

**Race is More Than Just Skin Deep:  
A Psychologist's View**

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This article defends the concept of "race" against a coordinated political campaign to deconstruct basic biology. It briefly reviews some of the most reliably documented Black-White differences, such as those in brain size, IQ, violent crime, testosterone, sexuality and AIDs. Although these racial differences are now reliably found worldwide (not just within the USA), many in the media and scholarly associations continue to try and deny them or attribute them to "political circumstance." "Statements on Race" made by organizations such as the American Association for Anthropology are discussed and found to be wanting.

Key Words: AAA Statement on Race, brain size, crime, evolution, intelligence.

I originally wrote this paper in reaction to a Knight-Ridder article ("Genetic Basis For Race Said To Be Just Skin Deep," October 13, 1996), which argued that race has no validity as a biological concept when applied to man, seeking to defend the concept of "race" against a coordinated political campaign to deconstruct basic biology. Since then numerous other media stories have appeared purporting to debunk the reality of race, some playing off policy statements by scholarly organizations such as the one adopted by the American Association of Anthropology on May 17, 1998. Worse, governments have become actively involved in propagating the misinformation.

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October 13, 1996), which argued that race has no validity as a biological concept when applied to man. I disseminated the paper on the Internet and elsewhere, seeking to defend the concept of "race" against a coordinated political campaign to deconstruct basic biology. Since then numerous other media stories have appeared purporting to debunk the reality of race, some playing off policy statements made by scholarly organizations. Worse, governments have become actively involved in propagating the misinformation.

The most recent example of a policy statement on race by a scholarly organization is the one adopted by the American Association of Anthropology on May 17, 1998 (to be discussed further below). Yet the AAA Statement on Race is empirically false when it argues that "physical variations in the human species have no meaning except the social ones that humans put on them" and that any observed group differences are the result of social conditioning and "political circumstance" (September 1998 *Anthropolgy Newsletter*, p. 3). To take one relevant example, consider the relationship between brain size and intelligence.

During the 19th century, physical anthropologists found that Blacks averaged smaller brains than Whites. Whether measuring the weight of the brain or the size of the cranial cavity, they consistently found a difference equivalent to about 100 cubic centimeters. The difference was well documented as early as the 1840s by the "American school" of anthropology, which included Samuel G. Morton, Joshiah C. Nott, and George R. Glidden. It was corroborated from the 1860s to the 1890s by European anthropologists, such as Paul Broca and Paul Topinard in France, who compared Blacks and Whites from Africa and Europe. Broca (1873) wrote: "West Africans have a cranial capacity about 100 cm<sup>3</sup> less than the European races."

The data on race differences in brain size were so widely known that Charles Darwin (1871) was able to cite them as evidence in favor of his then controversial theory of human evolution in *The Descent of Man*. Even Franz Boas, who is often described as the "real" founder of American anthropology and the first to challenge "Eurocentric racism," added further knowledge about brain size and race by emphasizing the amount of overlap in the distributions. On a visit to England in 1889, Boas had become acquainted with Sir Francis

Galton's work on biometrics and, in his 1894 article "Human Faculty Determined by Race," pointed out that Topinard's measurements revealed that 27 percent of Blacks exceeded the White average. His inference: "We might, therefore, anticipate a lack of men of high genius (among Blacks)." And, he wrote, "It would seem that the greater the central nervous system, the higher the faculty of the race and the greater its aptitude to mental development."

In 1910, Boas again acknowledged that the "average" Black brain was "smaller than that of other races." Remarkably, Boas published this in *Crisis*, the organ of the National Association for the Advancement of Colored People (NAACP). Boas wrote "We may, therefore, expect less average ability and also, on account of probable anatomical differences, somewhat different mental tendencies." These early works were enlarged in his 1911 book, *The Mind of Primitive Man*.

To the modern eye it is astounding to see these data discussed so openly, and from scientists with such diverse viewpoints. Some were sympathetic to slavery (Nott and Glidden), some were anti-evolutionists (Morton), others in favor of evolution (Broca, Topinard), and some avowedly pro-Black and anti-racist (Boas). Unfortunately, today, the data can scarcely be mentioned in polite society, or even at scientific meetings.

In recent times, what I have dubbed the "hermeneuticist" perspective has so come to dominate anthropology that it has effectively removed the topic from the social scientific radar screen. Hermeneuticists approach race, brain size, and IQ, as epiphenomena, mere social constructions (Rushton, 1997c). They argue that political, economic, and even linguistic forces are the real causal agents that have created the concepts of "race" and "IQ" and deemed them worthy of study. Rather than research race, hermeneuticists research those who do. The current popularity of the hermeneuticist position might best be demonstrated using some vivid examples.

### Deconstructing Race

"Race is a fiction, Racism is real" proclaimed the August 1998 placards on the Metro buses of Washington, D.C. The D.C. government is not alone in spending taxpayers money in the crusade against race. A 1995 campaign against racism by the British

Commission for Racial Equality featured a slick Madison Avenue-like poster of four brains. Three of the brains are the same size and are labeled "African," "Asian," and "European." The fourth brain, much smaller than the others, is labeled "Racist." Because there are, in fact, significant differences between the races in average brain size (see below), the poster campaign by the Commission for Racial Equality constitutes state-sponsored misinformation.

The government campaigns are based on policy statements made by professional bodies. A resolution denouncing racism at the 1938 meeting of the American Anthropological Association broke the mold to the idea that scientific societies should be apolitical (Degler, 1991, p. 203). Ideological resolutions began in earnest with the 1952 "Statement on Race" issued by 14 anthropologists and geneticists under the auspices of UNESCO (Comas, 1961). Since then, several endorsements and modifications to the 1952 Statement have appeared. In December 1994, for example, the American Anthropological Association (AAA) adopted a "Statement on 'Race' and Intelligence" which read in part:

The American Anthropological Association (AAA) is deeply concerned by recent public discussions which imply that intelligence is biologically determined by race. Repeatedly challenged by scientists, nevertheless these ideas continue to be advanced. Such discussions distract public and scholarly attention from and diminish support for the collective challenge to ensure equal opportunities for all people, regardless of ethnicity or phenotypic variation.

Earlier AAA resolutions against racism (1961, 1969, 1971, 1972) have spoken to this concern. The AAA further resolves:

WHEREAS all human beings are members of one species, *Homo sapiens*, and

WHEREAS differentiating species into biologically defined "races" has proven meaningless and unscientific as a way of explaining variation (whether in intelligence or other traits),

THEREFORE, the American Anthropological Association urges

the academy, our political leaders and our communities to affirm, without distraction by mistaken claims of racially determined intelligence, the common stake in assuring equal opportunity, in respecting diversity and in securing a harmonious quality of life for all people.

The American Association of Physical Anthropologists soon followed suit. Their 1996 "AAPA Statement on Biological Aspects of Race" was originally published in the *American Journal of Physical Anthropology* (which had earlier published the UNESCO Statement) and was reprinted in the *1998/99 Annual Edition of Physical Anthropology*. In fact, the AAPA did not deny the validity of race but, by carefully worded ambiguity, attempted to obscure its meaning out of existence. Point 11 of the AAPA Statement reads:

Although heredity influences the behavioral variability of individuals within a given population, it does not affect the ability of any such population to function in a given social setting. The genetic capacity for intellectual development is one of the biological traits of our species essential for its survival. This genetic capacity is known to differ among individuals. The peoples of the world today appear to possess equal capacity for assimilating any human culture. Racist political doctrines find no foundation in scientific knowledge concerning modern or past human populations.

In September 1997, the AAA drafted yet another statement in *Anthropology Newsletter* and invited commentaries. A final version of the AAA draft was adopted by the Executive Board on May 17, 1998 and published in the September 1998 (p. 3) issue of *Anthropology Newsletter*. It not only denied that there were gene-based behavioral differences among the races but bordered on Europhobia when it accused White scientists of "fabricating" the concept of race in order to justify slavery, colonialism, and murder. It made no mention of efforts to explain natural variation.

As they were constructing US society, leaders among European-Americans fabricated the cultural/behavioral characteristics associated with each race, linking superior traits with Europeans

and negative and inferior ones to blacks and Indians. Numerous arbitrary and fictitious beliefs about the different peoples were institutionalized and deeply embedded in American thought....

Ultimately race as an ideology about human differences was subsequently spread to other areas of the world....not limited to the colonial situation....During World War II, the Nazis under Adolf Hitler enjoined the expanded ideology of race and racial differences and took them to a logical end: the extermination of 11 million people of "inferior races" (e.g., Jews, Gypsies, Africans, homosexuals and so forth) and other unspeakable brutalities of the Holocaust....

At the end of the 20th century, we now understand that human cultural behavior is learned, conditioned into infants beginning at birth, and always subject to modification....

It is a basic tenet of anthropological knowledge that all human beings have the capacity to learn any cultural behavior....we conclude that present-day inequalities between so-called racial groups are not consequences of their biological inheritance but products of historical and contemporary social, economic, educational and political circumstances.

So now we know! Some discussion of the AAA Statement was hyped in the media. "No Biological Basis for Race, Scientists Say" proclaimed the *San Francisco Chronicle* (February 23, 1998). Science writer Charles Petit quoted the AAA as saying that "The concept of race is a social and cultural construction....Race simply cannot be tested or proven scientifically...It is clear that human populations are not unambiguous, clearly demarcated, biologically distinct groups. The concept of 'race' has no validity...in the human species." Petit went on to add supportive quotes from Jonathan Marks, a well known Berkeley anthropologist, Robert Sussman, an editor of the *American Anthropologist*, and Luigi Cavalli-Sforza, the Stanford University geneticist. He also cited Jefferson Fish, a psychologist at St. John's University in New York who challenged President Clinton's Initiative on Race because he believes the very concept of race is bogus. "This dialogue on race is driving me up the wall," said Fish. "What is race?" The reporter answered for him: "It is a biologically meaningless category."

Other scholarly associations and media pundits also weighed in, although with less extreme a position. "Scientists Dismiss Race as Key to Human Origins" declared *Guardian* writer David Beresford (July 8, 1998). This story, distributed widely by Scripps Howard News, reported on a "dual congress" held by the International Association for the Study of Human Paleontology and the International Association of Human Biologists at Sun City, South Africa. At the conference the question was raised whether the "Out of Africa" theory or the "Multi-Regional" theory of human origins had the most implications for current race differences. At the heart of this argument is whether the *Homo erectus* ancestor who left Africa 1.5 million years ago subsequently gave rise to *Homo sapiens* independently in several geographic regions (the Multi-Regional theory) or whether just one variety of *erectus*, in Africa, gave rise to modern *Homo sapiens*, who then went forth a mere 150,000 years ago to replace the remnants of *erectus* (the Out of Africa theory). Christopher Stringer of the British Museum and Sir Walter Bodmer of Oxford University were cited as part of the growing consensus in favor of the Out of Africa theory – and to argue this meant there had been too little time for the races to have genetically diverged very far.

In fact, of course, whether one adheres to the Multi-Regional or the Out of Africa theory (this author agrees with Out of Africa), the amount of racial variation in various traits (including brain size – see below) cannot be wished into non-existence. Like them or not, the observed racial differences are there for anyone who cares to observe them. No theoretical sleight of hand can make them disappear. The argument about too little time actually turns evolution upside down. As Sarich (1995, p. 86) points out, "it is the Out of Africa model, not that of regional continuity, which makes racial differences more functionally significant. It does so because the amount of time involved in the riation process is much smaller, while obviously, the degree of racial differentiation is the same – large. The shorter the period of time required to produce a given amount of morphological difference, the more selectively important the differences become."

Those objecting to the concept of race like to argue that taxonomic definitions are arbitrary and subjective. For example, race-critic Jared Diamond, in the 1994 issue of *Discover Magazine*, surveyed half a dozen geographically variable traits and was able to

form a number of very different pseudo-races depending on which traits he picked. Classifying people using anti-malarial genes, lactose tolerance, fingerprint patterns, or skin color resulted in the Swedes of Europe being placed in the same category as the Xhosa and Fulani of Africa, the Ainu of Japan, and the Italians of Europe.

Diamond's classifications, however, are nonsensical. They are far more arbitrary than the traditional classifications because the traits he singles out for classifying have little, if any, predictive value beyond the initial classification. Such schemes are not only confused, but dishonest, because they deliberately side-step the long accepted scientific meaning of race – a recognizable (or distinguishable) *geographic* population based on *common descent*.

### Race as a Biological Concept

Deconstructing the concept of race not only goes against the tendency of virtually every known culture to classify and build family histories according to some measure of common descent, it also ignores the work of biologists studying non-human species. Ever since 1758, when the Swedish naturalist Carolus Linnaeus created the classification system still used in biology today, most zoologists have recognized at least the four human subdivisions that Linnaeus categorized: Asians, American Indians, Europeans, and Africans. (Technically, some would group the first two Linnaean subdivisions together, thus yielding three major races, often termed, Mongoloids, Caucasoids, and Negroids.) Most researchers since Linnaeus have accepted these four and added the Australian Aborigines, Pacific Islanders, and some other numerically minor groups. Others have made finer subdivisions within each major group.

A race is what zoologists term a variety or subdivision of a species. Each race (or variety) is characterized by a more or less distinct combination of inherited morphological, behavioral, and physiological traits. In flowers, insects, and non-human mammals, zoologists consistently and routinely study the process of racial differentiation. Formation of a new race takes place when, over several generations, individuals in one group reproduce more frequently among themselves than they do with individuals in other groups. This process is most apparent when the individuals live in diverse geographic areas and therefore evolve unique, recognizable

adaptations (such as skin color) that are advantageous in their specific environments. But differentiation also occurs under less extreme circumstances. Zoologists and evolutionists refer to such differentiated populations as races. (Within biology, races are termed subspecies.) Zoologists have identified two or more races (subspecies) in most mammalian species.

Scientists do not believe that human beings are exempt from biological classification. In everyday life, as in evolutionary biology, a "Negroid" is someone whose ancestors were born in sub-Saharan Africa, and likewise a "Caucasoid" is someone whose ancestors originated in Europe or the Middle East and a "Mongoloid" is someone whose ancestors originated in east Asia. This definition fits with the temporal bounds offered by the out of Africa theory of human evolution mentioned at the beginning of the article. Thus, according to the estimates provided by Cavalli-Sforza et al (1994) since *Homo sapiens* first appeared in Africa about 200,000 years ago, branched off into the Middle East and Europe about 110,000 years ago, and into Eastern Asia 70,000 years after that, a Negroid is someone whose ancestors, between 4,000 and (to accommodate recent migrations) 20 generations ago, were born in sub-Saharan Africa. Similarly, a Caucasoid is someone whose ancestors were born in the Middle East or Europe, and *mutatis mutandis* for a Mongoloid.

On average, the Chinese, Koreans, and Japanese are more similar to each other and are different from Australians, Israelis and the Swedes, who in turn are similar to each other and are different from Nigerians, Kenyans, and Jamaicans. Of course, individuals vary greatly within each racial group. It is correct to point out that the variation within each race is extremely large, that there is disagreement as to exactly how many races there are, and that there is a blurring of category edges because of admixture. But it is an error when critics claim that classifications are arbitrary. Although some social concepts of race correlate poorly with biological relationships (Hispanics, for example, are not biologically an identifiable "race," but represent a variety of admixtures of diverse racial components), self-identification generally accords quite well with the physical evidence.

Also, just as some plant and animal sub-species represent either intermixed or historically intermediate forms, many human

populations are also mixed. Thus while clear distinctions identify the central tendency of the Mongoloid, Caucasoid, and Negroid people, many intermediate forms, representing genetic gradients, can be found. Interbreeding of diverse racial types, as a result of population mobility in today's world, is also affecting the human biological scene.

Yet despite all this, human racial variation is still marked by obvious differences in skeletal morphology, hair and facial features, as well by blood groups and DNA fingerprints. Forensic anthropologists regularly classify skeletons of decomposed bodies by race. For example, narrow nasal passages and a short distance between eye sockets identify a Caucasoid person, distinct cheekbones characterize a Mongoloid person, and nasal openings shaped like an upside down heart typify a Negroid person (Ubelaker & Scammel, 1992). In certain criminal investigations, the race of a perpetrator can be identified from blood, semen, and hair samples. To deny the predictive validity of race at this level is nonscientific and unrealistic.

### Some Historical Context

It is noteworthy that this Statement on Race is appearing in the *Mankind Quarterly* whose opening editorial in July 1960 (nearly 40 years ago) called for a new journal devoted to race research. That same editorial criticized the anthropology of its day for having abandoned the Darwinian evolutionary tradition. Appropriately enough, the very first article in *MQ* was by Sir Charles Darwin (1887-1962), grandson of the famous naturalist, on the subject of "World Population."

Mainstream anthropology immediately charged *MQ* with "racism." *Current Anthropology* opened its pages to Juan Comas (1961), who published a long article with the inflammatory title of "'Scientific' Racism Again?" This article attacked the *MQ* and its editors, denied the evidence of Black-White differences in brain size, defended the culture theory of race differences in intelligence and crime, and reprinted the 1952 UNESCO "Statement on the Nature of Race and Race Differences" (commonly known as the "Statement on Race"). *MQ* was also denounced in such journals as *Race*, *Man*, and *Science*. However, the editors of *MQ* stuck to their guns and fired back. For example, Henry E. Garrett (1960a, 1960b) challenged the 100% culture hypothesis of Black-White differences in intelligence,

set out the hereditarian perspective, and defended *MQ* against charges of racism.

Those 40-year-old debates over race differences clearly touched on deeply held values. Both sides often displayed an intemperate tone. Politics intruded then, just as it does today. But the debates of that time seem to me to have had more structure and substance than those of today. There appeared to be at least an illusion of possible scholarly resolution. Discussion in those days centered primarily on the causes of the gap in school achievement between Blacks and Whites in the U.S., and whether desegregation and school busing would diminish it. The protagonists were identified as "hereditarians" (those who believed in a partly genetic hypothesis for Black-White differences), and "environmentalists" (who attributed the differences to poverty, relative deprivation, poor schools, and racism). Today, unfortunately, the debate has been deconstructed.

Indeed, nothing in the history of the social sciences has been so persistently intrusive as the issue of the relative importance of genetic and environmental determinants of behavior, especially of Black-White differences (Degler, 1991). Ever since World War I, when widespread testing began, Blacks have averaged lower IQ scores than Whites, at several age levels, under a variety of conditions, and in Canada and the Caribbean as well as in the U.S. (see reviews by Shuey [1958, 1966], Osborne & McGurk [1982], Jensen [1998], and others). Despite an overlap of 10-30 percent, which means that many Blacks obtained scores above the White mean, the average differences persisted and were statistically significant.

The current instantiation of the controversy dates from the publication of Arthur R. Jensen's (1969) controversial monograph in the *Harvard Educational Review*. Jensen presented several propositions: (1) IQ tests measure a general-ability dimension of great social relevance; (2) individual differences on this dimension have a high heritability; (3) educational programs have proved generally ineffective in changing the relative status of individuals and groups on this dimension; (4) social mobility is linked to ability, so social-class differences in IQ probably have an appreciable genetic component; and (5) Black-White differences in IQ probably have a genetic component.

The publication of *The Bell Curve* (Herrnstein & Murray, 1994)

unleashed yet another torrent of debate. The book reported original analyses of 11,878 youths (3,022 of whom were Black) from the 12-year National Longitudinal Survey of Youth (NLSY). Most 17-year-olds with high scores on the Armed Forces Qualification Test (Black as well as White) went on to occupational success by their late 20s and early 30s whereas many of those with low scores went on to welfare dependency. The average IQ for African Americans was found to be lower than those for Latino, White, Asian, and Jewish Americans (85, 89, 103, 106, and 115, respectively, pp. 273-278).

Once more, the flashpoint of discussion was whether the Black-White difference in IQ was partly genetic in origin. It was the furor over *The Bell Curve* that had led the AAA to undertake its most recent round of policy statements. It also led the American Psychological Association (APA) to establish an 11 person Task Force to fill an "urgent need" for an authoritative report "about the meaning of intelligence test scores and the nature of intelligence" (Neisser et al. 1996). The Task Force accepted the substantial heritability found for IQ from studies of monozygotic twins who have been reared apart as well as from studies of other kinds of kinship (p. 85). But about race differences in IQ, they concluded: "There is certainly no [empirical] support for a genetic interpretation" (p. 97).

Having just written *Race, Evolution, and Behavior* (Rushton, 1995), describing three distinct racial profiles ranging over 60 anatomical and social variables including brain size, personality and temperament, sexual habits and fertility, and speed of maturation and longevity, I was struck by the amount of evidence sidestepped in the various "Statements" by the AAA, by the APA report, and by other critics. I responded in the February 1996 issue of *Current Anthropology*, in the January 1997 issue of the *American Psychologist*, and in a 1996 Internet posting. This is an update to the ongoing discussion.

### **Review of Current Race Differences**

Much has been learned about Black-White differences since the original debates in this journal. Indeed, the debate has been greatly extended to include Orientals, and data from around the world, not just the U.S. The debate has also been widened to include variables beyond IQ. In my 1995 book, I review the behavioral, morphological,

and physiological differences between the three major human races – Mongoloid, Caucasoid, and Negroid – and show that these statistical differences are constant across both historical time, national boundaries, and political and economic systems.

Because the very earliest debates in *MQ* were primarily about the nature of Black-White differences in IQ, I will focus on this issue here. Those early protagonists, like Henry E. Garrett (1960a, 1960b), turn out to have been correct about the heritable nature of Black-White differences. Some of this confirmatory work was in fact published in the *MQ*, the best known of which is probably Richard Lynn's (1991a, 1991b) review of the worldwide distribution of intelligence which was brought to wide attention by the publication of Herrnstein and Murray's (1994) *The Bell Curve*. I will also review the relationship between intelligence and brain size, the worldwide distribution of brain size, and finally the heritability of intelligence. Few of the race debunkers are willing to acknowledge any of these data, though they grow stronger every day. Readers seeking a more extensive summary can consult Herrnstein and Murray's (1994) *The Bell Curve*, Levin's (1997) *Why Race Matters*, Jensen's (1998) *The g Factor*, or my own (1995) *Race, Evolution, and Behavior*.

1. *The geographical distribution of intelligence.* As documented by these authors, one hundred years of research has established that East Asians and Europeans average higher IQs than do Africans. Various East Asian populations measured in North America and in Pacific Rim countries typically average IQs in the range of 101 to 111. Whites in North America typically average IQs between 100 and 105. African populations living south of the Sahara, in North America, in the Caribbean, and in Britain typically have mean IQs from 70 to 90 (see Lynn, 1997, for a recent review).

Parallel differences are found on relatively culture-free tests such as speed of decision making. Probably the simplest culture free mental tests are reaction time tests. In the "odd-man-out" test, Nine to twelve year-old children look at a set of lights. They have to decide which one goes on, and then press the button closest to that light. The test is so easy that all children can do it in less than one second. Even here, children with higher IQ scores are faster than lower IQ children. Around the world, Oriental children are faster than White

children who in turn are faster than Black children (Jensen, 1998).

2. *The relationship between intelligence and brain size.*

Remarkable discoveries have been made during the 1990's Decade of the Brain using magnetic resonance imaging (MRI). These MRI studies, which construct three-dimensional models of the brain *in vivo*, show a correlation of about 0.40 between brain size and IQ, as replicable a set of results as can be found in the social and behavioral sciences. The first MRI/IQ studies were published in the late 1980s and early 1990s in leading, refereed, mainstream journals like *Intelligence* (Willerman et al., 1991) and the *American Journal of Psychiatry* (Andreasen et al., 1993). My article "Brain Size and Cognitive Ability" in the 1996 issue of the journal *Psychonomic Bulletin and Review* (Rushton & Ankney, 1996) surveyed all the published literature on this topic. The MRI brain size/IQ correlation of .44 is as high as the correlation between social class at birth and adult IQ.

3. *The parallel geographical distribution of brain size.*

Racial differences in brain size have been established recently using wet brain weight at autopsy, volume of empty skulls using filler, volume estimated from head sizes, and MRI. Using brain mass at autopsy, Ho et al. (1980) reported a 100 gram difference in brain weight between Whites and Blacks in the U.S. Using endocranial volume Beals, Smith and Dodd (1984, p. 307, Table 5) analyzed about 20,000 skulls from around the world. East Asians and Europeans averaged 1,389 cm<sup>3</sup> while Africans averaged 1,268 cm<sup>3</sup>. Using external head measures to calculate cranial capacities, Rushton (1992) analyzed a sample of thousands of U.S. Army personnel. Even after correcting for body size, Asian and European Americans averaged 1,398 cm<sup>3</sup>, while African Americans averaged 1,359 cm<sup>3</sup>. Rushton (1994) reported a study of tens of thousands of men and women collected by the International Labour Office in Geneva, Switzerland. Head sizes (corrected for body size) were larger for East Asians and Europeans than for Blacks. Moreover, a recent MRI study found that people of African and Caribbean background averaged a smaller brain volume than did those of European background (Harvey, Persaud, Ron, Baker & Murray, 1994).

These racial differences in brain size show up early in life. In an analysis of data from the U.S. National Collaborative Perinatal Project on 35,000 children, Rushton (1997a) found that Asian and White children averaged a larger head perimeter than did Black children, even though, at age seven, Black children had the largest body size. Further, head perimeter at seven years correlates with IQ at age seven in all three racial groups.

*4. The heritability of intelligence.* The heritability of intelligence is now well established from numerous adoption, twin, and family studies. Particularly noteworthy are the heritabilities of around 80% found in adult twins reared apart (Bouchard, Lykken, McGue, Segal & Tellegen, 1990). Moderate to substantial genetic influence on IQ has also been found in studies of non-Whites, including African Americans and Japanese. Even the most critical of meta-analyses find IQ about 50% heritable (Devlin, Daniels & Roeder, 1997).

Transracial adoption studies suggest a genetic contribution to the between-group differences. Korean and Vietnamese children adopted into White American and Belgian families show that, although as babies many came from poor backgrounds and were malnourished, when they grew up they excelled in school. The IQs of the adopted Oriental children were 10 or more points higher than the national average for the country they grew up in (Frydman & Lynn, 1989). By contrast, Weinberg, Scarr and Waldman (1992) found that at age 17, Black and Mixed-Race children adopted into White middle-class families performed at a lower level than the White siblings with whom they had been raised.

*5. Violent crime, AIDS, and sexuality.* INTERPOL data from the 1980s and 1990s shows the same racial pattern in violent crime that occurs within the U.S. also occurs internationally. Asian and European countries have an average rate of homicide, rape, and serious assault that is less than one quarter that of African and Caribbean countries.

One neurohormonal contributor to crime is testosterone. Studies show that Black college students and military veterans have 3% to 19% more testosterone than their White counterparts. Sex hormones are circulated throughout the body and are known to

activate many brain-behavior systems involving aggression and reproduction. For example, around the world the rate of two-egg twinning (caused by a double ovulation), is twice as high in Africans as in Asian and Europeans (16, 8, and 4 per 1,000, respectively). The differences in multiple birthing are known to be heritable through the race of the mother regardless of the race of the father, as found in European/African matings in Brazil.

Testosterone may also play a part in sexual behavior. A similar international racial pattern is found for measures of sexual activity and frequencies of sexually transmitted diseases such as AIDS. The 1997 U.S. syphilis rate for Blacks was 24 times the rate it was for Asians and Whites. Racial differences in AIDS/HIV are increasingly well known. Currently 8 out of every 100 Africans are infected with the AIDS virus. In South Africa, the estimates are that about 10 % of the adult population is living with HIV. In some areas of Africa the AIDS rate reaches 70%. Less well known is that HIV infection rates are also high in the Black Caribbean, about 2%. Thirty-three percent of the AIDS cases are women. This high figure of women means the transmission is mainly from heterosexual intercourse. The high rate of HIV in the 2,000 mile band of Caribbean countries extends from Bermuda to Guyana, and it seems to be the highest in Haiti, with a rate over 5%.

Black Americans also have high HIV rates, similar to Blacks living in the Caribbean and Africa. Three percent of Black men and 1% of Black women in the U.S. are living with HIV. The rate for White and Asian Americans is less than 0.1%. Of course AIDS is a serious public health problem for all racial groups, but it is especially so for Africans and people of African ancestry.

### **Conclusion**

The ongoing campaign to deconstruct race as a biological concept needs to be countered by a careful examination of what we do and do not know about human variation. Academicians, journalists, and editorialists have an obligation to review the evidence cited here before offering any further comment on this controversial topic. Moreover, those in academia and the media need to be aware that major efforts are being made throughout Europe and Canada to stifle free discussion of race by tightening so-called "hate-laws" and,

in the U.S.A., to restrict the way research can be conducted (and funded). Implementation of such policies threatens the general principles of free speech, open inquiry, and academic freedom and tenure (Pearson, 1997).

Publication of Herrnstein and Murray's (1994) *The Bell Curve* brought widespread public attention to the research on race that has been accumulating over the last 30 years in technical and specialist journals that demonstrably challenges each and every article of the dogma of biological egalitarianism. Startling, and alarming to many, is the conclusion that follows from these data that if all people were treated the same, most average race differences would not disappear. With egalitarianism under siege, there has been a major effort to get the "race genie" back in the bottle, to squeeze the previously tabooed toothpaste back into the tube, to suppress or deny the latest scientific evidence on race, genetics, and behavior.

Regardless of the extent to which the media promote "politically correct," but scientifically wrong, resolutions from professional societies such as the American Anthropological Association, facts remain facts and require appropriate scientific, not political or ideological, explanation.

None of this should be construed as meaning that environmental factors play no part in individual and group differences. But with each passing year and each new study, the evidence for the genetic contribution to these differences becomes more firmly established than ever.

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