Biological Psychology

Checklist

- [ ] The central nervous system (CNS) and neurotransmitters in human behaviour, including the structure and role of the neuron, the function of neurotransmitters and synaptic transmission.
- [ ] The effect of recreational drugs on the transmission process in the central nervous system.
- [ ] The structure of the brain, different brain areas (e.g. pre-frontal cortex) and brain functioning as an explanation of aggression as a human behaviour.
- [ ] The role of evolution and natural selection to explain human behaviour, including aggression.
- [ ] Biological explanation of aggression as an alternative to Freud's psychodynamic explanation, referring to the different parts of the personality (id, ego, superego), the importance of the unconscious, and catharsis.
- [ ] The role of hormones (e.g. testosterone) to explain human behaviour such as aggression.
- [ ] Individual differences; Damage to the brain may be affected by individual differences in case studies of brain-damaged patients when it is assumed there are no individual differences. Freud's view of the personality shows it develops individual differences.
- [ ] Developmental psychology; The role of evolution in human development. The role of hormones in human development

Biological Psychology

Checklist

- [ ] The use of the correlational research method in psychology, including co-variables.
- [ ] Types of correlation: positive, negative and including the use of scatter diagrams.
- [ ] Issues surrounding the use of correlations in psychology; issues with cause and effect, other variables.
- [ ] Analysis of, use of, and drawing conclusions from correlational studies, including scatter diagrams, using inferential statistical testing (use of Spearman's rho) and issues of statistical significance; levels of measurement; critical and observed values.
- [ ] The use of alternate, experimental and null hypotheses. The use of IV and DV in experiments and co-variables in correlations. The use of control groups, randomising to groups, sampling, levels of measurement (ordinal, interval, nominal), reasons for using Spearman's rho.
- [ ] Other biological research methods; Brain-scanning techniques (CAT, PET, and fMRI).
- [ ] The use of brain-scanning techniques to investigate human behaviour, e.g. aggression.
- [ ] One twin study and one adoption study, e.g. Gottesman and Shields (1966); Ludeke et al. (2013).

Biological Psychology

Checklist

- [ ] Classic study; Raine et al. (1997) Brain abnormalities in murderers indicated by positron emission tomography.
- [ ] One contemporary study from the following: Li et al. (2013) Abnormal function of the posterior cingulate cortex in heroin addicted users during resting-state and drug-cue stimulation task. Or Brendgen et al. (2005) Examining genetic and environmental effects on social aggression: A study of 6-year-old twins. Or Van den Oever et al. (2008) Prefrontal cortex AMPA receptor plasticity is crucial for cue-induced relapse for heroin-seeking.

- [ ] Key Question for Biological Psychology

- [ ] Practical for Biological Psychology; Correlation

Do not forget to consider the Issues and Debates