

Discuss the contributions of the biological approach to our understanding of human behaviour (16 marks)

The biological approach to psychology states first and foremost that everything that is psychological must first be physiological. This way of approaching psychology can be related directly to case studies, such as that of Clive Wearing, whose biological brain damage in the hippocampus left him with severe amnesia. Case studies prove the importance of considering biological factors in psychology.

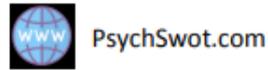
Additional studies however, like research into the brain structures of monozygotic and dizygotic twins, may serve as evidence to disprove the genetic importance in diseases like schizophrenia. In one study, only 48% of all monozygotic twins reviewed showed matching concordance rates, proving the possibility that nurture may be the dominant force over biology. Results didn't show the higher proportion of twins, 52%, didn't share the mental illness, so overall results prove triumphant for behavioural psychologists who argue the environment is more important in the development of schizophrenia.

The biological approach states that people are genetically predisposed to developing certain traits, like Alzheimer's disease, for example. While this can be a relief for some people, as they are given a better chance of eradicating the defected gene that will later cause an illness, for others, it can lead to a worsened quality of life, as they know they are certain to suffer an illness. This negative impact coupled with the possibility of facing discrimination for having a genetic condition, i.e. some employers may not want to hire employees if they are to suffer from a disease that will make them very ill and therefore have to take many days off work, makes the biological approach extremely harsh and negative towards the patient.

Including biological explanations in psychology means that research, like that done on brain structures of people with and without schizophrenia, is always highly controlled to rid extraneous variables. The biological approach provides psychology with some hard scientific credibility as the results gathered in studies are truth worthy and reliable. Studies are also highly valid as they are done in a lab setting, which on the other hand leads to a lack of ecological validity because the setting is not true to real life. Often, results gathered are replicable, but many studies done for research into the biological approach use the case study method. For example, KF and Clive Wearing are both idiographic studies that look into individuals rather than the whole population. Case studies are thus non generalizable and usually lack population validity.

The biological approach is very determinist in its approach to human behaviour, as it assumes that people are born with the key features that will allow them to progress, without taking into account an individual's free will to change their behaviour. The biological approach uses harder determinism than that of the cognitive approach, and is the opposite of the humanistic approach that believes in an individual's right to change their behaviour and achieve their full potential.

Due to the fact that biology focuses so heavily on evolution, natural selection and survival of the fittest, we can use these things to test certain observable behaviours in men and women. For example, it can be observed that men possess better special awareness than women. This trait can be traced back to early humans – male hunter gatherers, who hunted to survive and feed their families. According to biology, men alive today still possess some of the same DNA as early humans, which accounts for modern men's better special awareness. On the other hand, evolution is a theory, so it is hard to put all our faith into something that has not yet been definitively proven. However, developments in recent cognitive neuroscience makes proving evolution more likely.



There have been multiple positive implications in both the worlds of psychology and biology that come from a biological understanding of human behaviour. Knowing the links between high dopamine and OCD and low serotonin and depression has made it possible to develop effective SSRI's for these conditions. These medications, along with therapies such as electro-convulsive therapy and brain scanning technology, makes sufferers of specific conditions able to receive effective treatment that often works better than behavioural and cognitive treatments when it comes to severe illness. Nevertheless, implications from the biological approach are not always positive. Medications don't prove effective for everyone who takes them, and often produce side effects that range from miniscule to severe. Therapies like ECT can produce unexplained memory loss and psychologists who distribute the therapy are unaware of why it works – meaning that it could be putting patients at risk. Drugs administered also target the effects of problems, the side effects, rather than the root of the problem itself.

Moreover, biological approaches tend to be extremely reductionist. Science reduces complex ideas down into dense, more simplified statements (albeit with reliability). With the issue of gender dysphoria, the biological approach passes off a complicated experience as a simple problem with hormones and neurotransmitters. With the biological approach, there is no room to express multiple opinions, because biology is falsifiable. Ideas are thus either proved right or wrong, and there can be no additional comment, a negative concept when it comes to issues, like gender, that need more than one explanation.

Finally, because the biological approach focuses on solely genetic makeup (genotype) and how that affects our physicality (phenotype), the ideas set out in the approach don't always comply with real life. For example, the biological approach would explain a violent criminal's actions as predisposed, unchangeable traits, unaffected by free will. The approach goes against our justice system, making it hard to fully implement the approach into real life without being socially sensitive.