

impulse control and aggressiveness."¹² A study of adoptees designed to test the genetic transmission of specific behaviour disturbance has reported evidence consistent with the genetic transmission of hyperactivity and anti-social behaviour.¹³

9. Research to determine whether there is a genetic influence on human behaviour has been complicated by the fact that most experiments can be interpreted in different ways. In studies of the influence of genetics on behaviour, three methods of research have been used. One approach has been to study the families of children who have exhibited problem behaviour. In this method it is virtually impossible to isolate the influence of the genetic factors from that of the psychological or environmental factors. Other methods have involved the study of behaviour of twins and of adopted children. Research has indicated a closer relationship concerning behaviour disorder between monozygotic (identical) twins than between dizygotic twins. This appears to support the theory of the genetic transmission of behaviour characteristics. However, the data from twin studies are mostly suggestive. Environmental factors could provide a plausible explanation of these findings that are consistent with a genetic hypothesis regarding psychopathy and criminality.¹⁴

10. Adoption studies have provided a more precise method of separating possible environmental and genetic variables. Research in recent years has established that among adopted children, those whose biological parents had criminal records were more likely themselves to become criminals than those whose biological parents did not have criminal records.¹⁵ These studies support the view that heredity can contribute in some ways to criminal behaviour.

11. The possibility of a genetically transmitted predisposition to crime does not, of course, necessarily lead to criminal behaviour. It simply weights the chances. Life experience can modify genetic tendencies. Positive factors such as a healthy family life can overcome an inherent predisposition to criminal behaviour.¹⁶ What is decisive is the interaction between one's biological background with its inherited tendencies and all those environmental factors — the psychological, social and cultural — which influence development.

12. After reviewing the evidence, the Committee is convinced that there is no such thing as a natural born criminal. Some individuals may be more likely than others to become criminal or violent as a result of genetic inheritance, but it is never inevitable that they will become so. At most, genetic makeup must be considered as one factor, among many others, that can place a child at risk.¹⁷ Among these factors, the diet of the mother during pregnancy must now be considered.