

The GSA ad hoc committee to prepare a resolution on Genetics and IQ, (H. Echols, W. Nance, D. Perkins, J. Spofford, J.R.G. Turner, E. S. Russell, Chm.), presents the following statement for judgment by GSA members. This statement has full support from retiring Society president, Bruce Wallace, and the new president, Oliver Smithies.

PREAMBLE: In recent years there has been a revival of theories claiming there are inherited differences in intelligence between races and social classes. On the basis of these theories, changes in social policy have been suggested such as sterilization of the "unfit." The history of earlier eugenics movements demonstrates that great social damage can result from application of faulty scientific reasoning. Unfounded theories of race improvement were used in the first part of the 20th century as the "scientific" basis for sterilization laws in 31 states, miscegenation laws, and racially restrictive immigration laws. One of the reasons these policies were implemented is that geneticists who opposed them were silent. We believe that geneticists should not remain silent during the current crisis.

Recent reports in the United States, showing mean IQ scores of groups of Black school children approximately 15 points lower than the mean scores of Caucasian children, have been interpreted by some as proof of an innate genetic difference in mental ability between the races. This argument depends upon three assumptions we believe to be unwarranted on the basis of available evidence. These assumptions are: (1) that IQ scores are an adequate measure of intelligence, (2) that intelligence is predominantly determined by genetic factors, and (3) that racial differences in IQ test scores reflect genetic differences in mental ability between the races.

STATEMENT OF GSA MEMBERS ON HEREDITY, RACE, AND IQ.

Measurement of intelligence: The term intelligence refers to mental ability, which is expressed through, and limited by, environmental experience, subjectively viewed from the standpoint of a given culture at a given time. Because the concept of intelligence is dependent on cultural background, no person can produce an intelligence test completely free of cultural bias. Most analyses of genetic and environmental contributions to intelligence have been based on IQ scores, which are human constructs rather than biologic entities. Limitations on the meaning of IQ scores become particularly important when comparisons are made between scores of children from different cultural groups.

Heritability of IQ: IQ scores may be regarded as quantitatively varying characters; these traits are usually influenced by both genetic and environmental factors, whose effects and interactions are often difficult to separate unambiguously even in experimental animals. Only by comparing groups maintained at the same time under identical conditions can one safely ascribe observed character differences to genetic differences between the groups. One comes closer to this ideal in a culturally and economically homogeneous group than in a group with mixed background. Although a major component of the variation in IQ scores observed within such a group may have a genetic basis, this hypothesis remains to be established. The existing data on IQ scores of identical twins raised apart convinces some but not all geneticists of a considerable degree of heritability of IQ.

Racial and class differences in IQ: The racial and social class groups whose mean IQ scores have been compared have not lived under identical, nor generally under similar environmental conditions. It would be almost impossible at the present time to find culturally and environmentally comparable Black and Caucasian groups. The difference between wealth and poverty and between black and white skins clearly constitute enormous environmental factors in our society. When identical white twins are reared apart they are usually both reared in white homes of similar cultural background, so that data do not say what would happen if one twin were raised in the drastically different black environment. In our view, there is NO CONVINCING EVIDENCE OF GENETIC DIFFERENCE IN INTELLIGENCE BETWEEN RACES.

IMPLICATIONS FOR SOCIETY

All human populations are made up of individuals of many genotypes, with differences in genes affecting quantitatively varying character, including mental ability.

a stricter criterion than generally demanded in prev. genetics

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Each population, whether racially homogeneous or mixed, contains individuals with abilities far above or below the central mode of the group. It is important that rich educational opportunities be available to all children, so that their potentialities may be realized. We firmly believe that in planning educational programs, each child should be considered as a valuable individual, rather than as a member of a racial or socioeconomic group. At present, socially and environmentally disadvantaged children, Black or Caucasian, often have problems in schools which limit their future opportunities. We need a variety of approaches to education, available to all children without bias, which will allow each child to acquire the basic tools required for self-expression and employment. Further, no system of education should be encouraged which fails to foster the ability to think wherever that potentiality can be found.

THE ROLE OF GENETICISTS

It is our duty as geneticists to work to eliminate racial bias in educational opportunity by increasing public understanding of the relations between genetics, race, and intelligence. While the application of the techniques of quantitative genetics to the analysis of human biometric traits is fraught with many complications and potential biases that can be avoided in experimental organisms, we do not feel that research on the genetics of psychological traits should be prohibited. We feel that education is a legitimate area of research and that geneticists can and should play a role in the design for research projects and prospective studies that will lead to valid and useful conclusions about the genetic determinants of mental abilities. Moreover, we feel that geneticists can and must also speak out against the use of genetics to draw sweeping social and political conclusions from inadequate data.

To the GSA membership:

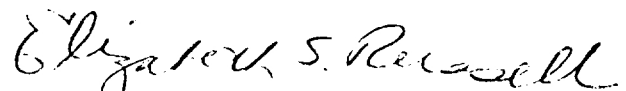
The ad hoc committee and Society presidents submit this statement for your judgment. On the enclosed postcard, please record separately for (1) the preamble, (2) the scientific statement itself, (3) the paragraph on implications for society, and (4) the paragraph on the role of geneticists whether you agree or disagree with the substance, feel insufficiently informed to judge, or are against taking a stand.

If you wish to delve more deeply into the subject, we recommend your reading "Statistical methodology of the nature-nurture controversy in human intelligence," a 1974 thesis prepared at Iowa State by T. H. Emigh, graduate student of Oscar Kempthorne, whose conclusion states regarding intelligence, "No quantitative theories exist to incorporate a realistic environmental model with the genetic models available.... Statements on heritability... of intelligence are unreasonable and potentially dangerous with the present state of knowledge." This thesis also contains an excellent up-to-date bibliography.

Please return the card by February 15th. If you feel moved to comment more extensively, please write a letter, but be sure to enclose the card.

We propose to publish the statement and analysis of the membership response in Genetics and possibly also elsewhere. It is very important to have a large response, so that our publication will truly convey the stand of geneticists on heredity, race, and intelligence. Thank you for your cooperation.

Sincerely,



Elizabeth S. Russell
Chairman

available from GSA