

## IQ, Birth Weight, and Number of Sexual Partners in White, African American, and Mixed Race Adolescents

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Mean levels of three characteristics—verbal IQ, number of sexual partners, and birth weight—were examined in African American, White (European-descent) Americans, and Black/White mixed race American adolescents. The sample came from Wave 1 of the *National Longitudinal Study of Adolescent Health*. The mean age was 16 years. According to their interviewers, the mixed race children had an African American physical appearance. The African American adolescents had a lower birth weight, a lower verbal IQ, and a higher number of sexual partners than did White adolescents. For each characteristic, the mixed race mean fell between the means of the two parental populations. Design extensions were proposed that include: (1) directly genotyping for individual racial admixture, (2) including parents of the mixed race children, and (3) including their cousins.

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A number of characteristics show a mean or frequency difference between African Americans and Whites, i.e., European-descent Americans. Racial differences are socially important and particularly substantial at the extremes for verbal intelligence (VIQ), number of sexual partners (SP), and birth weight (BW). Except for a few voices (Rushton, 2000), the majority of explanations of these racial differences have been environmental ones,

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particularly those that focus on social class or on racial discrimination (Jencks & Phillips, 1998; Collins et al., 2000; Cramer, 1995). Ideally, one would find a research design that could distinguish between genetic and social environmental hypotheses; one would adopt a mind-set of neutrality until the data came out in favor of one or the other hypothesis; or possibly, in favor of both. New, and more creative, approaches are needed to tackle this fundamental and difficult research question. In this study, I used mixed race adolescents as a sample that leads to a specific genetic prediction while it also may be used to test various environmental explanations of a racial difference.

This study draws its subjects from a nationally representative sample: the *National Longitudinal Study of Adolescent Health* (Add Health). Race was identified as the self-described racial classification given by the adolescents themselves (or by their parents) and by an interviewer. A mixed race adolescent was a child with one White parent and one African American parent whom the interviewer also rated as Black. Van den Oord and Rowe (2000; 2001) give a more detailed discussion of the racial concept from both social and biological perspectives.

### GENETIC HYPOTHESIS

Genetically, mixed race children represent a 50% admixture of genes from each parental background. For a quantitative trait, their mean should be midway between the means of the parental populations, assuming that different genes segregating in the two populations produce a racial difference. For this ideal result, there must be no selectivity in the matings between racial groups—a random sample of people would marry someone of the other race. The mixed race mean could still, however, fall midway between parental means if selection was not too severe. For example, if higher IQ African Americans tended to marry higher IQ whites, the offspring mean would be higher than the mid-parental group one. Other complications might arise from purely genetic processes, such as hybrid vigor. In behavioral genetic studies, though, most traits show substantial additive genetic variance that means that the regression of genotype on phenotype is roughly linear and that the averaging rule for parental populations would apply (Plomin, DeFries, McClearn, & McGuffin, 2000).

The genetic hypothesis also predicts a specificity of characteristics in racial differences. For some characteristics, like skin color, a few genes may create a large difference between populations and admixed people may present a mid-value. Other characteristics are caused by other genes. The