AQA A LEVEL PSYCHOLOGY
ISSUES & DEBATES
REVISION COMPANION

Everything you need to know for the Issues & Debates topic in Psychology, including:

- Gender Bias
- Culture Bias
- Free Will & Determinism
- Nature-Nurture Debate
- Idiographic & Nomothetic Approaches
- Ethical Implications

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GENDER BIAS

Specification: Gender and culture in psychology – universality and bias including androcentrism and alpha and beta bias; cultural bias, including ethnocentrism and cultural relativism.

WHAT YOU NEED TO KNOW

1. Discuss how gender bias has been an issue in psychology, with reference to the following terms:
   a. Androcentrism
   b. Alpha bias
   c. Beta bias

KEY TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tr>
<td>Gender Bias</td>
<td>The differential treatment and/or representation of males and females, based on stereotypes and not on real differences.</td>
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<tr>
<td>Alpha Bias</td>
<td>An alpha bias refers to theories that exaggerate the differences between males and females.</td>
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<tr>
<td>Beta Bias</td>
<td>A beta bias refers to theories that ignore or minimise sex differences. These theories often assume that the findings from studies using males can apply equally to females.</td>
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<tr>
<td>Androcentrism</td>
<td>Theories which are centred on, or focused on males.</td>
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1. Gender Bias in Psychology

The term bias is used to suggest that a person's views are distorted in some way, and in psychology there is evidence that gender is presented in a biased way. This bias leads to differential treatment of males and females, based on stereotypes and not real differences.

For example, Freud argued that 'anatomy is destiny', meaning that there are genuine psychological differences between men and women because of their physiological differences. For example, he claimed young girls suffer from 'penis envy', and viewed femininity as a failed form of masculinity.

The difficulty lies in distinguishing between real and culturally created gender differences. Evidence suggests that there are a small number of real gender differences, confirmed through cross-cultural studies. For example, in a review of the research on sex differences, Maccoby and Jacklin (1974) concluded that there were only four differences between boys and girls:

- Girls have greater verbal ability.
- Girls have greater visual and spatial abilities.
- Boys have greater arithmetical ability, which is a difference that only appears at adolescence.
- Girls are less aggressive than boys.

1a. Androcentrism

Androcentrism means being centred on, or dominated by, males or the male viewpoint. This can be conscious (the individual knows they are behaving this way) or unconscious. In the past most psychologists were male, and the theories they produced tended to represent a male view of the world. Hare-Mustin and Marecek (1988) argued for there being two types of gender bias: alpha and beta bias.

1b. Alpha Bias

Alpha bias refers to theories which exaggerate the differences between males and females. For example, in his psychoanalytic approach, Freud argued that because girls do not suffer the same oedipal conflict as...
boys, they do not identify with their mothers as strongly as boys identify with their fathers, and so develop weaker superegos.

The evolutionary approach in psychology has also been criticised for its alpha bias. This is because this approach suggests that evolutionary processes in the development of the human species explain why men tend to be dominant, why women have more parental investment in their offspring, and why men are more likely to commit adultery. However, society has changed considerably over recent years, and it is argued that the evolutionary perspective should not be used to justify gender differences.

**1c. Beta Bias**

Beta bias theories have traditionally ignored or minimised sex differences. These theories often assume that the findings from males can apply equally to females.

For example, Kohlberg’s stage theory of moral development was based on extensive interviews that he conducted with boys aged 10-16. The same all-male sample was then re-interviewed at intervals of 3-4 years over a 20-year period. His classification system is based on a morality of justice and some researchers, such as Carol Gilligan (1982), have found that women tend to be more focused on relationships when making moral decisions and therefore often appear to be at a lower level of moral reasoning when using Kohlberg’s system. Therefore Kohlberg’s approach meant that a real difference was ignored.

There is also evidence of beta bias in psychological research. Male and female participants are used in most studies, but there is normally no attempt to analyse the data to see whether there are significant sex differences. Where differences are found, it may be possible that these occur because researchers ignore the differential treatment of participants. For example, Rosenthal (1966) reported that male experimenters were more pleasant, friendly, honest, and encouraging with female participants than with male participants. This led Rosenthal to conclude: “Male and female subjects may, psychologically, simply not be in the same experiment at all.”

Even some animal research can be argued to suffer from beta bias. For example, biological research into the fight-or-flight response has often been carried out with male animals because they have fewer variations in hormones than females. It was assumed that this would not be a problem as the fight-or-flight response would be the same for both. However, later stress research by Taylor et al. (2000) has challenged this view by providing evidence that females produce a tend-and-befriend response. The beta-bias in these earlier animal studies meant that for a long time the stress response was not fully understood and a real difference was ignored.

The result of beta bias in psychological research is that we end up with a view of human nature that is supposed to apply to men and women alike, but in fact, has a male or androcentric bias. For example, Asch’s (1951; 1955) conformity studies involved all male participants, as did many of the other conformity studies (e.g., Perrin & Spencer, 1980) and it was just assumed that females would respond in the same way.

**Evaluation of Gender Bias in Psychology**

- Unfortunately, issues of gender bias often go unchallenged. For example, Darwin’s established theory of sexual selection suggests that women are selective (choosy) in terms of mate selection. These views have only recently been challenged by DNA evidence suggesting that women are equally as competitive as men when the need arises.
By developing a greater understanding of gender bias, psychologists have put forward a number of solutions. For example, some psychologists attempt to develop theories that emphasise the importance or value of women. *Cornwell et al. (2013)* noted that females are better at learning, as they are more attentive and organised, thus emphasising both the value of and the positive attributes of women. As a result, this type of research helps to reduce or challenge gender stereotypes, which is important in reducing gender bias.

- Another way to reduce gender bias is to take a feminist approach that attempts to restore the imbalance in both psychological theories and research. For example, feminist psychology accepts that there are biological differences between males and females: Research by *Eagly (1978)* claims that females are less effective leaders than males. However, the purpose of Eagly’s claim is to help researchers develop training programmes aimed at increasing the number of female leaders in the real world.

- *Worrell (1992)* also suggested a number of research criteria that are particularly important to ensure research investigations that are not gender biased: using alternative methods of inquiry to explore the personal lives of women; considering women in the natural settings in which they function; collaborating with research participants to explore personally relevant variables and studying diverse samples (women who vary by age, socio-economic class, partner preference, minority or ethnicity).

As society has changed and females have progressed further in academic disciplines such as psychology, there have been changes, both in the research methodology used and in the earlier theories. As previously explained, Carol Gilligan (a student of Kohlberg’s) proposed that women have a different sense of moral understanding from men and compiled her own stage theory of moral understanding. Her approach showed that men and women are different, but neither kind of moral reasoning (justice focus or care focus) is considered to be better, they are just different.

It is also important to remember that sometimes the gender bias can work against males as well as females, as sometimes alpha bias theories exaggerate the value of women. For example, *Chodorow (1978)* viewed women as more relational and caring. Another example is that women are more likely to be diagnosed with depression and given treatment than males. This may be because woman are more likely to suffer from depression, or it could be that the diagnostic system may be biased towards finding depression among women. The expectation that males should be able to ‘pull themselves together’ may highlight a bias with the diagnostic systems for mental disorders.

**Possible Exam Questions**

1. Which of the following statements describes the term androcentrism?
   - a. Theories that are focused or centred on men.
   - b. Theories that ignore differences between men and women.
   - c. Theories that exaggerate differences between men and women.
   - d. Theories that apply equally to men and women.

2. Briefly explain what is meant by the term ‘gender bias’ in psychology. (2 marks)

3. Outline how androcentrism has affected psychological research. (3 marks)

4. Explain the difference between an alpha and beta bias. (4 marks)

5. Discuss gender bias in psychology. (16 marks)
CULTURE BIAS

Specification: Gender and culture in psychology – universality and bias including androcentrism and alpha and beta bias; cultural bias, including ethnocentrism and cultural relativism.

WHAT YOU NEED TO KNOW

1. Discuss how culture bias has been an issue in Psychology, with reference to the following terms:
   a. Ethnocentrism
   b. Cultural Relativism

2. Understand what is meant by universality and how theories can be developed that apply to all people and include real differences

KEY TERMS

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<td>Culture</td>
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1. Culture Bias in Psychology

Culture can be defined as the values, beliefs and patterns of behaviour shared by a group of people. A variety of factors shape culture and these different factors are reflected in the differences between various cultures. Historically, Psychology has been dominated by white, middle-class American males, who have monopolised psychology both as researchers and participants. However, research findings and theories have been generalised as if culture makes no real difference.

Culture bias is the tendency to judge people in terms of one’s own cultural assumptions. In psychology, culture bias takes the same two forms as gender bias. Alpha bias occurs when a theory assumes that cultural groups are profoundly different, and that recognition of these enduring differences must always inform psychological research and understanding. Beta bias, on the other hand, occurs when real cultural differences are ignored or minimised, and all people are assumed to be the same, resulting in universal research designs and conclusions that mistakenly assume that all cultures are identical.

Exam Hint: The terms alpha and beta bias are only required for gender bias, and while it is useful to understand these terms, you are only required to understand ethnocentrism and cultural relativism for the Culture in Psychology subtopic.

Another way to consider culture bias is through the distinction between ethnocentrism and cultural relativism.
1a. Ethnocentrism
Ethnocentrism means seeing the world only from one’s own cultural perspective, and believing that this one perspective is both normal and correct. Ethnocentrism is an often inadvertent lack of awareness that other ways of seeing things can be as valid as one’s own. For example, definitions of abnormality vary from culture to culture. Rack (1984) claims that African-Caribbeans in Britain are sometimes diagnosed as ‘mentally ill’ on the basis of behaviour which is perfectly normal in their subculture, and this is due to the ignorance of African-Caribbean subculture on the part of white psychiatrists.

Ainsworth’s Strange Situation is another example of ethnocentric research. The Strange Situation was developed to assess attachment types, and many researchers assume that the Strange Situation has the same meaning for the infants from other cultures, as it does for American children. German children, on average, demonstrate a higher rate of insecure-avoidant behaviour. However, this does not mean that German mothers are more insensitive than American mothers. Instead, they value and encourage independent behaviour, and therefore their children react differently in the Strange Situation. The Strange Situation has been described as an imposed etic, which is when a technique or theory developed in one culture and then imposed on another.

Extension: An etic approach looks at behaviour from the outside, whereas an emic approach considers behaviour from the inside.

1b. Cultural Relativism
Cultural relativism insists that behaviour can be properly understood only if the cultural context is taken into consideration. Therefore, any study which draws its sample from only one cultural context (like American college students) and then generalises its findings to all people everywhere, is suspect.

According to this viewpoint, the meaning of intelligence is different in every culture. For example, Sternberg (1985) pointed out that coordination skills that may be essential to life in a preliterate society (e.g., those motor skills required for shooting a bow and arrow) may be mostly irrelevant to what is considered intelligent behaviour for most people in a literate and more “developed” society.

Evaluation of Culture Bias in Psychology
- Culturally biased research can have significant real-world effects by, for example, amplifying and validating damaging stereotypes. The US Army used an IQ test before WWI which was culturally biased toward the dominant white majority. Unsurprisingly, the test showed that African-Americans were at the bottom of the IQ scale and this had a negative effect on the attitudes of Americans toward this group of people. This highlights the negative impact that culturally biased research can have.

- One way to deal with culture bias is to recognise it when it occurs. Smith and Bond found, in their 1998 survey of European textbooks on social psychology, that 66% of the studies were American, 32% European, and only 2% from the rest of the world. This suggests that much psychological research is severely unrepresentative and can be greatly improved by simply selecting different cultural groups to study.

- Contemporary psychologists are significantly more open-minded and well-travelled than previously, and have an increased understanding of other cultures at both a personal and professional level. For example, international psychology conferences increase the exchange of ideas between psychologists which has helped to reduce ethnocentrism in psychology and enabled a more nuanced understanding and appreciation of cultural relativism.
  - This heightened awareness of cultural diversity has led to the development of ‘indigenous psychologies’: theories drawing explicitly on the particular experiences of people in
different cultural contexts. One example is Afrocentrism, a movement which suggests that because all black people have their roots in Africa, theories about them must recognise the African context of behaviours and attitudes. This is an example of an emic approach, which emphasises the uniqueness of every culture and looks at behaviour from the inside of a particular cultural system. This matters because it has led to the emergence of theories that are more relevant to the lives and cultures of people not only in Africa, but also to those far removed from their African origins. The development of indigenous psychologies is often seen as a strength of cultural relativism, but there are limitations as well: Are Afrocentric theories not as culturally biased as those they claim to replace?

- There has also been some progress in the field of diagnosing mental disorders. Early versions of the American DSM system virtually ignored mental disorders that are found mainly or exclusively in non-American cultures. DSM-IV in 1994 acknowledged the inadequacy of that approach and included a short appendix on culture-bound syndromes found in other parts of the world. However, Kleinman and Cohen (1997) dismissed this appendix as “little more than a sop thrown to cultural psychiasrists and psychiatric anthropologists” and pointed out that detailed work in several non-Western cultures had uncovered many disorders totally ignored by DSM-IV. Examples include: pa-fend (fear of wind) found in China; amafufunyana (violent behaviour caused by spirit possession) found in South Africa and brain fag (problems in concentrating and thinking caused by excessive study) found in West Africa.

2. Universality
When a theory is described as universal, it means that it can apply to all people, irrespective of gender and culture. However, this also means that it needs to include real differences.

In relation to gender, this means developing theories that show the similarities and differences between males and females, without devaluing either gender. This may mean using a variety of research methods and considering women in the natural settings in which they function. With regard to culture, one way to achieve universality would be to employ what Berry (1969) described as a derived etic. This is where a series of emic studies take place in local settings, conducted by local researchers using local techniques. Such studies can build up a picture of human behaviour in a similar way to the ethnographic approach taken by anthropologists. This is the study of different cultures through the use of comparisons, as by making comparisons between cultures we can learn more about a target culture.

Possible Exam Questions
1. Outline two examples of culture bias in psychological research. (4 marks)

2. Just before the First World War Yerkes developed Army intelligence tests in order to assess recruits. The items on the tests were very specific to American culture and the test results showed that European immigrants fell slightly below White Americans in terms of intelligence and African-Americans were at the bottom of the scale with the lowest mental age. With reference to the above example, explain what is meant by ethnocentrism. (4 marks)

3. Essay: Discuss culture bias in psychology. (16 marks)
FREE WILL AND DETERMINISM

Specification: Free will and determinism: hard determinism and soft determinism; biological, environmental and psychic determinism. The scientific emphasis on causal explanations

WHAT YOU NEED TO KNOW

1. Understand what is meant by free will and determinism and the distinction between hard determinism and soft determinism

2. Discuss examples of determinism in psychology, including:
   - Biological determinism
   - Environmental determinism
   - Psychic determinism

3. Understand how the scientific emphasis on causal explanations leads to determinism in psychology

KEY TERMS

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<td><strong>Biological Determinism</strong></td>
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<td><strong>Causal Explanations</strong></td>
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<td><strong>Determinism</strong></td>
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<td><strong>Psychic Determinism</strong></td>
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<td><strong>Soft Determinism</strong></td>
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1. Free Will & Determinism

Determinism is the view that free will is an illusion, and that our behaviour is governed by internal or external forces over which we have no control. Consequently, our behaviour is viewed as predictable. The causal laws of determinism form the basis of science. An example of an external force would be the influence of parents when rewarding certain behaviours, whereas an example of an internal force would be hormones influencing the way in which someone behaves.

However, while determinism is the view that we have no control over our behaviour, there are varying degrees of determinism, including **hard** and **soft determinism**. Hard determinism is the view that forces outside of our control (e.g. biology or past experience) shape our behaviour. Hard determinism is seen as incompatible with free will. Soft determinism is an alternative position favoured by many psychologists.
According to soft determinism, behaviour is constrained by the environment or biological make-up, but only to a certain extent. Soft determinism suggests that some behaviours are more constrained than others and that there is an element of free will in all behaviour. This was the view of Nick Heather (1976) who proposed that while our behaviour is predictable, that doesn’t make it inevitable. We can choose how to behave, but normally we only have a limited number of behaviours to choose from.

Free will is the idea that we can play an active role and have choice in how we behave. The assumption is that individuals are free to choose their behaviour and are self-determined. For example, people can make a free choice as to whether to commit a crime or not. Therefore, a person is responsible for their own actions, and it is impossible to predict human behaviour with any precision.

2. Examples of Determinism in Psychology

Biological determinism refers to the idea that all human behaviour is innate and determined by genes. Research into the human genome provides evidence to support the idea of biological determinism. For example, research has found that a particular gene (IGF2r) is implicated in intelligence (Hill et al., 1999). Furthermore, Chorley et al., (1998) reported a statistically significant association between IQ test scores and the IGF2r gene on chromosome six, suggesting that intelligence is to some extent biologically determined.

Environmental determinism is the view that behaviour is determined or caused by forces outside the individual. Environmental determinism posits that behaviour is caused by previous experience learned through classical and operant conditioning. For example, Bandura (1961) found that children with violent parents are more likely to become violent parents themselves as a result of observational learning.

Finally, Psychic determinism, claims that human behaviour is a result of childhood experiences and innate drives (id, ego and superego), as in Freud’s model of psychological development.

Evaluation

- Humanistic psychologists argue against determinism, claiming that humans have self-determination and free will and that behaviour is not the result of any single cause. Furthermore, there is plenty of evidence to support humanistic psychologists. For example, identical twin studies typically find an 80% similarity in intelligence scores and a 40% similarity in the likelihood of depression. However, as identical twins share 100% of their genes, these results suggest that 20% is caused by other (environmental) factors. This demonstrates that biological determinism is unable to explain any particular behaviour, in this case, depression and intelligence. The same evidence indicates that no behaviour is completely environmentally determined. If identical twins only show an 80% likeness in terms of intelligence, it is therefore assumed that only 20% is caused by the environment.

- While Freud appeared to support a deterministic point of view, in that he argued that the unconscious controls our actions and our thoughts, the goal of psychoanalysis is to help patients overcome that force. This insight has been taken up by several neo-Freudians, and one of the most influential has been Erich Fromm (1941). He argued that all of us have the potential to control our lives but that many of us are too afraid to do so, which means we give up our freedom and allow our lives to be governed by circumstance, other people, political ideology or irrational feelings. However, determinism is not inevitable, and Fromm sees the essence of human freedom in being the choice between good and evil.

- Many psychologists, theorists and legal experts do not favour a deterministic point of view. If behaviour is determined by outside forces, that provides a potential excuse for criminal acts. For example, in 1981 Stephen Mobley argued that he was ‘born to kill’ after killing a pizza shop manager,
because his family had a disposition towards violence and aggressive behaviour. An American court rejected this argument. Therefore, a truly determinist position may be undesirable as it provides an ‘excuse’, allowing people to mitigate their own liability and could lead to vexing legal issues regarding the nature of responsibility and intent (*mens rea*).

- However, the idea of free will has attracted similar criticisms. Some psychologists, such as Skinner, argue that free will is an illusion. Skinner insisted that our behaviour is in fact environmentally determined, even if we are unable (or unwilling) to admit it. Also, more recent evidence provides some support for Skinner’s claim. For example, Libet et al. (1983) found that the motor regions of the brain become active before a person registers conscious awareness of a decision, i.e. the decision to move the finger was actually a pre-determined action of the brain. This strongly suggests that many responses are biologically determined and that although we may believe that we have free will, Skinner’s claim that free will is an illusion, may be correct.

3. The Scientific Approach and Determinism

Science is heavily deterministic in its search for causal relationships as it seeks to discover whether X causes Y, or whether the independent variable causes changes in the dependent variable. For example, in Loftus and Palmer’s (1974) research, they manipulated the verb used in the critical question (IV), to measure the effect on the participant’s estimate of speed (DV). In Bandura’s Bobo doll experiment, he manipulated the condition to which the children were exposed (aggressive role model, non-aggressive model and no role model) to examine the effect on the behaviour of the children.

**Evaluation**

- Even in the natural sciences, it is now accepted that there is no such thing as hard determinism. This type of determinism seemed more appropriate in the 18th and 19th centuries when most physicists believed they would eventually be able to make very precise and accurate predictions about everything relevant to physics. However, discoveries in the 20th century suggested they were unduly optimistic. For example, according to chaos theory (Hilborn, 1994), very small changes in initial conditions can produce major changes later on. Theoretically, the flap of a butterfly’s wing in one part of the world could eventually change the whole weather system in a different part of the world. Such a chain of events doesn’t lend itself to prediction, and so it is impossible to show that an approach based on hard determinism is appropriate.

- While experiments are keen to establish causation, where X causes Y, they typically discount or minimise the importance of extraneous variables that have not been controlled. Furthermore, experiments often make sweeping generalisations about human behaviour and don’t acknowledge that at a different time, in a different place, our behaviour may not be influenced by X. There are so many variables that influence human behaviour that it is impossible to control them effectively.

- Finally, according to Baumeister (2009), psychological causality as revealed in psychology laboratories is arguably never deterministic. Statistical tests show the probability that something occurred by chance. This means that our entire statistical enterprise is built on the idea of multiple possibilities rather than a single cause.

**Critical Thinking**

Is scientific determinism the best way to study human behaviour? Are all research methods used in psychology deterministic? What are the strengths and limitations of using a deterministic approach in psychology?
Is belief in free will and personal responsibility universal? Do you think that some cultures would be less likely to believe in free will? What types of cultures do you think they would be and why?

Possible Exam Questions
1. Which two of the following statements describes a free will point of view? (2 marks)
   - A People are not responsible for their actions.
   - B People behave in a random fashion.
   - C Behaviour always has a cause.
   - D People exercise full choice over how they behave.
   - E People have no choice about how to act.

2. Explain what is meant by hard determinism and soft determinism. (4 marks)

3. This is an extract from a newspaper article: “Research suggests that depression runs in the family. However, many depressed people also have other issues, including social problems, or problems with drink or drugs. Despite these challenges, many depressed people overcome their depression, and find ways to resolve their issues.” With reference to the extract above, explain what is meant by ‘determinism’. Refer to at least two types of determinism in your answer. (6 marks)

4. Discuss the role of free will in human behaviour. (8 marks)

5. Discuss the free will and determinism debate in psychology. Refer in your answer to at least two topics you have studied. (16 marks)

Notes
THE NATURE-NURTURE DEBATE

Specification: The nature-nurture debate: the relative importance of heredity and environment in determining behaviour; the interactionist approach.

WHAT YOU NEED TO KNOW

1. Understand what is meant by ‘nature’ and explain the relative importance of genes and heredity in determining behaviour
2. Understand what is meant by ‘nurture’ and explain the relative importance of the environment and experience in determining behaviour
3. Evaluate both approaches using the interactionist approach and be able to discuss how nature and nurture interact together to produce behaviour

KEY TERMS

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<td><strong>Heredity</strong></td>
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<td><strong>Interactionist Approach</strong></td>
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The nature versus nurture debate is one of the oldest debates in psychology. It centres on the relative contributions of genetic inheritance and environmental factors to human development and behaviour.

1. The Influence Of ‘Nature’

*Nature* is the view that behaviour is the product of innate biological or genetic factors. For a long time, psychologists have known that certain physical characteristics, such as eye colour and skin pigmentation, and certain diseases (e.g., Huntington’s) are biologically determined and the result of heredity (or genetic inheritance). Heredity is the process in which traits are passed down from one generation to the next. Furthermore, characteristics like height, weight, hair loss, life expectancy and vulnerability to specific illnesses are positively correlated with genetic relatedness. This has led psychologists to investigate whether psychological characteristics are also “wired in” before we are born.

This is known as the nativist position, and the basic assumption is that the characteristics of the human species are a product of evolution and that individual differences are the result of each person’s unique genetic code.

For example, family, twin and adoption studies show that the closer the relatedness of two people, the more likely it is that they will show the same behaviours. For example, the risk of being diagnosed with schizophrenia is approximately 1% of the general population. However, Gottesman and Shields (1991) pooled the results of around 40 family studies and found that the risk increases to 46% for those with two parents who have schizophrenia. Also, Joseph (2004) pooled the data for schizophrenia studies conducted before 2001 and found an average concordance rate of 40.4% for MZ twins and 7.4% for DZ twins, highlighting a significant genetic component.
Characteristics and differences that are not observable at birth, but which emerge later in life, are regarded by nativists as the product of maturation, as we have a ‘biological clock’ which switches certain behaviours ‘on’ or ‘off’ in a pre-programmed way. For example, Huntington’s disease is a genetically transmitted disorder that usually emerges between the ages of 30 and 50, although it can appear at any time, since the genetic cause is innately present.

Evolutionary explanations also emphasise the importance of nature, as they assume that behaviours or characteristics that increase our chances of survival and reproduction will be naturally selected; the genes for these characteristics or behaviours will be passed on, as they provide an adaptive advantage. For example, Bowlby proposed that children come into the world biologically programmed to form attachments because this will help them to survive. This suggests attachment behaviours are naturally selected, and passed on as a result of generic inheritance (heredity mechanisms).

2. The Influence Of ‘Nurture’

Nurture is the view that behaviour is the product of environmental influences. The environment is seen as everything outside the body which can include people, events and the physical world. Environmentalists (also known as empiricists) hold the assumption that the human mind is a tabula rasa (a blank slate) and that this is gradually ‘filled’ as a result of experience. This view was first proposed by John Locke in the 17th Century and was later taken up by behavioural psychologists. For example, John Watson (1913) famously wrote:

“Give me a dozen healthy infants, well-formed, and my own specified world to bring them up and I’ll guarantee to take any one at random and train him to become any type of specialist I might select—doctor, lawyer, merchant-chief, and yes, even beggarman and thief, regardless of his talents, penchants, tendencies, abilities, vocations, and race of his ancestors.”

According to environmentalists, psychological characteristics and behavioural differences that emerge through infancy and childhood are the result of learning.

For example, behavioural psychologists explain attachment in terms of classical conditioning, where food (unconditioned stimulus) is associated with the mother (neutral stimulus), and through many repeated pairings, the mother becomes a conditioned stimulus who elicits a conditioned response in the child. Therefore, the child forms an attachment based on the pleasure experienced as a result of being fed.

Bandura argued that aggression is learned through observation, vicarious reinforcement and imitation, and is therefore explained by social learning theory. However, he did acknowledge that the urge to behave aggressively might be biological, which suggests a more interactionist approach.

Environmental explanations can also partly explain the occurrence of schizophrenia. Batson et al. (1956) proposed the double bind theory, which suggests that schizophrenia is the result of disordered communication within the family. This is where one instruction is given overtly to a child (e.g. a mother says ‘come to me’) while another instruction is given covertly (e.g. the mother’s manner and tone of voice are rejecting). Prolonged exposure to such interactions prevents the development of a coherent construction of reality, and in the long run this manifests itself as schizophrenic symptoms.

3. Evaluation – The Interactionist Approach

- Recently psychologists have begun to question whether human behaviour is due to heredity factors (nature) or the environment (nurture). It is now widely accepted that heredity and the environment do not act independently and both nature and nurture are essential for almost all behaviour. Therefore,
instead of defending extreme nativist or environmentalist views, most researchers are now interested in investigating the ways in which nature and nurture interact. The interactionist approach is the view that both nature and nurture work together to shape human behaviour.

- The interactionist approach is best illustrated by the genetic disorder PKU (phenylketonuria). PKU is caused by the inheritance of two recessive genes, one from each parent. People with PKU are unable to break down the amino acid phenylalanine which builds up in the blood and brain causing mental retardation. However, if the child is diagnosed early, they are placed on a low protein diet for the first 12 years, which helps to avert this potentially lifelong disorder. Therefore, the disorder PKU (nature) is not expressed, because of an altered environment (low protein diet – nurture).

- In psychopathology, many psychologists argue that both a genetic predisposition and an appropriate environmental trigger are required for a psychological disorder to develop; this is set out in the diathesis-stress model. The diathesis is the biological vulnerability such as being born with a gene that predisposes you to develop a disorder. However, the disorder will only develop if there is an environmental ‘stressor’ to trigger it. Evidence to support the diathesis-stress model comes from the Finnish Adoption Study, which compared 155 adopted children whose biological mothers had schizophrenia, with a matched group of children with no family history of schizophrenia. The researchers also assessed the quality of parenting through questionnaires and interviews. They found that the group with schizophrenic mothers had a 10% rate of schizophrenia, but they also discovered that all of the reported cases of schizophrenia occurred in families rated as ‘disturbed’. When the family environment was rated as ‘healthy’, even the high-risk sample (mother with schizophrenia), the occurrence of schizophrenia was well below the normal population rates. However, the environment was not the sole cause, as the low-risk children from ‘disturbed’ families did not develop schizophrenia – so the environment alone was not enough to trigger the disorder. This research provides strong evidence that schizophrenia is best explained by looking at an interaction between genetic inheritance and environmental triggers, in this case, family environment.

- Neural plasticity is another example of how nature and nurture interact. The brain can reorganise itself by forming new neural connections throughout life. Neuroplasticity is a term which describes the changes in the structure of the brain (nature), as a result of life experience (nurture). For example, Maguire et al. (2000) investigated the hippocampi volume of London taxi drivers’ brains. She found that the hippocampus on each side of the brain (and especially the right hippocampus) was larger in taxi drivers in comparison to non-taxi drivers. Consequently, Maguire concluded that driving a taxi (nurture) actually had an effect on the size of the hippocampi (nature).

- Nature and nurture can interact in a variety of ways, and three separate types of gene-environment interactions have been described by Plomin et al. (1977): passive, evocative/reactive, and active.
  1. In passive gene-environment interaction, parents pass on genes and also provide an environment, both of which influence the child’s development. For example, highly intelligent parents are likely to pass on genes for intelligence to their children. They are also more likely to provide high levels of cognitive stimulation and a good education. These correlated genetic and environmental influences both increase the likelihood that their child will be highly intelligent.

  2. In evocative gene-environment interaction, heritable traits influence the reaction of others and hence the environment provided by others. For example, a shy child (partly genetically influenced) may be less fun to other children, making other children less likely to want to spend time with him or her. This environment may result in the child becoming even more socially withdrawn.

  3. In active gene-environment interaction, a child’s heritable traits influence his or her choice of environment. For example, an aggressive child may choose to watch violent films and engage in
contact sports. This is known as ‘niche-picking’ and is one reason research has shown that the influence of genes increases as children get older.

Critical Thinking

Why is it impossible to accurately answer questions regarding how much behaviour is due to nature and how much due to nurture? If a study is conducted the biological children of parents with schizophrenia that suggests (like Gottesman & Shields) a large positive correlation between the parents and the children for schizophrenia, this is just at one moment in time and is also an average, with variations in home circumstances (see the Finnish adoption study) also bearing some responsibility. As Plomin et al. demonstrate nurture can act to increase the effect of nature, though parental and peer actions and through niche-picking, all of which can increase the genetic influences over time. So genetic influence becomes time and context sensitive.

What is meant by the phrase ‘nature via nurture’? This is the title of a book by geneticist Matt Ridley where he states “No longer is it nature versus nurture, but nature via nurture. Genes are designed to take their cues from nurture.” What do you think he means?

Possible Exam Questions

1. Explain what is meant by an interactionist approach in relation to the nature-nurture debate. (4 marks)

2. “Research suggests that depression runs in the family. However, many depressed people also have other issues, including social problems, or problems with drink or drugs. Despite these challenges, many depressed people overcome their depression and find ways to resolve their issues.” With reference to the item above, identify one influence of nature on our behaviour and one influence of nurture on our behaviour. (4 marks)

3. Discuss the relative importance of heredity (nature) in determining behaviour. (8 marks)

4. Discuss the nature-nurture debate in psychology. Refer to at least two topics you have studied in your answer. (16 marks)

Notes
HOLISM AND REDUCTIONISM

Specification: Holism and reductionism: levels of explanation in psychology: Biological reductionism and environmental (stimulus-response) reductionism.

WHAT YOU NEED TO KNOW
1. Outline what is meant by reductionism and explain different ‘levels of explanation’ in psychology
2. Outline different types of reductionism:
   a. Biological Reductionism
   b. Environmental Reductionism
   c. Extension: Experimental Reductionism
3. Outline what is meant by holism
4. Evaluate the holism and reductionism debate in psychology

KEY TERMS

<table>
<thead>
<tr>
<th>DEFINITION</th>
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<tr>
<td><strong>Biological Reductionism</strong></td>
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<td><strong>Environmental Reductionism</strong></td>
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<td><strong>Experimental Reductionism</strong></td>
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<tr>
<td><strong>Holism</strong></td>
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<td><strong>Interactionist Approach</strong></td>
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<td><strong>Levels of Explanations</strong></td>
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<td><strong>Parsimony</strong></td>
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<td><strong>Reductionism</strong></td>
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The holism and reductionism debate focuses on an important question in the philosophy of science: Can complex behaviours be reduced to their simpler components?

1. Reductionism & Levels of Explanation

Reductionism is the belief that human behaviour can be explained by breaking it down into simpler component parts. Those who take a reductionist position believe that the best way to understand behaviour is to look closely at the parts that make up our systems, and then use the simplest explanations to understand how they work. Reductionism is based on the scientific assumption of **parsimony**: the idea that complex phenomena should be explained in the simplest terms possible.

Parsimony is similar to the idea of **Occam’s Razor**, which was established by William of Ockham in the 14th century. Like parsimony, this theory states that one should not make unnecessary assumptions and that the answer to a problem is often the simplest.
The reductionist approach suggests that there are different levels of explanation. The lowest level considers physiological (biological) explanations, where behaviour is explained in terms of neurochemicals, genes and brain structure; the middle level considers psychological explanations (e.g. cognitive and behavioural) and the highest level considers social and cultural explanations, where behaviour is explained in terms of the influence of social groups.

Any behaviour can be explained using these levels, and this idea is best illustrated with an example.

Year 2 Optional Topic Aggression: Aggression can be explained at a biological level in terms of hormones (e.g. testosterone) or brain structure (e.g. the amygdala); or at a psychological level through either operant conditioning or observation and imitation (social learning). Furthermore, it could also be explained in terms of cultural norms and expectations. This was illustrated by Souweidane and Huesmann (1999), who found that Detroit High School children who had been born in the United States were more accepting of aggression than children who had emigrated from the Middle East, especially if they did so after the age of 11.

Extension: An Interactionist Approach
An interactionist approach argues that several levels of explanation are necessary to explain a particular behaviour, ranging from lower (biological) to higher levels (social and cultural). Interactionism is subtly different from holism, as below, as interactionism considers how different levels of explanation interact, whereas holism is more concerned with understanding the whole experience, rather than individual explanations.

2. Types of Reductionism

Biological reductionism refers to the way that biological psychologists try to reduce behaviour to a physical level and explain it in terms of neurons, neurotransmitters, hormones, brain structure, etc.

For example, explanations of psychological disorders are often biologically reductionist, as genes and neurochemical imbalances are offered as the main cause. For example, a meta-analysis of 14 twin studies of OCD found that monozygotic twins were more than twice as likely to develop OCD in comparison to dizygotic twins if their co-twin also had the disorder (Billett et al., 1998), thus suggesting a genetic link.

Environmental reductionism is also known as stimulus-response reductionism. Behaviourists assume that all behaviour can be reduced to the simple building blocks of S-R (stimulus-response) associations and that
complex behaviours are a series of S-R chains. For example, behaviourists reduce the complex behaviour of attachment down to a stimulus-response link, where the mother becomes the conditioned stimulus who becomes associated with the pleasure from feeding. Therefore the child comes to feel pleasure (conditioned response) when he or she encounters their mother, leading to the formation of an attachment.

Note: While experimental reductionism is not detailed in the specification, it is useful to understand this term, as it applies to the Cognitive Approach. However, you should not be asked a specific question on experimental reductionism in your exam.

Experimental reductionism is where a complex behaviour is reduced to a single (isolated) variable for the purpose of testing. For example, while the multi-store model of memory suggests that memory consists of three stores and each store has its own coding, capacity and duration, cognitive psychologists often examine memory in terms of isolated variables. For example, Miller (1956) examined the capacity of short-term memory and Peterson and Peterson (1959) examined the duration of short-term memory. Experimental reductionism underpins the experimental approach; complex behaviours are reduced to operationalised isolated variables in order to measure and determine causal relationships.

3. Holism

Holism comes from the Greek word ‘holos’, which means ‘all’, ‘whole’ or ‘entire’ and is the idea that human behaviour should be viewed as a whole integrated experience, and not as separate parts.

Gestalt psychology adopts a holistic approach to perception. When we perceive something in the real world, we do so as a whole rather than as a collection of bits and pieces. What we see only makes sense when we consider the whole image, rather than the individual elements that make up our vision. Consequently, some cognitive psychologists also take a holistic approach. For example, within the area of perception, visual illusions demonstrate that humans perceive more than the sum of the sensations on the retina. (If you examine the image on the right, what you will instantly perceive is the outline of a cube. However, there is in fact no cube in the image and your mind has created a cube due to the position and configuration of the black shapes).

Humanistic psychology also advocates a holistic approach, as it argues that humans react to stimuli as an organised whole, rather than as a set of stimulus-response links. As an approach, it uses qualitative methods to investigate all aspects of the individual, as well as the interactions between people.

4. Evaluation of the Holism and Reductionism Debate

Scientists (including psychologists) are drawn to reductionist explanations as a method of research. For example, most experimental psychology is based on the assumption that human behaviour can be studied effectively through relatively simple experiments, where complex behaviour is reduced to isolated variables (known as experimental reductionism). This allows researchers to study the different factors that influence human behaviour in a controlled manner while establishing a causal relationship. This would not be possible if psychologists attempted to study all of the factors that influence human behaviour at once, as it would be too complex to interpret the findings.

Counter-Argument: However, although experimental research has produced a wealth of findings, the results of highly controlled laboratory studies are often questionable. For example, the findings of laboratory research examining the reliability of eye-witnesses (e.g. Loftus and Palmer) have not been confirmed by studies examining real-life witnesses (e.g. Yuille and Cutshall).
Furthermore, both biological and environmental reductionism are viewed as scientific. Breaking complex behaviours into small constituent parts means that they can be scientifically tested, and over time explanations based on scientific evidence will emerge. In addition, biological reductionism has led to the development of biological therapies, such as drugs. For example, SSRIs are more effective than placebos at treating the symptoms of OCD and reduce the symptoms for up to three months after the treatment (Soomro et al., 2008). The use of SSRIs in patients with OCD has helped to reduce the anxiety associated with OCD, thus providing relief for some patients.

Criticism of reductionism takes many forms. Some psychologists argue that biological reductionism can lead to errors of understanding because it ignores the complexity of human behaviour. For example, to treat conditions like ADHD with drugs in the belief that the condition consists of nothing more than neurochemical imbalances is to mistake the symptoms of the phenomenon for its true cause. Ritalin may reduce these symptoms, but the conditions which gave rise to the ADHD have not been addressed. Whether or not this is true depends on what one thinks of as causation, but since success rates of drug therapy are so highly variable, the purely biological understanding seems inadequate.

The critique of environmental reductionism is as much methodological as it is substantive. Much of the relevant research in the behaviourist tradition has made use of non-human animals as subjects. The classic Pavlovian experiments are an iconic example. But is human behaviour simply a scaled-up version of that of dogs or rats? Critics of reductionism point to the social context in which humans are embedded from the earliest moments of life, and to hard-to-measure factors like cognition, emotion, and intentionality. In this case as well, the reductionist position seems, if not clearly incorrect, then at least inadequate.

The holistic explanation attempts to blend different levels of explanation; holistic theory and approaches attempt to provide a complete and realistic understanding of human behaviour. However, holistic explanations do not establish causation because they do not examine behaviour in terms of operationalised variables that can be manipulated and measured. This means that holistic explanations are viewed as unscientific.

Possible Exam Questions

1. Explain what psychologists mean by ‘levels of explanation’ in relation to reductionism. (3 marks)

2. Give an example of biological reductionism from an area of psychology you have studied. (3 marks)

3. Explain one similarity and one difference between biological reductionism and environmental reductionism. (6 marks)

4. Outline and evaluate reductionist explanations in psychology. (8 marks)

5. Discuss holism and reductionism in psychology. (16 marks)

Exam Hint: When answering essay questions in relation to holism and reductionism, some students produce muddled answers that have more to do with the idiographic vs. nomothetic debate or the free will vs. determinism debate. Therefore, students need to understand the holism and reductionism debate as a separate debate, and they should avoid mentioning other debates in their responses. Furthermore, when evaluating holism and reductionism students often draw on different topics in psychology, for example, psychopathology. However, some students fail to link the topic (e.g. OCD) to the debate (e.g. biological reductionism) and it is crucial that students are able to draw these links between topics and debates.
IDIOGRAPHIC AND NOMOTHETIC APPROACHES

Specification: Idiographic and nomothetic approaches to psychological investigation.

WHAT YOU NEED TO KNOW

1. Discuss the idiographic approach to psychological investigation
2. Discuss the nomothetic approach to psychological investigation

KEY TERMS

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<th>DEFINITION</th>
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<td>Idiographic</td>
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<td>Nomothetic</td>
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What is the ultimate aim of psychological research: Is it to discover universal laws of human behaviour, or to develop an in-depth understanding of unique cases? This is the central argument in the debate between the idiographic and nomothetic approaches.

1. The Idiographic Approach

The term ‘idiographic’ comes from the Greek word ‘idios’, which means ‘own’ or ‘private’. Psychologists who take an idiographic approach focus on the individual and emphasise the unique personal experience of human nature. This means they favour qualitative research methods, such as the case study, unstructured interviews and thematic analysis which allow an in-depth insight into individual behaviour. The idiographic approach does not seek to formulate laws or generalise results to others.

Case studies provide an interesting example of an idiographic approach, as they provide an in-depth insight into an individual or small group which can be used to evaluate a theory. For example, Shallice and Warrington (1970) examined the case of Patient KF, who experienced a motorbike accident. KF’s short-term forgetting of auditory information was greater than his forgetting of visual information, suggesting that short-term memory (STM) consists of multiple components. Consequently, Patient KF undermines the Multi-Store Model of Memory suggesting that STM is not one unitary component. Therefore, an individual case study can highlight flaws within a theory and significantly undermine other research.

Another example of an idiographic approach comes from Freud’s use of case studies. Freud conducted very detailed investigations into the lives of his patients in an attempt to understand and help them overcome their psychological disorders. His most famous case studies include Little Hans and The Rat Man. While Freud did try to produce generalisations from his case studies, they are still viewed as an idiographic approach because each person’s psychological disorder derived from their unique childhood experiences.

Evaluation

- The idiographic approach is unable to produce general laws or predictions about human behaviour, and that severely limits its usefulness as a source of practical knowledge about the diagnosis and treatment of psychological disorders. For a discipline so dedicated to the application of its scientific understanding, this is a devastating limitation. Furthermore, many psychologists criticise the idiographic approach for its essentially unscientific nature. The emphasis on in-depth data collection and the difficulties in arriving at justifiable generalisations contradicts the central purpose of any
mature science: to explain the most variation in the fewest possible terms so that phenomena can be predicted and ultimately controlled. Research practices that do not address these goals can seem scientifically pointless.

- However, idiographic researchers respond to these criticisms by emphasising the evidence-based nature of their descriptions and conclusions, and the critical awareness embedded in research techniques like reflexivity, and often claim that the validity of their findings is more secure than that which rests entirely on statistical analysis. As Allport noted when introducing the terms into American psychology in 1937, it is only through the understanding of single individuals that psychologists can hope to predict how such individuals will behave in a given situation.

- However, there are numerous strengths of taking an idiographic approach, and a case study method is a powerful tool for evaluating psychological theories. The case of Patient KF (Shallice and Warrington, 1970) exposed a limitation of the Multi-Store Model of Memory, by providing evidence that our STM comprises of at least two components (auditory and visual memory) and not one, as stipulated by Atkinson and Shiffrin. Consequently, a single case study can generate further research into a particular phenomenon (e.g. memory), which contributes to the development of new theories that further our understanding of human behaviour.

- While case studies can highlight a flaw in psychological theories and prompt further research, the case study method and other qualitative methods are extremely time-consuming. Freud’s case study of Little Hans consists of almost 150 pages of verbatim quotes from Little Hans’ father, as well as detailed descriptions of the events in Little Hans’ life. Freud did go on to create universal theories of personality development during childhood; however, these were based on limited and unrepresentative case studies that many psychologists would discredit.

2. The Nomothetic Approach

The term ‘nomothetic’ comes from the Greek word ‘nomos’ which means ‘law’. Psychologists who take a nomothetic approach are concerned with establishing general laws, based on the study of large groups of people, and the use of statistical (quantitative) techniques to analyse data. This means that experiments, correlations, psychometric testing and other quantitative methods are favoured among nomothetic researchers.

The nomothetic approach is the main approach within scientifically oriented psychology. For example:

- Biological Psychologists take a nomothetic approach when explaining psychological disorders, such as OCD and depression. They typically pinpoint biological factors, such as neurotransmitters, that are responsible for such disorders and use biological therapies (e.g. drugs) to treat all patients.

- Behaviourists, such as Pavlov and Skinner, conducted experiments with animals in order to establish laws of learning (classical and operant conditioning) that could be generalised to humans and non-human animals.

- Cognitive psychologists, such as Atkinson and Shiffrin, developed general laws, such as the Multi-Store Model of Memory, which they believed could be generalised to everyone.

- Social psychologists, such as Milgram and Asch, used a nomothetic approach to create general conclusions about human behaviour: that situational factors are responsible for both obedience and conformity.
Furthermore, in the area of psychopathology, classification manuals such as DSM-V and ICD-10 take a nomothetic approach, as they classify people with psychological disorders on the basis of specific symptoms.

**Evaluation**

Unlike the idiographic approach, the nomothetic approach is considered as generally scientific. The use of experimental (quantitative) methods, controlled measurement and the ability to predict behaviour, are all seen as strengths of the nomothetic approach. Furthermore, controlled methods allow for replication to examine the reliability of findings which has helped psychology establish itself as a scientific discipline. The development of theories and empirical testing are just one of the key features of science that are employed by the nomothetic approach.

Furthermore, because the nomothetic approach is viewed as scientific, it is useful for predicting and controlling behaviour. For example, biological psychologists take a nomothetic approach when explaining obsessive-compulsive disorder (OCD) and claim that OCD is caused by higher levels of dopamine and lower levels of serotonin. Drug therapies are developed on the basis of nomothetic research and work by redressing a biological imbalance. SSRIs are used to treat OCD and increase the availability and uptake of serotonin, thus reducing the anxiety associated with OCD, which helps to improve the lives of people suffering from this condition.

However, as drug treatments are not successful for all patients, some psychologists argue that alternate treatments (e.g. Cognitive Behavioural Therapy), which are based on an idiographic approach, are more suitable for treating individuals with such conditions, as they seek to understand and explain the disorder from the patient’s point of view.

Furthermore, some psychologists argue that the nomothetic approach loses sight of the ‘whole person’, due to its fixation on quantitative data and statistical analysis. Furthermore, these psychologists also claim that the nomothetic approaches only provides a superficial understanding of human behaviour. For example, Milgram’s research found that 65% of participants obeyed an authority figure and inflicted a 450-volt electric shock because they were ordered to do so. However, the results fail to provide an explanation of why each person obeyed, and there may have been very different circumstances that led to this obedience found in each participant.

Idiographic researchers would argue that Milgram’s research only allows us to make predictions on groups and not on individuals. While Milgram might predict that 65% of the population would obey an unjust order, he is unable to accurately predict what an individual would do. Allport (who first coined the term idiographic) argued that it is only by understanding an individual that we can make accurate predictions of individual behaviour.

**Extension: A Combined Approach**

Holt (1967) argues that the ideographic/nomothetic distinction is a false distinction. Many approaches in psychology take advantage of both approaches and therefore the two approaches can be viewed as complementary rather than contradictory. For example, while cognitive psychologists typically take a nomothetic approach and create general laws of cognitive processes (e.g. the Working Memory Model), they also take advantage of the idiographic approach when using case studies to provide evidence for a particular theory (e.g. Patient KF, Shallice and Warrington, 1970). In reality, many research studies make use of both approaches, and it could be argued that the distinction between idiographic and nomothetic is meaningless and that psychologists should employ both methods depending on the nature of the research question.

**Critical Thinking**

Consider the topic Psychopathology. Which psychological disorders are treated using a nomothetic approach and which are treated using an idiographic approach?
Are some disorders (e.g. OCD, Depression or Phobias) treated using both approaches? If so, which approach has produced better success rates?

Can you think of another example of where the idiographic and nomothetic approach have been combined?

Possible Exam Questions

1. Which of the following statements describes a nomothetic approach in psychology?
   A. Studying an individual and formulating general laws.
   B. Studying an individual and not formulating general laws.
   C. Studying a large group and formulating general laws.
   D. Studying a group and not formulating general laws.

2. Explain what is meant by the terms idiographic and nomothetic. (4 marks)

3. Two psychologists wanted to study delinquent behaviour in schools. One psychologist chose to conduct a case study on a pupil called Nathan who has ADHD, whereas the other psychologist chose to examine an entire primary school population to come up with a theory about delinquent behaviour. Using your knowledge of the idiographic and nomothetic approaches, outline one strength of both approaches in relation to this scenario. (4 marks)

4. Discuss idiographic and nomothetic approaches to psychological investigation. (16 marks)

Notes
ETHICAL IMPLICATIONS

Specification: Ethical implications of research studies and theory, including reference to social sensitivity.

WHAT YOU NEED TO KNOW

1. Outline what is meant by the term ethical implications and provide an example of ethical implications of research studies and theory.
2. Outline and evaluate socially sensitive research.

KEY TERMS

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<td>Ethical Implications</td>
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<td>Social Sensitivity</td>
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1. Ethical Implications of Research Studies and Theories

Implications are effects or consequences, and in this section you need to understand the consequences of research studies and theory.

In year one you studied ethical issues in psychological research, for example deception, informed consent, protection from harm, etc. These are examples of ethical implications/consequences for the participants who take part in the research, and psychologists are required to balance the rights of the individual participants against the need to produce research that is useful for society. However, the term ethical implications also refers to other people, and psychologists should consider the implications of their findings in a wider context.

Ethical Implications of Research Studies: If you consider Milgram’s (1963) research, you need to consider whether the ‘ends justify the means’. The participants were deceived and were unable to give fully informed consent. The experiment caused significant distress, and the participants were told or coerced to continue against their will. On the other hand, the participants were debriefed after the experiment and a follow-up interview took place a year later. The outcome of these follow-up interviews suggested that the participants had suffered no long-term effects.

Ethical Implications of Theories: Bowlby’s Theory of Attachment suggests that children form one special attachment bond, usually with their mother, which must take place within a critical period. Bowlby also suggested that this attachment bond affects their future relationships through an internal working model. While Bowlby’s work has contributed to the development of childcare practices, it has also encouraged the view that a woman’s place is at home with her children, which could make some mothers feel guilty for wanting to return to work following childbirth.

Exam Hint: If you are to write an essay on ethical implications of research studies and theories, you can draw on what you know about ethical issues from your year one topics. However, there are also wider consequences that psychologists should consider relating to the communication and publication of their findings. This is especially prevalent with research that is ‘socially sensitive’.
2. Socially Sensitive Research

Sieber and Stanley (1988) used the term social sensitivity to describe studies where there are potential social consequences for the participants or the group of people represented by the research.

Sieber and Stanley (1988) identified four aspects in the scientific research process that raise ethical implications in socially sensitive research:

1. **The Research Question:** The researcher must consider their research question carefully. Asking questions like ‘Are there racial differences in IQ?’ or ‘Is intelligence inherited?’ may be damaging to members of a particular group.

2. **The Methodology Used:** The researcher needs to consider the treatment of the participants and their right to **confidentiality** and **anonymity**. For example, if someone admits to committing a crime, or to having unprotected sex if they are HIV positive, should the researcher maintain confidentiality?

3. **The Institutional Context:** The researcher should be mindful of how the data is going to be used and consider who is funding the research. If the research is funded by a private institution or organisation, why are they funding the research and how do they intend to use the findings?

4. **Interpretation and Application of Findings:** Finally, the researcher needs to consider how their findings might be interpreted and applied in the real-world. Could their data or results be used to inform policy?

Also, any research linking intelligence to genetic factors can be seen as socially sensitive. For example, Cyril Burt used studies of identical twins to support his view that intelligence is largely genetic. His views greatly influenced the **Hadow Report (1926)**, which led to the creation of the 11+ exam for entry into a selective ‘grammar school’. This was used throughout England from 1944-1976, and is still used today in a few areas. This meant that generations of children were affected by the 11+ exam, even though there has been huge controversy regarding whether Cyril Burt had **falsified** his research data.

Sieber and Stanley also identified ten types of ethical issue that are especially important in socially sensitive research.

*Exam Hint: Some of the following ethical issues were examined in year one and therefore it is important when considering socially sensitive research to focus on the additional issue identified by Sieber and Stanley (see below).*

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<th>YEAR 1 ETHICAL ISSUES</th>
<th>YEAR 2 SOCIALLY SENSITIVE CONSIDERATIONS</th>
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<tr>
<td>Deception – this refers to self-deception, where the research may lead people to form false stereotypes (e.g. boys are better at maths than girls) that then becomes a self-fulfilling prophecy.</td>
<td>Sound and Valid Methodology – findings from research with poor methodology may find their way into the public domain and therefore shape important social policy (see the Hadow Report above).</td>
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<tr>
<td>Privacy – some research may lead to social policies that are an invasion of people’s privacy. For example, AIDS research may lead to laws requiring certain people to undergo compulsory testing.</td>
<td>Justice and Equitable Treatment – research interests, techniques or findings should not result in some people being treated unfairly, e.g. through creating unfavourable prejudices or withholding something favourable (e.g. an educational opportunity or a potentially beneficial treatment).</td>
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Informed Consent – is important in any research, but especially so when it is socially sensitive.

Scientific Freedom – censorship of scientific activity is usually thought to be unacceptable, but there are some kinds of research that should be, and researchers have an obligation not to harm their participants.

Confidentiality of Data – breaches of confidentiality in relation to sensitive issues could have far-reaching social and economic consequences.

Ownership of Data – problems here include the sponsorship of the research (e.g. a university department or commercial organisation) and who has access to the data. Certain findings in the wrong hands could be used to coerce, manipulate or subjugate people.

Values of Social Scientists – refers to the theoretical and personal beliefs of the scientist or psychologists and the need to recognise that research is not ‘value-free’. Different values can cause people to carry out research and interpret research findings differently.

Risk/Benefit Ratio – risks and benefits may be much harder to assess in socially sensitive research, so it is really important that they are considered carefully.

Exam Hint: This above list outlines all of the ethical considerations put forward by Sieber and Stanley and while these are useful, you are unlikely to list all of them in your exam. Therefore, it’s important to consider how the four aspects of the scientific research process (detailed above) might raise ethical issues in socially sensitive research.

Let’s consider how Cyril Burt’s research is an example of socially sensitive research.

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<th>CONSIDERATION</th>
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<tr>
<td>THE RESEARCH QUESTION</td>
<td>Burt should have considered his research question carefully. For example, examining whether intelligence is genetic could have serious implications and lead to further research where psychologists try to discover ‘intelligent genes’.</td>
</tr>
<tr>
<td>THE METHODOLOGY USED</td>
<td>Burt used twin studies as the basis of his investigation; however, it later transpired that his data was fabricated. Some psychologists even believe that he made up the names of his two research assistants who collected the data.</td>
</tr>
<tr>
<td>THE INSTITUTIONAL CONTEXT</td>
<td>While Burt was working for the University of Liverpool at the time, he also worked for London County Council and other institutions and therefore he should have been mindful about the intended use of his research, following publication.</td>
</tr>
<tr>
<td>INTERPRETATION AND APPLICATION OF FINDINGS</td>
<td>Finally, and most significantly, Burt should have considered the severe implications of his findings which were used to inform policy. His views greatly influenced the Hadow Report (1926) which led to the creation of the 11+ exam for entry into a selective ‘grammar school’. This was used throughout England from 1944-1976, and is still used today in a few areas. This meant that generations of children were affected by the 11+ exam, even though there has been huge controversy regarding whether Burt had falsified his research data.</td>
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Evaluation of Socially Sensitive Research

- The considerations outlined by Sieber and Stanley provide a mechanism to safeguard individuals who are indirectly affected by psychological research. Because of the problems associated with socially sensitive research, it’s important to consider how the four aspects of the scientific research process (detailed above) might raise ethical issues in socially sensitive research.
sensitive research, it is not sufficient to simply safeguard the interests of the participants taking part in the research. There is also the potential for an indirect impact on the participant’s family and co-workers, and therefore it is important for researchers to consider the wider implications of their research. Current ethical guidelines are focused on the direct effects of research practice on participants, but may not address the other ways that research might inflict harm on people in society. For example, the current ethical guidelines do not require researchers to consider how their findings may be used by other people or institutions to form and/or shape public social policy. Sieber and Stanley recommend that researchers should consider this when interpreting and applying their findings, to ensure that psychological research does no indirect harm to other members of society. Furthermore, because many marginalised groups (such as those with disabilities, the elderly, and the economically disadvantaged) are largely excluded from research, they may in some way be harmed by its conclusions and application.

- Socially sensitive research can lead to issues of discrimination and therefore some psychologists would argue against conducting this form of research. For example, research examining social differences in IQ has been used to justify new (and often unwarranted) forms of social control. For example, between 1907 and 1963, over 64,000 individuals were forcibly sterilized under eugenic legislation in the United States, and in 1972, the United States Senate Committee revealed that at least 2,000 involuntary sterilizations had been performed on poor married women without their consent or knowledge. This could be ‘justified’ by (flawed) research findings (e.g. Robert Yerkes) which argued that black Americans had lower IQ scores in comparison to white Americans.

- The issues with conducting socially sensitive research (like those highlighted above), are why some psychologists simply suggest that we should avoid conducting such research, and steer clear of sensitive topics, including ethnicity, gender and sexuality. Some psychologists believe that such research could have a negative impact for the participants. However, this would probably leave researchers with nothing but trivial questions to investigate. A more acceptable solution might be for psychologists to engage more actively with policy makers after the publication of their findings to help reduce the likelihood that data is misused and to ensure that evidence-based research is used in socially sensitive ways.

- Furthermore, some psychologists argue that ignoring socially sensitive areas (e.g. ethnicity or gender-related research) amounts to an abdication of their ‘social responsibilities’. Scarr (1988) argues that ‘science is desperately in need of good studies that highlight race and gender variables...towards a fulcrum of what we need to do to help underrepresented people to succeed in this society. Unlike the ostrich, we cannot afford to hide our heads for fear of socially uncomfortable discoveries’.

- However, it is important to recognise that not all socially sensitive research is controversial and some is desirable and beneficial to society. For example, research examining eye-witness testimony, especially the use of child-witnesses (e.g. Flin et al.) has found that young children can be reliable witnesses if they are questioned in a timely and appropriate manner. In this area, socially sensitive research has resulted in a good working relationship between psychologists and the legal profession to help improve the accuracy and validity of children eye-witnesses.

- It is also important that psychologists are free to carry out whatever research seems important to them, because if governments start passing laws to prohibit certain kinds of research (e.g. ethnicity-related research), then there is a real danger that research will be stopped for political rather than for ethical reasons. However, there is some evidence that socially sensitive research (at least in the US) is more likely than non-sensitive research to be rejected by institutional ethical committees. For example, Ceci et al. (1985) found that the rejection rate was about twice as great, which suggests that university ethics departments are mindful of socially sensitive research and appropriate measures are
put in place at an institutional level to protect individuals and the wider community from socially sensitive research.

**Critical Thinking**

Can you think of an example of socially sensitive research from a topic that you have studied? You have already been given the example of attachment, can you think of another one? In particular, think about your year two optional topics, especially schizophrenia, eating behaviour and stress.

**Possible Exam Questions**

1. Explain what is meant by socially sensitive research. (3 marks)

2. Outline one example of research you have studied that is socially sensitive. (3 marks)

3. Raine (1996) conducted brain scans on violent criminals and found that they tended to have subtle damage to areas of the brain associated with impulse control. He suggested that this type of brain damage is a marker for violent criminality. Explain why this research could be considered to be socially sensitive. (4 marks)

4. Discuss the ethical implications of research studies and/or theories, including reference to social sensitivity. (16 marks)

**Notes**
### Checklist

<table>
<thead>
<tr>
<th>Specification</th>
<th>Content</th>
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<tbody>
<tr>
<td><strong>Gender and Culture</strong></td>
<td>Gender and culture in psychology – universality and bias. Gender bias including androcentrism and alpha and beta bias; cultural bias, including ethnocentrism and cultural relativism.</td>
</tr>
<tr>
<td><strong>Free Will and Determinism</strong></td>
<td>Free will and determinism: hard determinism and soft determinism; biological, environmental and psychic determinism. The scientific emphasis on causal explanations.</td>
</tr>
<tr>
<td><strong>Nature-Nurture Debate</strong></td>
<td>The nature-nurture debate: the relative importance of heredity and environment in determining behaviour; the interactionist approach.</td>
</tr>
<tr>
<td><strong>Holism and Reductionism</strong></td>
<td>Holism and reductionism: levels of explanation in psychology. Biological reductionism and environmental (stimulus-response) reductionism.</td>
</tr>
<tr>
<td><strong>Idiographic and Nomothetic Approaches</strong></td>
<td>Idiographic and nomothetic approaches to psychological investigation.</td>
</tr>
<tr>
<td><strong>Ethical Implications of Research</strong></td>
<td>Ethical implications of research studies and theory, including reference to social sensitivity.</td>
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