

### Mark Scheme (Results)

October 2017

Pearson Edexcel International GCE in Psychology (WPS04) PAPER 4: Clinical Psychology and Psychological Skills

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### **General Marking Guidance**

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

### **SECTION A: CLINICAL PSYCHOLOGY**

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 1 (a)              | AO1 (4 marks)   | (4)  |
|                    | Credit up to <b>four</b> marks for an accurate description.   |      |
|                    | Unipolar depression   |      |
|                    | For example:  |      |
|                    | <ul> <li>There are two forms of depression, major depressive disorder and<br/>dysthymic disorder (1). Major depressive disorder (MDD) has<br/>symptoms such as a depressed mood or loss of interest (1) which<br/>will come and go in a cycle (1) unlike dysthymic disorder where the<br/>symptoms remain constant over two or more years (1).</li> </ul> |      |
|                    | Anorexia nervosa  |      |
|                    | For example:  |      |
|                    | • This is a refusal to eat because of a fear of gaining weight (1). Weight is less than 85% of expected body weight (1) and sufferers have a distorted perception of their weight and shape (1). It affects more females than males (1).  |      |
|                    | Look for other reasonable marking points.   |      |
|                    | Do not credit schizophrenia.  |      |

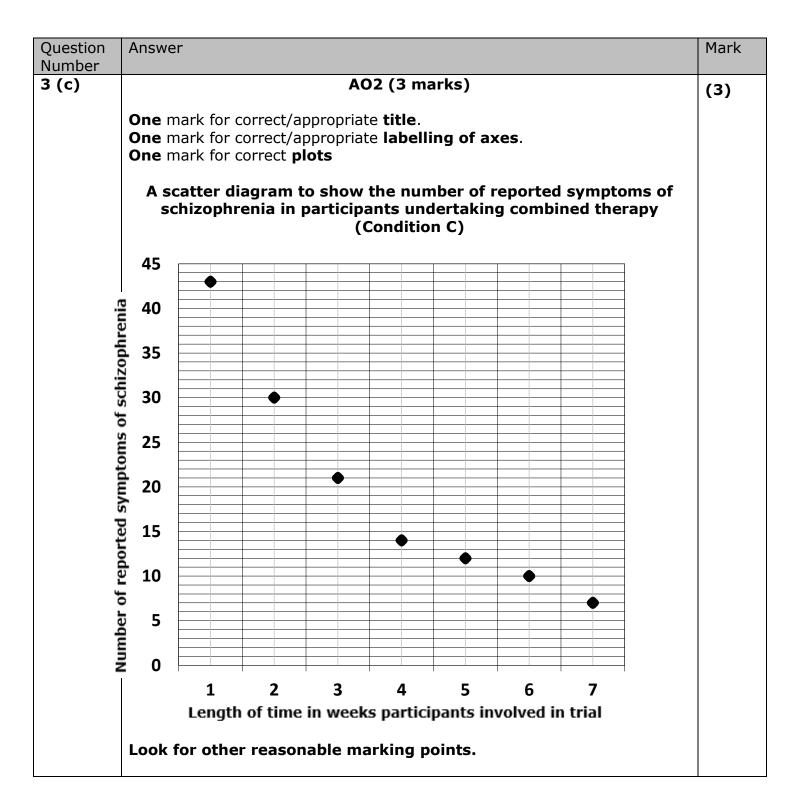
| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 1 (b)              | AO1 (2 marks)  | (2)  |
|                    | Credit <b>one</b> mark for each accurate principal of CBT given.   |      |
|                    | For example:   |      |
|                    | <ul> <li>CBT focuses on an individual's negative behaviours/thoughts (1).</li> <li>The therapy aims to help rationalise irrational/faulty thinking (1).</li> </ul> |      |
|                    | Look for other reasonable marking points.  |      |
|                    | Answers must relate to cognitive behavioural therapy.  |      |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| Number 2 (a)       | AO1 (2 marks) AO3 (2 marks)  Credit one mark for accurate identification of each strength (AO1) Credit one mark for justification/exemplification of each strength (AO3)  For example:  • The study took place in a real-life context as the pseudo-patients were admitted to a range of genuine psychiatric units in the USA (1), so the results have high ecological validity to the experiences of mental health patients within institutions in the USA (1).  • The study was conducted in a variety of hospitals, such as public and private, in several states of the USA (1). Therefore, the findings are more generalisable to other psychiatric hospitals in the USA as it represents psychiatric care in the USA at that time (1). | (4)  |
|                    | Look for other reasonable marking points.  |      |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 2 (b)              | AO1 (2 marks) AO3 (2 marks)  | (4)  |
|                    | Credit <b>one</b> mark for accurate identification of each weakness (AO1) Credit <b>one</b> mark for justification/exemplification of each weakness (AO3)  |      |
|                    | For example:   |      |
|                    | <ul> <li>There is a lack of objectivity in the observational data from the pseudo-patients in the ward as the reports could have been affected by their emotions (1), so the data gathered about the experiences of patients and behaviours of staff in the hospitals could have been subjective (1).</li> <li>The staff working at the hospitals were misled by the pseudo-patients when they gave fake symptoms as they were not told they were being studied (1). Therefore, the study can be considered unethical under the BPS code of ethics due to the deception of the hospital staff (1)</li> </ul> |      |
|                    | Look for other reasonable marking points.  |      |

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 3 (a)              | AO2 (2 marks)  Credit up to <b>two</b> marks for an accurate description of an appropriate methodology in relation to scenario  For example:  | (2)  |
|                    | <ul> <li>Dr Ashton uses a randomised controlled trial for schizophrenic patients (1) where the participants were assigned to the three different schizophrenia treatment programmes (1).</li> </ul> |      |
|                    | Look for other reasonable marking points.  Generic answers score 0 marks.   |      |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 3 (b)              | AO2 (2 marks)  Credit one mark a correct identification of ratio/interval data. Credit one mark for an accurate description.  For example;  Ratio data (1) because there is an absolute zero that would be considered meaningful as it shows no symptoms (1).  Interval data (1) because the intervals between each value are equal as two symptoms is twice as many as one symptom (1). | (2)  |
|                    | Look for other ways of expressing level of measurement.  |      |



| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 3(d)               | AO3 (2 marks)  Credit one mark for each accurate conclusion.  For example;  • Family therapy is less successful at reducing the symptoms of schizophrenia than drug therapy (1).  • Combined drug and family therapy is more successful than individual therapies in reducing the symptoms of schizophrenia. (1)  • Drug therapy and combined therapies produce a more immediate reduction in the symptoms of schizophrenia than family therapy. (1)  Conclusions must be directly relevant to results.  Look for other reasonable marking points. | (2)  |

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 4(a)               | AO2 (4 marks)  Credit up to four marks for an accurate description in relation to practical.  For example;  • We operationalised the concepts of negative, neutral and positive attitudes, such as 'danger to self', 'danger to others', 'medical condition', 'contribution to society' (1). As a group we read 10 articles written within the last 4 weeks and selected three final articles based on the credibility of the source (1). Each person then read all three articles and highlighted where the content reflected the operationalised themes (1) we used inter-rater scoring where we worked in pairs to check each other's highlighted themes against our own (1).  Procedure must relate to clinical practical (content analysis that explores attitudes to mental health).  Generic answers score 0 marks.  Look for other reasonable marking points. | (4)  |

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 4(b)               | AO2 (1 mark) Credit one mark for an accurate conclusion in relation to practical.  For example;  • A more negative attitude to mental health is shown by the tabloid press than by medical reports (1).  Conclusion must relate to clinical practical (content analysis that explores attitudes to mental health).  Generic answers score 0 marks.  Look for other reasonable marking points. | (1)  |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 4(c)               | AO2 (1 mark), AO3 (1 mark)   |      |
|                    | Credit <b>one</b> mark for accurate identification of a weakness in relation to practical (AO2) Credit <b>one</b> mark for justification/exemplification of the weakness (AO3) For example;  • The sources analysed were from a limited sample of Spanish articles that I                        | (2)  |
|                    | found online through using only one search engine (1), this limits the generalisability of my findings beyond the Spanish media as my sources were ethnocentric to this population (1).  Weakness must relate to clinical practical (content analysis that explores attitudes to mental health). |      |
|                    | Generic answers score 0 marks.   |      |
|                    | Look for other reasonable marking points.  |      |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 5(a)               | AO2 (1 mark)  Credit one mark for correct calculation  1:100 | (1)  |
|                    | Reject all other answers.                                    |      |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 5(b)               | AO2 (1 mark) Credit one mark for correct calculation | (1)  |
|                    | • 2/5  |      |
|                    | Reject all other answers.                            |      |

# WPSO4 CLINICAL PSYCHOLOGY AND PSYCHOLOGICAL SKILLS SECTION B: CLINICAL PSYCHOLOGY

| Question<br>Number | Indicative Content   | Mark |
|--------------------|--|------|
| 6                  | AO1 (6 marks), AO3 (10 marks)  | (16) |
|                    | Candidates can use any alternative biological explanation to neurotransmitters; such as genetics, brain structure.   |      |
|                    | Neurotransmitters  |      |
|                    | AO1  |      |
|                    | <ul> <li>Schizophrenia has been explained as an imbalance of the neurotransmitter dopamine/overactive dopamine receptors.</li> <li>Positive symptoms are associated with the mesolimbic pathway and negative symptoms with the mesocortical pathway.</li> <li>Patients taking drugs that increase dopamine display symptoms of schizophrenia.</li> </ul>   |      |
|                    | A03  |      |
|                    | <ul> <li>Iverson (1979) found that post-mortems of schizophrenic patients showed high levels of dopamine in the brain.</li> <li>In patients with schizophrenia phenothiazine drugs (which block dopamine receptors) show signs of improvement and a reduction in schizophrenia symptoms, which is evidence that dopamine plays a role in schizophrenia.</li> <li>Dépatie and Lal (2001) found that apomorphine, which stimulates dopamine receptors, did not result in schizophrenia symptoms, suggesting that dopamine may not be the cause of schizophrenia.</li> <li>Aarsland et al (1999) found that treatments for Parkinson's disease (Ldopa) that increase dopamine production result in schizophrenia symptoms (hallucinations/delusions) suggesting dopamine features significantly in schizophrenia.</li> <li>Amphetamine drugs were found by Krystal et al (2005) to increase the concentration of dopamine in the synaptic gap, but only produce the positive symptoms of schizophrenia, suggesting there is more than dopamine involved in schizophrenia.</li> <li>Krystal et al (2005) found that glutamate NDMA receptors in the brain are stimulated with ketamine drugs which can cause positive and negative schizophrenia symptoms, so dopamine may not be the only neurotransmitter involved.</li> </ul> |      |
|                    | Genetics   |      |
|                    | <ul> <li>AO1</li> <li>There is an increased risk of developing schizophrenia if a family member has the disorder.</li> <li>Identical twins share the same genetics and have a higher risk of developing schizophrenia.</li> <li>Genetic mutation can explain schizophrenia in people where there is no previous family history of the disorder.</li> </ul>   |      |

| Question | Indicative Content  | Mark |
|----------|---|------|
| Number   | Indicative Content  | Hark |
| 6        | <ul> <li>Kendler et al (1985) found that first line family members were 18 times more likely to develop schizophrenia than the general population.</li> <li>Gottesman (1991) found that there was a 48% chance of having schizophrenia if a person had a MZ twin with schizophrenia.</li> <li>However, this shows that there must be other factors otherwise the concordance rate would be 100% for MZ twins who are genetically identical.</li> <li>Gottesman and Shields (1982) found that there was a 58% concordance rate (7 out of 12 twins) of schizophrenia in MZ twins reared apart.</li> <li>Gottesman (1991) found that there was a 46% chance of developing schizophrenia if both parents had schizophrenia.</li> <li>MRI scans of MZ twins, one with and one without schizophrenia, suggest it is a brain disease not a genetic disposition.</li> <li>Walsh et al (2008) found that in cases where no family history was evident the patients had a rare CNV genetic mutation.</li> </ul> |      |
|          | Brain structure   |      |
|          | <ul> <li>Brain dysfunction can explain schizophrenia, with parts of the brain being reduced in size in schizophrenic patients.</li> <li>Ventricular enlargement has been observed in patients with schizophrenia.</li> <li>The temporal lobe is smaller in the brain of schizophrenic patients.</li> <li>AO3</li> <li>Buchanan et al (2004) examined 44 patients with schizophrenia and found that patients had smaller inferior prefrontal cortex volume than normal controls.</li> <li>MRI scans have shown that the ventricular cavities in the brain of a schizophrenic patient are around 15% larger than control groups.</li> <li>Degreef et al (1992) found ventricular enlargement in the frontal and temporal horns, with enlargement of the temporal horns associated with the presence of positive symptoms.</li> <li>Evidence from Wright et al (2002) suggests a loss of temporal lobe volume in schizophrenia of an order of approximately 8% compared to control groups.</li> </ul>    |      |
|          | <ul> <li>Barta et al (1990) have shown that smaller superior temporal lobe volume is associated with auditory hallucinations in schizophrenia.</li> <li>Warner (1994) found brain damage in patients with schizophrenia caused by early brain trauma, such as viral infection.</li> <li>Look for other reasonable marking points.</li> </ul>  |      |
|          | Look for other reasonable marking points.   |      |

| Level   | Mark   | Descriptor   |  |
|---------|--|--|--|
| Can     | AO1 (6 marks), AO3 (10 marks) Candidates must demonstrate a greater emphasis on evaluation/conclusion vs knowledge and understanding in their answer. Knowledge & understanding is capped at maximum 6 marks |  |  |
|         | 0  | No rewardable material.  |  |
| Level 1 | 1-4<br>Marks   | Demonstrates isolated elements of knowledge and understanding. (AO1) A conclusion may be presented, but will be generic and the supporting evidence will be limited. Limited attempt to address the question. (AO3)  |  |
| Level 2 | 5-8<br>Marks   | Demonstrates mostly accurate knowledge and understanding. (AO1) Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a superficial conclusion being made. (AO3)                         |  |
| Level 3 | 9-12<br>Marks  | Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning leading to a conclusion being presented. Candidates will demonstrate a grasp of competing arguments but evaluation may be imbalanced. (AO3)   |  |
| Level 4 | 13-16<br>Marks   | Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical evaluation, containing logical chains of reasoning throughout. Demonstrates an awareness of competing arguments, presenting a balanced conclusion. (AO3) |  |

# WPSO4 CLINICAL PSYCHOLOGY AND PSYCHOLOGICAL SKILLS SECTION C: PSYCHOLOGICAL SKILLS

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 7(a)               | AO2 (2 marks)  Credit up to two marks for an accurate description in relation to use in psychological research  For example;  • Qualitative data is descriptive information gathered through detailed case study histories or unstructured interviews (1) which is used in an attempt to find in-depth reasons for the behaviour being studied by the researcher (1).  Look for other reasonable marking points.  Generic answers score 0 marks. | (2)  |

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 7(b)               | AO2 (2 marks)  Credit up to <b>two</b> marks for an accurate description in relation to use in psychological research   | (2)  |
|                    | <ul> <li>For example;</li> <li>Quantitative data includes numerical data from measures such as Likert scales or a tally for a response (1) which can be statistically analysed to test the significance of the data from the behaviour being investigated (1).</li> </ul> |      |
|                    | Look for other reasonable marking points.   |      |
|                    | Generic answers score 0 marks.  |      |

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 7(c)               | AO1 (2 marks)  Credit one mark for each accurate definition  For example;  Primary data is gathered first hand by the researcher (1) whereas secondary data is when the researcher uses information gathered by someone else. (1) | (2)  |
|                    | Look for other reasonable marking points.   |      |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 7(d)               | AO1 (1 mark), AO3 (1 mark)  Credit one mark for accurate identification of a strength (AO1) Credit one mark for justification/exemplification of the strength (AO3)  For example;  • Secondary data is already in the public domain, so it can be easy to access information of the topic being investigated (1) because the researchers do not need specialist equipment to gather the data making it a cost-effective research process (1).  Look for other reasonable marking points. | (2)  |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 8(a)               | AO2 (3 marks)  One mark for an accurate directional (one-tailed) hypothesis.  One mark for a fully operationalised IV (interference time).  One mark for a fully operationalised DV (number of trigrams recalled).  For example;  There will be a decrease in recall when rehearsal is prevented (1)  There will be a decrease in the number of trigrams recalled when rehearsal is prevented by interference (2)  There will be a significant decrease in the correct number of trigrams recalled depending on the length of time (3 seconds, 8 seconds, 13 seconds, 18 seconds) that an interference task prevents rehearsal (3).  Look for other reasonable marking points.  Generic answers score 0 marks. | (3)  |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 8(b)               | AO2 (1 mark), AO3 (1 mark)  Credit one mark for accurate identification in relation to scenario (AO2) Credit one mark for accurate justification/exemplification (AO3)  For example;  Jacob could use a random sample where he picks student names from a hat to take part (1) which gives all students an equal chance of being selected for his memory study (1).  Look for other reasonable marking points.  Generic answers score 0 marks. | (2)  |

| Question<br>Number | Answer   | Mark |
|--------------------|--|------|
| 8(c)               | AO2 (3 marks), AO3 (3 marks)  Credit up to three marks for accurate identification in relation to scenario (AO2)  Credit up to three marks for accurate justification/exemplification (AO3)  For example;  Jacob could use an independent measures design where the experimental group has rehearsal interference and the control group does not (1) this will eliminate any order effects, such as practice or fatigue, which may occur if they do the tests more than once (1). Jacob should use identical trigram lists for both groups (1) this would increase the reliability of the data by ensuring that his experiment can be replicated and retested (1). He will need to control extraneous variables that can prevent rehearsal, such as noise or interruption (1) this will increase the internal validity to be sure the IV (interference) is the only variable affecting the DV (recall) (1).  Look for other reasonable marking points.  Generic answers score 0 marks. | (6)  |

| Question<br>Number | Answer  | Mark |
|--------------------|---|------|
| 8(d)               | AO2 (1 mark)  Credit one mark for accurate statement in relation to scenario.   | (1)  |
|                    | <ul> <li>For example;</li> <li>Jacob's sample is limited to students who would be of a similar age and not representative of the wider population (1).</li> </ul> |      |
|                    | Look for other reasonable marking points.   |      |
|                    | Generic answers score 0 marks.  |      |

# WPSO4 CLINICAL PSYCHOLOGY AND PSYCHOLOGICAL SKILLS SECTION D: PSYCHOLOGICAL SKILLS

| Question | Indicative Content   | Mark |
|----------|--|------|
| Number   |  |      |
| 9        | <ul> <li>AO1 (4 marks), AO3 (4 marks)</li> <li>AO1</li> <li>Day care results in separation from the primary care giver and this can lead to short-term deprivation in children.</li> <li>Bowlby suggested the critical period for bonding was between birth and two years old, where strong attachments were formed.</li> <li>Poor attachment leads to delinquency, affectionless psychopathology and problems with adult relationships in the future.</li> <li>Brengden et al. (2005) found that environmental factors have an influence on social aggression.</li> </ul>   | (8)  |
|          | <ul> <li>Children attending day care under the age of one were most affected because they are at the early stages of the critical bonding period, so day care is not beneficial.</li> <li>Children attending day care for less than 10 hours displayed less aggressive behaviours, so it could be time away from the primary caregiver that results in difficulties so being in day care is not beneficial.</li> <li>Belsky (2002) operationalised aggression to include some behaviours of young children that are developmentally expected at this age, such as demanding attention, so day care may have no impact on development.</li> <li>If the day care setting is of low quality with poor discipline, then social aggression may increase as a result of the children being in this environment regardless of the time spent there.</li> <li>Look for other reasonable marking points.</li> </ul> |      |

| Level   | Mark  | Descriptor   |  |  |  |  |
|---------|---|--|--|--|--|--|
| Candida | AO1 (4 marks), AO2 (4 marks)  Candidates must demonstrate an equal emphasis between knowledge and understanding vs application in their answer. |  |  |  |  |  |
|         | 0   | No rewardable material   |  |  |  |  |
| Level 1 | 1-2<br>Marks  | Demonstrates isolated elements of knowledge and understanding. (AO1) Provides little or no reference to relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)   |  |  |  |  |
| Level 2 | 3–4<br>Marks  | Demonstrates mostly accurate knowledge and understanding. (AO1) Discussion is partially developed, but is imbalanced or superficial occasionally supported through the application of relevant evidence from the context (scientific ideas, processes, techniques and procedures). (AO2)   |  |  |  |  |
| Level 3 | 5–6<br>Marks  | Demonstrates accurate knowledge and understanding. (AO1) Arguments developed using mostly coherent chains of reasoning. Candidates will demonstrate a grasp of competing arguments but discussion may be imbalanced or contain superficial material supported by applying relevant evidence from the context (scientific ideas, processes, techniques and procedures (AO2)           |  |  |  |  |
| Level 4 | 7–8<br>Marks  | Demonstrates accurate and thorough knowledge and understanding. (AO1) Displays a well-developed and logical balanced discussion, containing logical chains of reasoning. Demonstrates a thorough awareness of competing arguments supported throughout by sustained application of relevant evidence from the context (scientific ideas, processes, techniques or procedures). (AO2) |  |  |  |  |

# WPSO4 CLINICAL PSYCHOLOGY AND PSYCHOLOGICAL SKILLS SECTION E: PSYCHOLOGICAL SKILLS

| Indicative Content  | Mark   |
|---|--|
|   |  |
| <ul> <li>AO1</li> <li>Nature refers to the internal, inherent aspects of a person that they are born with.</li> <li>Nurture refers to the environment and interactions that a person experiences over their lifetime.</li> <li>Biological explanations of human behaviour include the role of hormones, genetics and brain structure.</li> <li>Learning explanations of human behaviour consider individuals to be born a blank slate and develop from their experiences.</li> <li>Some psychological explanations include both nature and nurture in explaining human behaviour, for example language development.</li> <li>Hormones such as testosterone have been claimed to be the cause of emotional reactions such as aggression.</li> <li>Evolutionary explanations of attachment suggest that nature underpins emotional reactions such as bonding.</li> <li>Nature and nurture are difficult to separate when studying human behaviour and often both are evident in research</li> <li>AO3</li> <li>Evidence produced by Raine et al (1997) of differences in the brains of murderers suggests that violence is a result of brain functioning, therefore as a biological basis.</li> <li>Bandura, Ross and Ross (1961) observed children playing after seeing an aggressive role model, they found that children imitated the behaviour they observed, suggesting violence is actually a learned behaviour.</li> <li>The role of the hormone testosterone has been linked by Lindman et al (1987) with aggression in males and so highlights that hormones play a significant role in violent behaviour.</li> <li>Watson and Rayner (1920) were able to condition Little Albert to fear a white rat, therefore evidence that the environment plays a role in the emotional reactions of people to situations, not biology.</li> <li>A reaction of aggression is biologically based due to the hormonal release of</li> </ul> | (20)   |
| <ul> <li>A reaction of aggression is biologically based due to the hormonal release of adrenaline, regardless of the environmental stimulus that creates it.</li> <li>The case of HM shows that human memory is a function of the brain, when HM had the hippocampus removed it created amnesia, therefore highlighting that brain structure is a key feature of human behaviour.</li> <li>Bartlett's (1932) theory of reconstructive memory is evidence that human memory is more complex than brain structure, highlighting how interpretation based on prior experience affects memory recall, therefore nurture plays a significant role in memory functioning.</li> </ul>  |  |
|   | <ul> <li>Nature refers to the internal, inherent aspects of a person that they are born with.</li> <li>Nurture refers to the environment and interactions that a person experiences over their lifetime.</li> <li>Biological explanations of human behaviour include the role of hormones, genetics and brain structure.</li> <li>Learning explanations of human behaviour consider individuals to be born a blank slate and develop from their experiences.</li> <li>Some psychological explanations include both nature and nurture in explaining human behaviour, for example language development.</li> <li>Hormones such as testosterone have been claimed to be the cause of emotional reactions such as aggression.</li> <li>Evolutionary explanations of attachment suggest that nature underpins emotional reactions such as bonding.</li> <li>Nature and nurture are difficult to separate when studying human behaviour and often both are evident in research</li> <li>AO3</li> <li>Evidence produced by Raine et al (1997) of differences in the brains of murderers suggests that violence is a result of brain functioning, therefore as a biological basis.</li> <li>Bandura, Ross and Ross (1961) observed children playing after seeing an aggressive role model, they found that children imitated the behaviour they observed, suggesting violence is actually a learned behaviour.</li> <li>The role of the hormone testosterone has been linked by Lindman et al (1987) with aggression in males and so highlights that hormones play a significant role in violent behaviour.</li> <li>Watson and Rayner (1920) were able to condition Little Albert to fear a white rat, therefore evidence that the environment plays a role in the emotional reactions of people to situations, not biology.</li> <li>A reaction of aggression is biologically based due to the hormonal release of adrenaline, regardless of the environmental stimulus that creates it.</li> <li>The case of HM shows that human memory is a function of the brain, when HM had the hippocampus removed it created amnesia, theref</li></ul> |

| Question<br>Number | Indicative Content  | Mark |
|--------------------|---|------|
| 10<br>Cont'd       | <ul> <li>Bowlby (1944) provided evidence that although the need to bond with a caregiver is instinctive, therefore nature, the quality and consistency of the attachment that is formed determined human behaviours into adulthood, therefore requiring nurture.</li> <li>Gottesman and Shields (1972) found a 58% concordance rate in MZ twins and schizophrenia symptoms, while this shows evidence for genetic inheritance it is not 100% concordance, therefore there must be environmental factors involved.</li> <li>Non-drug therapies for mental illnesses have high success rates, for example CBT and systematic desensitisation, therefore not all mental health conditions can be explained as having a biological basis in the brain.</li> <li>Chomsky claimed that humans have an innate language acquisition device (LAD) that is inbuilt into the brain in order to develop language skills and interact, therefore language is seen to have a biological basis.</li> <li>Explanations of human behaviour that focus on nature are often reductionist, explaining behaviour in distinctly separate ways, such as hormones or neurotransmitters, and so fail to account for a holistic view of a person.</li> <li>Look for other reasonable marking points.</li> </ul> |      |

| Level  | Mark           | Descriptor  |  |  |  |
|--|----------------|---|--|--|--|
| AO1 (8 marks), AO3 (12 marks)  Candidates must demonstrate a greater emphasis on assessment/conclusion vs  knowledge and understanding in their answer.  Knowledge & understanding is capped at maximum 8 marks. |                |   |  |  |  |
|  | 0              | No rewardable material.   |  |  |  |
| Level 1  | 1-4<br>Marks   | Demonstrates isolated elements of knowledge and understanding. (AO1)  |  |  |  |
|  |                | Generic assertions may be presented. Limited attempt to address the question. (AO3)   |  |  |  |
| Level 2  | 5-8<br>Marks   | Demonstrates mostly accurate knowledge and understanding. (AO1)   |  |  |  |
|  |                | Candidates will produce statements with some development in the form of mostly accurate and relevant factual material, leading to a generic or superficial assessment being presented. (AO3)  |  |  |  |
| Level 3  | 9-12<br>Marks  | Demonstrates accurate knowledge and understanding. (AO1)  |  |  |  |
|  |                | Arguments developed using mostly coherent chains of reasoning, leading to an assessment being presented which considers a range of factors. Candidates will demonstrate understanding of competing arguments/factors but unlikely to grasp their significance. The assessment leads to a judgement but this will be imbalanced. (AO3) |  |  |  |
| Level 4  | 13-16<br>Marks | Demonstrates accurate and thorough knowledge and understanding. (AO1)   |  |  |  |
|  |                | Displays a logical assessment, containing logical chains of reasoning throughout which consider a range of factors. Demonstrates an understanding of competing arguments/factors but does not fully consider the significance of each which in turn leads to an imbalanced judgement being presented. (AO3)                           |  |  |  |
| Level 5  | 17-20<br>Marks | Demonstrates accurate and thorough knowledge and understanding. (AO1)   |  |  |  |
|  |                | Displays a well-developed and logical assessment, containing logical chains of reasoning throughout. Demonstrates a full understanding and awareness of the significance of competing arguments/factors leading to a balanced judgement being presented. (AO3)  |  |  |  |

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