Evolution and Aggression

The theory of evolution by natural selection explain how a behavioural trait like aggression could evolve to be widespread in the human in the human population. It is based on the assumption that behaviours like aggression are transmitted genetically and that inheriting the 'aggression genes' would have a survival advantage for the individuals that carried it. Possible advantages include:

- Aggressive individuals would be more able to fight off predators;
- Aggressive individuals would be more able to compete for scarce resources e.g. food;
- Aggressive individuals would guard/defend their mates to ensure the survival of their offspring.

When applying evolutionary theory

You could be asked to explain why a particular trait evolved in humans. You must stress that the behaviour is determined by a gene or genes. Then look at the relationship between the trait and the environment. It is not always an advantage to be bigger, stronger, faster etc. Try to identify reasons why individuals would be more likely to survive *in that environment*. Avoid any talk about learning in your answer.

Evidence for evolutionary theory

Claim: aggression is adaptive (useful) to humans.

 Accept this claim because, compared to other species, humans are particularly prone to violence against humans; in many other species intraspecies aggression is relatively rare and usually non-lethal. Support: Gomez et al (2016) compared lethal intraspecific violence (i.e. killing another member of the same species) in 1024 mammals and 600 human populations. The death rate from interspecific violence in nonhumans was about 0.3% but in humans it was 2%.

Claim: aggression evolved as it helps individuals to compete for resources.

• Accept this claim because of the tendency of many species to become more aggressive when food etc. become scarce. Support: Lorenz (1966) observed that many species mark off territory and attack conspecifics more readily when food supplies are reduced. Allen et al (2016) examined archeological evidence of human-on-human violence by analysing prehistoric graves. They found that sharp-force trauma correlated closely with times of scarcity e.g. famine/drought.

Claim: aggression evolved as it helps individuals secure the survival of their own offspring.

Accept this claim because (1) humans males usually larger and more aggressive than females, suggesting they compete with other males for access to females (Puts, 2016); (2) Male partner violence appears linked to ensuring that their mate's offspring are really also their own. Support: men seem to be more bothered by sexual infidelity than women are (although women appear to be more troubled than men by the thought of emotional infidelity; Buss, 2000). IPV is often precipitated by a man's fear of sexual infidelity by or losing control of his partner (Morgan, 2009). Domestic violence is worse when the victim is young and attractive (Buss & Shackleford, 1997) and when the victim is pregnant or near ovulation (Gangestad et al, 2002).

Arguments against evolutionary theory

- Alternative theories also explain aggression in humans, for example, social learning theory (Bandura). Evidence for SLT can be put forward as an alternative to evolution.
- Evolutionary explanations are not always directly testable. Whilst behaviours like aggression may correlate with certain environmental factors it does not automatically follow that the behaviour was *caused* by them.
- Some feminist critics have argued that evolutionary views of sexual violence serve to 'legitimise' behaviours like partner violence and rape by casting them as 'natural' and 'inevitable'.