Describe how one psychological theory, other than SLT, explains anti-social behaviour/crime. Evaluate this explanation (12 marks)

The biological approach looks at the role of genes, hormones, neurotransmitters and brain structure and function in influencing our behaviour.

The role of hormones are said to affect behaviours. Males are typically more aggressive than females due to the important difference in levels of testosterone. From the age of 15-25 is when testosterone levels in boys are the highest. This age group is also the group who are most likely to commit a crime. Issues with this are that most studies are done on boys, which is unfair as the testosterone levels are naturally higher in boys than girls. It is hard to prove a cause and effect because although biological studies often show a link, there are instances when high testosterone levels lead to a positive action, and not crime. This positive action could be feelings channeled into something like sport, so the prediction that testosterone levels cause crime, cannot be made. The relationship between testosterone and aggression is therefore not a simple one, and it is correlational rather than casual. Beeman found that castration reduces aggression and injecting testosterone reinstates aggressive behaviour in mice. The effect of early castration was a permanent reduction in aggression. However, if testosterone is repeatedly administered to castrated animals they will eventually become aggressive. Studies that are done on animals, due to the ethical reason of it being impossible to test genetic manipulation of people, can not be generalised to humans, meaning there is not enough evidence to prove that testosterone levels lead to aggression.

The biological approach also says that genes affect behaviour. People are said to act through biological mechanisms, influenced by hormone levels, brain structure and neurotransmitters. Although this approach says humans can inherit aggression, there is no single gene for aggression, but multiple. It is argued that aggression is not just due to genes, and may be influenced by the environment. Lyons et al looked at misbehavior and juvenile crime in thousands of twins. MZ were not a lot more similar than DZ, suggesting that the environment is important in determining criminal behaviour. Research from twin and adoption studies is also correlational, so we cannot prove that genes cause aggression, as there may be other factors that have not been accounted for. Cadore et al showed that genes and the environment interact by studying adoptive and biological homes. If either were disruptive, or if either sets of parents were criminals, it acted as a risk factor for the child. Other explanations like poverty/lack of educational opportunity provide powerful evidence that social and economic reasons are more likely to push people towards criminal behaviour and the biological approach does not take this into consideration.

The role of brain structure is also said to be an influence in the biological approach. Van der Poll suggests that testosterone affects early development and influences the tendency of animals to become aggressive later. This may work through testosterone ‘priming’ neural systems. The brain controls the levels of