

RACE AND BRAIN WEIGHT: A NOTE ON  
J. P. RUSHTON'S CONCLUSIONS<sup>1</sup>

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*Summary.*—Rushton's (1988) reinterpretation of recent research on brain weight one-sidedly emphasizes the findings of heavier brain weight in whites than in blacks and neglects to comment on a larger difference found between men and women. Rushton explicitly used brain size as indicator of intelligence. His implicit conclusion that women are less intelligent than men is *not* supported by empirical research.

Old-fashioned racist doctrines of the inferiority of blacks have recently been resuscitated in psychological terminology by J. P. Rushton (1985, 1988). He reviewed empirical research on racial differences, and concluded that the "Negroids" are less intelligent, altruistic, law-abiding, and behaviorally restrained but higher in sex drive and shorter-lived than the "Caucasoids" or the "Mongoloids": he claims that the undesirable characteristics are inherited (Rushton, 1985, 1988). Although his views were presented extensively on public media, other psychologists such as Zuckerman and Brody (1988) frequently reject his efforts due to poor methodology, e.g., biased selection of literature, omission of contradictory evidence, reliance on unscientific sources, and a consistent failure to use statistical tools to compare between group differences to within-group variance.

The present note deals with Rushton's (1988) postulate that black groups are less intelligent. In a method reminiscent of 19th century writings, his measures of intelligence include cranial capacity and brain weight. His review of craniometric literature has already been shown to be misguided (Zuckerman & Brody, 1988). Rushton's review of the brain-weight research deserves closer scrutiny. One of the most important studies mentioned by Rushton was a thorough statistical analysis by Ho, Roessmann, Straumfjord, and Monroe (1980) of brain weights, at autopsy, of 1261 persons in Ohio. The highest average brain weight was found in white males (1392 gm.), followed by black males (1286 gm.), then white women (1252 gm.), and lowest for black women (1158 gm.). Although the *SDs* in the four subgroups were large (ranging from 119 to 138 gm.), each group differed significantly from the other three on *t* tests. Black men had higher average brain weight than white women ( $p < .005$ ). It is noteworthy that Rushton (1988) presents in his review only the over-all difference between black and white groups (men and women pooled). He interprets this difference as a difference in intelligence.

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However, this difference (100 gm.) between blacks and whites found by Ho's team is much smaller than the difference (136 gm.) also given in Ho, *et al.*'s paper between men and women with black and white groups pooled. Given the lack of evidence that women are less intelligent than men (in spite of the large difference in average brain weight), it is not logical to interpret selectively the smaller difference in brain weight between the groups of black and white individuals as indicative of racial inferiority in intelligence.

It could be argued that the data on brain size must be corrected for the person's body size (i.e., body height, weight, and/or body surface measures). This correction would eliminate the sex gap: women equal men with respect to some of the brain/body-mass ratios. However, in the context of Rushton's use of brain mass as indicator of intelligence, these corrections lead to absurd conclusions such as 'given two persons with the same brain weight, the one with smaller body is more intelligent,' or 'women are less intelligent than men (unless excused for by their smaller body size).' Furthermore, it would be absurd to use the brain/body-mass correction in practical situations such as personnel selection via various intelligence tests. There is no evidence that women consistently fare worse than men on similar tasks even though the correction is never used. In brief, the use of brain/body-size ratio by Rushton's followers (those who use brain weight as indicator of intelligence) is an eloquent disguise of their poor opinion of women's intellectual potential.

The present article focussed on Rushton's reinterpretation of Ho, *et al.*'s findings, mainly because Rushton's frequent references to brain size could easily be misconstrued as a reliable research effort. The onus is now on our profession to remedy the immeasurable psychological harm already done to black children with respect to self-image and to all adults with respect to racial mistrust or hatred.

#### REFERENCES

- HO, K-CH., ROESSMANN, U., STRAUMFJORD, J. V., & MONROE, G. (1980) Analysis of brain weight. *Arch. Pathol. Lab. Med.*, 104, 635-645.
- RUSHTON, J. P. (1985) Differential K theory: the sociobiology of individual and group differences. *Person. Individ. Diff.*, 6, 441-452.
- RUSHTON, J. P. (1988) Race differences in behaviour: a review and evolutionary analysis. *Person. Individ. Diff.*, 9, 1009-1024.
- ZUCKERMAN, M., & BRODY, N. (1988) Oysters, rabbits and people: a critique of "race differences in behaviour" by J. P. Rushton. *Person. Individ. Diff.*, 9, 1025-1033.

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