Ethical considerations in research into genetic influences on behaviour

**Confidentiality issue:** If misused, genetic information may be stigmatizing, may affect people’s ability to get jobs or insurance.

**Racism/discrimination:** Genetic information may be misused to justify discrimination and racism.

**Ethical considerations of findings in genetic research:** Given the methodological problems involved in genetic research, particular care needs to be taken into the use and interpretation of the findings. Potential self fulfilling prophecy.

**Genetic determinism:** If our behavior is partly influenced by our genes, to what extent do we have free will, i.e. can be held responsible for our actions?

1. ***Read the summaries of the following studies. Explain which ethical issues into genetic influences of behavior that each of the studies contain and why.***

Researchers at Washington University and 5 other centers have combined forces to identify a gene that is associated with alcoholism in some families. The scientists focused on a region of chromosome 15 that contains several genes involved in the movement of a brain chemical called GABA between neurons. One version of the gene, GABRG3, was found statistically linked (associated) with alcoholism in the affected families. (Washington University, 2004)

A study conducted looked at thirty two MZ twins reared apart, who had been adopted by a non-relative a short time after birth. The results showed that for both childhood and adult antisocial behavior, there was a high degree of heritability involved (Joseph, 2001).

In 1969, the *Harvard Educational Review* published Arthur Jensen’s lengthy

article, “How Much Can We Boost IQ and School Achievement?” Jensen concluded

that (a) IQ tests measure socially relevant general ability; (b) individual

differences in IQ have a high heritability, at least for the White populations of the

United States and Europe; (c) compensatory educational programs have proved

generally ineffective in raising the IQs or school achievement of individuals or

groups; (d) because social mobility is linked to ability, social class differences in

IQ probably have an appreciable genetic component; and tentatively, but most

controversially, (e) the mean Black–White group difference in IQ probably has

some genetic component.

1. ***In what way can the Steele and Aronson (1995) study challenge the conclusions of the Jensen (1969) study?***

In 1995, Claude Steele, in collaboration with Joshua Aronson, performed the first experiments demonstrating that stereotype threat can undermine intellectual performance. They had African-American and European-American college students take a difficult verbal portion of the Graduate Record Examination test. As would be expected based on national averages, the African-American students performed less well on the test. In a subsequent experiment, Steele and Aronson changed the instructions of the test so that participants no longer believed that the test accurately measured intellectual performance. This change reduced the performance gap between the two groups. Steele and Aronson concluded that changing the instructions on the test can reduce African-American students' concern about confirming a negative stereotype about their group.