deploring and trying to hinder. I wish that someone would come up with more potent ideas to address the public media problem, while still preserving academic freedom of topic, absence of censorship, and sensitivity to the harm that can be furthered by our statements about our work as well as interpretations of it.

## The Study of Race Differences: A Response to Commentaries

by: J. Philippe Rushton, Department of Psychology, University of Western Ontario, London, Ontario, N6A 5C2, Canada.

As a reading of the commentaries makes clear, cherished values conflict in the study of racial and ethnic differences. All of us desire a humane and decent world in which we and our children's children can live in harmony with people of different backgrounds. All of us also desire to see increases in scientific knowledge. All will differ somewhat, of course, in the weightings assigned to these values in particular instances of perceived incompatibility. More problematic, people will also differ in what they consider to be a just society and a scientific advance. It is even interesting to conjecture on the ethological influences that mold such differences (e.g., see Tellegen et al., 1988). My view, obviously, is that the study of racial group differences is important in its own right; we need to know where the differences came from and why they remain. The study of race differences may even shed light on important evolutionary processes.

First, the behavioral and morphological data, in which Caucasoids consistently average between Negroids and Mongoloids, can be used to help decide between alternative reconstructions of human evolution. Current thinking among physical anthropologists who use molecular biology (blood group, serum protein, mtDNA, and nuclear DNA) to buttress the paleontological data, involves a recent single-origin model for the emergence of modern humans instead of multiregionalorigin models (Stringer & Andrews, 1988; Simons, 1989). An African beginning is envisaged, perhaps even as recently as 140,000 to 290,000 years ago with an African-non African split occurring perhaps only 110,000 years ago, then a European-Asian split about 41,000 years ago. Thus the sequence in which the races emerged in earth history parallels the phased linearity of the suite of r/K characters including brain size and intelligence test scores (Rushton, 1988). This parallel is not readily predictable from the multiregional origin models based on long periods of separation, in which no consistent pattern of character appearance is expected.

Then, there is the much neglected but intriguing question of whether there is a directional or progressive trend toward greater complexity and intelligence over evolutionary time. Bonnder (1980) has shown that the later the emergence of an animal group in earth history, the larger is its brain size, and the greater is its culture. A similar trend of increasing brain size over geological time occurred with the dinosaurs during the 150 million years that they dominated the earth (Russell, 1989). It is well established that the hominid fossils show a three-fold increase in relative brain size over the last 3 million years (Jerison, 1973). And, with anatomically modern humans, it is the most recently emerged Mongoloid populations which have the largest brains and the highest IQ scores.

Should such issues as "progress" be raised in the context of human racial differences? Might they not be misrepresented and

have negative consequences? Should not a higher criterion, therefore, be placed on the expression of such views? Hans Eysenck answered these questions at the Edinburgh Meeting: (a) it is impossible to predict the consequences of advances in scientific knowledge; (b) social policies based on ignorance and incorrect theorizing are likely to be counter-productive; and (c) the use of double standards and, in effect, selective censorship is abhorrent and must be avoided. Thus we must have faith that the more open and fuller the research dialogue, the quicker will be our gains in understanding. Only in this way can the mutual respect that Eibl-Eibesfeldt writes about come into being and the technical issues raised by some of the commentators be properly addressed.

One misperception among some commentators concerns the universality of the findings. Some apparently thought the data are based primarily on negroid-Caucasoid differences in the U.K. and U.S.A. where they could be attributed to "oppression" and "imperialism". However, my research broadened the data base on race by (a) including Mongoloid samples (one-third of the world's population), (b) including other Negroid samples (most black people live in post-colonial Africa), and (c) considering many multifaceted life-history variables including brain size, maturation rate, longevity, personality, rate of twinning, sexual behaviour, and social organization. I concluded that despite much overlap the average racial group differences are to be found worldwide, in Africa and Asia, as well as in Europe and north America. Such a network of evidence allows more chance of finding valid theories than do single items. The central question thus remains: Why do Caucasian populations average so consistently between Mongoloid and Negroid populations on so many variables?

Finally it is important to emphasize that considerable variability exists within each major group, as well as within numerous subdivisions. Thus there are important individual differences to be considered over and above the average tendencies that I believe exist. Racism is the failure to acknowledge such within-group variation and to treat (usually mistreat) people in a category as though they were all the same and to deny them their human rights. Feierman is the strongest spokesperson for the belief that this is what is occurring, but it is not.

From an evolutionary point of view it is to be expected that populations will differ, genetically, in the mechanisms underlying their behaviour. Adopting such an outlook does not disconfirm the democratic ideal. As E.O. Wilson (1978) put it: "We are not compelled to believe in biological uniformity to affirm human freedom and dignity" (p. 52). He went on to quote Bressler (1968) that "An ideology that tacitly appeals to biological equality as a condition for human emancipation corrupts the idea of freedom. Moreover, it encourages decent men to tremble at the prospect of 'inconvenient' findings that may emerge in future scientific research.

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## **CURRENT LITERATURE**

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