

1.

the nature nurture debate is a debate which discusses the extent to which nature or nurture determines individuals behavioural characteristics.

2.

Nature suggests that internal physical factors affect your behaviour such as genes or hormones. Heredity are traits passed down from parents to their offspring through genes. For example Joseph, when conducting twin studies, found that monozygotic twins (100% identical genes) were 40% likely to be diagnosed with schizophrenia if their twin had the mental disorder as well, however, dizygotic twins (50% identical twins) were only 7% likely to be diagnosed with schizophrenia if their twin had also been diagnosed. This shows that nature (genes) has a strong link with schizophrenia. Another example of behaviour being determined by nature is ocd being caused by a damaged caudate nucleus. An individual with ocd when in the presence of a potential germ hazard will have their orbital frontal cortex send a worry signal to the thalamus causing it to become over excited and cause excessive anxiety. However, in an individual without ocd when in the presence of a potential germ hazard will have their caudate nucleus suppress the worry signal meaning they will not experience excessive anxiety. Therefore this shows that a damaged caudate nucleus which is a natural factor can cause ocd.

3.

Nurture suggests that external factors such as experiences will determine your behaviour. For example phobias are explained by Mowrer using the two process model which suggests that external factors such as classical conditioning can cause phobias and operant conditioning can maintain them. For example, to form a phobia such as arachnophobia the individual will go through classical conditioning where a spider will be paired with a fearful moment and will cause the two to be associated meaning that each time they are presented with a spider they experience excessive anxiety. The phobia is then maintained by operant conditioning as whenever they see a spider and run away this removes the anxiety and acts as a reward therefore causing them to repeat the behaviour. This suggests that phobias are caused by external factors such as experiences.

4.

It is important to determine whether behaviour is determined by nature or nurture as it allows us to develop effective treatments to mental health disorders such as depression. if it is due to internal factors such as hormones this should be dealt with using medication however if it is due to experiences this should be dealt with methods such as cbt. However the most widely accepted suggestion is the interactionist approach which suggests that both nature and nurture work together to determine behaviour rather than working in opposition. For example, social learning theory can be seen as taking the interactionist approach. Bandura suggests that behaviour is determined by observing behaviour and imitating it. (the likelihood of someone imitating a behaviour is increased if they identify with the model or experience vicarious reinforcement). This is suggesting that nurture determines our behaviour however bandura acknowledged that the urge to aggression may be due to genetics suggesting that what determines aggressive behaviour is an interaction of both nature and nurture factors.

5.

Another interactionist approach to the nature nurture debate is the diathesis stress model which suggests that an individual may have a genetic predisposition to a mental health disorder such as depression but may only experience the disorder if triggered by a life experience such as a death in the family. This shows that internal factors may not always determine behaviour without environmental input.



6.

The interactionist approach suggests that nature and nurture cannot be separated. For example, Donald Hebb suggested that trying to separate the influences of nature and nurture on behaviour is impossible such as trying to determine whether the length or width is more important when finding the area of a rectangle. They both contribute essential factors. There is a genetic disorder called PKU which prevents an amino acid from being metabolised resulting in brain damage. However, if it is detected at birth and the child is put on a specific diet they can avoid brain damage. This matters because it shows that environmental manipulation can bypass the genetic disorder showing the importance of the interactionist approach.

7.

Plomin also took the interactionist approach and presented the idea of reactive gene environment interaction. The reactive gene-environment interaction suggests that a child who is innately more aggressive may cause external factors such as other people's treatment towards them to be more aggressive. Therefore the genetics of the child is determining their environment. This also ties into the idea of passive influence which suggests that a parent with a genetic mental disorder such as depression may create an unsettled home environment for the child. The child may then develop a mental disorder due to the environment passively. This matters because it shows how nature can indirectly determine nurture and suggests an interactionist explanation would be better. Epigenetics are another example of an interaction of how nature and nurture work together to affect behaviour.

8.

Epigenetics are genes that can be changed by life experiences such as a stress diet or exercise. These life experiences can turn on or off certain genes. These genes are then passed on to the next generation. For example, Dias and Ressler exposed male lab rats to the smell of acetophenone and each time they exposed them to the scent that would give them electric shocks. They soon showed a fear response to the scent. However, the rats later had children and grandchildren who were not shocked but still showed a fear response to the scent of acetophenone even though they were not conditioned to. This matters because it supports the idea of epigenetics. Therefore the behaviour was determined by an interaction of the external factors of the first rats and the internal factors of the later rats. Therefore this suggests that an interactionist approach to the debate would be best.

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