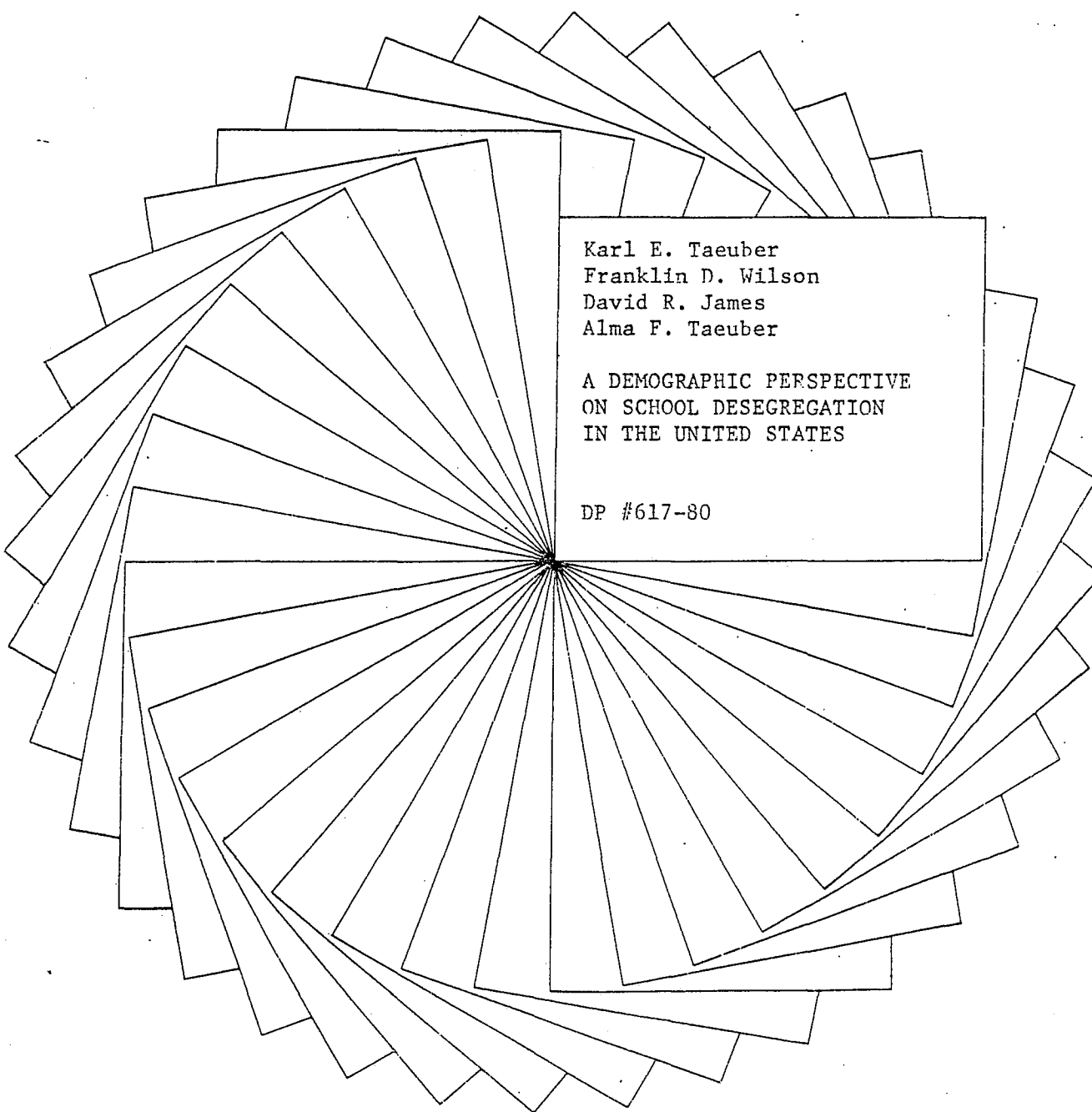




Institute for Research on Poverty

Discussion Papers



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A DEMOGRAPHIC PERSPECTIVE
ON SCHOOL DESEGREGATION
IN THE UNITED STATES

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ABSTRACT

For more than a decade following the 1954 Supreme Court desegregation decision, public schooling in the large cities of both North and South remained racially segregated. During the late 1960s and early 1970s, the federal government intervened in many school districts to alter the long-standing linkages among race, residence, and school assignment. Because the intervention proceeded on a case by case basis, there was considerable variation in the timing and scope of desegregation actions. This study describes school segregation trends, 1968 to 1976, in the 87 districts which had more than 10,000 black students in the fall of 1968. These large districts contained more than half of the nation's black students. Some of these districts experienced violent controversy over desegregation, some desegregated relatively peacefully and completely, and some have not yet taken any effective desegregative actions.

Three measures of desegregation are used to describe redistributive aspects of the desegregation experience: the index of dissimilarity, the exposure of blacks to whites, and the exposure of whites to blacks. In 1968, none of these districts was substantially desegregated; in 1976, they varied over the full range of segregation indices. The amount of desegregation between 1968 and 1976 was not

related to the level of segregation in 1968, but was loosely related to the numbers and proportions of black students. In particular, none of the districts with very large numbers of black students underwent extensive desegregation.

The percentage black among public school pupils increased in most of these districts. The measures of exposure of black pupils to white and of white pupils to black also increased. The changing racial composition of district enrollment typically did not vitiate the intended racial desegregation of the public schools.

A Demographic Perspective on School Desegregation in the United States

Public education in the United States is organized spatially and racially. During the last three decades the federal government, seeking to reduce racial segregation in the public schools, has intervened in the organization of education. In hundreds of school districts, the racial assignment of pupils to schools has been changed. Linkages among race, residence, and schooling have been altered, often massively. Other consequences for race and place may follow, putatively white flight and conceivably other types of residential change. Because the timing and magnitude of school racial reassignments have varied greatly from one school district to another, the school desegregation process may be viewed as a national experiment to make over certain features of ethnic ecology. In this report we present a demographic description of the direct changes in pupil distribution. Although the empirical materials do not extend to any new analysis of white flight, they do provide a basis for reconsideration of some of the scholarly and polemic literature on the demographic consequences of school desegregation.

To explain what we mean by a "national experiment in ethnic ecology," let us begin with the general observation that human activities are spatially organized. In contemporary industrial nations the settlement pattern is elaborately differentiated. Much of the population lives in densely settled urban or metropolitan regions. Within these regions, activities vary in patterns of spatial concentration. Manufacturing and other major employment centers, wholesale trade, certain kinds of retail trade, some governmental

facilities, and other "specialized" businesses and services tend to be highly concentrated. "Convenience" goods and services, including residential facilities, tend to be more widely and evenly distributed.

The utilization of residential space is organized along various social and economic axes. Among these is ethnicity. The highly structured and persistent racial residential segregation of U.S. cities is particularly pertinent for this analysis. There is also a racial patterning of convenience goods and services. For most of these establishments, the clientele are mainly of one race. Often there is racial patterning of personnel offering the services. There may also be racially patterned areal differences in the quantity or quality of services (including governmental services).

In the United States, the territorial structure of formal governmental administration is a complex overlay on the urban region. Educational services are typically administered by school districts that have varying degrees of geographic and political overlap with other administrative systems, particularly counties and municipalities. In many southern states, school districts tend to be county-wide. In northern states, each large municipality tends to be served by a school district with similar boundaries, although inclusion of additional territory and exclusion of some municipal area is common.

Elementary schools tend to be scattered through residential territory in the manner of a convenience service. Secondary schools serve a larger population base, but are also geographically dispersed. Prior to desegregation activities, most large school districts used residential location as a principal determinant of the school a child

was entitled to attend. Geographic determination, however, was often quite incomplete. Overlapping zones, transfer provisions, enrollment provisions for schools offering special services, and other attendance rules complicated the system.

Among the attendance rules in the South was compulsory racial separation. A formally designated dual system persisted intact until 1954 and changed little for some years thereafter. Northern districts with large numbers of black pupils used attendance rules, personnel policies, and other administrative strategies to operate substantially dual systems.

Although litigation against school segregation was only one tactic in a broad panorama of social actions and social movements affecting what Myrdal (1944; see also Kluger, 1976) called "the web of discrimination," the 1954 Brown decision of the U.S. Supreme Court that declared school segregation unconstitutional became the herald of the "civil rights movement" and the "civil rights era." For some years, this symbolic effect of Brown was its chief effect. Not until 1955 did the Supreme Court issue an implementation decree for Brown, and then the task of devising appropriate remedies was placed under the jurisdiction of local federal judges, who could take into account the specific circumstances of each school district. Among these circumstances were strong political opposition to desegregation and the peculiar U.S. balance between federal and state powers. The Supreme Court shied away from full clarification and implementation of its mandate, and the federal and state governments generally shied away from their enforcement responsibilities. In 1956 President Eisenhower sent federal troops to Little Rock, Arkansas, to enable 7

black pupils to attend a "white school," and for another decade most school desegregation was of a similar token sort.

In the mid-1960s the civil rights movement had become politically important, and there was a renewed flurry of judicial, legislative, and administrative actions to foster school desegregation (Orfield, 1969). The Supreme Court issued a series of decisions tightening up the remedy requirements, the Congress passed a major civil rights act, and both the Department of Justice and the Department of Health, Education, and Welfare began actively instigating and watchdogging desegregation.

In 1973, in Keyes, the Supreme Court gave clear sanction to imposition of desegregation remedies on northern districts. Two years before, in Swann, the Court had specified that those remedies could include busing if transportation to schools geographically remote from residences was necessary to disestablish the dual system "root and branch" and to create a system "without black schools or white schools but just schools." The Swann decision also authorized the use of racial balance--each school having the district-wide racial percentage--as a starting point for the evaluation of the effectiveness of a remedy.

This brief history is incomplete, but it suffices for emphasizing the ecologically significant features of the process. School desegregation activities during the last dozen years have been very much focused on the racial composition of schools. Rules for allocating children to schools have been altered in order to eliminate racial identifiability of schools and reduce school-by-school variation in racial percentages. Desegregation activities have

thereby transformed the linkages among race, residential location, and school assignment. Enforcement by judicial and administrative agencies has proceeded on a case-by-case basis. Desegregation has typically been implemented one district at a time, with various starting dates, various modes and rates of reallocation, various criteria for "desegregation," and various degrees of success in reducing racial segregation in the schools. This "natural experiment" has created enormous variance among cities in the timing and scope of transformation in school attendance patterns. Social scientists thus have the opportunity to anticipate and to study the ripple effects of these changes on other features of the racial locational process.

More than 2,000 school districts in the United States serve significant numbers and proportions of minority pupils. To permit a graphic portrayal of the varieties of experience, we chose a set of large districts with large numbers of black pupils. The minimum size criterion was 10,000 black pupils enrolled in public schools in fall, 1968. The 87 school districts that exceed this limit contain more than one-half of the nation's black public school pupils. These districts account for much of the judicial and administrative difficulty in devising, implementing, and evaluating desegregation plans; they are the locus of the greatest and most persistent political controversy and turmoil.

This report is based on fall enrollment data for black and white pupils in public elementary and secondary schools for the school years 1968-69 to 1976-77; no data were collected on a nationwide basis for fall 1975. We used specially edited tape files prepared for this project from the data files of the U.S. Office for Civil Rights,

Department of Health, Education and Welfare. (Data for some of these years have been published, e.g., U.S. Office for Civil Rights, 1970.) In several of the 87 districts the multiethnic nature of the student body has played a role in the structure of segregation, and in a few the desegregation process has explicitly distinguished one or more of the other groups separately identified in the files (Hispanic, Asian, or Native Americans). For simplicity of presentation and interpretation, attention here is given only to the black and white groups. ("White" is, more specifically, non-Hispanic white, or "Anglo.")

Three measures of school racial segregation are used. (Formal definitions of indices are given in the Appendix.) Many desegregation plans are designed with complete racial balance as the approximate target, and with a specified permissible tolerance range for the variation of each school's racial proportion from the district racial proportion. The tolerance range is often plus or minus 10 percent, or 15 percent. The index of dissimilarity is an adjusted weighted average of the deviations of school proportions black from the district proportion black, and thus is conceptually the most appropriate index for measuring school desegregation. It is also the most commonly used index for measuring racial residential segregation and other types of areal social segregation.

In the graphs the index of dissimilarity is expressed in percentage form, with 100 representing complete segregation (every school uniracial) and zero representing complete desegregation (every school with the same percentage black). Obviously this is a strictly demographic assessment of pupil segregation and desegregation, and

takes no account of educational processes, resources, and other aspects that may be specified in a desegregation plan and that would have to be included in an assessment of the educational effects of desegregation.

Two other measures of the demographic character of school desegregation will be used. These exposure indices, sometimes called racial contact measures, are measures of the average racial composition in the schools attended by pupils of a given race. The index of exposure of blacks to whites is the average percent white in the schools of black pupils. The index of exposure of whites to blacks is the average percent black in the schools of white pupils.

The index of dissimilarity is essentially independent of a district's racial composition. The exposure indices are very much constrained by that composition. To the extent that parental responses to desegregation are shaped by accurate perceptions of changes in the racial composition of their children's schools, the exposure indices may be more closely related to behavioral responses than are changes in dissimilarity. For this reason, and because exposure of each race to the other is one explicit goal of many proponents of desegregation, the exposure indices may usefully supplement the index of dissimilarity.

Our empirical description of trends in public school segregation in the 87 districts from 1968 to 1976 is presented in 16 figures. Each figure is a scatterplot; an asterisk locates each district at the point representing its value on the measures specified by the horizontal and vertical scales. In these computer-generated plots, if more than one district occupies approximately the same position on the

scatterplot, the number of such districts is printed.

The general trend in degree of school segregation is portrayed in Figures 1A and 1B, using the index of dissimilarity. The year by year dispersion of scores is plotted in Figure 1A. If data were available for fall 1953, before the Supreme Court ruled against racial segregation, all of the southern districts would have been plotted at 100. During the 1950s and 1960s all of these districts took some actions to move away from complete racial segregation, but by the fall of 1968, none of the districts (southern or northern) had undergone a desegregation program comprehensive enough to bring the dissimilarity index below 50. Eight years later, 37 districts had scores below 50. The strongest visual feature of Figure 1A, the spreading down toward the bottom of the chart in 1971, reflects the implementation of many substantial desegregation efforts in that year. Less obvious in this plot is the steady downward movement of the average index of dissimilarity; the median dropped from 82 to 56 in 8 years. To call attention to this trend, the location of the median district for each year is underlined.

To portray changes in school segregation for individual districts (Fig. 1B), dissimilarity indices for 1976 are plotted on the vertical scale and indices for 1968 are on the horizontal scale. The compression of 1968 scores into the range from 50 to 100 and the dispersion of 1976 scores through nearly the full range is again evident. What this figure adds to the preceding one is an indication of no connection between initial (1968) and terminal (1976) scores. Either of two patterns might have been considered more likely than this lack of pattern. If private litigants and government agencies

Figure 1A. Distribution of dissimilarity scores (D) in each year, 1968 to 1976.

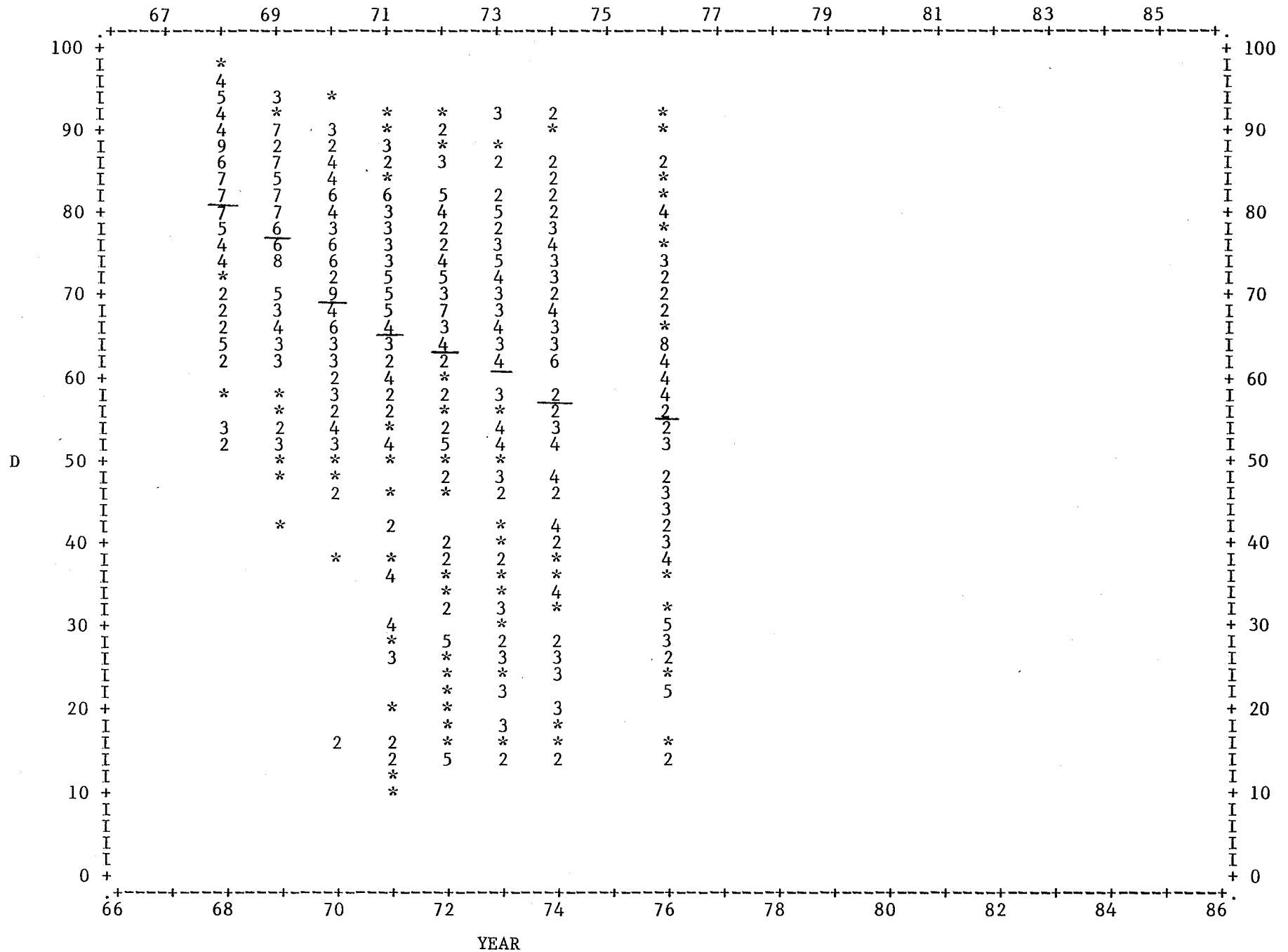
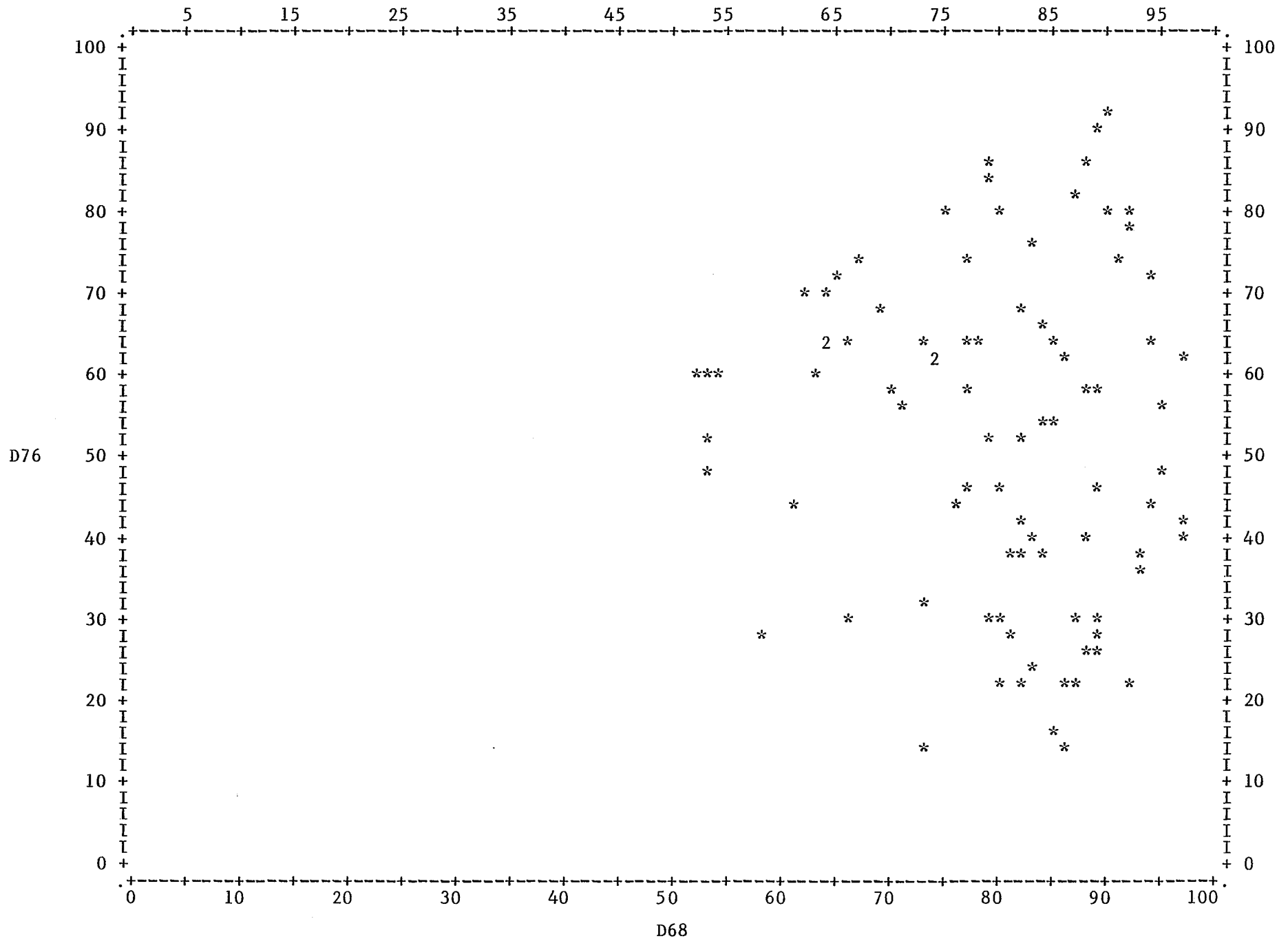


Figure 1B. Dissimilarity in 1976 (D76) vs. dissimilarity in 1968 (D68).



had directed their attacks on segregation largely toward the most segregated districts, Figure 1B might have been nearly empty in the upper right corner and much denser in the lower right, with a distinct negative correlation between 1968 and 1976 scores. Alternatively, those districts in which 1968 scores were below the median might have been those most receptive to past desegregation activities and most likely to engage in further desegregation, while those above the median might have been predicted, on the basis of having changed little from 1954 to 1968, to change little from 1968 to 1976. If this were the case, the points in Figure 1B would be clustered along a line running from about 50 on the horizontal axis to the upper right corner. The correlation between 1968 and 1976 scores would have been distinctly positive. Neither of these patterns occurred, nor is the actual dispersed pattern a combination of the two. Whatever the selection process that resulted in some districts having sharply lower segregation in 1976 than in 1968, it did not select districts on the basis of their 1968 score.

The diagonal line that would be obtained by connecting the lower left and upper right corners in Figure 1B represents no change in segregation index. For 12 districts located above that line, the 1976 score was above the 1968 score, in each case by only a few percentage points. Nineteen districts, located in the lower right of the plot, experienced decreases of more than 50 percentage points during the 8-year interval.

From this examination of Figures 1A and 1B, we conclude that there was a diversity of desegregation experiences among the 87 districts during this period. Viewing desegregation activities as an

experiment, we see that these districts were exposed to a wide range of "treatments." The treatment was not correlated with the initial (1968) level of segregation. The next question we pose is whether the treatment is correlated with the percentage or the number of black pupils in the district.

The percentage black (among the total of black and white pupils in the district) was not related to the level of school segregation in 1968 (Fig. 2A), but the segregation score 8 years later was related to the initial percentage black (Fig. 2B). The districts in which the percentage black was below 50 in 1968 were more likely to have a large decline in segregation by 1976 than were those districts in which black pupils outnumbered white pupils. This pattern is clear, but imperfect; the correlation coefficient is 0.5. The plot portrays some diversity of desegregation experience for districts at each level of percentage black.

The plots of segregation scores in 1968 and 1976 against the number of black pupils in 1968 (Figs. 3A and 3B) also have a striking pattern. Although the segregation score in 1968 was unrelated to number of black pupils, extensive desegregation during the next 8 years did not take place in districts with very large numbers of black pupils. None of the 16 districts with an initial (1968) black pupil population greater than 40,000 had a segregation score below 50 in 1976. Of the 7 districts with more than 100,000 black pupils (in order, from largest, New York, Chicago, Detroit, Philadelphia, Los Angeles, Washington, and Baltimore), 4 experienced small increases in segregation and 3 experienced decreases of less than 15 points.

This general pattern is repeated in both North and South

Figure 2A. Dissimilarity in 1968 (D68) vs. percentage black in 1968 (P68).

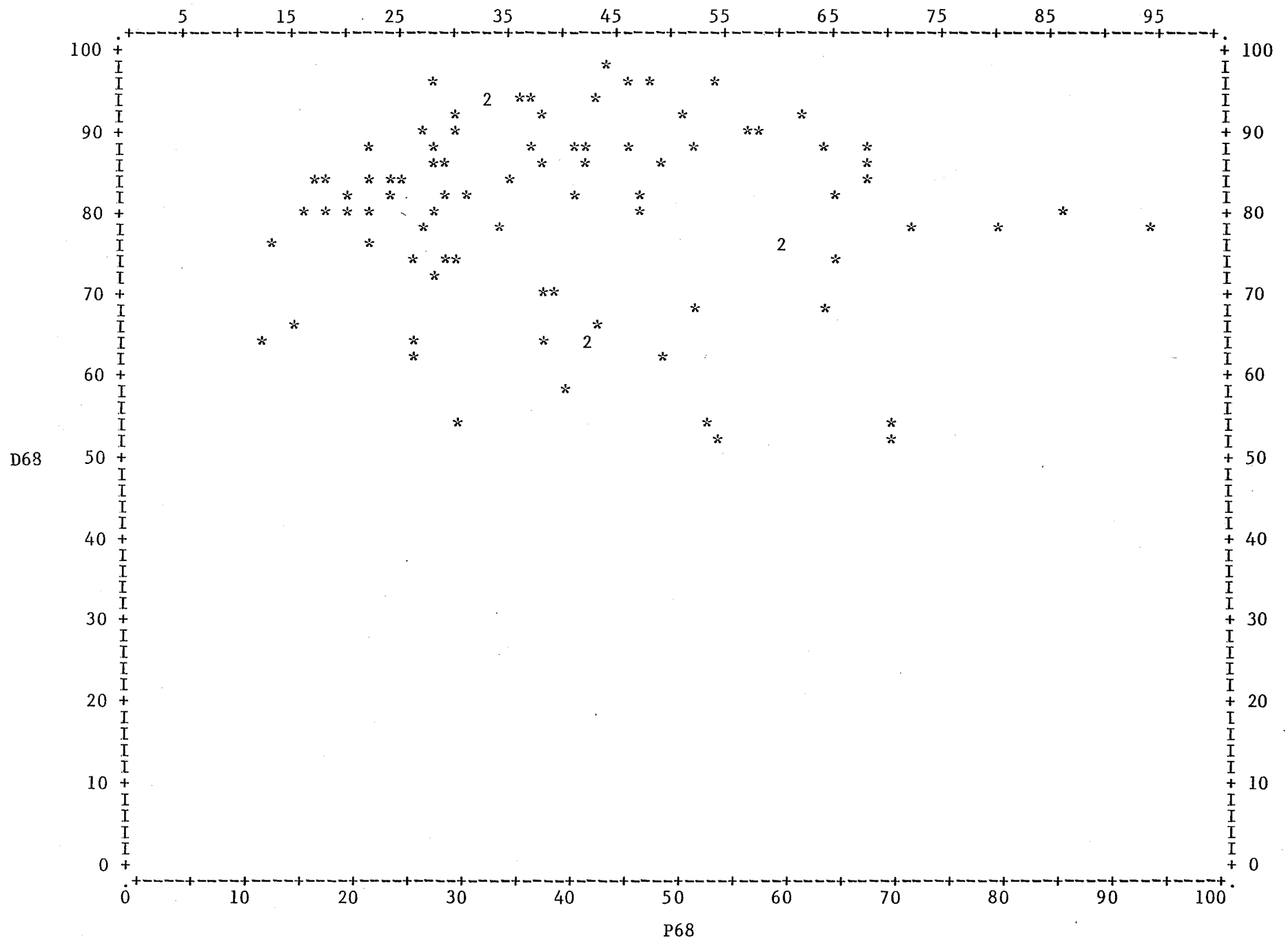


Figure 2B. Dissimilarity in 1976 (D76) vs. percentage black in 1968 (P68).

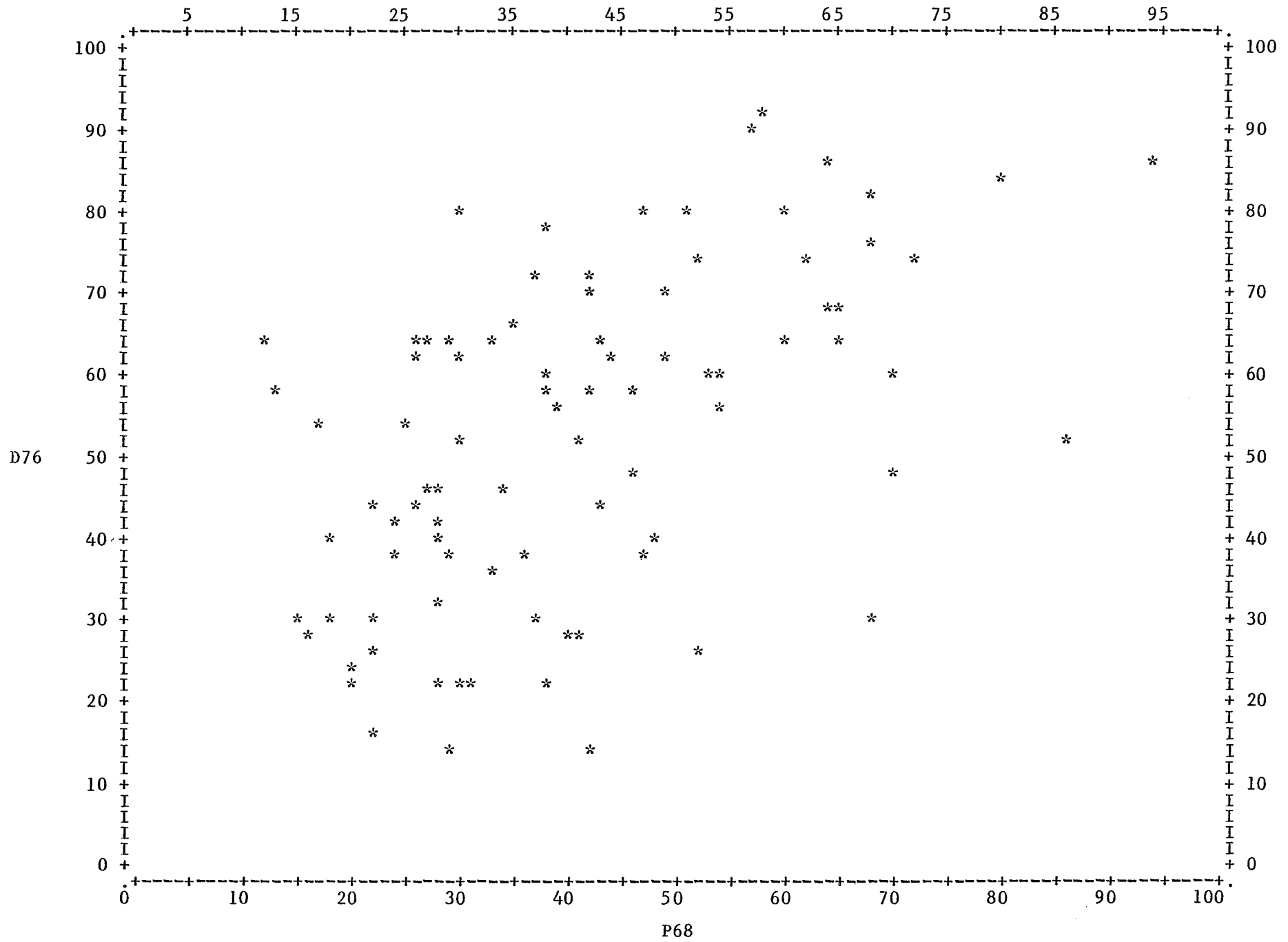
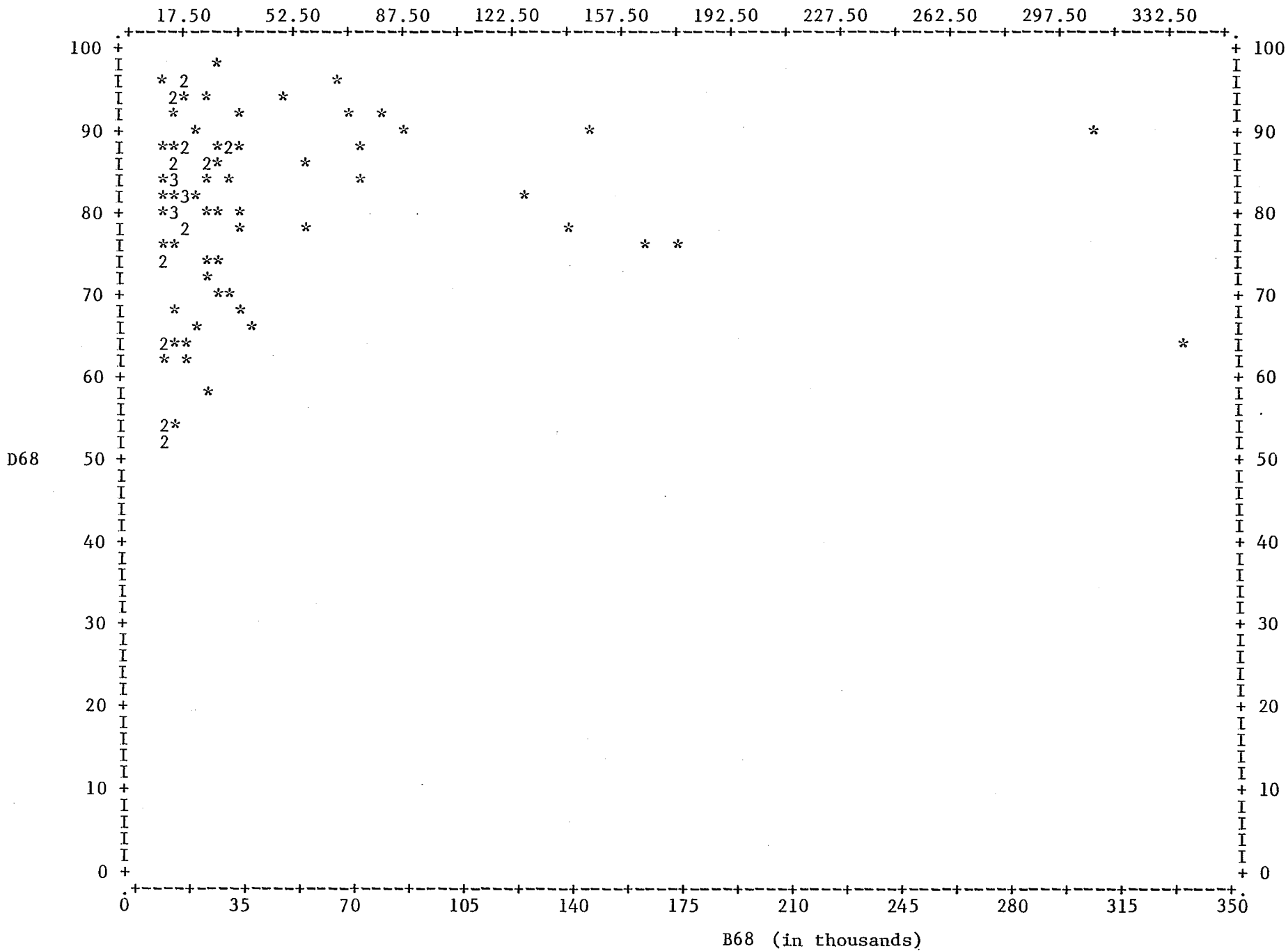


Figure 3A. Dissimilarity in 1968 (D68) vs. number of black pupils in 1968 (B68).



(Figs. 4A and 4B). Nine of the 16 districts with large black enrollments are in the South, 7 in the North; none experienced desegregation substantial enough to result in a 1976 score below 50. In each region, many of the districts with smaller black enrollments experienced substantial desegregation, but there is a regional pattern. None of these districts in the South had an increase in segregation score, 1968 to 1976, and 31 of 41 ended the period with scores below 50. Eight of 30 northern districts with smaller black enrollments had an increase in segregation, and only 7 ended the period with scores below 50.

The dissimilarity index is a measure of dispersion of school racial percentages around the district average; what that average is and whether it changes during the course of desegregation are ignored. The exposure indices summarize the actual school racial compositions from the perspective of the typical black or white pupil. Effective implementation of a substantial desegregation program simultaneously reduces the school-by-school variation in racial composition, increases the percentage white in the school of the typical black pupil, and increases the percentage black in the school of the typical white pupil. The magnitude of the changes in the three measures need not be identical. In the absence of a desegregation program, or in response to a partial program, the three indices may change in different directions, especially if the racial composition of the district is also changing. Some observers of desegregation in the United States suggest that because of white parent resistance to desegregation and the actions those parents take to remove their children from racially mixed schools, the extensive activities

Figure 3B. Dissimilarity in 1976 (D76) vs. number of black pupils in 1968 (B68).

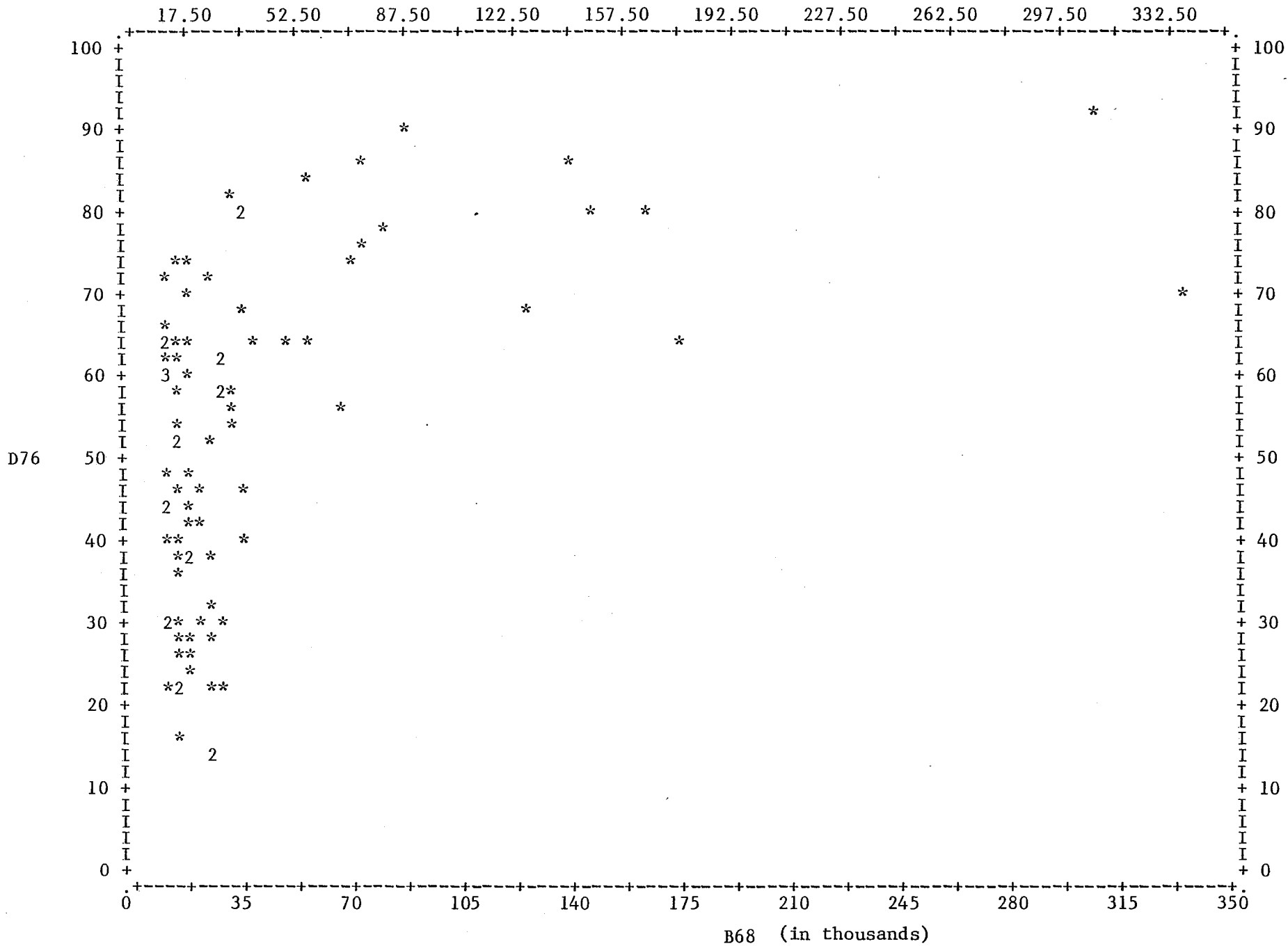


Figure 4A. Dissimilarity in 1976 (D76) vs. number of black pupils in 1968 (B68), for 37 northern districts.

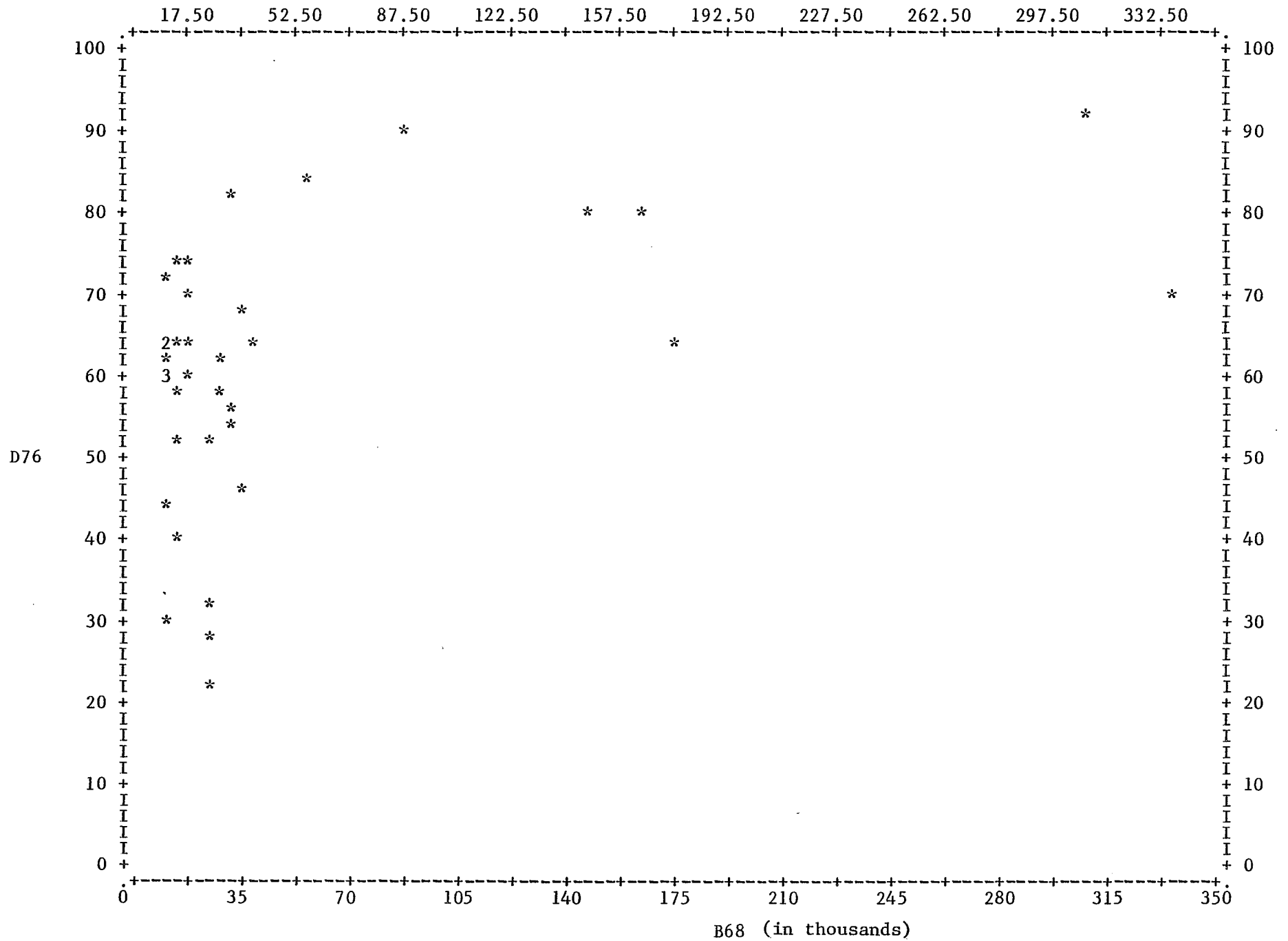
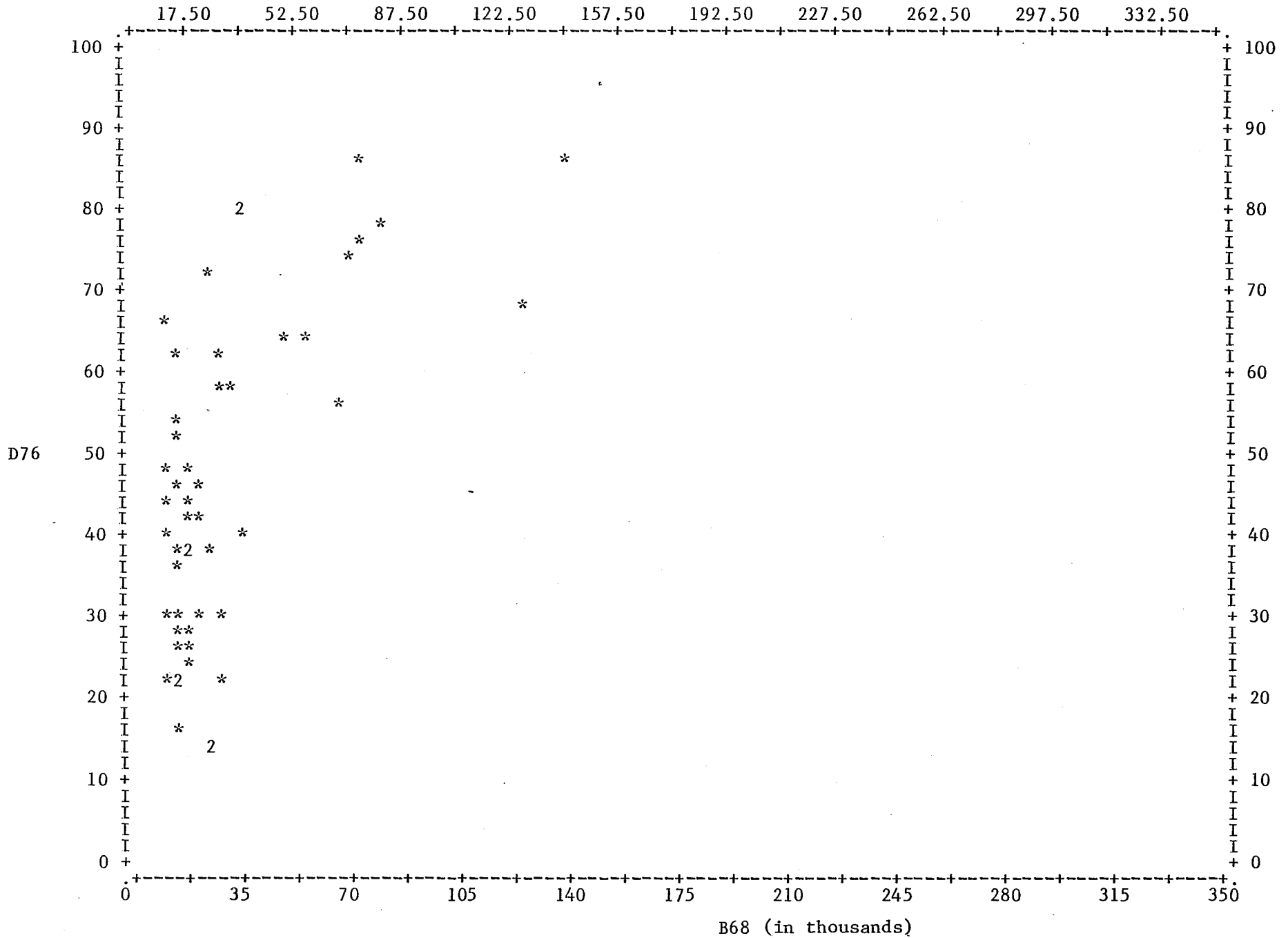


Figure 4B. Dissimilarity in 1976 (D76) vs. number of black pupils in 1968 (B68), for 50 southern districts.



designed to reduce dissimilarity in school racial percentages have not, in fact, resulted in much increased exposure of blacks to whites or whites to blacks. An empirical assessment of this aspect of the desegregation experience of our 87 districts during 1968 to 1976 may be made by examining changes in racial exposure indices.

The index of exposure of blacks to whites indicates the average percentage white encountered by black pupils in the schools they attend. Plotting the 1976 value for this index against the 1968 value (Fig. 5A) reveals a general pattern similar to that for the index of dissimilarity: a relatively constricted range in 1968 and a substantial dispersal in the direction of desegregation by 1976. In 1976, the median black-to-white exposure index was about 30 percent, 22 districts were above 50, and 12 districts were below 10. Despite the general similarity in patterns of change, two differences between the trends for this exposure index and the trends in dissimilarity plotted in Figure 1B are apparent. First, the exposure index does not assume values near the extreme of the range; this is an artifact of the range not being 0 to 100, but 0 to the district percentage white. This constraint will be more apparent when we examine Figures 6A and 6B. Second, about twice as many districts experienced decreases in black-to-white exposure as experienced increases in dissimilarity. Again this is partly a reflection of the link between the exposure index and percentage white; with many districts having a decreasing percentage white there is a tendency for black-to-white exposure to drift downward unless countered by desegregation activities.

The index of exposure of whites to blacks indicates the average percentage black encountered by white pupils in the schools they

Figure 5A. Exposure of blacks to whites in 1976 (EBW76) vs. exposure of blacks to whites in 1968 (EBW68).

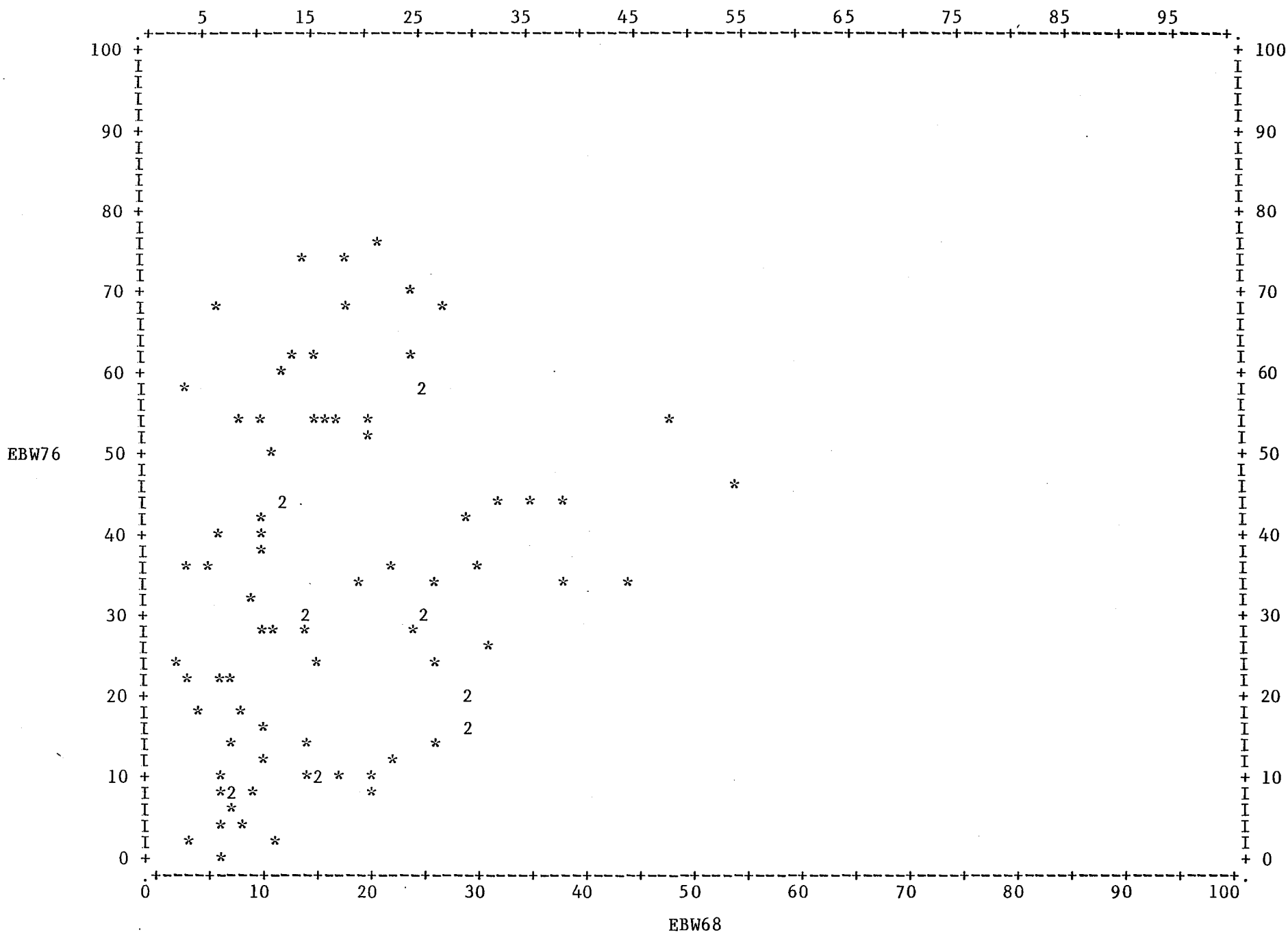
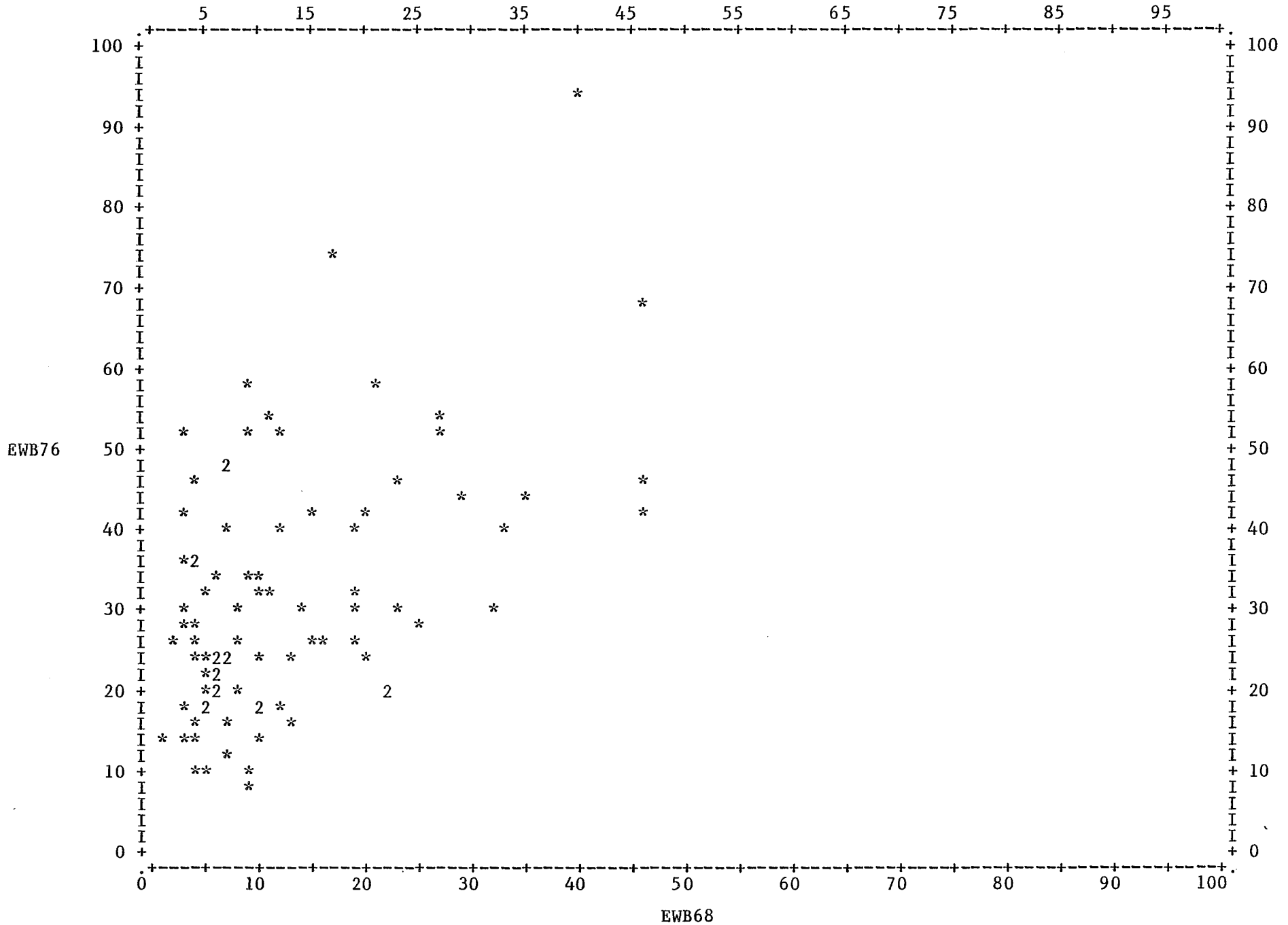


Figure 5B. Exposure of whites to blacks in 1976 (EWB76) vs. exposure of whites to blacks in 1968 (EWB68).



attend. Plotting the 1976 value for this index against the 1968 value (Fig. 5B) again produces a general pattern of a broader range and upward dispersal in 1976 as compared to 1968. In 1968, the median white-to-black exposure index was below 10; in 1976 it was about 28. In no district in 1968 was the average racial composition for white pupils a black majority; this was the case in 11 districts in 1976.

The specific value of an exposure index provides one perspective on the racial distribution in a district's schools. The value of an exposure index relative to the maximum value that it can take provides another perspective. The maximum value that an exposure index can take is determined by the district racial composition. In Figures 6 and 7 the exposure indices are plotted against the percentage black for the corresponding year.

For the black-to-white exposure index, the maximum value is 100 minus the percentage black. This maximum can be visualized as lying on the line running from the upper left to the lower right corners in Figures 6A or 6B. In 1968 (Fig. 6A), black exposure to white pupils is well below the maximum. In 1976 (Fig. 6B), many districts lie close to the diagonal of maximum value. In 14 districts in 1976, the percentage black was above 75 and the exposure of blacks to whites was necessarily below 25 percent. In the remaining 73 districts, the black exposure to whites was within 25 points of its maximum value in 69 districts. In 1968, only 12 of 84 districts were similarly within 25 points of the maximum black-to-white exposure. Both the absolute values of black-to-white exposure (Fig. 5A) and the values relative to district racial composition (Figs. 6A and 6B) reveal a prevailing trend for substantially increased exposure of blacks to whites from

Figure 6A. Exposure of blacks to whites in 1968 (EBW68) vs. percentage black in 1968 (P68).

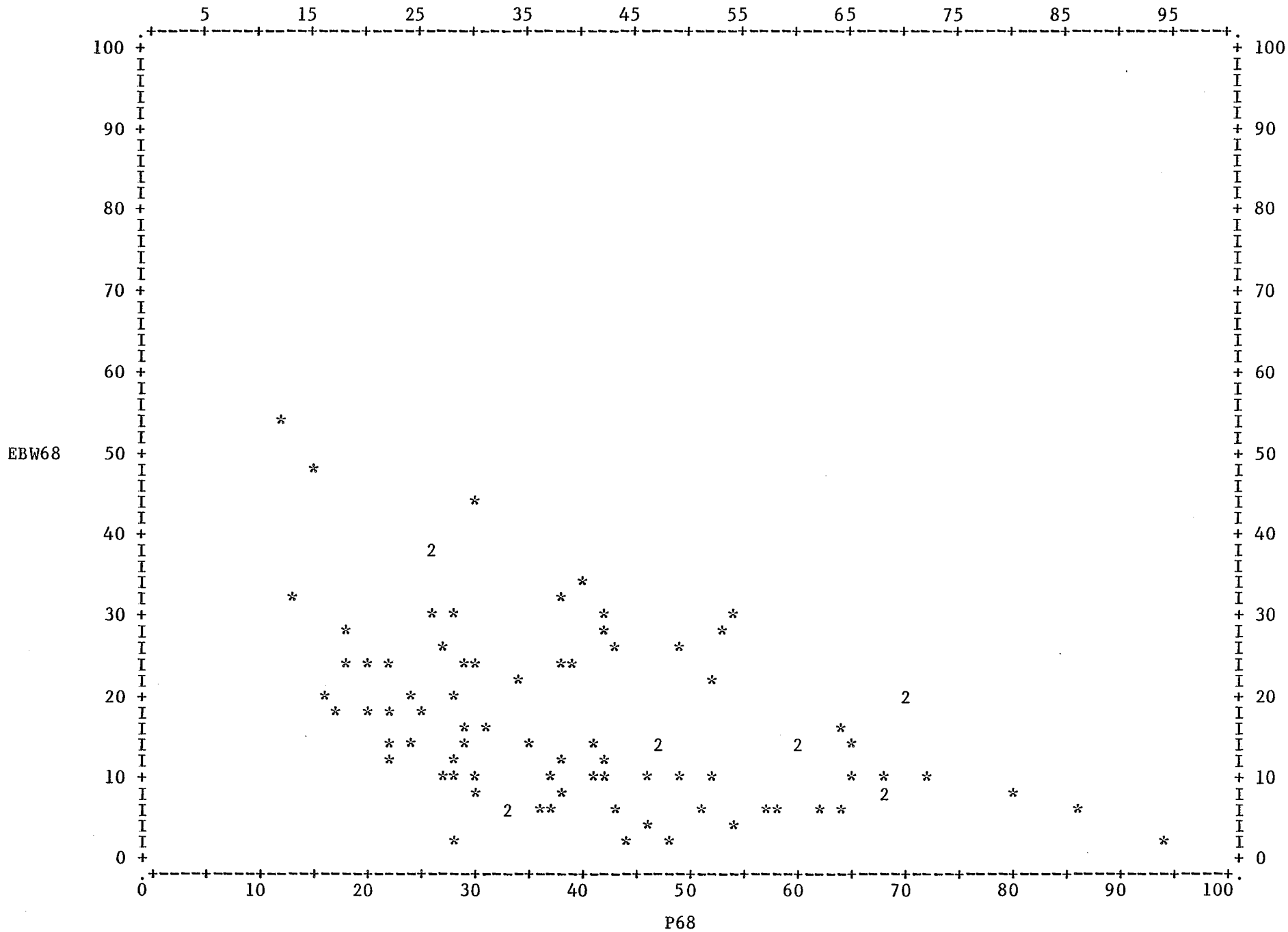
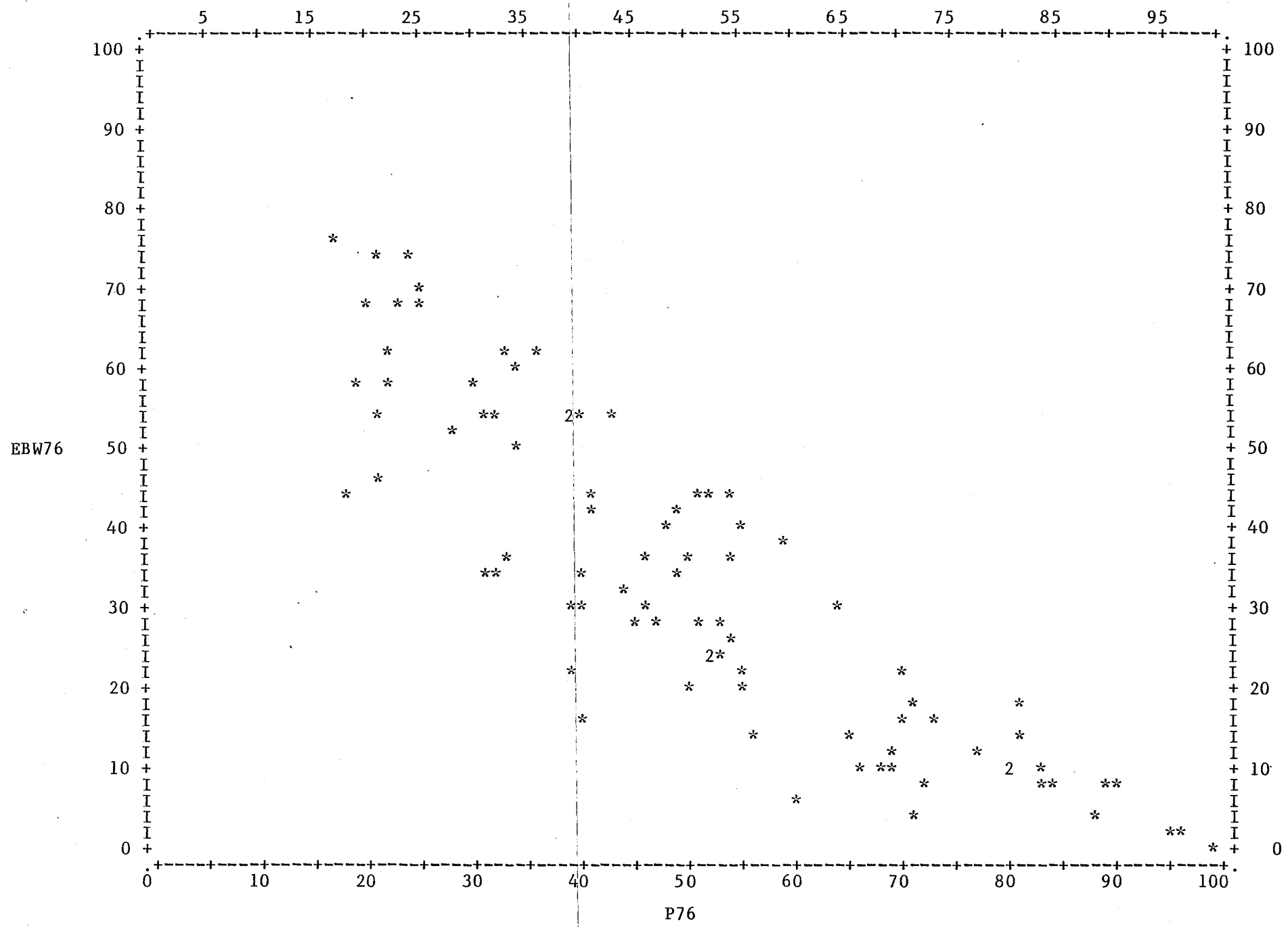


Figure 6B: Exposure of blacks to whites in 1976 (EBW76) vs. percentage black in 1976 (P76).



1968 to 1976.

The exposure of white pupils to black is plotted against percentage black in Figures 7A and 7B. For this exposure index the maximum attainable value is simply the district percentage black. This maximum can be visualized as lying on a diagonal line running from the lower left to the upper right corner of each figure. The plot for 1976 as compared to that for 1968 shows that many districts moved from near the bottom horizontal axis, representing little white-to-black exposure, to points closer to the diagonal. In 1976, 46 districts were within 25 points of the maximum, as compared to 28 districts in 1968. For white-to-black exposure, as for black-to-white exposure, comparisons of absolute scores and of scores relative to district racial composition reveal substantially increased exposure from 1968 to 1976.

In a segregated district, both exposure measures will be low; in a desegregated district, both will be high. How high depends on the racial composition of the district, and the two measures are asymmetrically affected. Under complete desegregation, when each exposure index is at its maximum, the two indices sum to 100. In Figures 8A and 8B, the two exposure measures are plotted against each other, for 1968 and for 1976. A diagonal line running from the upper left to the lower right of each figure would represent the location of points that sum to 100. The nearer a point is to that line, the closer the exposure measures jointly are to their maximum values.

In 1968 (Fig. 8A), all 87 districts were segregated and none had high exposure of each race to the other. Only 3 districts were above

Figure 7A. Exposure of whites to blacks in 1968 (EWB68) vs. percentage black in 1968 (P68).

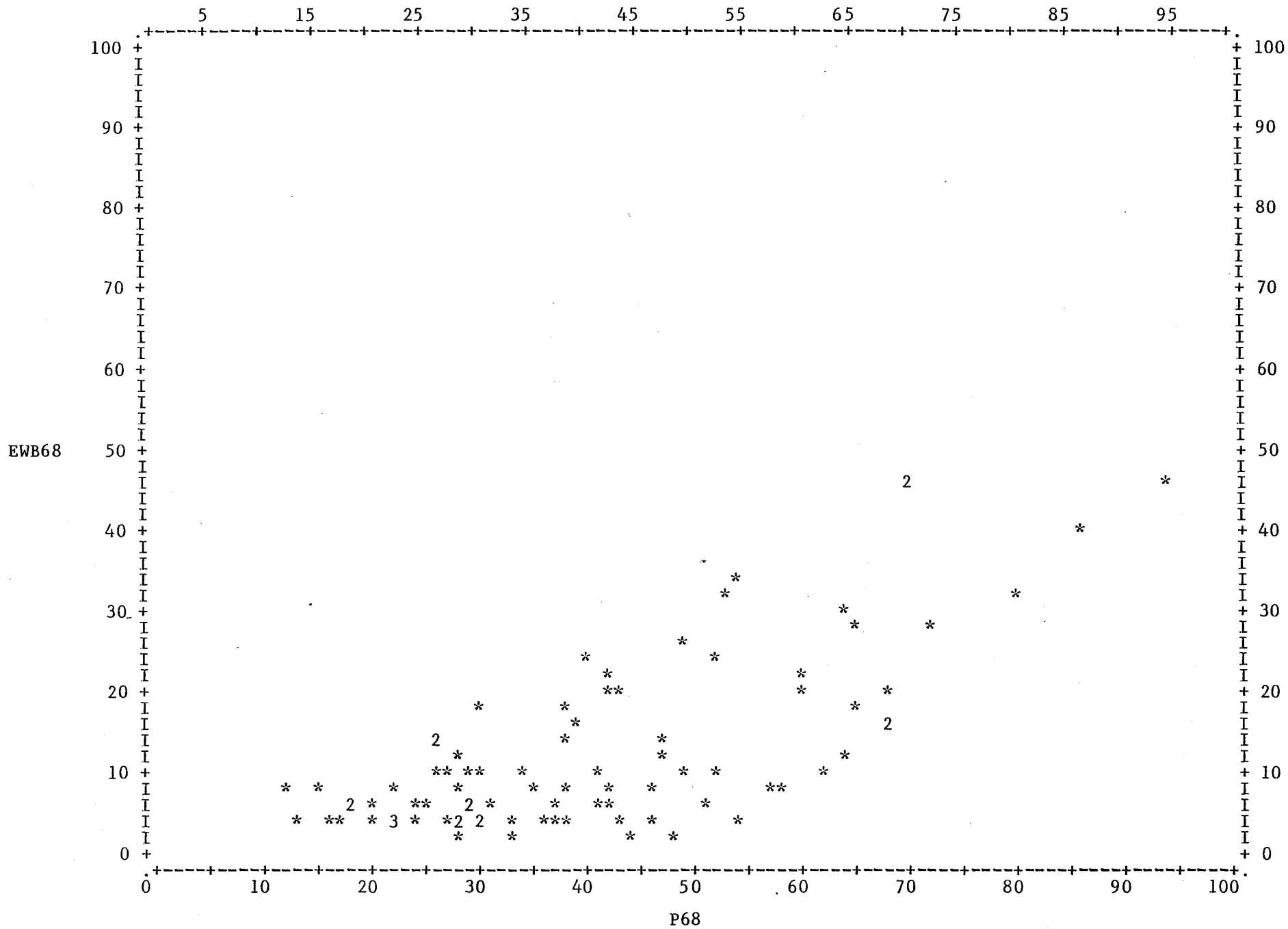
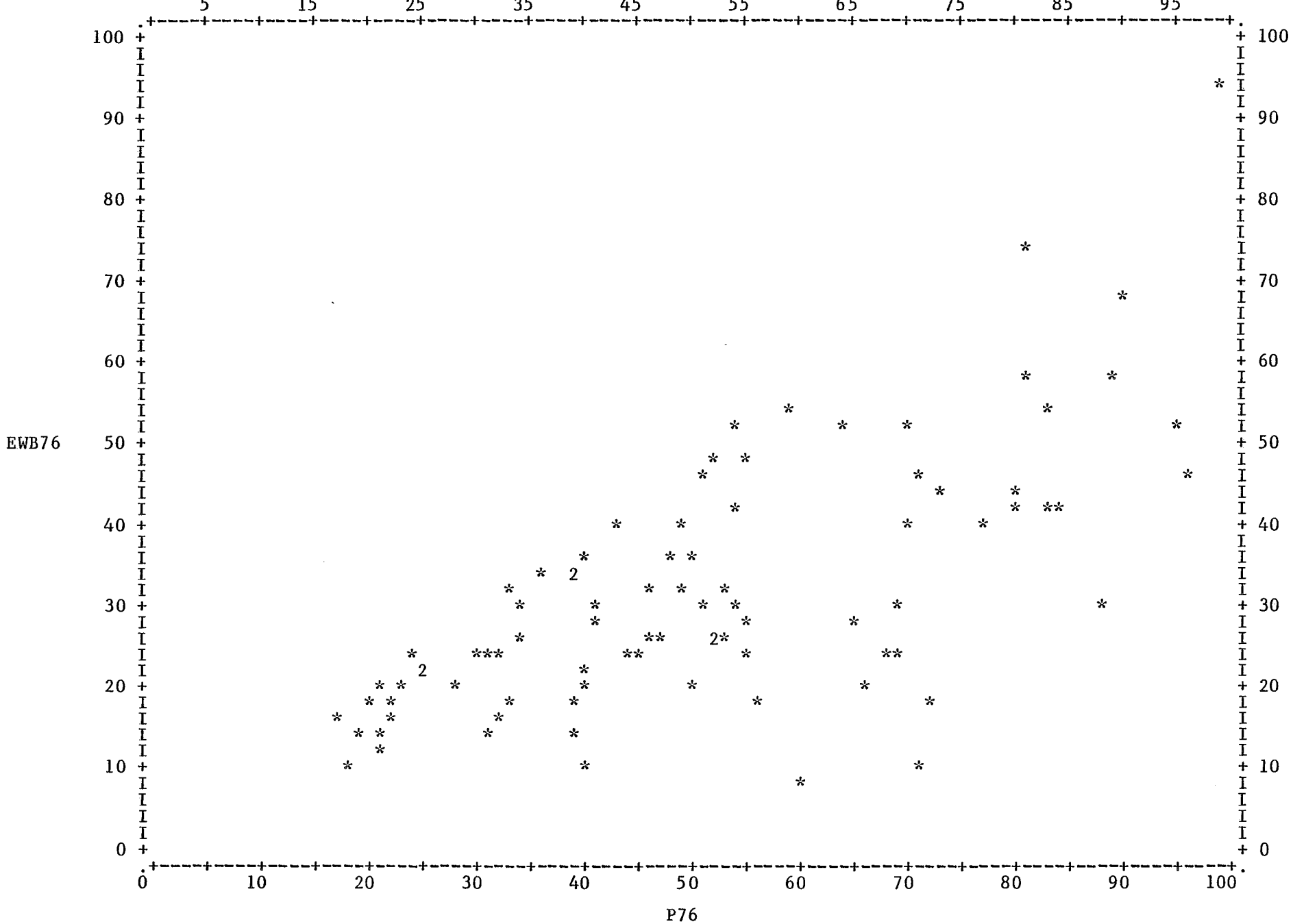


Figure 7B. Exposure of whites to blacks in 1976 (EWB76) vs. percentage black in 1976 (P76).



25 percent on both exposure measures, 8 more were above 25 percent on white-to-black exposure only, and 19 were above 25 percent only on black-to-white exposure. The remaining 57 districts were below 25 percent on both measures. In 1976 (Fig. 8B), 11 districts were below 25 percent on both exposure indices. Thirty-one districts in 1976 as compared to none in 1968 were within 25 points of their maximum sum.

The restructuring of public education for the purpose of desegregation has been controversial in these 87 districts, and in hundreds of others, even in those that have as yet altered the school assignments of few or no pupils. Opposition to proposed, newly implemented, or established desegregation programs may take many forms. Political controversy may be extraordinarily intense and sustained at fever pitch for more than a decade, as in Boston, or it may be more subdued and shorter-lived as in most of the Florida county districts. Study of the comparative dynamics of the political response to desegregation has barely begun, yet must ultimately form a part of any full interpretation of the demographic and ecological impact of desegregation. The effects of school desegregation are not confined to the actions of parents whose children's school assignments have been altered. Great opposition to desegregation is also expressed by adults without children in the public schools. Even in the short run, it is not only the immediately affected parents who may respond to desegregation with political protest or with a residential or educational relocation. In the longer run, shifts in the resources devoted to--and perceived quality of--public and private education and shifts in the patterns of residential demand will affect all the residents of a metropolitan area, even if the immediate political

Figure 8A. Exposure of whites to blacks in 1968 (EWB68) vs. exposure of blacks to whites in 1968 (EBW68).

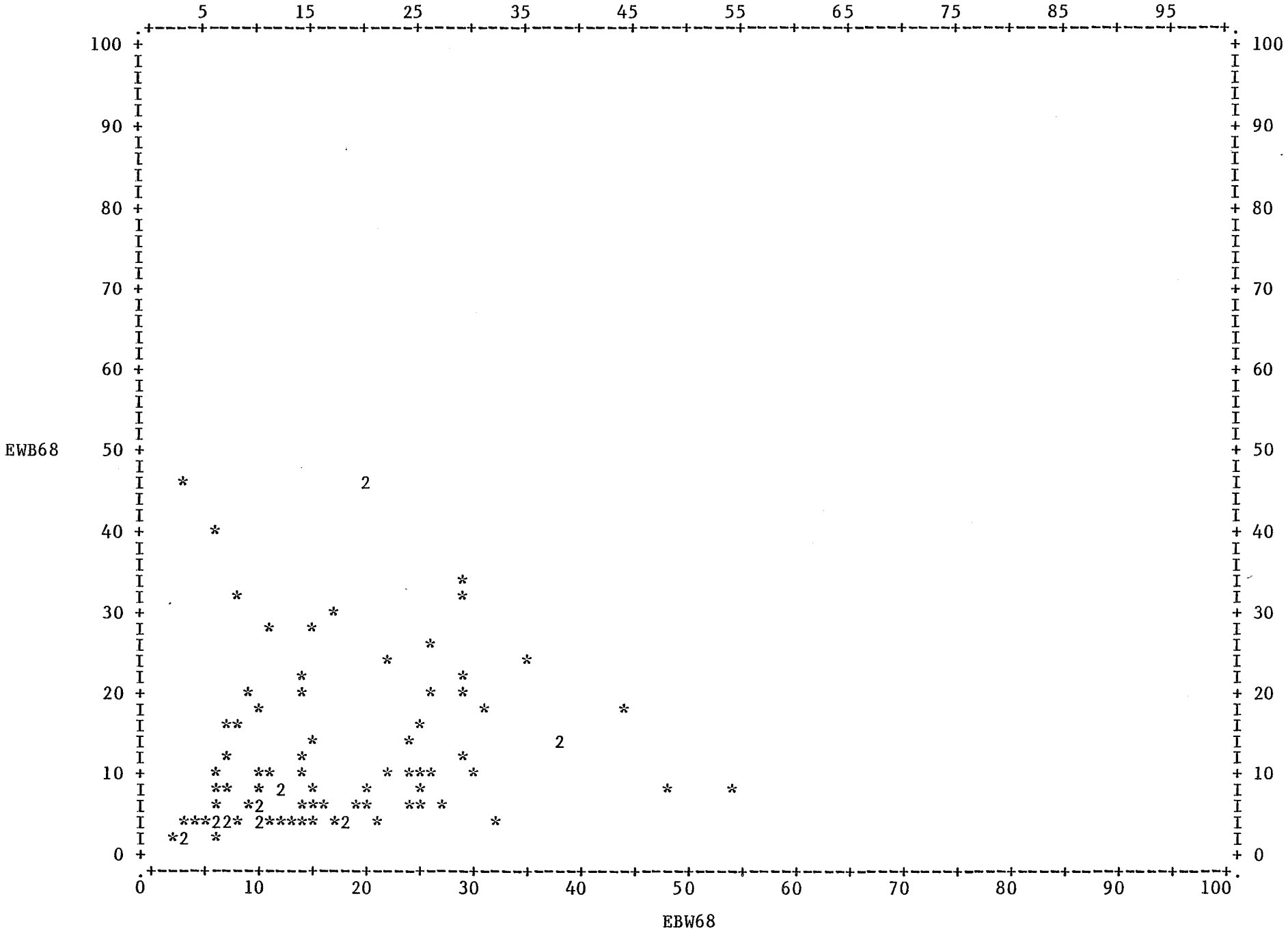
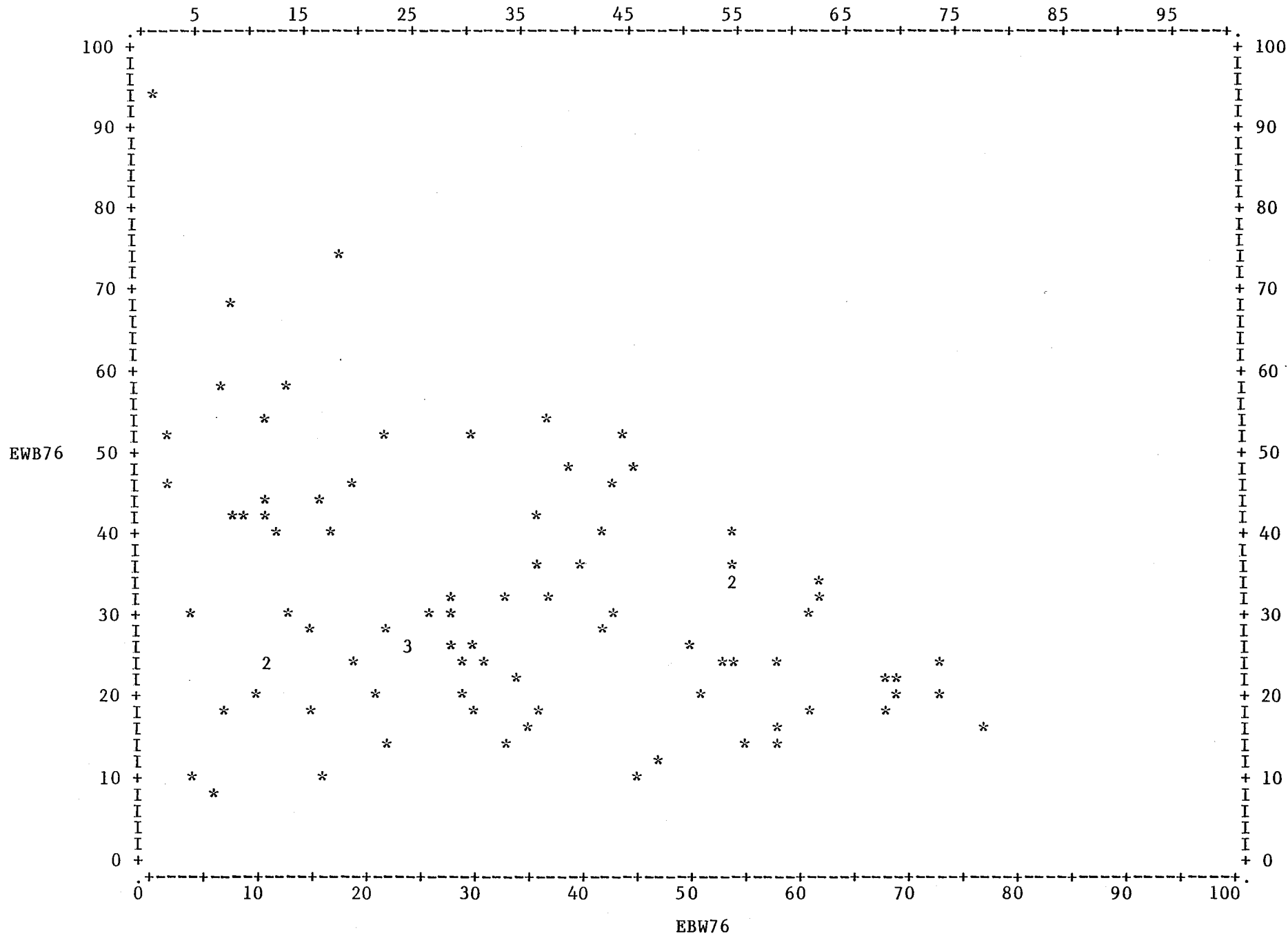


Figure 8B. Exposure of whites to blacks in 1976 (EWB76) vs. exposure of blacks to whites in 1976 (EBW76).



issues are resolved with relatively little disruption.

Among the demographic and ecological effects of school desegregation, "white flight" has received the greatest public and scholarly attention. In the 1960s, southern desegregation was often accompanied by the growth of "segregation academies," private schooling alternatives for whites. Problems of cost and quality of private schooling and the fact that public schools continued to offer free educational services made extensive use of the academies a short-lived response in most southern districts. They have persisted on a limited scale in many districts and on a large scale in a few (Orfield, 1978).

Residential white flight, the relocation of city residents to the suburbs, received increased attention in the late 1960s and on through the 1970s. During this period, major desegregation plans were implemented in a number of city districts, North and South, where surrounding suburban districts offered schools with few or no black pupils. Moving to avoid desegregation was an obvious option, and the typical pattern of declining white enrollment in the public schools was apparent evidence that the option was being used. Some commentators, including some judges ruling on remedies for past segregation, thought that white flight made desegregation plans ineffective, particularly those plans including compulsory reassignments with busing. It was claimed that the failure of white pupils to show up in their newly assigned schools meant the failure of such desegregation efforts. Others were concerned that the white flight further exacerbated prevailing urban problems connected with the loss of the middle classes to the suburbs. Scholarly studies

documenting the existence and magnitude of white flight became weapons used by opponents of certain desegregation programs and plans.

Proponents of desegregation began to use other studies as weapons in their political battles. Some of these studies emphasized the difficulty in distinguishing desegregation-induced white flight from the general white suburbanization that has been a central feature of metropolitan America since the 1920s. Other studies called attention to examples of desegregation without white flight. Many such cases depend on the historic presence of blacks in the southern countryside and the prevailing county-wide organization of school districts; in these circumstances residential white flight was not an option for escaping from desegregation.

Studies of white flight have thus become enmeshed in political and legal controversies. Most of the scholars have themselves become identified as partisans, and succeeding studies have often been designed as rebuttals to the other side or as documents for immediate courtroom use prior to publication for a professional audience. Most of these studies were facilitated by accumulation of the racial enrollment surveys conducted since 1967 by the government. These provide the basic data used in a series of studies that take "change in white enrollment in the public schools" as the measure of white flight. Little effort has been given to a systematic chronicle of potential demographic effects of desegregation. Whites may shift their children to private schools, or relocate within a district to schools unaffected by the particular desegregation plan (because the schools are already racially mixed, or because the plan is not truly system-wide), or relocate to another district. Households which do

not currently have children in the public schools may also respond to desegregation, but their activities will not be captured by the usual school-enrollment data base.

Extensive use of the term "white flight" has rather surprisingly not led to corresponding usage of the concept of "black flight." If assignment to nonlocal schools, or to inferior, overcrowded, and unsafe schools, or to any school not chosen by the parents, is a source of such profound concern to white parents that they are willing to undergo the financial sacrifice of private school tuition or a disadvantageous home sale, might it not be supposed that some black parents have similar concerns and similar responses? If the concerns of black parents are similar but the responses differ, how much of the racial differential in flight behavior should be attributed to the impact of the desegregation plan and how much to current or historical discrimination by private schools or the suburban housing market? Is there a trend toward black flight that, paired with white flight, augments the decline in city public school enrollments but avoids the "resegregative" consequence of increasing the percentage black among the public school pupils? For black parents or white, how can studies based on enrollment data distinguish analytically between a response to desegregation, a response to the "decline of the public schools," and a response inspired by the "back to the basics" movement?

The white-flight literature is complex, polemic, and becoming voluminous. A thorough review would be lengthy and, because of the shortcomings of data and method, inevitably inconclusive. For example, there was debate for some time over whether comparative multidistrict studies produced acceptable evidence of any relation

between indicators of desegregation and measures of white enrollment change. There then emerged a consensus that for large districts desegregating in the late 1960s or early 1970s, in the first year of desegregation the loss of white enrollment in the public schools was, on the average, greater than can be accounted for by any of the control variables. There is continued dissension over whether there are excess enrollment losses before year one (anticipatory effects), or after year one, and whether the excess year-one loss represents a permanent downward shift of the long-run white enrollment curve or only a temporary timing shift that is compensated in subsequent years by an upward shift of the curve (Coleman, Kelly, and Moore, 1975; Farley, Richards, and Wurdock, 1979; Rossell, 1979; Armor, 1980).

Although the data that we have presented for 87 school districts with large black enrollments do not constitute a new study of white flight, we believe they can be helpful in reformulating the social science and policy questions to which empirical evidence may be directed. One policy conclusion nominally based on evidence is that desegregation is futile because (1) desegregation accelerates white flight, and (2) white flight proceeds inexorably to the point at which there are few whites remaining in a district's public schools. We believe there is ample reason to question the universality and inevitability of each of the two premises, but even granting them, the policy conclusion is not compelling. The data for 87 districts (Figs. 5A and 5B) show many large increases, 1968 to 1976, in within-school exposure of blacks to whites and whites to blacks. Although we have not used any direct measures of desegregation

activities, it is obvious that in many districts desegregation has greatly increased interracial exposure in the schools. Perhaps all of these districts will have continually diminishing percentages of whites in the public schools, and the exposure indices will eventually begin a decline toward zero. Even were that inevitable, the policy conclusion that desegregation was futile would seem to be premature. Given the premises, the policy question that should be asked is whether the increased interracial exposure that desegregation brings about during an interim period should be sacrificed in order to slow by a few years the transition of a segregated school system to all black.

The study by Coleman, Kelly, and Moore (1975) was influential in posing the terms of the policy debate about white flight and in suggesting the relevance of empirical analysis to that debate. We believe that they and many other commentators have given insufficient attention to two of their empirical conclusions. At the end of their white flight chapter they report nine conclusions, of which the final two are pertinent (Coleman, Kelly, and Moore, 1975:79):

8. The effect of desegregation on white loss has been widely different among different cities where desegregation has taken place.

9. Because, insofar as we can estimate, the loss of whites upon desegregation is a one-time loss, the long-term impact of desegregation is considerably less than that of other continuing factors. The continuing white losses produce an extensive erosion of

the interracial contact that desegregation of city schools brings about.

With respect to conclusion 9, our empirical evidence seems to indicate that at any stage in a central district's presumed transition toward all-black public school enrollment, there will be greater interracial exposure with desegregation than without. The presumption of a universal rapid transition toward an all-black enrollment may also be questioned on the basis of the data presented here. In Figure 7B, consider the dispersal of points along the horizontal axis. Percentage black among the 87 districts is seen to be widely dispersed in 1976, with one of every six districts above 75 percent black and one-half below 50 percent. Comparing Figure 7B to 7A, an upward shift in percentage black can be discerned, but the presumed catastrophic pace of the upward trend is not visually overwhelming. Projection of a past trend into the future is one of the simplest forms of prediction, but the longer the future the less confident the prediction. Many scholars believe the era of increasing black concentration in the nation's largest central cities has ended. Within the last decade it became evident that (1) the centuries-long era of metropolitan gain from net migration has come to an end; (2) regional migration patterns are changing for blacks and whites; (3) with few rural blacks remaining and with black fertility in both urban and rural areas down sharply, the pace of urban black population increase has also diminished sharply; (4) the pace of black suburbanization has picked up sharply in many metropolitan areas; and (5) the fiscal and energy crises of the nation are altering the locational economics of housing choice. Simple projection of the trends of the 1950s and 1960s into the 1980s and 1990s may illuminate

the consequences of an analytic model and its specific assumptions, but unwitting extrapolation is not a sound basis for evaluating the effects of past actions or forming policy about new actions.

Conclusion 8 of the Coleman study, quoted above, seems to us worthy of far greater attention than it has received. Even among scholars, interest in the empirical results has centered on the average effect. Yet the average effect is an average of "widely different" effects among those cities where some amount of desegregation has taken place. Our empirical results, while not designed to evaluate the amount of white flight, show widely different amounts of desegregation and changes in interracial exposure. Indeed we chose to present the data in scatterplots because of the great degree of scatter in the experience of these 87 districts. The average value of any measure of desegregation-related experience should not be interpreted as representing the "typical" or "normal" experience. Each district has its own history, and only a very limited purpose can be served by efforts to describe or project that history on the basis of the average experience of the full set of 87 districts or the subset that has experienced some arbitrary amount of desegregation activity. If we regard desegregation as an experiment, we should describe the treatments being assigned to the subjects as being a diverse set of actions and inactions with respect to school desegregation, and the subjects themselves, the 87 districts, as heterogeneous in terms of their initial characteristics and their responses to treatment.

To return to our introductory theme, we conclude that the rather disorganized national desegregation experiment has indeed been altering the distribution of educational services as a convenience

good. Flight to another school system, public or private, is not the only option for those upset with a new school assignment. Those of either race who object to the loss of convenient access to public schools may be able to restore that convenience by an appropriate within-district move. Most desegregation plans offer to many families the opportunity to send their children to geographically proximate public schools during some portion of the grade span. That portion is likely to be greater the more racially balanced is the local residential area. School desegregation plans may thus offer incentives for local moves that enhance residential integration. It would be entirely possible for school authorities or other public and private agencies to provide additional incentives for such residential behavior, through information and referral services, assistance with residential finance, and other services (for an example, see Kentucky Commission on Human Rights, 1977). Although the U.S. judiciary has repeatedly recognized the contributions of school authorities as well as many other public agencies to the creation and maintenance of residential segregation, it has shied away from incorporating explicit residential desegregation programs into court-ordered school desegregation plans.

Among districts that have desegregated, several have boundaries that encompass all or much of a metropolitan area. In these districts, residential flight from desegregation is likely to be an unusually costly option, for no nearby white school districts are available. These districts provide a particularly clear opportunity to study what happens when one traditional determinant of residential choice is rendered inoperable. In these circumstances, as time passes, will the residential location process give compensatory weight

to other segregative determinants, or, as has occurred with respect to religious residential segregation in Belfast during periods of diminished violence (Boal, 1980), will there be some corresponding residential desegregation? An examination of data for Louisville, Kentucky, has suggested that the Belfast pattern is occurring (Kentucky Commission on Human Rights, 1977).

We conclude that analysis of school desegregation in the United States may be of broader than expected interest to students of ethnic segregation and the urban scene. The topic has interest beyond its applicability in the politics of school desegregation research. When national policies change a critical variable, the change often takes effect simultaneously nationwide, and it is hard for the social analyst to distinguish its effects from those of other temporal trends. By spreading out the timing and magnitude of desegregation activities, the U.S. experiment with desegregation offers a rich lode for scholarly analysis, albeit studded with the false gold of political payoffs and technically difficult to mine.

APPENDIX: Measures of School Segregation

The measures calculated are based on numbers of "black and "white" pupils (ignoring pupils identified as "Hispanic," "Asian," or "native American") enrolled in public elementary and secondary schools. Data refer to enrollment in fall of the year specified.

In the formulas, total pupil enrollment in the i^{th} school is T_i , the sum of B_i black pupils and W_i white pupils. $P_i = B_i / T_i$. The corresponding symbols without subscripts are district totals. Summations are taken over all schools.

Dissimilarity Index, D

$$D = \frac{\sum T_i |P_i - P|}{2TP(1-P)}$$

Exposure of Black Pupils to White Pupils, EBW

$$EBW = \frac{\sum B_i (1 - P_i)}{B}$$

Exposure of White Pupils to Black Pupils, EWB

$$EWB = \frac{\sum W_i P_i}{W}$$

Table A.1. Values of Measures in 1968 and 1976.

DISTRICT NAME		B68	B76	P68	P76	D68	D76	EBW68	EBW76	EWB68	EWB76
		====	====	====	====	====	====	====	====	====	====
BIRMINGHAM	ALA	34	35	51.4	68.7	92.3	80.4	6.0	10.9	6.4	23.8
JEFFERSON CO	ALA	18	10	28.3	18.9	97.0	42.2	2.9	58.4	1.1	13.7
MOBILE CO	ALA	31	29	41.7	44.4	88.8	58.2	9.2	31.2	6.5	24.8
MONTGOMERY	ALA	17	18	42.7	49.6	94.3	44.8	5.1	36.2	3.8	35.6
COMPTON	CAL	24	26	86.2	99.3	79.3	52.7	6.3	0.6	39.5	94.9
LOS ANGELES	CAL	148	147	29.6	40.1	90.4	81.0	10.4	16.0	4.4	10.7
OAKLAND	CAL	35	36	64.1	80.4	68.9	68.0	16.5	10.8	29.5	44.3
RICHMOND	CAL	10	12	26.3	40.6	61.2	44.1	38.0	43.1	13.6	29.4
SAN DIEGO	CAL	15	17	13.3	18.1	76.7	58.7	32.1	44.7	4.9	9.9
SAN FRANCISCO	CAL	26	20	40.0	51.3	57.7	27.2	34.9	43.3	23.3	45.6
DENVER	COL	14	16	17.7	30.2	83.0	39.3	24.9	57.7	5.4	24.9
HARTFORD	CONN	12	13	51.7	69.4	67.1	74.0	21.6	12.9	23.1	29.2
NEW HAVEN	CONN	11	12	53.0	70.3	54.4	59.9	29.0	16.8	32.7	39.7
WILMINGTON	DEL	11	11	69.6	89.8	53.3	47.3	20.1	7.6	46.0	67.5
WASHINGTON	DC	139	119	94.4	96.4	78.7	85.8	2.7	1.7	46.1	45.9
BROWARD CO	FLA	25	29	24.0	22.2	84.5	38.4	14.9	61.2	4.7	17.5
DADE CO	FLA	57	67	29.4	40.5	85.3	64.3	13.5	29.0	5.6	19.7
DUVAL CO	FLA	35	36	28.2	33.7	87.5	40.2	11.0	49.8	4.3	25.3
ESCAMBIA CO	FLA	13	13	27.7	28.0	79.6	45.2	19.8	51.3	7.6	20.0
HILLSBOROUGH CO	FLA	19	23	20.5	20.6	82.7	24.6	18.1	73.3	4.7	19.0
ORANGE CO	FLA	13	17	17.2	21.4	84.3	53.6	17.2	54.5	3.6	14.8
PALM BEACH CO	FLA	17	21	28.5	31.7	81.4	38.0	16.5	53.2	6.6	24.7
PINELLAS CO	FLA	13	15	16.3	16.5	81.0	28.5	20.6	76.7	4.0	15.2
POLK CO	FLA	12	13	22.4	22.3	75.6	43.7	24.9	58.2	7.2	16.7
ATLANTA	GA	69	73	61.8	88.8	91.2	73.7	5.7	7.2	9.3	57.1
BIBB CO	GA	15	15	41.0	52.9	81.7	52.6	14.5	27.7	10.0	31.1
CHATHAM CO	GA	17	19	41.1	55.1	88.6	28.6	9.5	39.3	6.7	48.3
MUSCOGEE CO	GA	13	14	29.7	39.6	91.7	22.9	8.3	54.1	3.5	35.5
RICHMOND CO	GA	13	15	35.5	47.7	93.5	37.7	6.0	40.5	3.3	36.9
CHICAGO	ILL	308	311	58.4	70.7	90.1	91.9	6.1	4.0	8.6	9.7
EAST ST. LOUIS	ILL	17	21	71.6	95.5	77.1	74.5	10.7	2.4	27.0	51.6
GARY	IND	30	30	68.0	84.3	87.1	82.1	7.3	7.8	15.4	42.1
INDIANAPOLIS	IND	37	37	33.7	45.8	77.3	46.7	21.6	36.9	11.0	31.2
KANSAS CITY	KAN	10	11	29.8	38.8	74.0	61.5	24.7	29.6	10.5	18.8
JEFFERSON CO	KY	29	29	20.4	24.9	79.9	22.0	24.1	69.3	6.1	22.9
CADDO PARISH	LA	26	26	43.8	52.3	97.4	62.4	2.3	24.1	1.8	26.4
E. BATON ROUGE PARISH	LA	24	26	37.4	39.0	93.8	72.3	5.7	22.0	3.4	14.1
JEFFERSON PARISH	LA	13	16	21.5	24.6	79.9	29.7	17.5	68.0	4.8	22.2
ORLEANS PARISH	LA	74	74	68.2	83.0	83.4	75.8	9.2	8.8	19.8	43.0
ST. LANDRY PARISH	LA	11	11	47.9	53.9	96.9	39.4	2.8	36.2	2.6	42.3
BALTIMORE	MD	125	118	65.1	77.0	81.9	67.6	10.0	11.7	18.7	39.3
PRINCE GEORGES CO	MD	22	54	15.2	38.6	66.2	29.4	47.5	54.0	8.5	33.9

Note: Measures are defined in the Appendix. Values of B are expressed in thousands.
All other measures are expressed in percentages.

Table A.1. Continued:

DISTRICT NAME		B68	B76	P68	P76	D68	D76	EBW68	EBW76	EWB68	EWB76
BOSTON	MASS	25	31	28.3	49.2	73.0	31.7	29.3	42.3	11.6	40.9
DETROIT	MICH	175	189	60.1	81.0	76.6	63.2	13.7	13.4	20.6	57.1
FLINT	MICH	17	20	37.5	54.5	63.5	59.2	31.3	25.6	18.8	30.6
JACKSON	MISS	18	20	46.3	70.3	95.4	47.4	3.5	21.9	3.0	52.0
KANSAS CITY	MO	35	28	46.8	67.9	80.2	79.0	14.8	10.9	13.0	23.1
ST. LOUIS	MO	73	61	63.7	72.2	88.3	85.4	6.6	7.3	11.7	18.9
OMAHA	NEB	11	12	18.4	22.8	79.2	30.0	27.2	68.8	6.2	20.4
CAMDEN	NJ	12	13	65.0	83.1	73.4	63.1	14.8	10.8	27.5	53.2
JERSEY CITY	NJ	16	17	49.3	65.5	61.6	69.5	26.2	14.9	25.5	28.2
NEWARK	NJ	55	52	80.1	88.0	78.8	83.3	7.9	4.0	31.9	29.5
PATERSON	NJ	11	14	54.1	73.4	52.8	59.7	29.5	16.2	34.7	44.9
TRENTON	NJ	11	12	69.5	79.8	51.8	60.6	20.3	10.7	46.4	42.1
BUFFALO	NY	26	25	37.5	47.3	70.3	58.7	24.5	28.5	14.7	25.5
NEW YORK	NY	335	407	41.7	55.4	64.3	70.5	28.6	19.5	20.5	24.2
ROCHESTER	NY	14	18	29.9	48.5	53.1	51.2	43.9	33.3	18.8	31.4
WINSTON-SALEM	NC	14	15	27.7	33.4	85.6	22.6	13.0	62.0	5.0	31.1
GREENSBORO	NC	10	12	31.3	43.0	82.0	21.1	15.2	53.7	6.9	40.4
CHARLOTTE/MECKLENBURG	NC	24	28	29.3	35.9	73.2	14.9	24.4	61.5	10.1	34.5
AKRON	OHIO	15	15	25.9	31.6	63.8	64.1	37.6	34.9	13.1	16.1
CINCINNATI	OHIO	37	35	43.1	53.0	66.3	64.5	25.6	23.9	19.4	26.9
CLEVELAND	OHIO	87	70	56.8	60.2	89.5	90.3	6.6	5.9	8.7	9.0
COLUMBUS	OHIO	29	31	26.0	32.6	73.6	61.0	29.6	36.3	10.4	17.5
DAYTON	OHIO	23	21	38.4	52.1	86.8	22.2	11.6	44.7	7.2	48.7
TOLEDO	OHIO	16	16	27.4	30.7	77.6	64.7	25.7	33.3	9.7	14.8
YOUNGSTOWN	OHIO	11	10	42.3	50.5	64.6	72.8	29.4	20.5	21.6	20.9
OKLAHOMA CITY	OKLA	16	15	21.8	33.7	88.6	26.0	12.2	60.8	3.4	31.0
PHILADELPHIA	PA	166	163	60.3	66.4	75.1	80.8	14.3	9.9	21.8	19.6
PITTSBURGH	PA	30	27	39.4	46.1	70.6	56.7	24.9	30.4	16.2	25.9
CHARLESTON CO	SC	27	27	45.7	51.2	88.1	57.6	9.6	28.0	8.1	29.4
GREENVILLE CO	SC	13	13	22.4	24.4	85.0	16.1	13.8	73.3	4.0	23.6
RICHLAND CO	SC	19	21	46.7	63.6	82.0	38.3	13.6	30.0	11.9	52.5
CHATTANOOGA	TENN	13	13	48.8	44.9	86.2	61.9	10.5	28.6	10.0	23.4
MEMPHIS	TENN	67	86	53.6	70.6	95.2	56.3	3.6	18.9	4.1	45.5
NASHVILLE/DAVIDSON	TENN	23	24	24.1	30.5	81.6	42.7	20.2	53.5	6.4	23.5
SHELBY CO	TENN	14	4	32.5	20.3	93.3	35.3	6.2	67.9	3.0	17.3
DALLAS	TEX	49	65	33.5	55.1	93.8	64.8	6.8	22.3	3.4	27.4
FORT WORTH	TEX	21	25	26.9	40.6	89.0	46.6	10.3	41.6	3.8	28.5
HOUSTON	TEX	82	90	38.5	55.9	91.7	77.1	7.3	14.8	4.5	18.8
SAN ANTONIO	TEX	12	10	35.3	51.7	83.9	66.4	14.6	23.7	8.0	25.4
NEWPORT NEWS	VA	11	11	37.2	39.2	88.6	29.1	9.8	53.7	5.8	34.6
NORFOLK	VA	23	24	42.5	54.1	85.5	14.7	11.8	44.2	8.7	52.1
PORTSMOUTH	VA	14	13	52.0	58.8	88.2	26.2	9.9	37.2	10.7	53.1
RICHMOND	VA	29	30	68.5	80.7	86.7	29.6	7.7	17.7	16.7	74.0
SEATTLE	WASH	10	11	11.8	21.0	63.8	64.7	53.7	46.9	7.2	12.5
MILWAUKEE	WIS	31	41	24.6	40.0	84.7	54.9	18.6	33.7	6.1	22.4

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