

# **The Biological Approach to Understanding Behaviour**

## **The Brain and Behaviour**

The biological approach to understanding behaviour is largely an investigation into correlations. Do areas of the brain correlate with behaviour? When changes take place in the brain do changes take place in behaviour or is the reverse the case? Could an individual's behaviour be predicted from their genes? Is human behaviour subject to natural selection?

The relationship between biology and behaviour is a complex one of mutual causality. The technology available to investigate this relationship is becoming ever more sophisticated, while the ethics of this line of inquiry are increasingly an area for public debate.

### **Areas of the human brain related to behaviour**

- Methods used to study the brain

- Localization

- Neuroplasticity

### **Neurotransmitters and their effect on behaviour**

- Neural transmission

- Neurotransmitters

- Neural networks

### **Hormones and behaviour**

- Hormones

- Pheromones

### **Genetics and behaviour**

- Nature of the gene

- Genetic similarities

- Gene regulation and gene expression

- Factors that affect gene expression

- Evolutionary explanations for behaviour

- Survival of the fittest and natural selection

### **The role of animal research in understanding human behaviour**

- The value of animal models in psychology research.

- Whether animal research can provide insight into human behaviour.

- Ethical considerations in animal research.

### **Relevant to all the topics are:**

The contribution of research methods used in the biological approach to understanding human behaviour

Ethical considerations in the investigation of the biological approach to understanding human behaviour.