

Comment

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Racial Differences: A Reply to Zuckerman

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Applying evolutionary or genetic hypotheses to race differences in behavior in academic psychology is akin to questioning the immaculate conception in a Benedictine monastery. Zuckerman's (December 1990) critique of my work, bordering on the ad hominem (implying "misrepresentation" and "racist ideology"), shows that little improvement has been made to the zeitgeist in the years since Jensen's (1969) classic monograph.

I have concluded that on more than 60 variables, including brain size, intelligence, speed of maturation, personality, reproductive behavior, and social organization, measured in Africa, Asia, and Europe, as well as in North America, a distinct pattern emerges with Mongoloids and Negroids at opposite ends of the spectrum and Caucasoids occupying an intermediate position, with a great deal of intraracial variability within each broad grouping (Rushton, 1988, 1991). For example, regardless from which country the samples are taken, the rate of dizygotic twinning per 1,000 births is less than 4 among Mongoloids, 8 among Caucasoids, and 16 or greater among Negroids. Moreover, populations that produce the fewest gametes average the largest brains, whether measured by brain weight at autopsy, by endocranial volume, or by external head measurements (Rushton, 1991).

No known environmental variable is capable of producing the inverse relation-

ship between gamete production and brain size, or of causing so many diverse variables to correlate in so comprehensive a fashion. There is, however, a genetic one: evolution. The racial ordering may correspond to what is familiar to evolutionary biologists as the *r-K* scale of reproductive strategy. At one end of this scale are *r strategies*, which emphasize high reproductive rates, and, on the other, *K strategies*, which emphasize high levels of parental investment, the bioenergetic tradeoff between which has been postulated to underlie cross-species differences in numerous life-history characteristics (Wilson, 1975). I suggested that Mongoloids are more *K* selected than are Caucasoids, who in turn are more *K* selected than are Negroids, with environmental influences accounting for about 50% of the variance on most traits.

In his critique, Zuckerman (1990) tactically maneuvered around the main thrust of *r-K* theory and its supporting data, and deconstructed phenomena into unrelated particulars. Zuckerman's assertion that racial taxonomies show poor construct validity and that little can be proved about racial origins is contradicted by Stringer's (1990) review and references. Evidence (a) from molecular biology including DNA sequencing, (b) from the fossil record, and (c) from the mapping of linguistics on genetic trees, suggests that archaic versions of the three races emerged from the ancestral hominid line, out of Africa, in the following order: Negroids about 200,000 years ago, Caucasoids about 110,000 years ago, and Mongoloids about 41,000 years ago. Such an ordering fits with and helps explain the way in which the variables I studied are found to cluster: Negroids, the earliest to emerge, were least *K* selected; Caucasoids, emerging later, were next least *K* selected; and Mongoloids, emerging latest, were the most *K* selected. Contrary to Zuckerman's opinion, *K* selection is more likely to occur in predictable arctic conditions such as in northeast Asia where Mongoloids evolved, than in less predictable tropical conditions, such as in Africa, where Negroids evolved (Zammutto & Millar, 1985).

Concerning personality, Zuckerman (1990) chastised me for ignoring the Psychoticism (P) scale in my (Rushton, 1988) review of the international data, despite the fact that this scale predicts creativity as well as aggression, and its predictions about racial differences are ambiguous. Zuckerman failed to mention the extensive and aggregated international data that I did review. For example, a study carried out with 825 four- to six-year-old children in French Canadian preschools found that teachers consistently reported better social adjustment and less hostility-aggression from Oriental children than from Caucasian children, who in turn showed better social adjustment and less hostility-aggression than did Black children (Tremblay & Baillargeon, 1984). With adults, cross-cultural data showed that 8 Oriental samples totaling 4,044 individuals were less sociable and more anxious, on average, than 30 Caucasoid samples totaling 19,807 individuals, who were less sociable and more anxious, on average, than 4 African samples totaling 1,906 individuals (Rushton, 1985).

Racial differences in crime rates and sexual behavior are typically attributed to the consequences of living in inner cities. Again, Zuckerman (1990), and other critics, ignored the international data. I recently examined the crime statistics reported to Interpol, the International Criminal Police Organization (Rushton, 1990b). I grouped nearly 100 countries by primary racial composition and found, for both 1983-1984 and 1985-1986, that Middle Eastern and European countries reported significantly more violent crime than did countries in the Pacific, but significantly less than did African and Caribbean countries. For example, in 1983-1984, the number of reported rapes per 100,000 population was less for Mongoloid countries ($M = 3.7$, $SD = 2.6$, $N = 9$), than for Caucasoid countries ($M = 6.3$, $SD = 6.5$, $N = 40$), which was less than for Negroid countries ($M = 12.8$, $SD = 15.3$, $N = 22$). A parallel ordering is to be observed with sexual behavior and sexually transmitted diseases, including acquired immunodeficiency syndrome

(AIDS), both in and among countries. On a per capita basis, for example, Black Caribbeans are now known to have as big an AIDS problem as do Africans and Black Americans (Rushton, 1990a).

Finally, a word about Zuckerman's (1990) objection to certain viewpoints being presented on television and to his wanton splicing of political with scholarly criticism (at least 10 references to "racism" in the last two pages, along with a juxtaposition of genetics research with Nazi experimentation). I wonder if someone would be favorably reviewed if they questioned "environmental determinists" for making TV appearances and associated them with positions leading to Stalin's gulags. Exploiting the victims of World War II for current political purpose is quite inappropriate. Unfortunately, I have learned about selective intolerance in the academy first hand since the presentation of my views to the American Association for the Advancement of Science (Rushton, 1989; see Gross, 1990).

A truth must be faced: Across time, country, and circumstance, African-descended peoples show similarities that, on average, differentiate them from Caucasoids who, in turn, show characteristics differentiating them, on average, from Orientals. It may be worth recalling the words of the deeply pious Blaise Pascal when faced with the Copernican hypothesis: "If the earth moves, a decree from Rome cannot stop it." Readers may fervently wish that genetically based race differences in behavior did not exist, but the data show otherwise.

REFERENCES

- Gross, B. (1990). The case of Philippe Rushton. *Academic Questions*, 3(4), 35-46.
- Jensen, A. R. (1969). How much can we boost IQ and scholastic achievement? *Harvard Educational Review*, 39, 1-123.
- Rushton, J. P. (1985). Differential K theory and race differences in E and N. *Personality and Individual Differences*, 6, 769-770.
- Rushton, J. P. (1988). Race differences in behaviour: A review and evolutionary analysis. *Personality and Individual Differences*, 9, 1009-1024.
- Rushton, J. P. (1989, January). *Evolutionary biology and heritable traits*. Paper presented at the Annual Meeting of the American Association for the Advancement of Science, San Francisco.
- Rushton, J. P. (1990a). AIDS, race, and evolution. *Social Science and Medicine*, 28, 905-909.
- Rushton, J. P. (1990b). Race and crime. *Canadian Journal of Criminology*, 32, 315-334.
- Rushton, J. P. (1991). Do r-K strategies underlie human race differences? *Canadian Psychology*, 32, 29-42.
- Stringer, C. B. (1990). The emergence of modern humans. *Scientific American*, 263(6), 98-104.

Tremblay, R. E., & Baillargeon, L. (1984). Les difficultés de comportement d'enfants immigrants dans les classes d'accueil, au préscolaire [Behavioral difficulties of immigrant children in preschool classes]. *Canadian Journal of Education*, 9, 154-170.

Wilson, E. O. (1975). *Sociobiology: The new synthesis*. Cambridge, MA: Cambridge University Press.

Zammuto, R. M., & Millar, J. S. (1985). Environmental predictability, variability, and *Spermophilus columbianus* life history over an elevational gradient. *Ecology*, 66, 1784-1794.

Zuckerman, M. (1990). Some dubious premises in research and theory on racial differences: Scientific, social, and ethical issues. *American Psychologist*, 45, 1297-1303.

Unanswered Questions about Racism and Scientific Purpose

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Zuckerman (December 1990) argued that the concept of *race* is too vague to be used in scientific research and that "Generalizations about innate intelligence . . . of large and genetically diverse segments of the species are open to criticism on the grounds that they serve no scientific purpose" (p. 1301). Is it unreasonable to note that affirmative action programs do make racial and ethnic distinctions and consequently scientific studies of group differences are justified because such programs assume implicitly or explicitly that intelligence and other aptitudes are equally distributed among all breeding populations? If a particular ethnic or racial group is underrepresented in certain prestigious positions, such as university professors, it therefore follows from an affirmative action commitment that certain "racist" policies or attitudes are responsible for the social inequality.

Can it also not be argued that Zuckerman's (1990) accusation that those who investigate racial differences, defined in terms of certain genetically determined attributes (e.g., morphological, serological), serve the cause of *racism* is both unfair and misleading? As psychologists, should we not try to distinguish between different meanings of the pejorative term *racism* instead of passively accepting one particular dictionary definition? Should we not demarcate racist attitudes that advocate differential treatment of members of different racial groups, such as the school segregation of Blacks, from those "racist" interests that encourage research in racial or ethnic differences either in disease (e.g., sickle-cell anemia, Tay-Sachs), or academic and athletic aptitude?

Are not genetically rooted differences in behavior possible considering the evolutionary pressures that have been exerted on different breeding populations? Can attempts to solve or ameliorate the social conflicts among different racial and ethnic groups profit from empirical evidence, or is such strife better dealt with by the political power of competing ideologies? Are *racial differences* and *racial superiority* equivalent terms, or is one factual and the other a value judgment? Is it absurd to suggest that one can decouple facts from values and therefore, if genetic differences were found in academic or athletic aptitudes, that such findings would have no direct implications for social policy (Hunter & Schmidt, 1976; Kendler, 1981)? Would not a political democracy be free to decide in such cases which social policy of job allotments be adopted—one based on individual merit, on racial or ethnic membership, or some combination of both? Can a political democracy cope more effectively with clear-cut policy questions than with hidden ideological agendas?

REFERENCES

- Hunter, J. E., & Schmidt, F. L. (1976). Critical analysis of the statistical and ethical implications of various definitions of *test bias*. *Psychological Bulletin*, 83, 1053-1071.
- Kendler, H. H. (1981). *Psychology: A science in conflict*. New York: Oxford University Press.
- Zuckerman, M. (1990). Some dubious premises in research and theory on racial differences: Scientific, social, and ethical issues. *American Psychologist*, 45, 1297-1303.

Truth and Consequences: Responses to Rushton and Kendler

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As in previous responses to critiques of his work, Rushton (1991, this issue) restates his "truth," ignoring or sidestepping the major criticisms and adding new "data" to clinch his case. Many of the critiques of Rushton's theory and "data" by psychologists, anthropologists, and ecologists have been published since my article (Zuckerman, December 1990) was written. Readers should consult these as well as Rushton's responses to them. I will limit my response here to the points made in Rushton's comment.

"Populations that produce the fewest gametes average the largest brains" (Rushton, 1991, p. 983). This correlational statement is based on an ordering of three populations (races) on three variables: dizygotic twinning, fertility (birth rates), and