Race and I.Q. Reconsidered

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Much controversy has surrounded the question of the relationship between intelligence and heredity, and particularly the question of a relationship between race and intelligence. Yet, despite the emotionally-charged philosophical and political issues involved, this is ultimately an empirical question—indeed it is independent of anyone’s beliefs, hopes, or fears. Whether we currently have the technical expertise to answer it is another matter. Yet even in the physical sciences, it is seldom that a definitive answer to any question springs forth, full-blown, from a chaos of controversy and surmise. More usually, a succession of painstaking studies and a series of theoretical analyses tend ultimately toward some resolution which reasonable men find acceptable, and eventually compelling. This present study hopes to contribute towards such an eventual outcome as regards race and intelligence.

A research project directed by the author at the Urban Institute collected more than 70,000 I.Q. records from schools across the country, covering a dozen ethnic groups, and extending back over a period of up to 50 years, depending upon the record-keeping practices of the individual schools and boards of education. Together with existing mental test score data collected during the period from about 1915 to 1925, these data permit an analysis of the general historical pattern of mental test results.
for American ethnic groups from differing racial backgrounds. Some of the questions that can be asked in the light of these data include:

1. Is there anything to explain as regards racial differences? That is, do the mental test scores of American Negroes (or other racially distinct ethnic minorities) today differ in either level or pattern from those of European immigrant groups at a similar stage of their socioeconomic development?

2. Have the I.Q.'s of European ethnic minorities changed substantially over the decades as their socioeconomic position has altered?

3. Have mental test score changes over the years been less for highly endogamous groups, such as the Jews or Orientals, than for various northern and western European groups who have intermarried more freely with members of the general population and thereby altered the minority's gene pool?

Note that the focus of this study is not the very general question of the relative influence of "heredity" and "environment" on "intelligence," but the more specific and policy-relevant question, whether large intergroup differences in standard mental test scores are more a function of genetic or of environmental differences between the particular groups considered. It is entirely possible that there are very different answers to these two questions. That is, the variations in mental test scores among individuals in the general population may be more related to differences in their genes than in their rather similar environments, while differences between whole groups facing markedly different environmental conditions may be due to those environmental differences. It is of course also possible that the environmental differences between groups are a function of genetic differences between them, as well as of history and social conditions, and there is no a priori reason to rule out a greater influence for heredity. What is important for this study is to recognize that two very different questions exist. Much of the evidence brought forth thus far, such as I.Q. correlations between twins reared in separate homes, relates only to the general question, though the results are often extended to I.Q. differences between groups living under environmental influences which appear much greater than the differences between the homes in which separated twins are reared.

The validity of mental tests—in various senses of the word "validity"—is a large and complex area which is important in itself but peripheral to the specific issues involved in this study. Environmentalists have frequently pointed out the "cultural bias" of I.Q. tests, College Board examinations, etc., especially when arguing against the genetic determinism of Professor Arthur R. Jensen of Berkeley. It is easy enough to show that some questions on some tests ("Who wrote Faust?" for example) presuppose a kind of cultural information which is much more likely to be known to a middle class white child than to children of other races and social classes. However, it cannot be automatically assumed that such questions or tests are the explanation of intergroup differences in test scores, or that these differences are greatest on tests which depend upon such information. On the contrary, it is precisely on those tests which do not require such information—abstract tests—that black-white differences in results are greatest. 8

Jensen cites this as the basis for his contention that black-white differences in I.Q. are innate, for his theory is not one of general mental "inferiority" of Negroes, but specifically that there are different kinds of intellectual ability and that abstract reasoning is the specific ability genetically lacking among blacks. 8 It is not simply the level of mental test performance but also the pattern of mental test performance which Jensen depicts as peculiar to blacks. It is this pattern rather than "test validity" in general which is relevant to the present study.

From an environmentalist viewpoint, the abstract material can be regarded as more culturally biased—though less obviously so—than material dealing with particular cultural information, because interest in and practice with abstract concepts is a peculiarity of better educated nations and social classes. This alternative hypothesis implicitly concedes that there is a real difference in mental capability which the tests measure, though that difference is regarded as environmentally determined. And in a technologically complex society, the ability to handle abstractions cannot be regarded as an unimportant cultural attribute, or one whose importance is due merely to arbitrary social conventions. Again, what is crucial to the present study is whether (1) this pattern of doing worse on abstract questions is peculiar to blacks, or (2) whether it was common to low-I.Q. immigrant groups from
a Caucasian racial background, and in particular whether it was once common to Caucasian groups whose I.Q.’s subsequently rose by large amounts.

Another pattern emphasized by some is the tendency of black children’s test scores to be closer to those of white children at earlier ages, and to fall progressively further behind as the years pass. A genetic interpretation of this phenomenon is that black children approach the limits of their capacity sooner—one implication of this being that “early childhood” educational efforts may simply bring black youngsters to their genetic plateau earlier, with no long-run educational results. An alternative hypothesis is that intellectual development builds on past intellectual mastery of more fundamental material, so that any group (of whatever race) whose scores were below average (for whatever reason) at the beginning would tend to fall progressively further behind the norm as intellectual development proceeded. An interesting implication of this latter hypothesis is that while maturational increments of raw test scores are below normal, other kinds of incremental gains (not dependent upon mastery of previous material) need not be below normal for low I.Q. groups with “normal” genetic endowments—these incremental being from such things as greater test familiarity, a better psychological environment for test-taking, or better teaching. This implication will be examined empirically for black children and for children of European immigrant groups.

It should be noted that a study of black and white Americans is not a study of Negro and Caucasian races in any global sense. There is no reason to believe that either American group is a representative sample of its race, and some historical reasons for believing that there is a definite bias in both samples. Moreover, the subsequent genetic history of the American samples did not correspond to that of the contemporary populations from which they derived—especially as regards intermarriage among constituent groups within each broad racial category, not to mention interbreeding across racial lines. But this limitation for purposes of global or definitive racial comparisons or for the more general question of “heredity versus environment” is not a limitation for the purpose of analyzing American social questions in an American context.

The present study will consider not only the levels of mental test performance, but also the patterns of mental test performance. For an explanation of test score levels to be acceptable,

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it must also be consistent with the test score patterns. These patterns include not only intergroup differences in performance on abstractions and differences in maturational patterns, but also intragroup differences (by sex, geographic location, etc.) which will be explored in section II of this chapter. Both levels and patterns of ethnic group test scores will be considered historically; and, within the broad categories of levels and patterns, groups with European, African, and Oriental ancestry will be considered, as well as groups of Latin American origin (Mexican Americans and Puerto Ricans living on the U.S. mainland).

I. LEVELS OF MENTAL TEST PERFORMANCE

The average I.Q. of American Negroes has generally been around 85, using a wide variety of tests and research methods. How does this compare with the I.Q.’s of European immigrant groups during their periods of similar poverty and social pathology? A survey of Italian American mental test scores research, summarized in 1921, found their I.Q.’s to be 85 in one study, 84 in two studies, 83 in another study, and 77.5 in still another study. Another survey of American ethnic I.Q. studies in 1926 found median I.Q.’s of 85.6 for Slovaks, 83 for Greeks, 85 for Poles, 78 for Spanish, 84 for Portuguese, and 85.5 for southern Europeans as a group. Still another study of I.Q.’s in three Youngstown, Ohio, schools in 1919-20 showed an average I.Q. of 88 for children classified as “American (colored),” while among European immigrant children in the same schools there were lower average I.Q. scores among Italians, Slavs, Greeks, Poles, Lithuanians, Croatians, Syrians, and Gypsies. Similarly, a 1924-25 study of Massachusetts school children from many ethnic backgrounds found blacks with higher I.Q.’s than the Portuguese, and with a higher percentage scoring over 120 on the I.Q. test than among Portuguese, Italian, Polish, or French Canadian youngsters in the same schools.

Data on Jewish I.Q.’s during this period are more difficult to obtain, since Jews are an ethnic-religious group, while nationality groups were the major research category at that time. However, it is known that one-half or more of the Polish and Russian immigrants were Jews. The early mental test averages typically put immigrants from Poland and Russia at or near the bottom of
AMERICAN ETHNIC GROUPS

Table 6
HISPANIC AMERICAN I.Q.'S

<table>
<thead>
<tr>
<th>Decades</th>
<th>Mexican I.Q.</th>
<th>Sample Size</th>
<th>Puerto Rican I.Q.</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920s</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1930s</td>
<td>85</td>
<td>724</td>
<td>85</td>
<td>202</td>
</tr>
<tr>
<td>1940s</td>
<td>83</td>
<td>2,666</td>
<td>79</td>
<td>478</td>
</tr>
<tr>
<td>1960s</td>
<td>95</td>
<td>2,916</td>
<td>84</td>
<td>274</td>
</tr>
<tr>
<td>1970s</td>
<td>87</td>
<td>193</td>
<td>80</td>
<td>418</td>
</tr>
</tbody>
</table>

*Sample size less than fifty.

The mental test literature on Mexican American immigrants and Puerto Rican migrants to the United States is not nearly as vast as that on black Americans or on European immigrants. A 1924 survey of studies of Mexican American I.Q.'s found their average to be 85—^29—the same as that found for a variety of disadvantaged minorities in the United States and abroad. A 1931 survey of previous studies of Mexican American children showed average I.Q.'s ranging from 68 through 97, with a central tendency in the 80's. 40 The Urban Institute survey (table 6) found a similar range of scores for both Mexican Americans and Puerto Ricans living on the U.S. mainland.

Table 7
HISPANIC AMERICAN I.Q.'S BY TEST TYPE

<table>
<thead>
<tr>
<th>Decades</th>
<th>Mexican Americans</th>
<th>Puerto Ricans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>California Test of Mental Maturity</td>
<td>Large-Thorndike</td>
</tr>
<tr>
<td></td>
<td>Mean I.Q.</td>
<td>Sample Size</td>
</tr>
<tr>
<td>1920s</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1930s</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1940s</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1950s</td>
<td>85</td>
<td>483</td>
</tr>
<tr>
<td>1960s</td>
<td>95</td>
<td>315</td>
</tr>
<tr>
<td>1970s</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

*Sample size less than fifty.

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The I.Q. results by specific tests (table 7) from this survey do not show any very different pattern from the results derived from heterogenous I.Q. scores. The only striking exception is the 10-point rise of Mexican Americans on the California Test of Mental Maturity from the 1950s to the 1960s.

The absence of any clear trend in I.Q. over time among these two Latin groups might conceivably reflect (1) genetic differences from other groups with upward trends over time, (2) the relatively static socioeconomic position of these two groups, (3) the enduring prevalence of Spanish as the language which is spoken in the home in both groups, 41 or (4) the high incidence of return-migration in both groups, 42 which inhibits acculturulation to American norms. The genetic explanation is relatively easily disposed of, however. A special study of Puerto Rican children by the New York City Board of Education in 1958 shows the following relationships (tables 8 and 9) between I.Q. and the number of years in school on the U.S. mainland:

Table 8
PUERTO RICANS' SCHOOLING AND I.Q.

<table>
<thead>
<tr>
<th>Number of Years in Mainland Schools</th>
<th>Average I.Q.</th>
<th>Number of Pupils Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>72</td>
<td>29</td>
</tr>
<tr>
<td>3-4</td>
<td>73</td>
<td>33</td>
</tr>
<tr>
<td>5-6</td>
<td>82</td>
<td>28</td>
</tr>
<tr>
<td>7-8</td>
<td>87</td>
<td>16</td>
</tr>
<tr>
<td>9-10</td>
<td>93</td>
<td>10</td>
</tr>
</tbody>
</table>


The same study found a similarly clear relationship between reading ability and mainland (versus Puerto Rico) schooling:

Table 9
PUERTO RICANS' SCHOOLING AND READING

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Lag in Grade Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Island-born, Island Schooled</td>
<td>5.7</td>
</tr>
<tr>
<td>Island-born, Mainland Schooled</td>
<td>3.5</td>
</tr>
<tr>
<td>Mainland-born of Puerto Rican Parents</td>
<td>2.6</td>
</tr>
</tbody>
</table>

the midwest sample had shrunk to a tenth of its size the previous decade, and the southern sample had become suspect, for reasons noted above. If the integration and individual identification problem can be overcome somehow, new surveys would be very much in order to measure the I.Q. effect of recently rising socioeconomic status on succeeding generations of black school-children.

II. PATTERNS OF MENTAL TEST PERFORMANCE

Several kinds of mental test score patterns will be considered:

1. Variations in an ethnic group's performance from one kind of question to another—abstract versus concrete, for example—either on a given test or on different tests.

2. Variations between a given ethnic group's male and female scores on the same mental tests.

3. Variations in the mental test performance of a given ethnic group under different testing conditions—such as with greater test familiarity, test coaching, or a better psychological environment.

4. Variations in an ethnic group's incremental gain in raw scores with age and/or more teacher input.

5. Variations between the mental test scores of different segments of the same ethnic group located in different geographic regions of the country.

TYPES OF QUESTIONS

Recent studies have demonstrated that different racial or ethnic groups have characteristic patterns of relative success on different kinds of mental test questions—and that the higher socioeconomic classes from these respective groups simply repeat the same pattern on a higher level. For example, Jewish school children did best on verbal portions of mental tests and their worst on spatial conceptions, while Chinese children had just the reverse pattern, and Negro and Puerto Rican school-children had still other patterns. The same ethnic patterns were found in different social classes and in different cities. While this clearly suggests a genetic trait, an intertemporal comparison would be necessary to see whether these patterns are sufficiently stable through periods of social change to indicate a genetic characteristic. International comparisons of the same racial group in different cultural settings would also be relevant. Little has been done to tie all these patterns together in this way, and the scarcity of intertemporal data makes this especially difficult.

Such scattered data as exist on low-scoring European immigrant groups (as of the World War I era) indicates that they, like American Negroes today, scored lowest on abstract questions. A 1917 study of various immigrant groups at Ellis Island showed them to be particularly deficient on abstractions, confirming an impression published in 1913 by the noted psychologist H. H. Goddard, who had tested children there, that "These people cannot deal with abstractions. . . ." L. M. Terman, author of the Stanford-Binet test, likewise concluded from his studies of racial minorities in the southwest that children from such groups "cannot master abstractions." A 1932 study of white children in isolated mountain communities also showed that, in addition to having low I.Q.'s, their deficiencies were "most evident on items involving abstract comprehension." A recent study in England showed that rural working class boys differed from their London and small town counterparts more on abstractions than on any other aspect of the various mental tests which they all took. Orientals, during their era of lower than average test scores, did particularly poorly on tests and subtests requiring abstract reasoning ability. The later concentration (and success) of Orientals in mathematics and the natural sciences suggests that this was an environmental rather than a genetic phenomenon.

Scattered comments by testers support the hypothesis that interest in, and orientation toward, abstraction is an exceptional and acquired taste or facility. White mountaineer children showed difficulty in orienting themselves toward such questions, Indian children in South Africa had a "lack of interest in nonverbal materials," West African school boys "obviously became bored" with such items, and examiners administering the Army Beta test during World War I reported "a decided disposition" for black soldiers "to lapse into inattention and almost into sleep" during such tests.

SEX DIFFERENCES

A substantial volume of research indicates that females are less affected by environment—good or bad—than are males.
This generalization embraces both physical and mental phenomena. It offers a way of circumventing some of the problems of culturally biased tests and of separating genetic from environmental factors. A low-I.Q. group whose females had higher scores than its males could be regarded as suffering environmental deprivation, whereas the reverse might suggest genetic deficiencies, since females tend to be less affected by environment than males. Moreover, the cultural bias of tests is less a factor in intragroup comparisons, especially of children who have not yet reached the age of sharp sex differentiation in exposure to the dominant culture.

Small average male-female differences may be difficult to detect in empirical research, but there are exaggerations of these small differences at some points on the I.Q. distribution, and these exaggerations are more likely to be observable. If both male and female I.Q.'s are normally distributed with identical variance about their respective means, then a relatively small difference in those means will tend to lead to larger and larger overrepresentation of one sex above selected, and progressively higher points on the I.Q. scale. In figure 1, the distribution of I.Q.'s of one sex (S₁) has a somewhat lower mean than the distribution of I.Q.'s of the other sex (S₂). At point M, representing a somewhat higher I.Q. than the mean of either group, the number of members of sex S₂ is greater than the number of members of sex S₁, but not by as much as two-to-one. At some higher I.Q., such as at point N, the number of members of sex S₂ exceeds the number of members of sex S₁ by more than two-to-one. It is easy to visualize how this ratio of S₂ to S₁ continually increases as the cut-off level rises. Therefore, by selecting some arbitrarily high level of intellectual performance (an I.Q. of 110 or 120, for example) intragroup male-female differences in representation above that level should be readily apparent statistically.

In principle, either sex could be S₁ or S₂. A complicating factor in reality is that the variance of male I.Q.'s has been found to be slightly wider than the variance of female I.Q.'s. For the general population, where the mean I.Q.'s of the sexes are equal, this means a slight over-representation of males at both high and low extremes. For a low-I.Q. group, this difference in variance makes it theoretically possible to have either a male or a female overrepresentation at high-I.Q. levels, even if the mean female I.Q. within the group is higher (S₂) than the group's
mean male I.Q. (S1). However, a female overrepresentation means that the female I.Q. advantage within the group is sufficient to overcome the greater male variance at high I.Q. levels.

What are the facts? A massive study of individuals with I.Q.’s at or above 140 found males slightly overrepresented in the general population, as they are at low I.Q. extremes as well, in conformity with the principle of greater male variance. For the black population of the United States, however, a number of studies have consistently shown the females to be very substantially overrepresented among high I.Q. individuals. A 1934 study among black schoolchildren with an average I.Q. of 149 found that there were nearly three times as many girls as boys; a later (1943) study of black schoolchildren found exactly three times as many girls as boys with I.Q.’s at or above 120, and a later doctoral dissertation (1956) found more than five times as many females as males among black people with I.Q.’s of 130 and above.

Some social theorists have attributed such phenomena to peculiar cultural characteristics of the black American population—a “matriarchal” syndrome of some sort. However, before “explaining” the black pattern, it is necessary to see if it is in fact peculiar to blacks. Again, for the earlier or immigrant period, data are scattered and fragmentary, but such information as there is suggests that females did better than males among low I.Q. groups of European ancestry as well. The Ellis Island studies during the period of low Jewish performance on mental tests showed that Jewish girls exceeded the national norms “at most ages” at a time when Jewish boys were below those norms “up to the age of 16.” Similarly, in England, working class girls scored higher on mental tests than working class boys, although there was no such sex difference in the middle classes. The Urban Institute data do not go far enough back in time to determine the sex breakdown of European minorities when their I.Q.’s were comparable to black I.Q.’s today. For Latin groups, however, there are some data indicating that females maintain a small but consistent I.Q. advantage, despite a culturally male-centered society (table 12).

Only the Mexican Americans had sample sizes large enough for a statistical breakdown of males and females with high I.Q.’s (over 110 in this case). The results are shown in table 13. Again, the females are clearly overrepresented among high I.Q. members of a low I.Q. group, though apparently not as extremely

<table>
<thead>
<tr>
<th>Decades</th>
<th>Mexican Americans</th>
<th>Puerto Ricans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1920s</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1930s</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1940s</td>
<td>82</td>
<td>85</td>
</tr>
<tr>
<td>1950s</td>
<td>82</td>
<td>85</td>
</tr>
<tr>
<td>1960s</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>1970s</td>
<td>87</td>
<td>88</td>
</tr>
</tbody>
</table>

*Sample size less than fifty.

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Table 12

SEX DIFFERENCES IN LATIN I.Q.’S

<table>
<thead>
<tr>
<th>Decades</th>
<th>Mexican Americans</th>
<th>Puerto Ricans</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>1920s</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1930s</td>
<td>*</td>
<td>*</td>
</tr>
<tr>
<td>1940s</td>
<td>82</td>
<td>85</td>
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<tr>
<td>1950s</td>
<td>82</td>
<td>85</td>
</tr>
<tr>
<td>1960s</td>
<td>80</td>
<td>85</td>
</tr>
<tr>
<td>1970s</td>
<td>87</td>
<td>88</td>
</tr>
</tbody>
</table>

*Sample size less than fifty.

so as among black Americans. However, direct comparisons between blacks and Mexican Americans are not possible from these data, which dictate a high-I.Q. cut-off score of 110 for Mexican Americans, because sample size was below 50 for Mexican American I.Q.’s of 120 and above for each decade of this particular survey. It is striking that the female superiority pattern in I.Q.’s is found in household-dominant Latin groups, suggesting that a similar pattern among blacks is not necessarily a sign of a “matriarchal” culture.

The Orientals were an average or above average I.Q. group for the period covered by the Urban Institute survey, and so should not be expected to have a female superiority pattern. Table 14 shows that they do not.

Table 13

SEX DIFFERENCES AMONG HIGH-I.Q. MEXICAN AMERICANS

<table>
<thead>
<tr>
<th>Decades</th>
<th>Mexican Americans: Percent With I.Q.’s Over 110</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Males</td>
</tr>
<tr>
<td>1920s</td>
<td>*</td>
</tr>
<tr>
<td>1930s</td>
<td>*</td>
</tr>
<tr>
<td>1940s</td>
<td>*</td>
</tr>
<tr>
<td>1950s</td>
<td>4.3</td>
</tr>
<tr>
<td>1960s</td>
<td>6.2</td>
</tr>
<tr>
<td>1970s</td>
<td>*</td>
</tr>
</tbody>
</table>

*Sample size less than fifty.
APPENDIX: RESEARCH METHODS

I.Q. scores were collected primarily from individual student records in schools and boards of education in communities across the country. In a few cases preexisting compilations of individual student records were used. Rigorous methods of producing a random or a stratified sample were not attempted, since official permission to gain access to this sensitive information was a major uncontrollable variable. However, all of these schools came by referrals from such a wide variety of sources as to constitute a crude approximation of a random sample. The path from the initial contact to the particular school was usually circuitous and unpredictable; typically one person referred

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us to another person, who referred us to a third, fourth, or fifth person, who actually suggested a particular school to include in the study—a school often hundreds of miles from the first person in the sequence.

The standards used for determining what kind of school we wanted were general and changed somewhat over time as our existing stock of data grew. Initially we sought schools with concentrations of the 12 ethnic groups under study, and preferred those schools with I.Q. records reaching furthest back in time. This led us to the usual metropolitan centers, with an under-representation of smaller cities and towns, and of southern data. A conscious effort was then made to seek data from these other categories, and at any given point in time to prefer those ethnic groups whose data were currently in short supply, but the actual availability of schools continued to be a major determinant of where we conducted research—and when or whether permission would be granted remained unpredictable. The research pattern that emerged was one in which general goals determined our initial contacts, and where the week-to-week decisions were determined by the changing size of our staff, the state of our negotiations with education officials, and the condition of the records in the schools we were canvassing before beginning actual collecting. School vacations, our staff vacations, and the availability of short-term additions to our research team added further elements of randomness. During slack periods we sent researchers wherever we had permission to go, and during periods where permissions exceeded our capabilities, we selected among alternatives—and also cut short some research either because of our exigencies or those of the schools. The specific research procedures used at each school surveyed are written up on "anonymous description forms" for each school. These are available from The National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161 (Accession No. PB265 8.13), together with the computer tapes, so that the sample may be reconstituted and re-analyzed by others, according to their own preferred purposes or purposes. A number of variables not discussed here are included in the tapes and accompanying documents.

Among the general research problems were: (1) determining the ethnicity of the students whose I.Q.'s were compiled, and (2) selecting among I.Q. scores where several were available.

Ethnicity was determined in a variety of ways, some being used as checks against the others when needed. The simplest case was where the individual's school record specified his ethnicity, but this was the exception rather than the rule. Two broad ways of determining ethnicity were by school and by individual. Some schools were known to have been 99 percent or more Negro or Indian or Chinese, and all the individuals in such schools were therefore assigned to those ethnic categories. For other schools and other ethnic groups, individual determinations of ethnicity were more common. Individuals with ethnically distinctive names were identified by name (with the aid of a dictionary of names, or—in the case of Poles—with the
help of consultants), but this required some prior assurance that the school population included no black children who would have similar names. Germans and Jews share some names so further information was needed for a determination there. In all cases of individual ethnic determination the policy was to resolve doubts by classifying individual ethnicity as "unknown"—i.e. to maintain the purity of the sample rather than maximize its size.

The nationwide I.Q. averages are based on selecting one I.Q. score per person even though many individuals had multiple I.Q.'s listed on their school records and/or recorded on our computer tape. For elementary school students the I.Q. score nearest the fifth grade was selected. Only for the later phases of the research study were multiple I.Q. scores recorded on our records. Similarly, only for the later phases of the research were specific names of I.Q. tests recorded along with the scores.

NOTES

1. Americans of Chinese, German, Indian, Irish, Italian, Japanese, Jewish, Mexican, Negro, Polish, Puerto Rican, and West Indian ancestry. The data for native American Indians were from only one tribe at one location, and so were considered too inadequate to be used in this study. Similarly, a sample of West Indian I.Q. scores from only one atypical education was not used. These data and computer descriptions are available from The National Technical Information Service, U.S. Department of Commerce, Springfield, Virginia 22161 (Accession No. PB 265 813). I am indebted to many individuals for their help and criticism at many stages of this work. An especial appreciation is due to Professor Arthur Goldberger of the University of Wisconsin and Professor Sandra Scaife of the University of Minnesota for their careful and cogent criticisms and suggestions—some of which I followed. Conclusions and errors are of course my sole responsibility.


3. Ibid.


5. The whole population of colonial America has been called a "decapitated" society, since the European aristocracy seldom migrated, and convicts and other social "undesirables" were over-represented. Among Africans, the weaker, less culturally advanced tribes tended to be captured—often by the stronger or more advanced African tribes—and sold into slavery.


Race and I.Q. Reconsidered

10. Loc. cit.
12. Loc. cit.


19. Ibid., p. 697.


26. Ibid., chap. 1.


Race and I.Q. Reconsidered

65. Jensen, "How Much Can We Boost I.Q. and Scholastic Achievement?" op. cit., p. 100.
66. Loc. cit.
68. Vernon, op. cit., p. 104.
70. Jensen, "How Much Can We Boost I.Q. and Scholastic Achievement?" op. cit., p. 98.
76. Ibid., pp. 3-31, passim.
77. Yerkes, op. cit., p. 874.
78. Brigham, op. cit., p. 18.
79. Ibid., pp. 32-33.
80. Ibid., pp. 37, 40, 43, 46, 49, 52.
82. Brigham, op. cit., p. 42.
83. Yerkes, op. cit., p. 875.
84. Loc. cit.
85. Brigham, op. cit., p. 45.
86. Ibid., p. 38. Only three questions could be answered by counting visible cubes.
87. Ibid., pp. 36-37.
88. Shuey, op. cit., chap. 10.
89. Butcher, op. cit., p. 252.
90. Loc. cit.


93. Jensen, "How Much Can We Boost I.Q. and Scholastic Achievement?" op. cit., p. 95.


### Sibling I.Q. Correlations among Ethnic Groups

**LEON J. KAMIN**

The school I.Q. data collected by the Ethnic Minorities Research Project at the Urban Institute contain intelligence test scores for a large number of siblings, classified by ethnic group membership. There is very little empirical information available concerning sibling (or other kinship) I.Q. score correlations as a function of ethnic group. These scores thus seem to merit some separate analysis. They can be approached in two fundamentally distinct ways.

The traditional approach has been to compare kinship correlations, or "heritability" across groups. For blacks and whites, the few relevant existing studies (Osborne and Gregor, 1968; Vandenberg, 1970; Scarr-Salapatek, 1971; Jensen, 1973) have used this method, with inconclusive results. The question whether family resemblances in I.Q. are of similar magnitude for all ethnic groups is, in principle, empirically straightforward. The discovery of differences across various ethnic groups, however, would pose very grave, if not insuperable, problems of interpretation. Though such differences, if discovered, might provide clues relevant to the nature-nurture controversy, it must be stressed that most of the ambiguities and complexities which beset the study of within-group heritability are also present in the comparison of heritabilities or kinship correlations across groups. For