

Rushton, J. P. (1995). Construct validity, censorship, and the genetics of race. *American Psychologist*, *50*, 40-41.

Construct Validity, Censorship, and the Genetics of Race

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In their critique of my work on the biological differences among human races, Yee, Fairchild, Weizmann, and Wyatt (November 1993) hold that the usual principles of classification and construct validity in science—based on a network of predictive relationships, including item, subject, and sample aggregations—do not apply because anthropologists and geneticists have not defined the term “race” to their own satisfaction. It follows, they imply, that my work is at best unreliable and at worst unethical, and they call for the American Psychological Association to institute guidelines for editors who have to deal with “Rushton-type submissions” (p. 1134).

A race, it should be clear, is what zoologists term a geographic variety or subdivision of a species characterized by a more or less distinct combination of traits (morphological, behavioral, physiological) that are heritable. Zoologists have identified two or more races in many mammalian species. In humans, the three major races of Mongoloid, Caucasoid, and Negroid can be distinguished on the basis of obvious differences in skeletal morphology, hair and facial features, and molecular genetic information. Forensic anthropologists regularly classify the skeletons of decomposed victims by race.

For example, narrow nasal passages and a short distance between eye sockets mark a Caucasoid, distinct cheekbones identify a Mongoloid, and nasal openings shaped like an upside down heart typify a Negroid (Ubelaker & Scammel, 1992). The race of a perpetrator is increasingly identifiable from blood, semen, and hair samples. To deny the predictive validity of race at this level is absurd, as was Yee et al.'s (1993) suggestion that "obviousness" (p. 1134) in geographic variation in morphology is not indicative of racial variation.

Biologists use molecular information to work out genetic distances among populations and even to relate these to the times that languages split (Cavalli-Sforza, Menozzi, & Piazza, 1993). On the assumption that mutation rates are constant across time and locale, current estimates are that modern humans evolved in Africa sometime after 200,000 years ago, with an African/non-African split occurring approximately 110,000 years ago and a Mongoloid/Caucasoid split approximately 41,000 years ago. Evolutionary selection pressures are far different in the hot African savanna, where Negroids evolved, from those in the cold Arctic environment, where Mongoloids evolved. Hence, it was predictable that these geographic races would show genetic differences in numerous traits.

The evolutionary sequence explains the how and why of the clustering found on race differences around the world. As I clearly show in my book *Race, Evolution and Behavior: A Life History Perspective* (1995), on more than 60 variables, Mongoloids and Negroids are most dissimilar to each other, with Caucasoids intermediate, albeit with great variability within each broad grouping. This racial matrix includes measures of speed of physical maturation, personality, family stability, law-abidingness, reproductive behavior, sex hormones, twinning rate, brain size, intelligence, and social organization.

I propose that gene-culture coevolution explains these differences better than do 100% environmental or 100% genetic alternatives. No known environmental variable can explain why Mongoloids average larger cranial capacities but produce fewer gametes than do Negroids. Only evolutionary theories based on life-history analyses predict such a trade-off (Rushton, 1991, 1995).

In order to increase scientific understanding of human diversity, it is necessary to rise above both "racist" and "antiracist" ideology and to broaden the focus beyond that of Yee et al. (1993). Their article was limited to the United States, except for passing mention of European imperialism, South

Africa, and World War II genocide. But most Black and Asian people do not live in European-run nations, and the Caucasoid race includes Arabs and East Indians.

With data from around the world, it has been repeatedly found that the races differ not only in cognitive ability (Lynn, 1991) but also in brain size, even after corrections are made for body size. In a stratified random sample of 6,325 U.S. Army personnel measured in 1988 for the fitting of helmets, I found that after adjusting for the effects of body size, sex, and military rank, self-defined Asians, Whites, and Blacks averaged cranial capacities, respectively, of 1,416, 1,380, and 1,359 cubic centimeters (Rushton, 1992). With data from tens of thousands of people from around the world, collated by the International Labour Office in Geneva, Switzerland, in 1990, I found that after adjusting for effects of body size and sex, samples from the Pacific Rim, from Europe, and from Africa averaged cranial capacities, respectively, of 1,308, 1,297, and 1,241 cubic centimeters (Rushton, 1994). Converging modern (post-1980) evidence for this pattern comes from independent methodologies based on wet brain weight from autopsies and endocranial volume from skulls (Rushton, 1995). Even head perimeter measured at birth reveals race differences; and in 19,000 Black and 17,000 White children, head perimeter at birth correlated with IQ at age seven from 0.10 to 0.20 (Broman, Nichols, Shaughnessy, & Kennedy, 1987).

The racial differences, however, should not be overgeneralized, as some of them are quite small. In the U.S. Army data, for example, only a 4% difference separated Asian Americans from African Americans, and Black officers averaged a larger cranial capacity than did White enlisted personnel (Rushton, 1992). It is problematic to generalize from a group average to an individual. Yee et al. (1993) seriously misrepresented my position when they stated that I "interpreted this variation as error" (p. 1134). Rather, it represents natural variation, likely genetically based, that is common to all studied animal populations.

Yee et al.'s (1993) call for official regulation of the scientific concept of race, if taken seriously, constitutes a threat to free inquiry. For too many, work on the genetics of intelligence, and racial differences therein, is a challenge to the enlightenment assumption that knowledge is always better than ignorance. But scholars have accepted that the earth is not the center of the universe and that man's closest living relatives are the chimpanzees. We can yet affirm our common heritage by accepting our differences.

REFERENCES

- Broman, S. H., Nichols, P. L., Shaughnessy, P., & Kennedy, W. (1987). *Retardation in young children*. Hillsdale, NJ: Erlbaum.
- Cavalli-Sforza, L. L., Menozzi, P., & Piazza, A. (1993). Demic expansions and human evolution. *Science*, 259, 639-646.
- Lynn, R. (1991). Race differences in intelligence: A global perspective. *Mankind Quarterly*, 31, 255-296.
- Rushton, J. P. (1991). Do r - K strategies underlie human race differences? *Canadian Psychology*, 32, 29-42.
- Rushton, J. P. (1992). Cranial capacity related to sex, rank and race in a stratified random sample of 6,325 U.S. military personnel. *Intelligence*, 16, 401-413.
- Rushton, J. P. (1994). Sex and race differences in cranial capacity from International Labour Office data. *Intelligence*, 19, 281-294.
- Rushton, J. P. (1995). *Race, evolution and behavior: A life history perspective*. New Brunswick, NJ: Transaction.
- Ubelaker, D., & Scammel, H. (1992). *Bones: A forensic detective's casebook*. New York: Harper Collins.
- Yee, A. H., Fairchild, H. H., Weizmann, F., & Wyatt, G. E. (1993). Addressing psychology's problems with race. *American Psychologist*, 48, 1132-1140.