## Mongoloids, Caucasoids and Negroids in Evolutionary Perspective: A Commentary on Lynn

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Lynn has provided extensive scholarly documentation that in both general IQ and visuospatial abilities, Mongoloids score higher than Caucasoids. Moreover, he judiciously theorizes about the evolutionary and neurological origins of this superiority as well as reviewing other correlates including sex hormones and developmental delay. In a recent overview of mathematics education, Steen (1987) provided additional data that supports Lynn's thesis, showing that within the United States, the proportion of Oriental-American students who achieve high mathematics scores (above 650) on the Scholastic Aptitude Test is twice the national average, while the proportion of Black students is less than one-fourth the national average. Here I review multifarious other racial differences that accord with an evolutionary ordering of Mongoloids > Caucasoids > Negroids, and outline a theory of r/K reproductive strategies which might account for them.

The pattern noted by Lynn, in which Caucasoids fall between Mongoloids and Negroids, also occurs on estimates made of brain size, personality and temperament, rate of maturation, sexual restraint, and social organization (Rushton, 1985a, in press; Rushton and Bogaert, 1987). With respect to brain size, for example, Coon (1982) calculated cranial capacity from observations recorded by Howells (1973) of 2,000 skulls from 17 populations gathered on a tour of the world's museums. I averaged these figures and found: Mongoloids, 1401cc; Caucasoids, 1381cc; and Negroids, 1321cc (Rushton, in press). Other data show similar results. Thus, in a widely cited highly critical review, Gould (1978) reanalyzed 19th-century data on skull size purportedly finding evidence of "unconscious

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bias" and "rounding errors." Nonetheless, Gould's own "corrected" estimates of these data show the rank ordering to be Mongoloids > Caucasoids > Negroids with cranial capacity in cubic inches = 85.5, 84.5, and 83, respectively. The same relationships are found in brain weight measured at autopsy in which I calculated average estimates of 1351gms, 1336gms, and 1286gms, respectively. These differences would be larger if adjustments were made for the brain-body allometric regression because Mongoloids are typically smaller in body size than Caucasoids. Also, there is evidence that in Caucasoid samples brain weight begins to decrease around age 25, whereas in Mongoloid samples the decrease doesn't begin until age 35 (Ho, Roesmann, Straumfjord and Monroe, 1980).

The data on "sexual restraint" shows a similar rank ordering on numerous indices including gamete production (dizygotic birthing frequency per thousand: Mongoloids < 4; Caucasoids = 8; Negroids > 16), intercourse frequencies (premarital, marital, extramarital), precocity (age at first intercourse, age at first pregnancy, number of pregnancies), primary sexual characteristics (size of penis, vagina, testes, ovaries), secondary sexual characteristics (salient voice, muscularity, buttocks, breasts), and biologic control of behavior (periodicity of sexual response, predictability of life history from onset of puberty), as well as with androgen levels, sexual attitudes, and sexually transmitted diseases (Rushton and Bogaert, 1987).

Similar findings occur with temperament and personality. Across ages (24-hour-old infants, children, high school students, university students, and adults), across traits (activity level, aggressiveness, cautiousness, dominance, excitability, impulsiveness, and sociability), and across methods (archival statistics, naturalistic observation, ratings and self-reports), much data support the hypothesis that, in terms of behavioral restraint, Mongoloids > Caucasoids > Negroids (Freedman, 1979; Vernon, 1982). For example, Rushton (1985b) indexed behavioral restraint by low extraversion (sociability) and high neuroticism (anxiety) scores from the Eysenck Personality Questionnaire and, aggregating data collected from 25 countries, found that eight Mongoloid samples (N = 4,044) were less sociable and more anxious than 38 Caucasoid samples (N = 19,807), who were less sociable and more anxious than four African samples (N = 1,906). Moreover, the same pattern of racial differences is observed with maturation rate (age to walk alone, age of puberty, age of death) and social organization (marital stability, mental health, law abidingness).

That across populations brain size negatively correlates with gamete production and both co-vary with a suite of other attributes suggests underlying differences in r/K reproductive strategies where a trade-off is postulated to occur between egg production and parental care (Rushton, 1985 a; following Wilson, 1975). As shown in Figure 1, oysters, producing 500 million eggs a year but providing no care, exemplify r, while great apes, producing one infant every five or six years and providing lavish care, exemplify K. Animal studies show these reproductive strategies correlate with other features of the organism's life history, including: litter size, birth spacing, infant mortality, maturation speed, life span, energy use, encephalization, dispersal tendency, population size, social organization, and altruism. All the data converge to the effect that, in terms of K, Mongoloids > Caucasoids > Negroids.

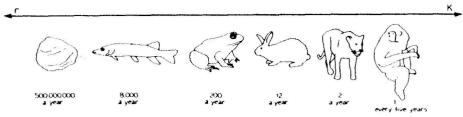


Figure 1. The r/K continuum of reproductive strategies balancing egg production and parental care (After Johanson & Edey, 1981).

The question arises as to whether, in some sense or another, one race has evolved more. Lynn's essay suggests the answer may be "yes," and I agree. Although it has become unfashionable to view man as the most "advanced" of species, this once traditional view gains novel support from the perspective of the r/K dimension. As Wilson (1975) put it, "In general, higher forms of social evolution should be favored by K selection" (p. 101). The process may have carried some individuals and populations further than others.

## REFERENCES

Coon, C.S. (1982) Racial Adaptations. Chicago: Nelson Hall.

Freedman, D.G. (1979) Human Sociobiology: A Holistic Approach. New York: Free Press. Gould, S.J. (1978) Morton's ranking of races by cranial capacity. Science, 200, 503-509.

Ho, K-C., Roessmann, U., Straumfjord, J.V., and Monroe, G. (1980) Analysis of brain weight 1. Adult brain weight in relation to sex, race, and age. Archives of Pathology and Laboratory Medicine 104, 635-639.

Howells, W.W. (1973) Cranial variation in man. Peabody Museum Papers, Vol. 67. Cambridge, Mass.: Harvard University Press.

Johanson, D.C., and Edley, M.A. (1981) Lucy: The Beginning of Human Kind. New York: Simon & Schuster.

Rushton, J.P. (1985a) Differential K theory and race differences in E and N. Personality and Individual Differences 6, 769-770.

Rushton, J.P. (in press). Race differences in behavior: A review and evolutionary analysis. Personality and Individual Differences.

Rushton, J.P. and Bogaert, A.F. (1987) Race differences in sexual behavior: Testing an evolutionary hypothesis. *Journal of Research in Personality* 21.

Steen, L.A. (1987) Mathematics education: A predictor of scientific competitiveness. Science 237, 251-253.

Vernon, P.E. (1982) The Abilities and Achievements of Orientals in North America. New York: Academic Press.

Wilson, E.O. (1975) Sociobiology: The New Synthesis. Cambridge, Mass.: Harvard University Press.