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ABSTRACT

The development of school integration programs throughout the country has made possible a test of the hypothesis that school integration enhances black achievement, aspirations, self-esteem, race relations, and opportunities for higher education. The programs reviewed here have two important characteristics that may limit ability to their being generalized: they are examples of induced integration, and all use varying amounts of busing to accomplish integration. Five reports on integration programs in Northern cities throughout the country are cited: (1) Project METCO, Boston, Massachusetts; (2) White Plains, New York; (3) Ann Arbor, Michigan; (4) Riverside, California; and, (5) Project Concern, Hartford and New Haven, Connecticut. To test the hypothesis, findings are grouped under five major headings--the effects of busing and integration on: (1) academic achievement; (2) aspirations; (3) self-concept; (4) race relations; and (5) educational opportunities. Program support is also examined. In each case, bused students are compared with the control groups to assess those changes that might be uniquely associated with the effects of induced integration. The implications of these findings for policy are then examined. Since the data do not support the hypothesis on most counts, the burden must fall upon those who support a given school integration program to demonstrate that it has the intended effects--with no unintended, negative side-effects. (Author/JM)

RESEARCH REPORT

The Evidence on Busing

DAVID J. ARMOR

The legal basis of the national policy of integration—and of the school busing issue today—is the declaration of the Supreme Court in 1954 that

> to separate [black children] from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone.

Few decisions of the Court have provoked so much controversy for so long, or have had so much impact on the way of life of so many persons, as the case of *Brown v. the Board of Education of Topeka*, where this doctrine is stated. Policy makers have used it to restructure political, economic, and social institutions. Groups have rioted and states

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Rarely can an unpublished academic article have attracted as much attention and publicity as has this analysis of busing. Professor Armor, a sociologist who specializes in research methods and social statistics, played a leading role in research on the Boston METCO study, which was one of the earliest evaluations of the effects of busing on black students. In this article he reports the detailed findings of that study plus those of several other comparable studies. While his manuscript was being copy-edited in our office, its findings were being "reported" in the national press (e.g., New York Times, Washington Post, Boston Globe*), and they have even been denounced publicly by critics who have never seen the results of the studies themselves. We are publishing the full text of this academic article —all the graphs, footnotes, and references are included at the end —because we think that, in so controversial a matter as busing, it is important to be as precise as possible, even at the risk of pedantry. Inevitably, findings such as those of Professor Armor give rise not only to public but also to scholarly controversy. In our next issue we shall print comments on Professor Armor's article by other scholars. —Editors*

have divided over actions, direct and indirect, that have flowed from this ruling. And social scientists have proudly let it stand as a premier axiom of their field—one of the few examples of a social theory that found its way into formal law.

Few persons, perhaps, know of the role played by the social sciences in helping to sustain the forces behind desegregation. It would be an exaggeration to say they are responsible for the busing dilemmas facing so many communities today, yet without the legitimacy provided by the hundreds of sociological and psychological studies it would be hard to imagine how the changes we are witnessing could have happened so quickly. At every step—from the 1954 Supreme Court ruling, to the Civil Rights Act of 1964, to the federal busing orders of 1970—social science research findings have been inextricably interwoven with policy decisions.

And yet, the relation between social science and public policy contains a paradox in that the conditions for adequate research are often *not* met until a policy is in effect, while the policy itself often cannot be justified until supported by the findings of science. In consequence, the desire of scientists to affect society and the desire of policy makers to be supported by science often lead to a relation between the two that may be more political than scientific. Further, this can mean that the later evaluation research of a social action program may undo the very premises on which the action is based—as is the case somewhat in the Coleman Report on the effect of schools on achievement. There are obvious dangers for both social science and public policy in this paradox. There is the danger that important and significant programs —which may be desirable on moral grounds—may be halted when scientific support is lacking or reveals unexpected consequences; conversely, there is the danger that important research may be stopped when the desired results are not forthcoming. The current controversy over the busing of schoolchildren to promote integration affords a prime example of this situation.

The policy model behind the Supreme Court's 1954 reasoning—and behind the beliefs of the liberal public today—was based in part on social science research. But that research did not derive from the conditions of induced racial integration as it is being carried out today. These earlier research designs were "ex post facto"—i.e., comparisons were made between persons already integrated and individuals in segregated environments. Since the integration experience occurred *before* the studies, any inferences about the effects of *induced* integration, based on such evidence, have been speculative at best. With the development of a variety of school integration programs across the country there arose the opportunity to conduct realistic tests of the integration policy model that did not suffer this limitation. While it may have other shortcomings, this research suffers neither the artificial constraints of the laboratory nor the causal ambiguity of the cross-sectional survey. The intent of this essay is to explore some of this new research and to interpret the findings. What we will do, first, is to sketch the evolution of the social science model which became the basis of public policy, and then review a number of tests of this model

as revealed in recent social science studies of induced school integration and busing.

The Integration Policy Model: Stage I

The integration model which is behind current public policy is rooted in social science results dating back to before World War II. The connections between segregation and inequality were portrayed by John Dollard (1937) and Gunnar Myrdal (1944) in the first prestigious social science studies to show how prejudice, discrimination, segregation, and inequality operated to keep the black man in a subordinate status. Myrdal summarized this process in his famous "vicious circle" postulate: White prejudice, in the form of beliefs about the inferior status of the black race, leads to discrimination and segregation in work, housing, and social relationships; discrimination reinforces social and economic inequality; the resulting inferiority circles back to solidify the white prejudice that started it all. The vicious circle theory was the integration policy model in embryonic form.

Along with these broad sociological studies there also appeared a number of psychological experiments which were to play a crucial role in the policy decisions. The most notable were the doll studies of Kenneth and Mamie Clark (1947). They found that preschool black children were much less likely than white children to prefer dolls of their own race. Though this tendency tapered off among older children, the Clarks concluded that racial awareness and identification occurred at an early age and that the doll choices suggested harmful and lasting effects on black self-esteem and performance. Other studies confirmed these early findings (Proshansky and Newton, 1968; Porter, 1971). These studies added a psychological dynamic to explain the operation of the vicious circle: Prejudice and segregation lead to feelings of inferiority and an inability to succeed among the blacks; these sustain inequality and further reinforce the initial white prejudice. In other words, segregation leads to serious psychological damage to the black child; that damage is sufficient to inhibit the kind of adult behavior which might enable the black man to break the circle.

How could the circle be broken? This question plagued a generation of social scientists in quest of a solution to America's race problems. Of a number of studies appearing after the war, two which focussed upon the effects of segregation and integration upon white racial attitudes had especial impact. The first was a section of Samuel Stouffer's massive research on the American soldier during World War II (1949). Stouffer found that white soldiers in combat companies with a black platoon were far more likely to accept the idea of fighting side by side with black soldiers than were white soldiers in non-integrated companies. The second was the study by Morton Deutsch and Mary Evans Collins (1951) of interracial housing. Comparing residents of similar backgrounds in segregated and integrated public housing projects, they found that whites in integrated housing were

more likely to be friendly with blacks, to endorse interracial living, and to have positive attitudes towards blacks in general than were whites living in the segregated projects. Though neither of these studies could ascertain the beliefs of these individuals *prior* to integration, neither author had reason to believe that the integrated whites differed from the segregated whites before the former's experience with blacks. They concluded, therefore, that the positive results were due to the effect of interracial *contact* and not to prior positive belief.

The culmination of this research was Gordon Allport's influential work, *The Nature of Prejudice* (1955). Using the work of Stouffer, Deutsch and Collins, and others, he formulated what has come to be known as the "contact theory":

> Contacts that bring knowledge and acquaintance are likely to engender sounder beliefs about minority groups. . . . Prejudice . . . may be reduced by equal status contact between majority and minority groups in the pursuit of common goals. The effect is greatly enhanced if this contact is sanctioned by institutional supports (i.e., by law, custom, or local atmosphere), and if it is of a sort that leads to the perception of common interests and common humanity between members of the two groups.

The clear key to breaking the vicious circle, then, was contact. By establishing integrated environments for black and white, white prejudice would be reduced, discrimination would decline, and damaging effects upon the black child's feelings and behavior would be reduced.

While the Supreme Court based its 1954 decision upon the narrower relationship between legally sanctioned segregation and psychological harm, it is clear that the *modus operandi* by which the damage would stop is implied by the contact theory. With the 1954 decision, then, contact theory became an officially sanctioned policy model, and the Southern public school systems became prime targets for its implementation.

The Integration Policy Model: Stage II

In the eyes of the Northerner, segregation had always been a Southern problem. The Supreme Court's action at first reinforced this belief, since state-sanctioned school segregation was rare outside the South. But events in the 1960's changed this for good. While the modern civil rights movement began in the South, its zenith was reached in the March on Washington in the late summer of 1963. Organized to dramatize the failure of court action to end segregation in the South, the March brought together 250,000 persons in the most impressive organized protest meeting in the history of the United States, and showed President Kennedy and the Congress the deep and massive support for anti-discrimination legislation.

The Congress answered this appeal by passing the Civil Rights Act of 1964, the strongest such act since the Reconstruction period. The Act included strong sanctions against discrimination in education, employment, housing, and voting (the last supplemented by the Vot-

ing Rights Act of 1965), and while its thrust was still aimed at the South, it also set standards that could be used against de facto segregation in the North (for example, the Title VI provisions directed the withholding of federal funds from localities which intentionally maintain segregated schools—and this has recently been applied to the city of Boston). Equally important, it set in motion a social science study that was to have an immense impact upon public policy in the North as well as the South. As part of the Act, the Congress commissioned the United States Office of Education to conduct a survey "concerning the lack of equal educational opportunities for individuals by reason of race, color, religion, or national origin in public educational institutions at all levels in the United States. . . ." Sociologist James Coleman was selected to head a team to design and conduct the survey.

The Coleman Report (1966), as it has come to be known, contained striking evidence of the extent of school segregation not only in the South but in all parts of the country. While the South was more segregated than the North, fully 72 per cent of black first graders in the urban North attended predominantly black schools. The report also confirmed one of the basic assumptions of the Stage I model: that black students performed poorly compared to white students. Using results from a variety of achievement tests, Coleman reported that throughout all regions and all grade levels, black students ranged from two to six years behind white students in reading, verbal, and mathematics performance. Equally, black students were shown to have lower aspirations, lower self-esteem about academic ability, and a more fatalistic attitude about their ability to change their situation.

The Coleman study, however, also reported some findings that surprisingly were not in accord with the early model. For one thing, black children were already nearly as far behind white children in academic performance in the *first* grade as they were in later grades. This raised some question about whether school policies alone could eliminate black/white inequalities. Adding to the significance of this finding were the facts that black and white schools could not be shown to differ markedly in facilities or services, and that whatever differences there were could not be used to explain the disparities in black and white student achievement. This led Coleman to conclude that

> schools bring little influence to bear on a child's achievement that is independent of his background and general social context; and this very lack of an independent effect means that the inequalities imposed on children by their home, neighborhood, and peer environment are carried along to become the inequalities [of their adult life].

While the findings about segregation and black/white differences have been widely publicized and largely accepted, this concluding aspect of Coleman's findings has been ignored by educational policy makers. Part of the reason may derive from the methodological controversies which surrounded these findings (e.g., Bowles and Levin, 1968), but the more likely and important reason is that the implications were devastating to the rationale of the educational establish-

ment in its heavy investment in school rehabilitative programs for the culturally deprived; the connection between public policy and social science does have its limitations.

We must return to the policy makers one more time for an important input into the final policy model. In 1965, President Johnson requested the United States Commission on Civil Rights to conduct an investigation into the effects of de facto segregation in the nation and to make recommendations about how it might be remedied. He expressed hope that the findings "may provide a basis for action not only by the federal government but also by the states and local school boards which bear the direct responsibility for assuring quality education." The Commission recommendations, in its 1967 volume entitled *Racial Isolation in the Public Schools*, constitute the most comprehensive policy statement to date on the subject of school integration; it is the policy which is, indeed, being followed by many states and local school boards throughout the country.

Using data from the Coleman study and several other original studies prepared for the Commission, the report concluded that

> Negro children suffer serious harm when their education takes place in public schools which are racially segregated, whatever the source of such segregation may be. Negro children who attend predominantly Negro schools do not achieve as well as other children, Negro and white. Their aspirations are more restricted than those of other children and they do not have as much confidence that they can influence their own futures. When they become adults, they are less likely to participate in the mainstream of American society, and more likely to fear, dislike, and avoid white Americans. The conclusions drawn by the U.S. Supreme Court about the impact upon children of segregation compelled by law—that it "affects their hearts and minds in ways unlikely ever to be undone"—applies to segregation not compelled by law.

To remedy this situation, the Commission recommended that the federal government establish a uniform standard for racial balance and provide financial assistance to states that develop programs to meet the standard. The Commission did not recommend a precise standard, but it did suggest that the standard be no higher than 50 per cent black in any single school. Likewise, the Commission did not specifically recommend that busing be the method whereby integration is accomplished. But the realities of residential segregation in many cities throughout the nation offered little alternative to the use of busing if these integration standards were to be attained.

This, then, became the basis for the integration policy model as applied to public schools. While the implementation of racial balance programs has differed from one locality to the next, the underlying rationale of all these programs is similar to that first formulated by the Supreme Court and extended by the Civil Rights Commission. The full policy model may be summarized as follows: The starting point is white prejudice consisting of stereotyped beliefs about black people. These beliefs lead to discriminatory behavior in

employment, housing, schooling, and social relationships in general. Discrimination in turn leads to social and economic inequality on the one hand, and segregation on the other hand. Inequality and segregation are mutually reinforcing conditions, reflecting not only the judicial doctrine that separation is inherently unequal, but also the social reality that segregation of a deprived group can cut off channels and networks that might be used to gain equality. Segregation and inequality combine to cause psychological damage in children resulting in lower achievement, lower aspirations, and less self-esteem. As the child grows older, this damage leads, on the one hand, to further social and economic inequalities in the form of inadequate education and inferior jobs and, on the other hand, to black alienation, prejudice, and hostility towards whites. This in turn leads to increased white prejudice (the vicious circle) and a general polarization of race relations. Given these cause and effect relations, the elimination of segregation in schooling should act as a countervailing force for black students by increasing achievement, raising aspirations, enhancing self-esteem, reducing black/white prejudices and hostility, and enabling black students to find better educational and occupational opportunities. It then follows that social and economic inequalities would be lessened and the vicious circle would be bent if not broken.

It must be stressed that this model is construed from public policy. While many of the causal relationships assumed in the model are, indeed, based on many years of scientific research in psychology and sociology, it is doubtful that any two specialists in the field of race relations would agree on all of the components of the model. Be that as it may, it is more to the point to stress that we are not setting out to test the *full* model. *We are specifically interested in those aspects of the model that postulate positive effects of school integration for black students; namely, that school integration enhances black achievement, aspirations, self-esteem, race relations, and opportunities for higher education.* We do not have data on the effects of integration on adults, nor on the effects of other types of integration, such as neighborhood housing, employment, and other forms. More important, the school integration programs we review here have two important characteristics in common that may limit generalizability. First, they are examples of "induced" integration as opposed to "natural" integration. Induced integration is brought about by the decision of a state or local agency to initiate a school integration program (sometimes voluntary, sometimes mandatory), rather than by the "natural" process whereby a black family makes an individual decision to relocate in a predominantly white community. Second, all of these programs have had to use varying amounts of busing to accomplish integration. This makes it difficult to separate out the potential effects of busing, if any, from the integration experience *per se*. In other words, *we will be assessing the effects of induced school integration via busing*, and not necessarily the effects of integration brought about by the voluntary actions of individual families that move to integrated neighborhoods. This is a more limited focus,

yet induced integration, usually necessitating some amount of busing, is precisely the policy model that has been followed (or is being considered) in many communities throughout the country.

The Data

Many of the cities which desegregated their schools to achieve a racial balance have conducted research programs to evaluate the outcomes of desegregation. It is from these studies that we can derive data to test the school and busing hypotheses stemming from the integration policy model. Since the evaluations were conducted independently, the variables studied and the research designs differ from one study to the next, and the quality of the research and the reports varies considerably. Accordingly, we have been selective in choosing studies to include in our analysis. Our choices have been guided by two considerations: 1) A study must employ a longitudinal time-span design, with the same tests administered at different times during the integration experience so that *actual* changes can be assessed; and 2) a study must have a control group for comparison with integrated black students. The ideal control group, of course, would consist of black students who are identical to the integrated students in every way except for the integration experience. Since such studies are rare, an "adequate" control group for our present purposes is either a group of non-bused black students who are reasonably comparable to the bused black students, or a group of white students in the same school as the bused black students. In the latter case, the effects of integration are revealed in the changes in the black/white differential for the measure in question.[1]

The data we will use can be classified into two parts. The first part consists of findings from a study of Boston's METCO program, for whose research design, execution, and analysis we are partly responsible (Walberg, 1969; Armor and Genova, 1970).[2] The data are more complete and offer a more thoroughgoing test of the policy model than many other studies we have seen. The METCO program buses black students of all age levels from Boston to predominantly white middle-class schools in the suburbs. Approximately 1500 black students and 28 suburban communities have participated since the program began in 1966; the study from which our data will be taken covers the period from October 1968 to May 1970. The study used a longitudinal design that called for achievement testing for all students and a questionnaire for the junior and senior high students in three waves: the first at the beginning of the school year in October 1968; a second in May 1969; and a third in May 1970. (For a variety of reasons, the achievement testing was not done for the third wave.) The questionnaire covered several areas, including academic performance, aspirations and self-concept, relations with and attitudes toward white students, and attitudes toward the program.

The METCO study also included a small control group consisting

of siblings of the bused students matched by sex and grade level.[3] The fact that the siblings were from the same families as the bused students means that there is an automatic control for social class and other tangible and intangible family factors. Since the high application rate usually prevented the busing program from taking more than one applicant per family, we had reason to believe that the control students would not differ substantially from the bused students along the important dimensions of ability, aspirations, and so forth. This belief is confirmed by the findings presented in the next section.

In addition to the data for black students, there are also data from a single cross-sectional study done in the spring of 1969 to assess the impact of the program on white sophomores in eight of the suburban schools (Useem, 1971 and 1972). We will cite some of the findings from the Useem study whenever such comparisons seem relevant.

The second part of the data comes largely from reports on integration programs in four other Northern cities throughout the country.[4] In 1964, White Plains, New York, closed down one racially imbalanced inner-city elementary school and began busing the children to predominantly white inner-city schools; the study we cite covers a two-year period from 1964 to 1966 (White Plains Public Schools, 1967). In Ann Arbor, Michigan, there was a similar pattern: A racially imbalanced elementary school was closed in 1965 and the students were bused to predominantly white schools; the study covers a one-year period with a three-year follow-up (Carrigan, 1969). A program in Riverside, California, followed a graduated program of closing its racially imbalanced elementary schools and integrating its predominantly white schools; the program began in 1965 and the study covers a five-year period (Purl and Dawson, 1970; Gerard and Miller, 1971). The fourth program, Project Concern, is similar to METCO. Elementary school children from two inner cities (Hartford and New Haven, Connecticut) are bused to suburban schools in surrounding towns; this program began in 1966—the studies selected cover two years for Hartford (Mahan, 1968) and one year for New Haven (Clinton, 1969). In addition to these five major studies, we will also refer at certain points to studies of other integration programs that seem relevant. One such study is an evaluation of A Better Chance (ABC), a program which places high-ability black students in white preparatory schools in the Northeast (Perry, 1972). This evaluation research used techniques and instruments similar to those used in the METCO study; therefore comparisons with ABC may be more valid than comparisons with some of the other studies.

To test the integration policy model we can group our findings under five major headings—the effects of busing and integration on: (1) academic achievement; (2) aspirations; (3) self-concept; (4) race relations; and (5) educational opportunities. In addition, we will examine a sixth area, program support. In each case, we shall compare bused students with the control groups to assess those

changes that might be uniquely associated with the effects of induced integration.

The Findings: Achievement

None of the studies were able to demonstrate conclusively that integration has had an effect on academic achievement as measured by standardized tests. Given the results of the Coleman study and other evaluations of remedial programs (e.g., Head Start), many experts may not be surprised at this finding. To date there is no published report of *any* strictly educational reform which has been proven substantially to affect academic achievement; school integration programs are no exception.

The changes in reading achievement for elementary and secondary students in the METCO program are shown in Figures 1 and 2.[5] For the elementary students, the grade-equivalent gains for bused third and fourth graders after one year are somewhat greater than those for the control group (.4 to .3), but this is not a statistically significant difference. For grades 5 and 6 the situation is reversed; the control group outgained the bused group (.7 and .5), but again the difference is not significant. We can see that the control group is somewhat higher initially for both grade levels, but this difference, too, is not significant.[6]

In the case of high school students, the bused group scores somewhat higher than the control groups initially (but not significantly so).[7] Nonetheless, the gain scores present no particular pattern. While the bused junior high students increased their grade-equivalent score from 7.5 to 7.7, the control group improved from 7.4 to 7.5; the bused gain is not significantly different from that for the control group. For senior high students the effect is reversed; the control students gain more than the bused students (9 percentile points compared to 4 points), but again the gains are not statistically significant for either group.

The results for reading achievement are substantially repeated in a test of arithmetic skills; the bused students showed no significant gains in arithmetic skills compared to the control group, and there were no particular patterns in evidence.

The White Plains, Ann Arbor, and Riverside studies also found no significant changes in achievement level for bused students in the elementary grades when comparisons were made with control groups. Although the White Plains report did show some achievement gains among the bused students, these were not significantly different, statistically, from gain scores of inner-city black students in 1960. Moreover, when comparisons were made with white students in the integrated schools, the black/white achievement gap did not diminish during the period of the study. The Ann Arbor study compared bused black student gains to white gains and to black student gains in a half-black school.[8] The bused students did not gain significantly more than the black control group, nor did their gains diminish the black/white gap in the integrated schools. On the contrary, a follow-

up done three years later showed that the integrated black students were even further behind the white students than before the integration project began.[9] The Riverside study compared minority students (black and Mexican-American) who had been integrated for differing number of years with the city-wide mean (which consisted of about 85 per cent white students). The minority/white gap had not diminished for fourth graders who had been integrated since kindergarten; the gap in 1970 was as great as it was in 1965 when the program began (Purl and Dawson, 1971). Similar results occurred for minority pupils at other grade levels with differing numbers of years in the integration program.

Studies in the fifth program, Project Concern, showed mixed results. A study of the Hartford students compared bused black students who received special supportive assistance with non-bused inner-city black students (Mahan, 1968). (Although two separate one-year periods were covered, problems with missing data allow valid comparisons for only one full academic year, fall 1967 to spring 1968). The bused students showed significant IQ gains only in grades two and three; the gains in kindergarten and grades one, four, and five were either insignificant or, in two cases, favored the control group. In a study of New Haven students, second and third grade students were randomly assigned to bused and non-bused conditions and were given reading, language, and arithmetic tests in October 1967 (when the busing began) and again in April 1968 (Clinton, 1969). Of the six comparisons possible (three tests and two grades), only two showed significant differences favoring the bused students.[10]

While none of these studies are flawless, their consistency is striking: Moreover, their results are not so different from the results of the massive cross-sectional studies. An extensive reanalysis of the Coleman data showed that even without controlling for social class factors, "naturally" integrated (i.e., non-bused) black sixth-grade groups were still one and one-half standard deviations behind white groups in the same schools, compared to a national gap of two standard deviations (Armor, 1972). This means that, assuming the Coleman data to be correct, the *best* that integration could do would be to move the average black group from the 2nd percentile to the 7th percentile (on the *white* scale, where the average white group is at the 50th percentile). But the social class differences of integrated black students in the Coleman study could easily explain a good deal of even this small gain. Other investigators, after examining a number of studies, have come to similar conclusions (St. John, 1970).

While there are no important gains for the METCO group in standardized test scores, there were some important differences in school grades (See Fig. 2). Even though the bused secondary school students have somewhat higher test scores than the control group, the bused group was about half a grade-point *behind* the control group in 1969, and the bused students dropped even further behind by 1970.[11] The average control student is able to maintain a grade average at above a B— level in the central city, while the average bused student in the suburbs is just above a C average. Although it is

not shown in the Figure, from the Useem study we can estimate the average white student *academic* grade average (i.e., excluding non-academic courses—an exclusion not made for the black students) at about 2.45, or between a B— and C+ average.

Again, if we take into account the Coleman findings, we should not be too surprised. Since black students of the same age are, on average, behind white students in all parts of the country with respect to academic achievement, we should expect their grades to fall when they are taken from the competition in an all-black school to the competition in a predominantly white school. In addition, the bused students may not be adequately prepared for this competition, at least in terms of the higher standards that may be applied in the suburban schools.

Aspiration and Self-concept

In the METCO study we found that there were no increases in educational or occupational aspiration levels for bused students (see Figs. 4 and 5); on the contrary, there was a significant decline for the bused students, from 74 per cent wanting a college degree in 1968 to 60 per cent by May 1970. The control panel actually increased its college aspirations over the same period, but this is probably not a meaningful finding. (The cross-sectional data show a slight decline for the control group in 1970; this cautions us about our interpretation).

At the very least, we can conclude that the bused students do not improve their aspirations for college. The same is true for occupational aspirations, and in this case both the bused students and the controls show a similar pattern. We should point out, however, that the initial aspiration levels are already very high; Coleman found that only 54 per cent of white twelfth graders in the urban North aspired to college, and 53 per cent expected a professional or technical occupation. Therefore, even the slight decline we have found still leaves the bused students with relatively high aspirations compared to a regional norm. Moreover, when achievement is taken into account, black students actually have higher aspirations than white students at similar levels of achievement (Armor, 1967; Wilson, 1967). In this respect, some educators have hypothesized that integration has a *positive* effect in lowering aspirations to more realistic levels; of course, others would argue that any lowering of aspirations is undesirable. However, we shall see in a later section that the METCO students were more likely to start college than the control group.

Since the other cities in our review included only elementary students, they do not provide data on regular educational or occupational aspirations.[12] But two of the studies did examine a concept closely related to aspirations—"motivation for achievement." The findings of the Ann Arbor and Riverside studies corroborate the pattern of high aspirations for black children in both the pre- and post-integration periods. In addition, the Ann Arbor researchers concluded

that the overly high aspiration of black boys may have been lowered by the integration experience. The Riverside study, on the other hand, concluded that there were no significant changes in achievement motivation.

In the METCO study we also found some important differences with respect to academic self-concept (Fig. 6). The students were asked to rate how bright they were in comparison to their classmates. While there were some changes in both the bused and control groups, the important differences are the gaps between the bused students and controls at each time period. The smallest difference is 15 percentage points in 1970 (11 points for the full cross-section), with the control students having the higher academic self-concept. Again, this finding makes sense if we recall that the academic performance of the bused students falls considerably when they move from the black community to the white suburbs. In rating their intellectual ability, the bused students may simply be reflecting the harder competition in suburban schools.

Both the Ann Arbor and Riverside studies made much more extensive inquiry into the realm of self-esteem of black children, although there were no directly comparable data for our academic self-concept measure. The Riverside study did report that, in a special test, minority children (black and Mexican-American) tended to choose white students more often than black students as "the [ones] with good grades." While we will not go into detail on the many other measures used in these studies, we can summarize their findings briefly as follows: 1) Minority children do tend to have lower self-esteem before integration, particularly in the later elementary grades; and 2) integration does not seem to affect the self-esteem measures in any clearly consistent or significant way.

Race Relations

One of the central sociological hypotheses in the integration policy model is that integration should reduce racial stereotypes, increase tolerance, and generally improve race relations. Needless to say, we were quite surprised when our data failed to verify this axiom. Our surprise was increased substantially when we discovered that, in fact, the converse appears to be true. The data suggest that, under the circumstances obtaining in these studies, integration heightens racial identity and consciousness, enhances ideologies that promote racial segregation, and reduces opportunities for actual contact between the races.

There are several indicators from the METCO study that point to these conclusions. The question which speaks most directly to the 50 per cent racial balance standard suggested by the Civil Rights Commission asked: "If you could be in any school you wanted, how many students would be white?" Figure 7 reports the percentage which responded in favor of 50 per cent or fewer white students. While both the control and the bused students started out fairly close together in 1968 (47 per cent and 51 per cent, respectively), two

school years later the bused students were 15 percentage points *more* in favor of attending *non-white* schools than the controls (81 per cent compared to 66 per cent), although the differential change is not statistically significant. The changes for the controls (both the panel and the full cross-sections) indicate that the black community as a whole may be changing its attitudes toward school integration, but the bused students appear to be changing at a more rapid rate. Ironically, just as white America has finally accepted the idea of school integration (Greeley and Sheatsley, 1971), blacks who begin experiencing it may want to reject it.

That these changes reflect ideological shifts is supported by Figures 8 and 9. The bused students are much more likely to support the idea of black power than the control students, going from a difference of 11 points in 1969 to 36 points in 1970. We were also able to construct a Separatist Ideology Index from responses to a series of statements about black/white relations (e.g., 1. "Most black people should live and work in black areas, and most whites should live and work in white areas." 2. "Black and white persons should not intermarry.") The scores range from 0 (anti-separatist) to 4 (pro-separatist). From 1968 to 1970 the control group barely changes, increasing from 1.4 to 1.5. The bused group, however, changed from 1.4 to 1.8—a statistically significant change of about one half a standard deviation. This is the clearest indication in our data that integration heightens black racial consciousness and solidarity.

The changes do not appear to be in ideology alone. From 1969 to 1970 the bused students reported less friendliness from whites, more free time spent with members of their own race, more incidents of prejudice, and less frequent dating with white students (Fig. 10). In other words, the longer the contact with whites, the fewer the kinds of interracial experiences that might lead to a general improvement in racial tolerance.

To what extent might these changes be a result of negative experiences with white students in the schools? We do not doubt that there has been considerable hostility shown by certain groups of white students. Nonetheless, although the evidence is not complete, what we have indicates that the white students themselves were negatively affected by the contact. Support for the busing program was generally high among white sophomores in the eight High schools studied, especially among middle-class students in the college preparatory tracks (Useem, 1972). For example, 46 per cent of all students were "very favorable" to METCO (only 11 per cent were "not favorable"); 73 per cent felt METCO should be continued; and 52 per cent agreed that there should be more METCO students (20 per cent disagreed and 27 per cent were not sure). But those students who had direct classroom contact with bused black students showed *less* support for the busing program than those without direct contact. In fact, the kind of students who were generally the most supportive —the middle-class, high-achieving students—showed the largest decline in support as a result of contact with bused black students. This finding is based on cross-sectional data and does not indicate

a change over time, but it is suggestive of the possibility that a general polarization has occurred for both racial groups.

The data from the Ann Arbor and Riverside studies give some support to these findings, although again there were no directly comparable measures. Moreover, it is unlikely that the concept of ideology is relevant to elementary students. The Ann Arbor study included a sociometric test, whereby children could indicate how much they liked each classmate. Black students at all grade levels suffered a loss of peer status when they switched from a segregated to an integrated school, although the results were statistically significant only for second and third grade girls and fourth and fifth grade boys. That is, these black children were liked less by their new white peers than by their previously all-black peers. Also, the level of acceptance was considerably lower for black students than for white students. On the other hand, the black students tended to be more positive about their white peers after integration than they were about their black peers before integration, although the changes are not statistically significant.

The Riverside data more clearly support the conclusion that integration heightens racial identity and solidarity. Data from a test in which children rate pictures of faces portraying various ethnic and racial groups showed that fewer cross-racial choices were made after integration than before integration. For example, one rating task required that the children choose the face that they would "most like for a friend." Both black and white children tended to choose their own race to a greater extent after one year of integration than before integration (Gerard and Miller, 1971). The Riverside study also concluded that these effects were stronger with increasing age; that is, the cross-racial choices declined more in the later grades than in the earlier grades.

To avoid any misinterpretation of these findings, we should caution that the measures discussed here do not necessarily indicate increased *overt* racial hostility or conflict. This may occur to some extent in many busing programs, but our impression based on the METCO program is that overt racial incidents initiated by black or white students are infrequent. The polarization that we are describing, and that our instruments assess, is characterized by ideological solidarity and behavioral withdrawal. Our inferences pertain to a lack of racial togetherness rather than to explicit racial confrontations or violence. While it is conceivable that a connection may exist between these ideological shifts and open racial conflicts, such a connection is not established by the studies reviewed.

There are two other qualifications we must place on the interpretation of these data. First, as of 1970 the *majority* of the bused METCO students still supported general integration ideology. Only 40 per cent of the METCO students would ideally prefer schools with a majority of black students (compared to 28 per cent of the controls); 60 per cent of METCO students believe that "once you really get to know a white person, they can be as good a friend as anyone else" (compared to 78 per cent of the controls); and 58 per cent of

METCO students do not agree that "most black people should live and work in black areas, and most whites should live and work in white areas" (compared to 71 per cent of the control students).

The main point we are making is that the integration policy model predicts that integration should cause these sentiments to *increase*, while the evidence shows they actually *decrease*, leaving the bused students *more opposed* to integration than the non-bused students. Only further research can determine whether this trend will continue until the majority of bused students shifts to a general anti-integration ideology.

Second, group averages tend to obscure important differences between individual students. While we do not deny the existence of racial tension and conflict for some students, other students and families (both black and white) have had very meaningful relationships with one another, relationships made possible only through the busing program. It is very difficult, indeed, to weigh objectively the balance of benefit and harm for the group as a whole. The main point to be made is that a change in a group average does not necessarily reflect a change in every individual group member.

Long-term Educational Effects

In view of the fact that most of the short-term measures do not conclusively demonstrate positive effects of busing in the area of achievement, aspirations, self-concept, and race relations, it becomes even more important to consider possible longer-term changes that may relate to eventual socio-economic parity between blacks and whites. Since no busing program has been in operation for more than seven years or so, this area, obviously, has not been studied extensively. There are, however, some preliminary findings on long-term educational effects. Specifically, two studies have investigated the effects of integration on college attendance, and some tentative conclusions have emerged.

Seniors from the 1970 graduating class in the METCO program, as well as the seniors in the 1970 control group, formed samples for a follow-up telephone interview in the spring of 1972. Approximately two thirds of both groups were contacted, resulting in college data for 32 bused students and 16 control group students. The results of the follow-up are striking and they are summarized in Figure 11. The bused students were very much more likely to start college than the control group (84 per cent compared to 56 per cent), but by the end of the second year the bused students resembled the control group (59 per cent compared to 56 per cent). In other words, the METCO program seems to have had a dramatic effect upon the impetus for college, and many more of the bused students actually started some form of higher education. But the bused drop-out rate was also substantially higher, so that towards the end of the sophomore year the bused students were not much more likely to be enrolled full-time in college than the control group.

In spite of this higher drop-out rate, the bused students were still

enrolled in what are generally considered higher-quality institutions. That, is, 56 per cent of the bused students were in regular four-year colleges, compared to 38 per cent for the control group. An even greater difference was found for those enrolled in full universities (which include a graduate school). The figures are 47 per cent and 12 per cent for bused and control students, respectively.

Similar findings emerged from a special college follow-up study of the ABC program (Perry, 1972). A group of ABC students were matched with a control group of high-ability black students not in the ABC program. Since ABC is a highly selective program, the matching was carried out so that the ABC and control groups had very similar family backgrounds, socio-economic status, and achievement levels. Approximately 40 matched pairs were followed until their first year of college (academic year 1971-72). All of the ABC students entered college, whereas only half of the control group did so. While it is too early to assess differential drop-out rates, it is very clear from the data that even if half of the ABC students drop out of college, the quality of colleges attended by the ABC students is considerably higher than those attended by the control group. Of the matched pairs attending college, two thirds of the ABC students attended higher-quality institutions.

Neither of these studies is large enough, of course, to draw any definite conclusions. But there does seem to be some strong evidence that middle-class suburban or prep schools have an important "channeling" effect not found in black schools. The effect is probably due to better counseling and better contacts with college recruiting officers. Whatever the reason, black students attending such schools may have doors opened for them that are closed to students attending predominantly black schools. Given the lack of positive effects in other areas, these findings may have great significance for future busing programs, and further research is urgently needed.

Program Support

Although it is not explicitly part of the invegration policy model we are testing, it seems appropriate to consider the extent of the support for the busing program among the students and communities involved. As might be expected from the changes already described, there was a general decline in the enthusiasm for the METCO program over time, with the bused students showing greater changes than the controls: 80 per cent of the bused group said they were "very favorable" to the program in 1968, compared to 50 per cent by 1970. Yet we cannot infer from this alone that there is a decline in support for the program. The drop-out rate in the METCO program is almost non-existent in spite of some of the changes we have reported. The families involved in the program appear to feel that their children will get a better education in the suburbs in spite of the inconvenience and the problems. Our data indicated that the most important reason cited by the bused students for being in the busing program was to receive "a better education." Moreover, this did not

change as much as many of our other indicators from 1969 to 1970; 88 per cent said this was a "very important" reason in 1969, and 81 per cent indicated the same in 1970. Very few reported that "getting out of the city" or "more contact with whites" were important reasons for being in the program.

In other words, the justification of the program in the black community has little to do with the contact-prejudice components of the policy model; instead, busing is seen in the context of enlarging educational opportunities for the black students.

We do not have much systematic data from the white receiving schools other than those cited earlier (i.e., a sample of white sophomore students was generally supportive of the program in 1969). It is our impression, however, that most of the 28 communities that receive METCO students are enthusiastic about the program, and only a few communities have turned down the opportunity to participate. The other programs reviewed receive moderate to strong support from the community and participants. In Project Concern the drop-out rate was only 10 per cent, half of which was due to the program directors' initiative in withdrawing students. After two years of urban-to-suburban busing, nine additional suburban towns chose to participate and over 1,000 additional elementary school children were bused to suburban schools. In White Plains both black and white parents expressed more positive than negative attitudes about integration, although black parents were more favorable to the program than white parents after two years of desegregation. In Ann Arbor the black parents felt more positive toward the program after one year of desegregated schooling, but the children were slightly less positive than they were prior to the integration experience. In both groups, however, support was high; only 20 per cent of each group expressed negative attitudes toward the program.

We must conclude that the busing programs we have reviewed seem to have considerable support from both the black and white communities. In most cases, black parents were highly supportive of the various busing programs. Like the students in our own study, black parents stressed quality education as the most important benefit of such programs, whereas white parents in receiving schools tended to stress the experience of coming into contact with other races. We must point out, however, that *none* of the programs reviewed involved *mandatory* busing of white students into black communities; cities facing this situation might present a very different picture of white support. Moreover, it is unlikely that many in the black community have seen the data on achievement reported here; much black support may be based upon premises regarding academic gain which our findings call into question. Whether or not black support will be affected by such findings remains to be seen.

Social Class and Other Background Factors

Most of the data we have presented so far summarize the effects of busing on all students considered as a single group. A question

might be raised about whether these effects (or lack of same) are consistent for all students regardless of their background. In particular, it might be hypothesized that social class differences between black and white students can explain the changes (or lack of changes) we have reported. We shall briefly indicate the major trends for students of differing social class and other characteristics, such as sex and age level.

It is difficult to separate race and social class, since black families as a group tend to be lower than white families on most socio-economic measures. To the extent that the distinction can be made, however, no uniquely social class factors have been reported that would contradict the findings presented so far. The Riverside study selected a group of white students whose social class scores were less than or equal to the minority students; achievement test scores of the black students were still significantly lower than the low-SES white students (although the original difference was diminished somewhat; Gerard and Miller, 1971). For the METCO data, special analyses were made of the race relations changes among bused students who were children of blue-collar as compared to white-collar workers; no significant differences emerged. What small changes there were usually revealed that the black students from white-collar families changed more (in a negative direction) than those from blue-collar families.

There is also the possibility that, contrary to the assumptions behind many school integration programs, some of the predominantly white schools to which black students are sent are in fact worse than the inner-city black schools. In the METCO study there were no data to examine this issue in detail, but it is our impression that perhaps only one or two suburbs would approximate the inner-city socio-economic level. In any event, while there were some differences from one town to another in the absolute levels of the various measures, there were no important variations in the *changes* over time that appeared to be related to any socio-economic differences in the communities.

With the exception of achievement test scores, there was some sex and age differential on various measures both before and after integration; but there were no important differences in the relative *changes* in these groups due to integration. That is, in METCO we found that girls generally had a more difficult time adjusting to the program (reflected in lower program support, stronger separatist ideology, and less contact with white students). There seemed to be some important differences in cross-sex, cross-race relationships, which were better between black boys and white girls than between white boys and black girls. This situation seems to have left some black girls with resentful feelings over white girls "stealing their men." But the amount of interracial contact was small for both groups, and, more important, the *changes* in our race relations measures for bused students were about the same for both boys and girls. A similar finding emerged for age levels. Younger students were somewhat more supportive of the program and were more positive

on the various race relations measures than older students, but the degree and direction of *change* were similar for all ages. This was true for the METCO secondary school data as well as the Riverside elementary school data.

In sum, while there were some over-all differences according to the sex and age levels of students in busing programs, the effects of busing on *changes* (if any) in achievement and attitudes tended to be uniform for all groups.

It seems clear from the studies of integration programs we have reviewed that four of the five major premises of the integration policy model are not supported by the data, at least over the one- to five-year periods covered by various reports. While this does not deny the possibility of longer-term effects or effects on student characteristics other than those measured, it does mean that the model is open to serious question.

The integration policy model predicted that achievement should improve as black students are moved from segregated schools to integrated schools. This prediction was based in part upon the classical works of Kenneth Clark and others which argue that, because of segregation, black students have lower regard for themselves. It was also based in part upon reanalyses of the Coleman data which showed that black students achieve less than white students, but that black students in integrated schools achieve more than black students in segregated schools. But four of the five studies we reviewed (as well as the Berkeley and Evanston data discussed in footnote 4) showed no significant gains in achievement scores; the other study had mixed results. Our own analyses of the Coleman data were consistent with these findings (see Armor, 1972).

Although there were no gains in general standardized achievement scores that we might attribute to integration, neither were there any losses for black or white students. Unfortunately, we cannot say the same about academic grades of black students. The grades of the METCO secondary students in suburban schools dropped considerably. We did not measure the bused students' grades before they entered the program, but the fact that their test scores are somewhat *higher* than the control group's offers substantial evidence that this difference does represent a change. Along with this change we observed a difference in academic self-concept that seems to indicate that the bused students are aware that they are experiencing more difficult competition in the suburbs. While we might expect this result if we believe the Coleman finding of black/white achievement differences, it does not mean there is no problem. It is possible that there are psychological consequences of this increased competition that may be harmful to black children. Being moved from an environment where they are above average to one in which they are average or below may be frustrating and discouraging. It might be one of the reasons why the bused black students have become less supportive of the program and more supportive of black separatism.

We tested this latter possibility by examining the relationship

between support for the Black Panthers and academic grades in our 1970 sample from METCO (see Fig. 12). Consistent with our findings, the bused students are more favorable to the Panthers than the control group. But among the bused students we find that the METCO group which has college aspirations but which has a C average or below stands out clearly as more pro-Panther than the other groups. In other words, the increased militancy and anti-integration sentiments among the bused students may arise partly from the fact that their aspirations remain at a very high level even though their performance declines to the point where they may question their ability to compete with whites at the college level. The fact that this group is proportionally a large one (about 25 per cent of the total bused group compared to 13 per cent for the analogous control group) may be an indication of a potentially serious problem.

The integration policy model predicted that integration should raise black aspirations. Again, our studies reveal no evidence for such an effect. Unlike poor achievement, however, low aspirations do not appear to be much of a problem. The black students in our busing program seem to have aspirations as high as or higher than white students. If anything, given their academic records in high school, these aspirations may be unrealistic for some students. The emphasis on equality of educational opportunity may be pushing into college many black students whose interests and abilities do not warrant it. The fact that only half of the 1970 METCO seniors are still enrolled in four-year colleges (after over 80 per cent had started) may attest to this possibility.

The integration policy model predicted that race relations should improve as the result of interracial contact provided by integration programs. In this regard the effect of integration programs seems the opposite of that predicted. It appears that integration increases racial identity and solidarity over the short run and, at least in the case of black students, leads to increasing desires for separatism. These effects are observed for a variety of indicators: attitudes about integration and black power; attitudes towards whites; and contact with whites. The trends are clearest for older students (particularly the METCO high school students), but similar indications are present in the elementary school studies as well. This pattern holds true for whites also, insofar as their support for the integration program decreases and their own-race preferences increase as contact increases.

It is this set of findings that surprised us most. Although many recent studies have questioned the meaning of black/white differences in achievement and aspirations, to our knowledge there have been no research findings which challenged the contact theory. The idea that familiarity lessens contempt has been a major feature of liberal thought in the western world, and its applicability to racial prejudice has been supported for at least two decades of social science research. It may be true that, under certain conditions, greater contact will lead to a reduction of prejudicial feelings among racial or ethnic groups. But the induced integration of black and white

students as it is being carried out in schools today does not fulfill the conditions.

In all fairness to the Allport contact theory, it must be said that he placed many qualifications upon it. One major qualification was that the contact must be made under equal-status conditions. Many behavioral scientists might assume that an integration program presumes equality of status, at least in the formal sense that all races are treated equally and have equal access to educational resources. But there is another way to look at status. Integrating black and white students does very little, in the short term, to eliminate the *socio-economic* and *academic* status differentials between black and white students that exist before integration. Therefore, we have to question whether integration programs for black and white children fulfill the equal-status conditions as long as socio-economic and academic inequalities are not eliminated. Allport warned that contact under the wrong conditions can reinforce stereotyped beliefs rather than reduce them; this may be occurring in our current integration programs. In other words, the social class differences between blacks and whites—the differences that integration programs are supposed to eliminate eventually—may heighten the sense of black identity and solidarity, leading to an increasing opposition to integration.

What Allport did not say, but what his emphasis on equal-status conditions may imply, is that contact between two groups with strong initial prejudices may increase prejudice to the extent that stereotypes are reflected by actual group differences. For black students, initial stereotypes about white students as snobbish, intellectual, and "straight" may be partially confirmed by actual experience; the same may be true for white stereotypes of black students as non-intellectual, hostile, and having different values. We might make the same observations about some of the other ethnic and religious conflicts we see in the world today, particularly the Protestant-Catholic conflict in Northern Ireland and the Israeli-Arab battles in the Middle East. It is certainly true in these cases that the amount of contact has not lessened the hostilities; it seems to have heightened them to dangerous levels in the first place.

Why has the integration policy model failed to be supported by the evidence on four out of five counts? How can a set of almost axiomatic relationships, supported by years of social science research, be so far off the mark? Part of the reason may be that the policy model has failed to taken into account some of the conditions that must be placed upon contact theory; but we believe that there may be other reasons as well having to do with (1) inadequate research designs, (2) induced versus "natural" factors, and (3) changing conditions in the black cultural climate.

Most of the methodological procedures which have been used to develop various components of the integration policy model are not adequate. The single most important limitation is that they have been cross-sectional designs. That is, the studies have measured

aspects of achievement or race relations at a single point in time, with causal inferences being drawn from comparisons of integrated groups with segregated groups. Such inferences are risky at best, since the cross-sectional design cannot control for self-selection factors. For example, the Coleman study showed that integrated black students had slightly higher achievement than segregated students, but it is more than likely that families of higher-achieving students move to integrated neighborhoods in the first place (for reasons of social class or other issues involving opportunity). Thus the cause-and-effect relationship may be the opposite to that suggested by the U.S. Civil Rights Commission report. In the Deutsch and Collins housing study, which found that integrated whites were more tolerant of blacks than segregated whites, it is possible that self-selection factors were operating which led the more tolerant white persons to choose the integrated housing project in the first place. It is fair to say that none of the studies before the ones we have reviewed had an opportunity to study the effects of large-scale, induced integration over a reasonable period of time. Yet this is the only way the effects of integration can be sorted out from differences which may originally exist between any two groups of persons.

The second reason for our findings in the race relations realm may have to do with the relatively contrived nature of current school integration programs. In all of the programs reviewed, the integration has been induced by the actions of state or local agencies; it has not occurred in a more natural way through individual voluntary actions. The use of busing, the relatively instantaneous transition from an all-black to an all-white environment, the fact of being part of a readily identifiable group in a new and strange setting, may all combine to enhance racial solidarity and increase separatist tendencies for black students. (We might find a very different picture for black families that move into predominantly white neighborhoods and allow their children some time to adjust to the new environment.) On the other hand, this set of mechanisms would not explain why white student attitudes in the receiving schools also tended to become less favorable to black students, as shown in the Ann Arbor, Riverside, and METCO studies. Moreover, these mechanisms—if they are, in fact, operating—do not invalidate our evaluation of those current policies that focus precisely on induced school integration.

The final major reason why the integration policy model may fail is that the racial climate has changed drastically in the years since the Allport work and the Supreme Court decision. The most noteworthy change, of course, has been in the attitudes of black people. Although the majority of blacks may still endorse the concept of integration, many younger black leaders deemphasize integration as a major goal. Black identity, black control, and black equality are seen as the real issues, and integration is regarded as important only insofar as it advances these primary goals. Some black leaders, albeit the more militant ones, feel that integration might actually defeat attainment of these goals by dispersing the more talented blacks

throughout the white community and thereby diluting their power potential. Integration is also seen as having white paternalistic overtones and as the means whereby the white man allays his guilty conscience while ignoring reform on the really important issues. Given these sentiments, school integration programs are seen by blacks not as a fulfillment of the goal of joining white society, but only as a means of obtaining better educational opportunities, which would ultimately lead to a more competitive position in the occupational and economic market.

Integrated schools *per se* are not the real issue; if schools in the black community provided education of the same quality as those in white communities, blacks would not be so interested in busing programs. In fact, when we asked students in the METCO program this question, almost 75 per cent said they would prefer to attend their own community school if it were as good as the suburban schools. Of course, it is by no means clear that the suburban schools actually offer better education. Any improvement in facilities or teacher quality (the ultimate importance of which is called into question by the Coleman report) may be counteracted, as our data show, by stiffer competition and a more hostile and unfriendly student atmosphere. Black leaders who view school integration only as a means to better opportunity must take these other factors into account.

In the context of these new black attitudes, the Allport model may not be applicable, and contact with white students provided by induced school integration may enhance ideological tendencies towards separatism. The reality of contact seems to sensitize black students to the heightened racial identity and separatism that has been growing in the black community since the late 1960's. The explanation may be, in part, that the large socio-economic differences between black and white students are fully recognized only when contact enables them to witness these differences. The difficulty of bridging this gap, coupled with the knowledge that they are viewed by whites as having lower status, leads black students to reject white standards and relationships. They turn inward, as it were, stressing the uniqueness and value of their own race, shutting off contact with whites, and embracing a point of view which endorses separatism as a means toward preserving and elevating their own position. Those black students not in contact with whites may exhibit some of these tendencies due to the over-all contact with white society, but the lack of direct contact postpones the problem or avoids it altogether. This type of "contact-conflict" model may be used to explain the conflicts which occur between two different cultural groups which come into direct contact (e.g., Catholics and Protestants in Northern Ireland; Israelis and Arabs in the Middle East). Whether or not it is applicable on a larger scale, it would fit the data better and would provide a more realistic model for the school integration case.

It would be a mistake, of course, to view the increased racial solidarity of black students as a completely negative finding. The differences between black and white cultures make a certain amount of culture conflict inevitable and even necessary if an integrated

society is to be realized. In fact, it would be reasonable *not* to expect conflict—which always accompanies the contact of two cultures—only if we did not believe that a distinct black culture exists in America. Although this belief was held at one time by a large number of social scientists, it is not so popular today. There is now growing recognition that a black culture does exist, at least in the eyes of many blacks, and that this culture stresses values, goals, and behavioral patterns that differ considerably from those of the predominant white culture (Jones, 1972; Metzger, 1971).

Up to this point, we have said little about the one positive finding of our research, the "channeling" effect whereby black students who attend white middle-class schools tend to get into higher quality colleges (even though they may not finish college at a higher rate than segregated black students). This finding should be heartening to those who have believed that integration does provide educational opportunities not found in inner-city black schools, although the finding must be considered a tentative one since it has been shown in only two fairly small studies. Also, the positive effects are limited to the college-bound, so that there still may be a question about the benefits of integration for the non-college-bound black students. And it may be that the "channeling" effect works only when the number is relatively small. Nonetheless, this kind of longer-term effect—and perhaps others as yet undiscovered—may turn out to provide a basis for certain types of integration plans.

Policy Implications

It is obvious that the findings of integration research programs have serious implications for policy. Given the momentum which has built up over the last few years for the school integration movement, however, it is likely that in some quarters the data we have presented will be attacked on moral or methodological grounds and then summarily ignored. In other quarters the data may be met with rejoicing over the discovery of a club which can be used to beat back the pro-integration forces. But we hope these extreme reactions will be avoided and that a more balanced interpretation of our findings will prevail.

The most serious question is raised for mandatory busing (or induced integration) programs. If the justification for mandatory busing is based upon an integration policy model like the one we have tested here, then that justification has to be called into question. The data do not support the model on most counts. There may be justifications for school integration other than those in the integration policy model, but then the burden must fall upon those who support a given school integration program to demonstrate that it has the intended effects (with no unintended, negative side-effects). It also must be demonstrated that any such program is at least supported by the black community.

We want to stress this last point. Decisions must be based upon feelings of the black community as well as the white community.

Many liberal educators have been so intent on selling integration to reluctant white communities that they risk the danger of ignoring the opinion of the black community. While many black leaders favor school integration, there are also many black persons who would much prefer an upgrading of schools in their own community. The recent (March 1972) National Black Political Convention in Gary, Indiana, condemned mandatory busing and school integration, arguing that such plans are racist and preserve a black minority structure. These views may not represent the entire black community, but they are indicative of the complexity and heterogeneity of black political opinion.[13] Whether or not a white community wants integration (and there are obviously many that do not), we must take into account the feelings of the group on whose behalf integration is advocated.

Although the data may fail to support mandatory busing as it is currently justified, these findings should not be used to halt voluntary busing programs. For one thing, we have stressed that the studies of integration so far have been over fairly short periods (one to five years), and there are possibilities of longer-term effects which are not visible until adulthood (not to speak of effects on characteristics not measured by the present research). More important, however, we have tentatively demonstrated one very significant longer-term benefit of integration for college-bound blacks. The "channeling" effect, if substantiated by further research, could form a substantial basis for voluntary programs whose focus is upon the college-bound black student. Even for this subgroup, of course, we have documented the trend towards separatist ideology. But the gain in educational opportunity may well outweigh this consequence in the eyes of the black community, as indeed it does now for programs like METCO. In fact, some persons will view these ideological changes, as well as any conflict that may accompany them, as an inevitable consequence of contact between two different cultures. If blacks and whites are ever to live in an integrated culture, they must begin learning and accepting their differences; and this cannot happen without contact. If contact engenders a certain amount of racial friction, many persons will feel the gains from school integration—both long-term and symbolic—more than make up for it.

To these questions of the symbolic and long-run benefits of induced school integration, the existing studies provide no answer. What they do show is that, over the period of two or three years, busing does *not* lead to significant measurable gains in student achievement or interracial harmony (although it does lead to the channeling of black students to better colleges). The available evidence thus indicates that busing is *not* an effective policy instrument for raising the achievement of black students or for increasing interracial harmony. On the other hand, the existing studies do not rule out the possibility that in the longer run, or in other respects, busing may indeed prove to have substantial positive consequences.

The available evidence on busing, then, seems to lead to two clear policy conclusions. One is that massive mandatory busing for pur-

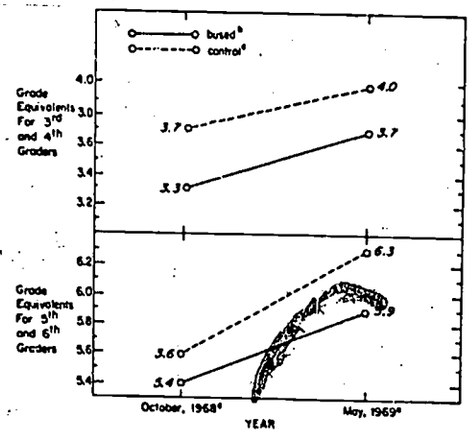
poses of improving student achievement and interracial harmony is not effective and should not be adopted at this time. The other is that *voluntary* integration programs such as METCO, ABC, or Project Concern should be continued and positively encouraged by substantial federal and state grants. Such voluntary programs should be encouraged so that those parents and communities who believe in the symbolic and potential (but so far unconfirmed) long-run benefits of induced integration will have ample opportunity to send their children to integrated schools. Equally important, these voluntary programs will permit social scientists and others to improve and broaden our understanding of the longer-run and other consequences of induced school integration. With a more complete knowledge than we now possess of this complicated matter, we shall hopefully be in a better position to design effective public education policies that are known in advance to work to the benefit of all Americans, both black and white.

Even in voluntary school integration programs, however, our data indicate that certain steps should be taken which might help alleviate the problems of achievement and race relations. Wholesale integration without regard to achievement levels of white and black students can lead to potentially frustrating experiences. Some selectivity might be desirable so that both groups reflect a similar achievement capacity. Although a certain amount of racial problems may be inevitable, full education of both groups about the possibilities and causes of differences might ameliorate the kind of polarization that would endanger the program.

One must also consider the possibility that other types of integration programs may be more successful. We have said since the outset that our data do not necessarily apply to neighborhood integration brought about by the individual choice of black families. It is possible that such programs would be more successful over the long run, at least in terms of race relations. Being a member of the community might tend to ameliorate black feelings of separateness that are fostered in the relatively contrived busing situation. Whether or not this kind of program could also change standardized achievement levels remains to be seen. Since the differences between black and white achievement are so large and consistent across so many different settings and studies, we must entertain the possibility that no plan of school integration will lessen this gap. Research will have to be continued in this area before the full causal mechanisms are understood and a firm basis is established on which social action can accordingly be planned.

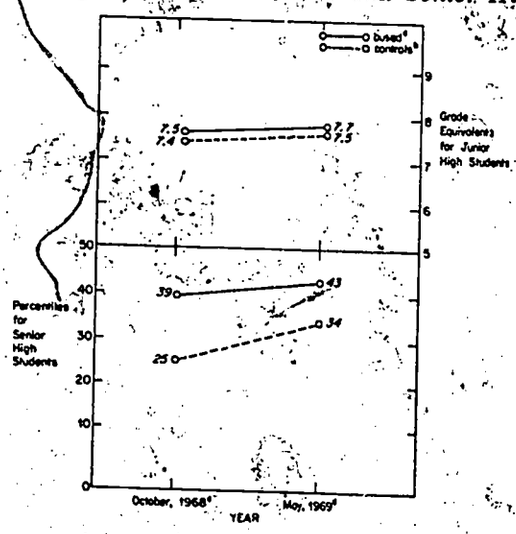
Although we have been critical of some aspects of the connection between social science and public policy in the integration movement, we do not want to imply that their connection should be lessened. On the contrary, the real goals of social science and public policy are not in opposition; the danger is rather that the connection may not be close enough to enable us to make sound decisions. Society can only benefit by those ties which combine the advantage of scientific knowledge with a clear awareness of its limitations.

FIGURE 1. *Reading Achievement—Elementary.*[a]



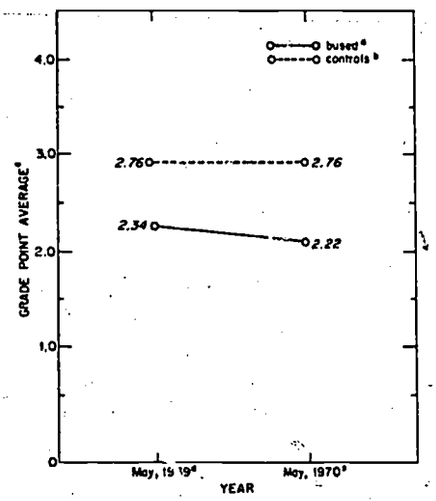
[a]Metropolitan Achievement Tests; no statistically significant gains when bused compared to controls for either age group.
[b]N=88 for Third-Fourth graders and 59 for Fifth-Sixth graders.
[c]N=14 for Third-Fourth graders and 27 for Fifth-Sixth graders.
[d]Full cross-sections for grades:
3-4: bused 3.4 (N=131); control 3.7 (N=38)—not significant (sd= .96)
5-6: bused 5.5 (N=90); control 5.4 (N=55)—not significant (sd=1.5).
[e]Full cross-sections for grades:
3-4: bused 3.7 (N=111); control 3.8 (N=23)—not significant (sd=1.1)
5-6: bused 6.0 (N=74); control 5.8 (N=52)—not significant (sd=1.7).

FIGURE 2. *Reading Achievement—Junior and Senior High.*



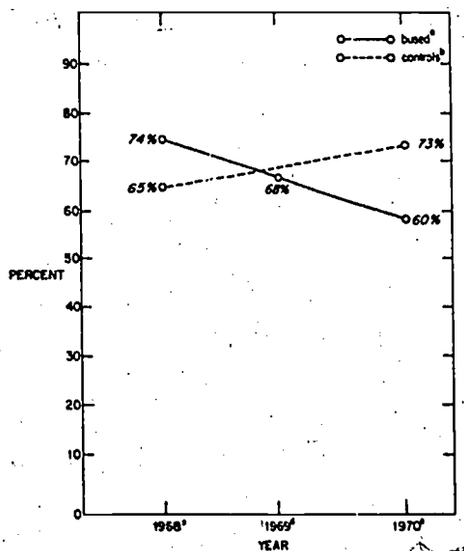
[a]N=123 for junior high and 72 for senior high (no statistically significant changes).
[b]N=27 for junior high and 14 for senior high (no statistically significant changes).
[c]Full cross-section for junior high: bused 7.5 (N=197); control 7.4 (N=74)—n. s. (sd=1.9)
Full cross-section for senior high: bused 36 (N=160); control 28 (N=35)—n. s. (sd=24).
[d]Full cross-section for junior high: bused 7.7 (N=143); control 7.3 (N=47)—n. s. (sd=1.9)
Full cross-section for senior high: bused 44 (N=86); control 34 (N=20)—n. s. (sd=25).

FIGURE 3. *Grade Point Average—Junior and Senior High.*



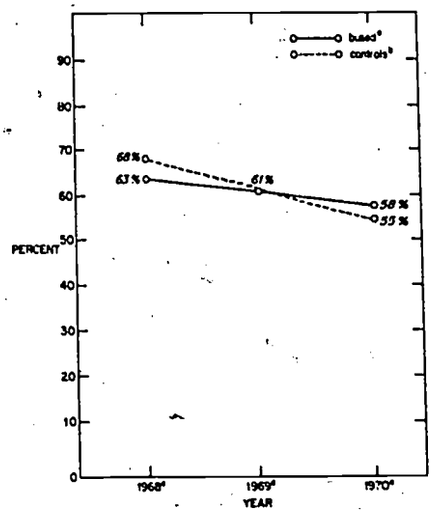
[a]N=165; statistically significant change (.01 level).
[b]N=23; no significant change.
[c]Self-reported; a grade of A is 4.0, B is 3.0, etc.
[d]Full cross-section: bused 2.33 (N=210); control 2.73 (N=59)—significance at .001 level.
[e]Full cross-section: bused 2.20 (N=467); control 2.59 (N=228)—significance at .001 level.

FIGURE 4. *Per Cent Wanting a Bachelor's Degree.*



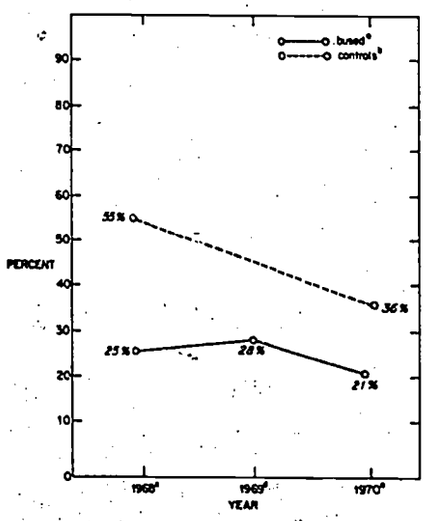
[a]N=132; bused changes significantly different from control changes (.02 level).
[b]N=34.
[c]Full cross-section: bused 71% (N=323); controls 68% (N=87)—not significant.
[d]Full cross-section: bused 69% (N=211); controls 68% (N=60)—not significant.
[e]Full cross-section: bused 60% (N=486), controls 56% (N=228)—not significant.

FIGURE 5. *Per Cent Expecting a Professional or Technical Occupation.*



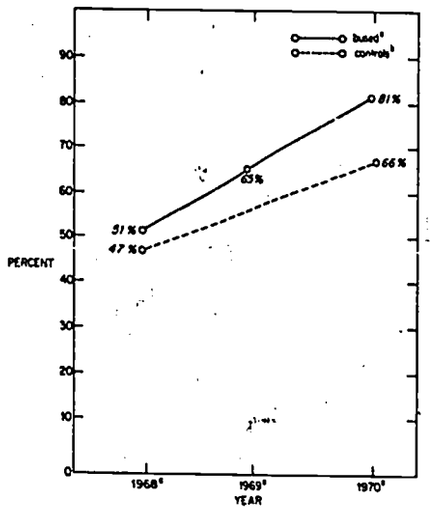
[a]N=130; bused changes not significantly different from control changes.
[b]N=31.
[c]Full cross-section: bused 63% (N=311); controls 55% (N=91)—not significant.
[d]Full cross-section: bused 62% (N=203); controls 52% (N=58)—not significant.
[e]Full cross-section: bused 66% (N=482); controls 66% (N=228)—not significant.

FIGURE 6. *Per Cent Feeling More Intelligent than Classmates.*



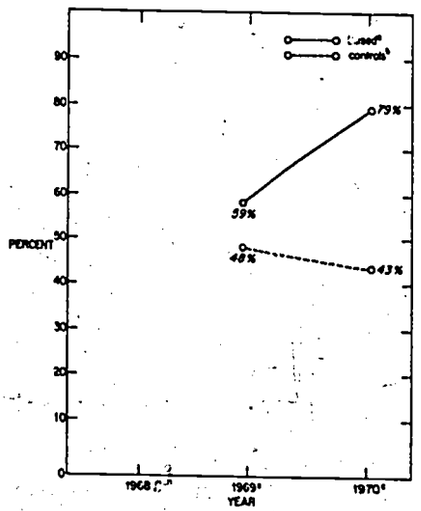
[a]N=130; bused changes not significantly different from control changes.
[b]N=33.
[c]Full cross-section: bused 25% (N=320); controls 47% (N=99)—significance under .01.
[d]Full cross-section: bused 31% (N=211); controls 42% (N=60)—not significant.
[e]Full cross-section: bused 23% (N=483); controls 34% (N=230)—significance under .01.

FIGURE 7. *Per Cent Wanting to be in a School with no More than 50 Per Cent White Students.*



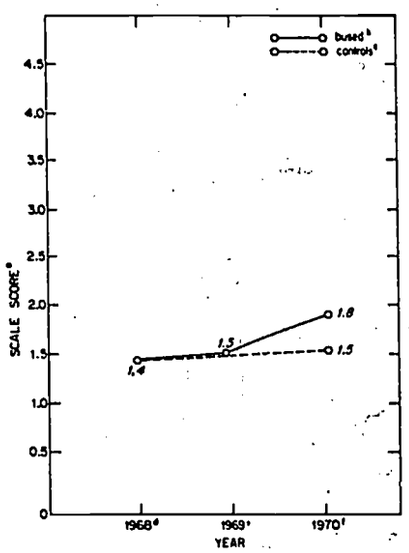
[a]N=133; bused change not significantly different from control change.
[b]N=36.
[c]Full cross-section: bused 56% (N=323); controls 56% (N=97).
[d]Full cross-section: bused 67% (N= 209); controls 59% (N=61)—not significant.
[e]Full cross-section: bused 71% (N=485); controls 62% (N=229)—significance under .001.

FIGURE 8. *Per Cent Favoring Black Power.*



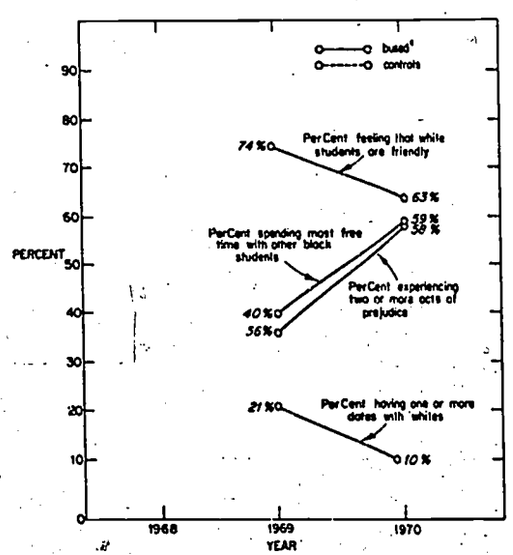
[a]N=167; bused change significantly different from control change (.05 level).
[b]N=21.
[c]Full cross-section: bused 59% (N=211); controls 52% (N=59)—not significant.
[d]Full cross-section: bused 76% (N=479); controls 55% (N=220)—significance under .001.

FIGURE 9. *Separatist Ideology Index.*



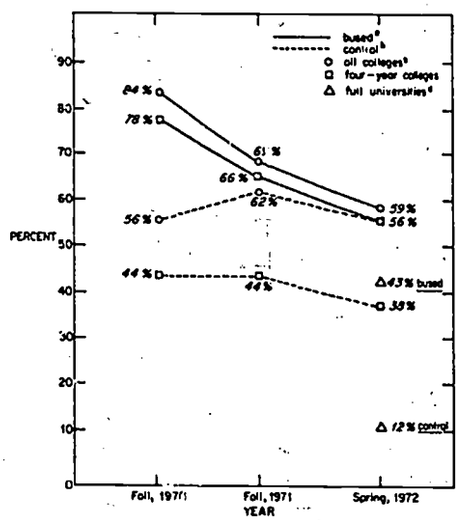
[a]A score of 4 indicates strongest separatist feelings; relinbility = .76; sd = .8.
[b]N=135; bused change significantly greater than control change (under .01 level).
[c]N=34.
[d]Full cross-section: bused 1.4 (N=324); control 1.4 (N=97)—not significant.
[e]Full cross-section: bused 1.8 (N=213); control 1.5 (N=60)—not significant.
[f]Full cross-section: bused 1.8 (N=489); control 1.5 (N=230)—significance under .001.

FIGURE 10. *Bused Students Relations with White Students.*



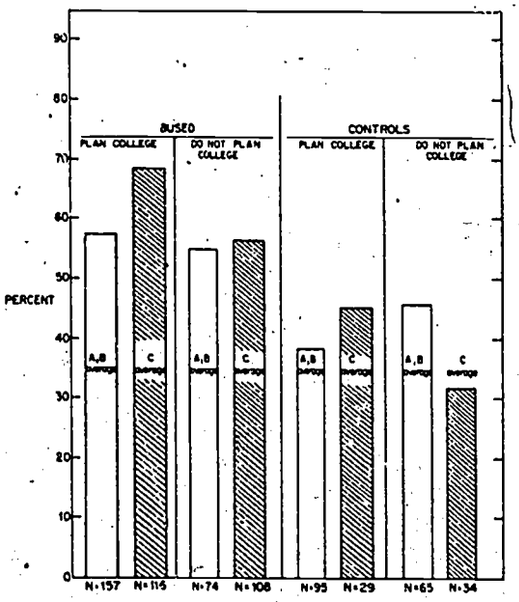
[a]N's range from 146 to 159; all changes significant at or under .02 level.

FIGURE 11. *Per Cent Attending College Full-time.*



[a]N=32 for all time periods.
[b]N=16 for all time periods.
[c]Includes 2-year junior college; bused change significantly greater than control change (.05 level).
[d]Universities with a graduate program.

FIGURE 12. *Percentage of Bused and Control Students Who Sympathize with the Black Panthers, by College Plans and Academic Performance.*



FOOTNOTES

[1]In spite of these precautions, we must still warn that it is difficult to make comparisons and generalizations when data are derived from different studies. Also, all of the studies we review were done in Northern cities, so that our findings may not be generalizable to the South. Nonetheless, the studies do reveal sufficiently clear and consistent findings in certain areas to enable at least a preliminary assessment of the effects of induced integration in de facto segregated cities of the North.

[2]The data summarized in the reports cited were subjected to extensive reanalysis for the present study.

[3]The number of junior and senior high students participating in the METCO study are as follows: wave one, 357 bused (80 per cent of the total population) and 112 controls (54 per cent of the eligible population); wave two, 229 bused (51 per cent) and 67 controls (32 per cent); wave three, 492 bused (87 per cent) and 232 controls (65 per cent). Because of clerical errors in relating achievement tests to questionnaires, the questionnaire data for waves one and two are based on about 10 per cent fewer respondents in each group. Given the low turnout rates for wave two and other factors (drop-outs; graduates, transfers from control to bused status), our panel of secondary school students with achievement data for both testing periods consists of 195 bused students and 41 control students; for the questionnaire data the panel consists of 135 bused students with data from all 3 waves and 36 control students with data from wave one and wave three. (Only 16 students in the control group had questionnaire data from all three waves. Of the initial sample of control students, over a third had either graduated or transferred into the busing program by the third wave.) In addition, achievement data for elementary grades is available for panels of 147 bused students (66 per cent of the wave one sample) and 41 controls (44 per cent). Given the relatively small proportion of both bused and control students in the panels, there is the chance that the panels are not representative of the full population of bused students and their matched siblings. In the comparisons we make in the next section, therefore, we shall also present data from the complete cross-sections for all waves. The bused panel does not differ significantly from the full cross-section of bused students, and the control panel differs in no way that would affect our main conclusions. In other words, the cross-sectional data can be used as a check on the panel data; the absence of any divergence between the two sets of findings indicates that the attrition of the panels does not invalidate the panel findings. (Analysis was carried out on the 240 bused students who were in both waves one and three, representing 74 per cent of the wave one sample, and there were no important differences between these results and the results from the smaller three-wave panel.)

[4]Research reports for a number of widely-discussed busing programs were not included for various reasons. For example, the Berkeley, California, busing program has not been systematically studied; a report is available, however, which shows that black student achievement is as far behind (or *further* behind) white achievement after two years of integration as before integration (Dambacher, 1971). A study of the Rochester busing program also lacked a proper pre-test design (Rochester City School District, 1970). The study had pre-test and post-test achievement scores from *different tests*, and control groups with generally lower pre-test scores; and it used analysis of covariance to make adjustments for post-test scores. Such statistical adjustments do not necessarily eliminate initial differences between the bused and control groups. A third study—of the Evanston integration program—was received too late for inclusion (Hsia, 1971). This report did show, however, that after two to three years of integration, integrated black students were still as far—or farther—behind white students as before integration. This research also confirmed the reduction in black academic self-concept after integration and the tendency for black student grades to decline. We know of no other studies of induced school integration in the North which have the research design necessary for establishing cause and effect relationship—to wit, a longitudinal design with a control group.

[5]About half of the elementary students and two thirds of the secondary students

were new to the program in 1968. However, there were no differences in gain scores for the newly-bused compared to the previously-bused students.

[6]Initial differences between the newly-bused and the previously-bused revealed no particular pattern; for third and fourth graders the previously-bused were higher by .15 points, but for fifth and sixth graders the newly-bused were higher by .5 points; in any event there were no statistically significant differences in gain scores.

[7]The newly-bused students were somewhat higher than the previously-bused initially for both junior and senior high students (.3 and 2.5, respectively), but the differences were not significant.

[8]The control school was a "naturally" integrated school with an increasing proportion of black students; it was scheduled to be closed down the following year.

[9]The pattern of black achievement falling further behind white achievement at later grade levels has been extensively documented (Coleman, 1966; Rosenfeld and Hilton, 1971).

[10]Even these two significant results might not have occurred if the data had been analyzed differently. The author controlled for pre-busing scores using analysis of covariance rather than analyzing gain scores (see footnote 4). Since the author did not present pre-test means, we cannot know if the bused and control groups differed initially.

[11]The grade-point system used here has an A as 4 points, B as 3 points, and so on.

[12]The Ann Arbor study did include a measure of occupational aspiration, but the variation was so great (not to speak of the coding problems presented by such choices as "superman" and "fairy princess") that interpretation was difficult.

[13]A recent Gallup Poll reported that 46 per cent of a national non-white sample are opposed to busing for racial balance; 43 per cent were in favor, and 11 per cent were undecided (August 1971).

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