



GSOC.SA6 The Nature versus Nurture Debate

AQA 8192 · Calculators not allowed · about 75 minutes

Total Marks

Name: _____ Date: ____ / ____ / ____

Answer ALL questions. Show your understanding by using sociological vocabulary and, where asked, your own examples.

1 The 'nature versus nurture' debate is mainly a disagreement about what?

- ☐ A) Whether human behaviour is shaped more by biology or by social experience
- ☐ B) Whether a country should have a monarchy or a republic
- ☐ C) Whether schools should set homework every night
- ☐ D) Whether crime rates are rising or falling

(Total for Question 1 is 1 mark)

2 Define the terms 'nature' and 'nurture' as they are used in this debate.

(a) Define 'nature' in this context.

(2)

(b) Define 'nurture' in this context.

(2)

(Total for Question 2 is 4 marks)

3 Sociologists generally emphasise the nurture side of this debate.

(Total for Question 3 is 4 marks)

- 4 The sociologist Kingsley Davis published case studies, in 1940 and 1947, of children who had been raised in extreme social isolation, with very little human contact during their early years.

(Total for Question 4 is 6 marks)

- 5 Explain what these case studies suggest about the nature versus nurture debate, and why sociologists are cautious about drawing firm conclusions from them.

(Total for Question 5 is 4 marks)

- 6 Not every sociologist or scientist agrees that nurture explains most human behaviour. Sociobiology offers a different view.

(Total for Question 6 is 4 marks)

- 7 Sociologists such as Steven Rose, Leon Kamin and Richard Lewontin criticised strong versions of sociobiology in their book 'Not in Our Genes' (1984).

(Total for Question 7 is 4 marks)

- 8** Give one everyday example of a human ability or behaviour, and explain how both nature and nurture might contribute to it.

(Total for Question 8 is 4 marks)

- 9** Twin studies compare identical twins, who share (almost) all their genes, often raised in different environments.

(Total for Question 9 is 4 marks)

- 10** State one reason a nature-only explanation of human behaviour is generally seen as incomplete by sociologists.

(Total for Question 10 is 2 marks)

- 11** State one reason a nurture-only explanation of human behaviour is generally seen as incomplete.

(Total for Question 11 is 2 marks)

- 12** Sociologists, biologists and sociobiologists continue to disagree about how much of human behaviour is shaped by nature and how much by nurture.

Evaluate the view that human behaviour is best explained by nurture (social experience) rather than by nature (biology). In your answer you should refer to evidence and views on both sides of the debate.

(Total for Question 12 is 12 marks)

- 13** Explain why sociologists are careful to avoid presenting biology as having no influence on human behaviour at all.

(Total for Question 13 is 2 marks)

- 14** Explain one reason case-study evidence, such as Davis's studies of children raised in extreme isolation, cannot fully settle the nature/nurture debate on its own.

(Total for Question 14 is 2 marks)

Mark scheme · GSOC.SA6 The Nature versus Nurture Debate

Question 1

- **B1** A (biology or social experience)
- **Answer: A**

Question 2

- (a) **B1** identifies 'nature' as the influence of biology, genetics or inherited instinct on behaviour (oe)
- (a) **B1** development, e.g. a nature-based explanation says behaviour is present from birth or determined by biological factors
- **(a) Answer: Nature refers to the influence of biology, genetics or inherited instinct on behaviour; a nature-based explanation says behaviour is present from birth or determined by biological factors.**
- (b) **B1** identifies 'nurture' as the influence of social experience, upbringing and socialisation on behaviour (oe)
- (b) **B1** development, e.g. a nurture-based explanation says behaviour is learned through interaction with family, culture and wider society
- **(b) Answer: Nurture refers to the influence of social experience, upbringing and socialisation on behaviour; a nurture-based explanation says behaviour is learned through interaction with family, culture and society.**

Question 3

- **B1** identifies that sociology as a discipline is mainly interested in how society, culture and social relationships shape human behaviour
- **B1** development, e.g. sociologists therefore look for evidence that patterns of behaviour vary between different societies, cultures or historical periods
- **B1** explains that such variation would be difficult to explain if behaviour were fixed entirely by biology, since biology does not differ systematically between societies in the same way
- **B1** development, e.g. this is why sociologists study socialisation, culture and social structure as major influences on behaviour, without necessarily claiming biology plays no role at all
- **Answer: Sociology studies how society and culture shape behaviour; because patterns of behaviour vary between different societies and historical periods in ways biology alone would struggle to explain, sociologists emphasise socialisation and social structure as major influences, without claiming biology plays no role at all.**

Question 4

- **B1** identifies that Davis studied children who had experienced extreme social isolation in early childhood, with very limited contact with other people
- **B1** explains that these children were found to lack basic social skills usually expected by their age, such as language and everyday social behaviour, when they were later found
- **B1** development, e.g. some skills developed to some degree once the children received social contact and support, suggesting learning was still possible, though outcomes varied and were affected by many factors
- **B1** explains that Davis used these findings as evidence for the importance of social contact and socialisation in normal human development
- **B1** development, e.g. the cases suggested that skills often assumed to be 'natural', such as language and basic social interaction, may depend heavily on early social experience rather than developing automatically
- **B1** appropriate care/caution, e.g. noting these were real individual cases and that other factors (health, the exact circumstances of the isolation) make firm general conclusions difficult
- **Answer: Davis's case studies of children raised in extreme social isolation found they lacked age-typical social skills and language when found, though outcomes varied once they received social contact; Davis used this as evidence that skills often assumed to be 'natural' may depend heavily on early social experience, while noting that individual case studies make firm general conclusions difficult.**

Question 5

- **B1** identifies that the case studies are often used to support the nurture side, since basic social skills did not appear automatically without social contact
- **B1** development, e.g. this suggests some abilities assumed to be innate are actually the product of learning through interaction with others
- **B1** identifies a reason for caution, e.g. these are individual, real-world case studies rather than controlled experiments, so other factors (health, the specific circumstances of each case) could also explain the outcomes
- **B1** development, e.g. it is difficult to generalise confidently from a very small number of individual, uncontrolled cases to a claim about human development as a whole
- **Answer: The case studies are often used to support the nurture side, since basic social skills did not appear automatically without contact, but sociologists are cautious because these are individual, uncontrolled real-world cases, where other factors could also explain the outcomes, making it hard to generalise confidently.**

Question 6

- **B1** identifies sociobiology as an approach, associated with the biologist E.O. Wilson (Sociobiology: The New Synthesis, 1975), that argues social behaviour has an important biological basis
- **B1** development, e.g. sociobiologists argue that some patterns of behaviour may have evolved because they helped human survival or reproduction over long periods of time
- **B1** development, e.g. sociobiologists therefore argue that biology should be given more weight when explaining human behaviour than a purely social explanation allows
- **B1** correct source attribution, e.g. reference to E.O. Wilson and the 1975 publication date
- **Answer: Sociobiology, associated with the biologist E.O. Wilson (1975), argues social behaviour has an important biological basis, with some patterns having evolved to aid survival or reproduction, so biology should be given more weight than a purely social explanation allows.**

Question 7

- **B1** identifies that Rose, Kamin and Lewontin criticised claims that complex social behaviour is largely fixed by genes
- **B1** development, e.g. they argued such claims often rest on weak evidence and can wrongly present unequal social outcomes as natural or inevitable, rather than as the product of social conditions that could be changed
- **B1** explains that their criticism did not deny biology plays any role at all, but argued its influence is much harder to separate from social and environmental influence than strong sociobiology suggests
- **B1** development, e.g. this exchange is a good example of the nature/nurture debate being argued directly between scientists and sociologists, rather than settled in favour of one side
- **Answer: Rose, Kamin and Lewontin (1984) argued that claims complex social behaviour is largely fixed by genes rest on weak evidence and can wrongly present unequal outcomes as natural rather than socially caused; they did not deny biology any role, but argued it is very hard to separate from social influence, showing the debate remains genuinely contested.**

Question 8

- **B1** a plausible everyday example, e.g. language ability, sporting talent or musical ability
- **B1** a correct explanation of a possible nature contribution, e.g. some inherited biological capacity or predisposition
- **B1** a correct explanation of a possible nurture contribution, e.g. exposure, practice, encouragement or teaching from family and society
- **B1** development linking the two, e.g. explaining that the final outcome likely depends on an interaction between the two, rather than either alone
- **Answer: Musical ability may involve both nature (an inherited capacity for pitch or rhythm) and nurture (access to instruments, encouragement and years of practice), with the final level of skill likely depending on the interaction between the two rather than either alone.**

Question 9

- **B1** identifies that identical twins share almost all of their genetic material, so differences between them raised in different environments can suggest an environmental (nurture) influence
- **B1** identifies that similarities between identical twins raised apart can suggest a genetic (nature) influence
- **B1** development, e.g. this design is useful because it can help separate the effects of shared genes from the effects of different environments
- **B1** development/limitation, e.g. cases of identical twins raised entirely separately are rare, and even twins raised together do not have identical experiences, so results must still be interpreted with caution
- **Answer: Because identical twins share almost all their genes, differences between twins raised in different environments can suggest a nurture influence, while similarities between twins raised apart can suggest a nature influence; this design helps separate genetic from environmental effects, though such cases are rare and results must be interpreted with caution.**

Question 10

- **B1** identifies a genuine reason, e.g. behaviour patterns vary significantly between different cultures and historical periods, which a purely biological explanation struggles to account for
- **B1** brief development, e.g. this variation is better explained by differences in socialisation and culture than by genetics
- **Answer: Behaviour patterns vary significantly between different cultures and historical periods, which a purely biological explanation struggles to account for; this variation is better explained by differences in socialisation and culture.**

Question 11

- **B1** identifies a genuine reason, e.g. some human abilities and predispositions appear very early in infancy, before much socialisation has taken place, which suggests some biological basis
- **B1** brief development, e.g. or that treating all behaviour as purely learned ignores real evidence, such as some twin-study findings, that genetics plays some part
- **Answer: Some human abilities and predispositions appear very early in infancy, before much socialisation has taken place, and evidence such as some twin-study findings suggests genetics plays some part, so treating behaviour as purely learned is incomplete.**

Question 12

- **Level 4** (10-12): A detailed, well-balanced evaluation that accurately explains BOTH the nurture case (e.g. sociological emphasis on socialisation, evidence such as Davis's case studies) AND a genuine nature-leaning case (e.g. sociobiology), supported by accurate reference to named sources. Strengths and limitations of the evidence on both sides are analysed, and a reasoned, supported judgement is reached that does not claim biology is irrelevant. Sociological terminology is used accurately and consistently throughout.
- **Level 3** (7-9): A clear evaluation that explains both the nurture case and a nature-leaning case, with some accurate reference to named sources. Some analysis of strengths/limitations. An attempt at a conclusion, which may be only partly supported.
- **Level 2** (4-6): Some relevant explanation of nurture and/or nature, with limited development or accuracy. Little clear evaluation or comparison, and/or an unbalanced treatment that ignores one side of the debate.
- **Level 1** (1-3): One or two isolated, undeveloped points about nature or nurture, with little or no sociological terminology or accurate detail.
- **Level 0** (0): No relevant content.
- **Indicative content:**
 - Nurture case: sociology's core evidence is that behaviour varies across cultures and time periods, which a fixed biological explanation cannot easily account for; Davis's case studies of children raised in extreme social isolation are often cited as evidence that basic social skills depend heavily on early social contact.
 - Nature case: sociobiology (E.O. Wilson, 1975) argues some social behaviour has an evolved biological basis, and that biology should be given real weight in explaining human behaviour, not dismissed.
 - Twin-study evidence: comparisons of identical twins raised in different environments can be used to argue for both nature (similarities despite separation) and nurture (differences due to environment), showing that evidence is genuinely mixed rather than one-sided.
 - Evaluation of the nurture case: critics such as Rose, Kamin and Lewontin (1984) still had to argue directly against sociobiology, which shows the biological case cannot simply be dismissed; case-study evidence like Davis's also has limits, since it comes from a very small number of uncontrolled real-world cases.
 - Evaluation of the nature case: critics argue sociobiology can risk presenting unequal or harmful social outcomes as natural and unchangeable, when they may instead be the product of social conditions, and that isolating a 'pure' biological cause is very difficult in real human lives.
 - A balanced conclusion should avoid claiming either side has been proven false: most sociologists today argue nature and nurture interact, with biology setting some potential and range, and social experience shaping how, whether and to what degree that potential is expressed.
 - A convincing top-level answer treats this as a genuine, unresolved debate rather than a settled sociological victory for nurture, using specific named evidence from both sides to support its judgement.

Question 13

- **B1** identifies that there is genuine scientific evidence, such as from twin studies and some early-infancy observations, suggesting biology plays some part in human behaviour
- **B1** development, e.g. dismissing biology entirely would misrepresent the evidence and would not accurately reflect how most sociologists and scientists actually understand the debate today
- **Answer: There is genuine scientific evidence, such as from twin studies, suggesting biology plays some part in behaviour, so dismissing it entirely would misrepresent the evidence and how most sociologists and scientists actually understand the debate.**

Question 14

- **B1** identifies that case studies involve a very small number of individuals, often in unusual and uncontrolled circumstances
- **B1** development, e.g. other factors specific to each case (health, the exact nature and length of the isolation) make it hard to draw firm general conclusions that would apply to human development as a whole
- **Answer: Case studies involve a very small number of individuals in unusual, uncontrolled circumstances, so other factors specific to each case make it hard to draw firm general conclusions that would apply to human development as a whole.**