special facilities and programs were designed to attract students and to foster a shared pride in the school. Students were selected on a first-come first-serve basis within predetermined racial quotas. The school's unusual efforts to provide an ideal environment for interracial education have been documented elsewhere (Schofield, 1975). School authorities clearly endorse positive intergroup relations and support an extensive program of activities designed

to help students get to know one another, The fact that Wexler's students come from 26 different feeder schools is also conducive to the formation of new interaction networks since many children have none of their previous classmates in their new classes. The fact that the school is new has greatly increased the opportunities for students to be cooperatively involved in working for shared goals. For example, large numbers of students participated in the formation of new special-interest organizations and in a variety of fund-raising activities to purchase equipment for these clubs.

Wexler's commitment to fostering equal status contact is illustrated by its staffing. The top four administrative posts are evenly divided between blacks and whites. Similarly, each grade has two counselors, one white and one black. About 30% of the faculty are black. Black teachers tend, however, to be underrepresented in the academic areas and somewhat overrepresented in certain vocational education areas. More noticeably, all ten teachers' aides are black. These staffing imbalances reflect the pool of teachers available within the city school system.

Equal formal status for black and white students is supported by the policy adopted in the sixth and seventh grades of distributing black and white students into individual classes roughly in proportion to their numbers in that grade. Hence, although the black students tend to have noticeably lower reading scores than the whites they are not reseggregated by a tracking system.

The eighth grade, however, presents a very different picture. In order to enhance the ability of the school to attract students, a prestigious city-wide accelerated academic program is offered in Wexler's eighth grade. Students in this program attend almost all

classes together, mixing with others only in classes like home-room and gym--and in the lunchroom, the setting of interest for this study. Approximately 80% of these students, who were chosen on the basis of test scores, are white. The rest of the eighth grade is heavily black.

Data Gathering

Coding of cafeteria seating patterns, as reported here, began in mid-February of the first year of Wexler's operation following the conclusion of a city-wide teachers' strike which had closed the school since late November.¹ Observations were made one day a week until the end of the school year in late June.

The cafeteria contains 32 rectangular tables. Each table has sixteen seats, eight on each long side. These seats are a part of the table units and cannot be moved. Elevated ramps along two sides of the cafeteria permit relatively easy and unobtrusive observation of the entire cafeteria. About ten minutes after the beginning of each grade's lunch period, observers began mapping seating patterns, using a simple numerical code to note the race and sex of the student in each occupied seat. Typically, each of two observers covered 16 of the 32 tables, thereby providing a map of the entire cafeteria.

The Aggregation Index

The indices of racial clustering were computed according to the formula developed by Campbell, Kruskal, and Wallace (1972) in their study of interracial seating patterns in college classrooms. This index is based upon the actual frequency with which blacks and whites sit together in relation to the expected frequency, given random distribution of the races within the pattern of occupied seats. The expected frequency is based on the proportion

of blacks in the sample and the number of adjacent pairs of individuals observed. Individuals are not considered adjacent if they are separated by an empty seat. The index is constructed so that negative values represent more aggregation than would be expected if individuals sat randomly with respect to race, whereas positive values represent less aggregation than would be expected under randomness.

Campbell et al's formula was developed to analyze only "side by side" seating in rows. However, interviews with a random sample of sixth graders suggested that students were about as likely to sit across from the person they ate lunch with as they were to sit next to him or her. Hence, two indices of racial clustering were computed. First, an overall index of racial aggregation in side-by-side seating (Index 1) was computed treating the seats on each side of each table as rows of eight. Then an index of face-to-face aggregation (Index 2) was computed treating each of the 256 pairs of face-to-face seats as rows of two.

Side-by-side (SS) and face-to-face (FF) racial aggregation indices were constructed for males (Indices 3 and 4) and females (Indices 5 and 6) separately. Unfortunately, as Campbell et al. note, their formula is based on a binary code (either "black" or "white") and does not permit ready analysis of the joint effects of race and sex. In computing the aggregation index for males, seats occupied by females were treated as empty. In the analysis of female patterns just the opposite was true. This somewhat myopic treatment of entire classes of human beings as statistically non-existent was justified on the grounds that cross-sex adjacencies, whether intra- or inter-racial, were extremely rare. Silverman and

9

Shaw's (1973) data which show that 90% of the interracial interactions in two junior high schools were between members of the same sex are very consistent with our observations.

Finally, aggregation according to gender, both side-by-side (Index 7) and face-to-face (Index 8), was computed with the binary code indicating either "male" or "female", rather than "black" or "white". Each of the eight single indices computed from each day's observation was treated as a single score in the following statistical analyses.

RESULTS

Race was found to be a powerful factor in student seating patterns for both sexes at all three grade levels throughout the course of the school year.² The mean racial aggregation indices for SS (Index 1) and FF (Index 2) were -1.63 ($t(48) = -51.27, p < .001$) and -1.57 ($t(48) = 37.84, p < .001$) respectively. The equivalent indices for each of the three grade levels are presented in Table 1, along with parallel indices for males only (Indices 3 and 4) and females only (Indices 5 and 6). All of these means are significantly different from zero beyond the $p < .001$ level.

INSERT TABLE 1

The actual amount of racial clustering indicated by the means in Table 1 can be illustrated by examining a typical observation from the sixth grade which yielded racial aggregation indices of -1.62 (SS) and -1.57 (FF). These indices were based on the seating locations of 138 white and 109 black students. Random distribution

of these students within the pattern of occupied seats could be expected to have resulted in 67 SS and 41 FF interracial adjacencies. Thirteen SS and nine FF interracial adjacencies were found.

Further inspection of Table 1 reveals significantly less racial aggregation in the sixth grade than in the seventh and eighth, which do not differ from each other. T-tests show that this finding is consistent for both the overall SS and FF indices (Indices 1 and 2, $p < .001$), and for both males ($p < .02$) and females ($p < .002$) considered separately (Indices 3-6). Greater aggregation in the eighth grade alone might be regarded as due to its tracking policy rather than to age trends; but no parallel structural explanation is available for the equally aggregated seventh grade. In her review of the literature on school desegregation and racial cleavage, Carithers (1970) concludes that racial cleavage is greatly furthered by the onset of puberty. Hence, the fact that so many children reach puberty in the seventh and eighth grades may explain the difference in racial aggregation between these grades and the sixth grade.

Table 1 further indicates more interracial interaction among males than females. This finding was consistent for both the SS and FF indices in each of the three grade levels studied, ($p < .05$ in all t-tests).

Table 2 presents comparisons of the racial and sexual aggregation indices in all three grades. Although racial aggregation is highly significant, sex proved to be an even stronger grouping criterion on both indices. Perhaps not surprisingly, the difference is most marked in the sixth grade. By eighth grade,

the difference in SS is still significant, but small, while comparison of the eighth grade FF indices reveals no difference in the amount of racial and sexual clustering.

INSERT TABLE 2

The question of greatest interest, whether the school's active efforts to foster positive intergroup relations were attended by an actual increase in voluntary interracial interaction over time, was investigated by computing the Pearson product-moment correlations between elapsed time and the indices of interracial aggregation. The overall positive correlation for the SS index of racial aggregation indicates a significant trend towards increased interracial mixing over time. (See Table 3). No such trend is indicated on the FF index. The change over time on the SS index appears to be accounted for primarily by the males, who show a significant increase in mixing from February to June. The parallel trend for females fails to approach significance.

INSERT TABLE 3

Examination of the means in Table 3 suggests that the overall shift toward increased interracial interaction shown on the SS index was due almost entirely to time trends in the sixth and seventh grades. In the eighth grade, which was tracked into a heavily white accelerated group and a heavily black regular group, the time trends were just the reverse. In this grade, the FF index shows a significant decrease in racial mixing over time.

Clearly, the absolute magnitude of the changes in aggregation

over time is of considerable interest. The aggregation indices which serve well in testing the statistical significance of these changes give little information about the size of these changes. For illustrative purposes, Table 4 shows the expected and observed number of interracial adjacencies for the first and last four observation periods in the seventh grade. As can be seen in the table, the mean number of observed adjacencies on the SS index for the seventh grade went from 3.25 to 10.00. Although the shift was in the same direction on the FF index, it was not nearly as strong.

INSERT TABLE 4

DISCUSSION

The results presented above lead to the conclusion that race is an extremely important grouping criterion even for children who have chosen to attend a desegregated school. However, it is important to note that the sixth grade showed significantly less racial aggregation than the seventh and eighth grades. Hence, this study supports the widely held view that desegregation in the early grades is more likely to be conducive to positive intergroup relations than is the desegregation of older children (Carithers, 1970, Pettigrew, 1967).

The significant correlation between time and the side-by-side index of racial clustering confirmed the expectation, based on contact theory, that interracial contact in a school like Wexler will lead to improved intergroup relations. The data from the eighth grade, however, suggest that clear cut tracking of students within a school into high status primarily white classes and low status

primarily black classes may vitiate whatever other efforts the school may make to promote positive intergroup relations.

The correlation between time and the aggregation indices is in the same direction for males and females with only one exception. However, none of these correlations reaches significance for females whereas several do for the males. This finding of greater change for males, in both the positive and negative direction, is especially provocative when combined with the evidence that males in all grades are more likely to interact interracially than are females. Taken together these findings suggest that the girls tend to ignore members of the other race, so one finds both relatively little interaction and little change in levels of interaction. The boys, on the other hand, appear to venture out of their racially isolated groups and to interact more. Their reaction over time to this interaction appears to be more strongly influenced by the structural characteristics of the contact situation.

One reasonable explanation for the difference in male and female patterns of interaction stems from analysis of traditional sex roles and the developmental stage of the children studied. Male sex roles have traditionally emphasized physical competition and prowess. Such an emphasis would naturally lead to intergroup contact since to establish a really meaningful position of dominance one has to be superior to both in-group and out-group members. Female sex roles have traditionally stressed beauty and attractiveness to the opposite sex more than male role. Also, girls of middle school age are more likely to have reached puberty and to evince the accompanying heightened interest in their attractiveness to the opposite sex than are boys. Thus, the girls of both groups may be

more interested in attracting boys than in activities which would lead to their interacting with out-group girls.

The data clearly suggest that interracial schooling like that found in Wexler's sixth and seventh grades does foster increased voluntary association between blacks and whites. However, interpretation of the practical significance of the changes found is clearly a matter of individual judgement and perspective. The pessimist who values interracial association might note that the June data show that the actual number of interracial adjacencies in the seventh grade was about one-fifth of the number that would have resulted if race were not a grouping criterion. (See Table 4). The optimist with the same values might note something quite different in Table 4--the fact that the number of observed adjacencies on the SS index in the later time period is over three times that in the initial time period. The optimist would also stress the fact that these changes occurred in less than one full school year and in spite of the marked disparities between the black and white students in economic and academic backgrounds. Being optimists we are inclined to stress the promise that schools have as socialization agents which can prepare children for life in a pluralistic society. However, being realists, we would also agree that school experiences alone cannot be expected to rapidly undo the lessons which our nation's history and present day patterns of residential segregation and intergroup hostility also teach.

References

Allport, G.W.

1954 The nature of prejudice. Cambridge, Mass.: Addison-Wesley.

Amir, Y.

1969 "Contact hypothesis in ethnic relations". Pp. 319-342
in Psychological Bulletin, 71.

Aronson, S. & Nobel, J.

1966 Urban-suburban school mixing: A feasibility study.
Unpublished manuscript, West Hartford Board of Education.

Biehler, R.F.

1954 "Companion choice behavior in the kindergarten". Pp. 45-50
in Child Development, 25.

Bozney, M.E. & Powell, J.

1953 "Differences in social behavior between sociometrically
high and sociometrically low children". Pp. 481-495 in Journal of
Education Research, 46.

Byrd, E.

1951 "A study of validity and constancy of choices in a socio-
metric test". Pp. 175-181 in Sociometry, 14.

Campbell, D., Kruskal, W., and Wallace, W.

1972 "Seating aggregation as an index of attitude". In L.
Bickman and T. Henchy, Beyond the Laboratory: Field Research in
Social Psychology.

Carithers, M.

1970 "School desegregation and racial cleavage, 1954-1970:
a review of the literature". Pp. 25-47 in Journal of Social Issues,
26.

Cohen, E.

1975 "The effects of desegregation on race relations. Pp.271-299 in Law and Contemporary Problems, 39 (2).

Criswell, J.H.

1937 "Racial cleavage in Negro-White groups. Pp.81-89 in Sociometry, 1.

Cusick, P. and Avling, R.

1971 "Racial interaction in an urban secondary school.

Paper presented at meeting of the American Education Research Association, New Orleans.

Deutschberger, P.

1946 "Interaction patterns in changing neighborhoods" New York and Pittsburgh. Pp. 303-315 in Sociometry, 9.

Gerard, H. and Miller, N.

1975 School Desegregation. New York: Plenum Press.

Pettigrew, T.F.

1967 "Social evaluation theory: convergences and applications".

In D. Levine (ed.), Nebraska Symposium on Motivation, Vol. 15, Lincoln, Nebraska.

1973 "Busing: a review of the evidence". Pp. 88-118 in Public Interest.

Schofield, J.

1976 "Ethnographic study of a nearly integrated middle school.

Unpublished manuscript. University of Pittsburgh.

In press. "School desegregation and intergroup relations".

In D. Bar-Tal and L. Saxe, Social Psychology of Education: Theory and Research. Washington, D.C.: Hemisphere Publishing Co.

Silverman, I. and Shaw, M.E.

1973 "Effects of sudden mass desegregation on interracial interaction and attitudes in one southern city" Pp. 133-142 in Journal of Social Issues, 29 (4).

St. John, N.

1975 School Desegregation: Outcomes for Children. New York: Wiley.

Willie, C.

1973 Race Mixing in the Public Schools. New York: Praeger.

FOOTNOTES

1. Mapping of randomly selected tables actually began in the fall, shortly after the school opened. Because only a small minority of tables showed any racial mixing during any given observation, the daily aggregation index fluctuated greatly, depending upon the tables drawn. Because of this high variance, these early data are difficult to interpret and have been excluded from the present analyses.

2. The possibility that these aggregation tendencies developed between the beginning of the school year and the post-strike observation period reported here can be dismissed by examination of the unreported pre-strike data. Despite the variability of this early data, all aggregation indices from all observations were strongly negative, indicating minimal interracial mixing.

TABLE 1
Mean Racial Aggregation Indices

Grade level	n of observations	SS(Index1)	FF(Index2)	Overall		Index Males only		Females only	
				SS(Index3)	FF(Index4)	SS(Index5)	FF(Index6)	SS(Index5)	FF(Index6)
6	(15)	-1.39	-1.29	-1.20	-1.16	-1.60	-1.44	-1.44	-1.44
7	(17)	-1.71	-1.66	-1.51	-1.44	-1.82	-1.82	-1.82	-1.82
8	(17)	-1.77	-1.77	-1.65	-1.49	-1.84	-1.84	-1.84	-1.84
Overall	(49)	-1.63	-1.57	-1.47	-1.37	-1.76	-1.71	-1.71	-1.71

Note. Larger negative numbers represent greater aggregation.

TABLE 2

Comparison of Racial and Sexual Aggregation

Grade level	Type of index	n of observations	Grouping factor			P
			Race	Sex	t	
6	SS	(15)	-1.39	-1.94	11.24	< .001
	FF	(15)	-1.29	-1.86	6.73	< .001
7	SS	(17)	-1.71	-1.94	5.46	< .001
	FF	(17)	-1.66	-1.90	10.00	< .001
8	SS	(17)	-1.77	-1.86	3.15	< .01
	FF	(17)	-1.71	-1.73	< 1	n.s.
Overall	SS	(49)	-1.63	-1.91	7.95	< .001
	FF	(49)	-1.57	-1.83	5.63	< .001

TABLE 3

Changes in Racial Aggregation

Grade level	n of observations	Overall		Index Males only		Females only	
		SS(Index1)	FF(Index2)	SS(Index3)	FF(Index4)	SS(Index5)	FF(Index6)
6	(15)	.32	-.12	.40	-.11	.14	-.13
7	(17)	.44*	.45*	.38	.22	.23	.40
8	(17)	-.05	-.53**	.25	-.58**	-.18	-.27
Overall	(49)	.31**	.02	.38**	-.14	.17	.09
6 and 7 combined	(32)	.39**	.14	.42**	.09	.25	.14

Note. Positive correlations represent decreasing racial aggregation (i.e., greater interracial mixing) over time.

* $p < .10$

** $p < .05$

TABLE 4

Expected and Observed Interracial Adjacencies in the 7th Grade
During the First and the Final Observation Phases.

Observation number	n of whites	n of blacks	Side-by-side			Face-to-face		
			adjacencies expected	adjacencies observed	Index 1	adjacencies expected	adjacencies observed	Index 2
1	98	77	50.55	4	-1.86	27.76	3	-1.79
2	128	110	66.40	4	-1.89	41.44	6	-1.72
3	104	82	48.58	2	-1.93	27.26	4	-1.71
4	70	72	31.72	3	-1.82	17.62	3	-1.62
Mean	100	85.25	49.25	3.25	-1.88	28.50	4.75	-1.72
14	127	109	65.40	16	-1.52	39.44	10	-1.50
15	58	91	33.03	4	-1.76	21.06	5	-1.53
16	96	90	44.19	8	-1.65	27.12	4	-1.71
17	87	105	54.80	12	-1.57	29.39	6	-1.60
Mean	92	98.75	49.25	10.00	-1.63	29.00	6.25	-1.59