

Ethological Explanation - Mark Scheme

Q1.

[AO1 = 2]

1 mark for a basic definition

Plus

1 further mark for relevant elaboration

Possible content:

- Innate releasing mechanisms (IRMs) are hard-wired brain networks that respond to specific stimuli (signs or releasers) by initiating a fixed action pattern, a set sequence of behaviours.
- IRMs are a key part of the ethological (instinctive) approach to aggression (and other behaviours such as courtship/mating). Examples of IRM in relation to aggression include the male stickleback showing aggressive behaviour to red-bellied sticklebacks (male rivals).

Credit other relevant material.

Q2.

[AO2 = 4]

| Level | Marks | Description |
|-------|-------|--|
| 2 | 3 – 4 | Knowledge of evolutionary explanations of aggression is clear and mostly accurate. The material is used appropriately to explain levels of aggression amongst young males in inner cities. The answer is generally coherent with effective use of terminology. |
| 1 | 1 – 2 | Some knowledge of evolutionary explanations of aggression is evident. Links to high levels of aggression amongst young males in inner cities are not always effective. The answer lacks accuracy and detail. Use of terminology is either absent or inappropriate. |
| | 0 | No relevant content. |

Possible content:

- male aggression derives from need to acquire / defend resources such as mates or territory (in the city) and / or to establish status (in groups of peers or between gangs)
- male aggression derives from sexual jealousy of other males who may have sex with or steal their mates.

Q3.**[AO1 = 6 AO3 = 10]**

| Level | Marks | Description |
|-------|---------|---|
| 4 | 13 – 16 | Knowledge of evolutionary explanations for aggression is accurate and generally well detailed. Evaluation is thorough and effective. Minor detail and/or expansion of argument is sometimes lacking. The answer is clear, coherent and focused. Specialist terminology is used effectively. |
| 3 | 9 – 12 | Knowledge of evolutionary explanations for aggression is evident but there are occasional inaccuracies/omissions. Evaluation is mostly effective. The answer is mostly clear and organised but occasionally lacks focus. Specialist terminology is used appropriately. |
| 2 | 5 – 8 | Limited knowledge of evolutionary explanations for aggression is present. Focus is mainly on description. Any evaluation is of limited effectiveness. The answer lacks clarity, accuracy and organisation in places. Specialist terminology is used inappropriately on occasions. |
| 1 | 1 – 4 | Knowledge of evolutionary explanations for aggression is very limited. Evaluation is limited, poorly focused or absent. The answer as a whole lacks clarity, has many inaccuracies and is poorly organised. Specialist terminology is either absent or inappropriately used. |
| | 0 | No relevant content. |

Possible content:

- role of aggression in individual survival and reproductive success
- evolution and adaptation – genetic mutations and survival of the fittest
- competition for resources – aggressive individuals more able to compete for food, females etc so more likely to reproduce successfully
- aggressive genes are passed on to subsequent generations
- sexual jealousy – male violence against partners motivated by jealousy to ensure own paternity and genetic success
- mate retention strategies – direct guarding, negative inducements (threats) linked to aggression
- females look for males with resources – aggressive males more successful.

Possible evaluation

- use of supporting evidence, eg attractiveness of dominant behaviour in males (Sadalla 1987); positive correlation between mate retention behaviours and physical violence (Shackleford 2005)
- can explain gender differences in aggression
- cultural differences in acceptability and prevalence of aggressive behaviour suggest it is learned rather than evolutionary
- evidence cannot demonstrate cause and effect – all correlational
- comparison with other explanations, eg social learning theory
- broader issues/debates, eg reductionism, determinism, nature v nurture

- implications: ethical – suggests aggression is innate and therefore cannot be controlled and individuals are not personally responsible; of psychological research into aggression for the economy.

Credit other relevant material.