

Sample Answer:

One biological explanation for offending behaviour is the atavistic form. **Lombroso (1876)** was credited as moving criminology into a more rigorous and scientific realm and thus laid the foundation for offender profiling. He claimed that offenders turn to crime because they are lacking evolutionary development. Their savage and untamed nature meant they would find it impossible to adjust to the demands of civilised society. He examined the facial and cranial features of hundreds of Italian convicts, both living and dead, and proposed that the atavistic form was associated with several physical anomalies which were key indicators of criminality. These consisted of a prominent brow, curly hair, asymmetrical face, large ears and dark skin. He found that 40% of the criminals analysed had atavistic characteristics. A criticism of Lombroso's research is that there is contradictory evidence from **Goring (1913)** who conducted a comparison between 3000 criminals and 3000 non-criminals. He saw that there was no evidence that offenders are a distinct group with unusual facial and cranial characteristics. However, he did find that intelligence levels were linked to crime and thus a more significant explanation for criminal behaviour. For example, those with lesser intelligence were more likely to be criminals. A further criticism of Lombroso's atavistic form is that it is controversial and advocates 'scientific racism'. There are distinct racial undertones within his work. For example, curly hair and dark skin is associated with being from African descent. This is socially sensitive as it has implications for members of this race. If someone from African descent believes that their physical characteristics are likely to cause them to engage in criminal behaviour, this may result in a self-fulfilling prophecy, and they will go on to commit crimes in the future. In analysis, more control is needed to heighten the reliability of Lombroso's findings. He didn't use a control group of non-criminals in his sample. It is thought that if he did, the significant differences that he concluded would not have occurred. Use of a control group helps to make sure that his findings were valid as he would have been able to compare the changes to a group of non-criminals as with Goring's research. Goring conducted a similar study and used a control group and found no significant findings. Therefore, Lombroso's findings need to be applied with caution and maybe revised to biologically explain offending behaviour. A second biological explanation is genetics. Adoption studies have shown that offending behaviour may be inherited. **Mednick (1984)** found that adopted children often shared their biological parent's offending behaviour, despite not sharing the same environment. Of the adoptees without criminal biological parents, 13.5% had convictions. This was compared to 20% of adoptees where either biological parent had a conviction. Thus, these percentages show that offending behaviour has a basis in genetics. Family studies have found that a candidate gene for offending behaviour is MAOA, the 'warrior' gene. This is responsible for controlling neurotransmitters serotonin and dopamine. A mutation on this gene is associated with violent crime. In **Brunner's (1993)** study of a Dutch family, all the male members were involved in offending behaviour with convictions of rape and arson. It was later found that they all had a mutation of the MAOA 'warrior gene', resulting in an imbalance of serotonin and dopamine levels. Low levels of serotonin and high levels of dopamine have been found to be related to aggressive offending behaviours. A criticism of the biological explanation

for offending behaviour is that the free will and determinism debate comes into play. It is deterministic and suggests that individuals who commit crime do not have the free will to stop themselves. By using biological determinism, it diminishes the responsibility of the individual and thus has implications for the criminal justice system which considers individuals to be responsible for the crimes that they commit. This is an issue because it means that either, criminals who are not actually 'guilty' are being punished for crimes that they had no choice in committing, or many people may not be convicted of crimes merely because they are biologically determined but are therefore still a danger to society. Further, the approach is reductionist and ignores cognitive factors associated with offending behaviour. For example, in the Dutch family, there may have been other factors that led to all males committing similar crimes rather than just the candidate gene such as social learning theory. The younger males in the family may idolise their brothers or father and therefore imitate their behaviour in hope of acceptance or a reward. Knowing that they have a genetic history of crime may also have resulted in a self-fulfilling prophecy whereby the individuals acted according to their labels. To combat this, a study where more control can be achieved may have to be used to disregard any other factors that may influence the offending behaviour.

