

Commentary

RACE DIFFERENCES: A REPLY TO MEALEY

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Can environmental contingencies explain human race differences "without necessitating any underlying genetic variability"? Mealey (1990) suggests they can. My data imply otherwise.

I have examined published data, from Africa and Asia as well as from Europe and North America, on some 60 variables for each of three vast racial groups: Negroids, Caucasoids, and Mongoloids. On all traits, including brain size, intelligence, speed of maturation, temperament and personality, reproductive effort, and social organization, the Caucasoid average falls between those of Mongoloids and Negroids (Rushton, 1988, 1991). For example, regardless of the country from which 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). There is no known environmental factor capable of producing this inverse relationship 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 at the other, " K -strategies," which emphasize high levels of parental investment; the bioenergetic tradeoff between these has been postulated to underlie cross-species differences in numerous life history characteristics (Wilson, 1975). I suggested that Mongoloids are more K -selected

than Caucasoids, who in turn are more K -selected than Negroids, with environmental influences accounting for about 50% of the variance on most traits.

I also mapped the r - K scale of reproductive strategies onto human evolution using studies of genetic distancing drawn from molecular biology, including the analysis of DNA sequencing. I suggested that groups that are more K -selected in their reproduction strategy emerged later in the evolutionary process than groups that are less K -selected. Archaic versions of the three races are envisaged as emerging from the ancestral hominid line in the following order: Negroids about 200,000 years ago, Caucasoids about 110,000 years ago, and Mongoloids about 41,000 years ago (Stringer & Andrews, 1988). 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.

Focusing on a network of international evidence allows a greater chance of finding powerful theories than does examining any individual dimension in one particular country. A mixed evolutionary/environmental model such as the one I have proposed fits the data better than any currently available purely genetic or purely environmental alternative.

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