Scientific

Biological explanations have clear variables that enable us to conduct accurate, scientific research and therefore determine cause and effect. This is advantageous because we can develop treatments from such research that are reliable. We can then measure the effects of treatments such as chemotherapy and psychosurgery by monitoring the behaviour and symptoms of the patient before and after treatment. We can also use PET scans to measure the effects of treatments, as it gives us detailed information about the brain; we can monitor the levels of activity in the brain before and after treatment.

Determinist

The determinist nature of the biological approach is advantageous because if we know what 'predetermines' our behaviour, we can treat it in advance. For example, scientists seek to understand the function of neurotransmitters so they can predict the effects of abnormal levels of neurotransmitters and treat it effectively. For example, the neurotransmitter dopamine has been linked to schizophrenia, and so with this knowledge we can alter the levels of dopamine to reduce schizophrenic symptoms.

Successful applications

Biological research has led to success in developing new drug treatments and evaluating the effectiveness of current drugs. Drug therapy is a popular method of treating mental illness as it is easy and allows people with such disorders to carry out a normal life. Bipolar disorder has been successfully treated using drugs, and one study showed that 60% of people with bipolar disorder improved after taking lithium. This study was conducted by VIGUERA E AL.

Reductionist

The biological approach reduces the explanation of behaviour to a simpler set of explanations; for example, blaming the feeling of stress on the hormone adrenaline. By reducing the explanation, it allows us to ignore experience and we may lose a real understanding of what we are investigating. Also, a simplified explanation may prevent us from reaching a real understanding of the target behaviour.

Nature over nurture

The biological approach ignores life experiences and psychological factors such as how people think and feel, which are part of the nurture side of the nature nurture debate. The biological approach is concerned with altering abnormal biological factors rather than understanding how people think and feel to help them improve. Other successful therapies (e.g. CBT in the cognitive approach) focus on talking about the patients feelings.

Individual differences

The biological approach is nomothetic, meaning it ignores individual differences, aims to make generalisations and also aims to find similarities. Biological research often only involves a small sample, and therefore we cannot make reliable generalisations about a wider population as the sample is not representative. For example, only 25 people are treated using psychosurgery in the USA per year. Also, biological research tends to only use men in their sample as female hormone systems can interfere with the research. For example, women produce oxytocin when stressed which makes them seek help and protect their children. This means that biological research cannot be generalised for women and so it is less useful.