

**MARK SCHEME for the May/June 2011 question paper  
for the guidance of teachers**

**9698 PSYCHOLOGY**

**9698/23**

Paper 2 (Core Studies 2), maximum raw mark 50

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

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## Section A

### 1 From the study by Loftus and Palmer on eyewitness testimony:

**(a) Describe one conclusion from either experiment 1 or experiment 2. [2]**

- The results could be due to a distortion in the memory of the participant. The memory of how fast the cars were travelling could have been distorted by the verbal label used.
- Results could be due to response-bias factors, in which case the participant is not sure of the exact speed and therefore adjusts estimate to fit in with the verb in the question.
- The reconstructive hypothesis is where two kinds of information go into a person's memory of an event. Our memory is due to a mixture of both information received at the time of the event and information received after the event.

1 mark for a brief answer, 2 marks if clear conclusion.

**(b) Suggest how this conclusion can be applied to everyday life. [2]**

Likely 2 mark answers:

- Could be useful to police officers to not ask leading questions when interviewing witnesses.
- Could be useful in court for solicitors/barristers/judges to not ask leading questions when interviewing anyone on the stand.
- Teachers could use leading questions to help students give the answer they want.

1 mark for a brief answer, 2 marks if it is well explained.

### 2 From the study by Freud on little Hans:

**(a) Describe one piece of qualitative data. [2]**

Answers could focus on one of Hans' fantasies (giraffe, plumber, etc.) or a description of any other relevant part of the study (e.g. death wish against sister, horse phobia).

1 mark for a brief description (e.g. Hans described the giraffe fantasy) and 2 marks for a clear description (e.g. the giraffe fantasy where the big giraffe doesn't like it that Hans wants to take away the crumpled giraffe).

**(b) Outline one strength of the qualitative data in this study. [2]**

Likely answers will focus on the detail and/or depth of explanation of the behaviour of the participants.

1 mark for any mention of a strength with no link to Freud, 2 marks for the strength plus a link to Freud.

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**3 The study by Gardner and Gardner on Washoe used the longitudinal method.**

**(a) Describe what is meant by longitudinal method. [2]**

A detailed study over a long period of time.

1 mark for a brief definition (e.g. long), 2 marks for a clear explanation (e.g. as above).

**(b) Outline one strength of using the longitudinal method in this study. [2]**

1 mark for a brief/detailed strength not in the context of Gardner and Gardner (longitudinal studies provide a lot of detail) and 2 marks for a clear strength in the context of Gardner and Gardner (e.g. longitudinal studies provide a lot of detail; the Gardners' study tells us a lot about how Washoe acquired language.)

**4 In Piliavin, Rodin and Piliavin's study (subway Samaritans) they concluded the results were due to a cost-benefit analysis.**

**(a) Describe two benefits of helping for the participants in the study. [2]**

Feel good about yourself, don't embarrass yourself in front of others, reduces anxiety about the emergency, etc.

1 mark for each benefit.

**(b) Suggest why this study is not reductionist. [2]**

Likely 2 mark answers:

- Piliavin offers a complex explanation of helping behaviour as he believes lots of factors influence both the costs and benefits of helping.
- When we consider whether we help someone or not we have to take on board the situation we are in as well as how we feel.

Likely 1 mark answer:

- It offers a complex explanation of helping behaviour.

1 mark for a brief description that will explain holism, 2 marks for a clear description that explains holism in terms of this study.

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**5 In the study by Thigpen and Cleckley (multiple personality disorder) tests and equipment were used to collect data from Eve.**

**(a) Identify one physiological measure and one psychological measure used in the study. [2]**

Physiological – EEG

Psychological – Ink Blot test, IQ test, memory test, outside expert observations of Eve.

1 mark for each.

**(b) Explain one difficulty with the psychological measure used in the study. [2]**

Likely 2 mark answer:

- The results of the Ink Blot test come from the interpretation of the psychiatrist which could be open to bias.

Likely 1 mark answers:

- The results are open to interpretation.
- The measuring device may not be valid.
- Difficult to carry out the test again in the same way (Ink Blot and outside expert).

1 mark for a brief/detailed difficulty, 2 marks for a clear difficulty in the context of Thigpen and Cleckley.

**Partial/full answer**

|                |   |
|----------------|---|
| <b>0 marks</b> | No answer <b>or</b> incorrect answer.   |
| <b>1 mark</b>  | Partially correct answer <b>or</b> correct but incomplete, lacking sufficient detail or explanation to demonstrate clear understanding. |
| <b>2 marks</b> | Correct answer with sufficient detail/explanation to demonstrate clear understanding.   |

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### Section B

6 Situational factors such as the environment and behaviour of others can have an impact on our behaviour.

Using the studies from the list below, answer the questions which follow.

Haney, Banks and Zimbardo (prison simulation)

Milgram (obedience)

Bandura, Ross and Ross (aggression)

Rosenhan (sane in insane places)

(a) Outline how situational factors affected behaviour in each of these studies. [10]

*Emphasis on study. Answers must be related to named studies. One point from each study.*

**Indicative content:**

**Zimbardo:** Many features of the environment of the prison caused the guards and prisoners to adopt the appropriate roles.

**Milgram:** Many features of the situation (Yale university, lab environment, lab coat of experimenter) made the participants accept the situation and behave according to the prods of the experimenter.

**Bandura:** The environment of the experimental room with the model either behaving aggressively or not caused the participants to imitate this behaviour in the third room in the study. The environment of the mild aggressive arousal condition affected the children as it made them feel aroused when they were allowed to play and then told to stop.

**Rosenhan:** The environment of the hospital caused patients/pseudopatients to be restless and bored. The power the staff experienced in this environment enabled them to treat the patients/pseudopatients badly.

*For each point up to a maximum of FOUR points:*

|   |     |
|---|-----|
| No answer or incorrect answer.  | [0] |
| Identification of point relevant to question but not related to study or comment from study but no point about the situational explanation of the behaviour from the study. The description may be very brief or muddled. | [1] |
| Description of point about the situational explanation of the behaviour from the study. (Comment without comprehension.) A clear description that may lack some detail.   | [2] |
| As above but with analysis (comment with comprehension) about the situational explanation of the behaviour from the study. A clear description that is in sufficient detail.  | [3] |

[max: 10]

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(b) What problems might psychologists have when they study situational explanations of behaviour? [10]

*Emphasis on problem. Answers supported with named (or other) studies. Each problem does not need a different study; can use same study.*

**Indicative content:**

Ethics of situation, validity of measures used in situation, bias of psychologist observing situation, restrictive sample due to the situation, lack of control over variables in the situation, separating individual and situational influences, or any other relevant issue.

- 1 mark: When psychologists set up situations this can create ethical problems.
- 2 marks: When psychologists set up situations this can create ethical problems as the situation needs to be realistic and this realism could really upset the participants involved.
- 3 marks: When psychologists set up situations this can create ethical problems as the situation needs to be realistic and this realism could really upset the participants involved. For example in Bandura's study some participants may have been upset by the aggressive model as he/she could have been perceived as a threat.

*For each point up to a maximum of FOUR points:*

|  |     |
|--|-----|
| No answer or incorrect answer.   | [0] |
| Identification of problem related to studying situational explanations of behaviour.   | [1] |
| Description of problem related to studying situational explanations of behaviour <b>or</b> a weak description of a problem related to studying situational explanations of behaviour and applied to a study. | [2] |
| Description of problem related to studying situational explanations of behaviour and applied to the study effectively.   | [3] |

[max: 10]

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- (c) 'Behaviour can only be explained in terms of the situation.' To what extent do you agree with this statement? Give reasons for your answer. [10]

*Emphasis on point. Answers supported with named study (or other) studies/evidence.*

|   |        |
|---|--------|
| One or two general statements which may be inaccurate, incomplete or muddled.   | [1–2]  |
| General statements are made which are focused on the question but are basic, lacking in detail and have no supporting evidence. For four marks there may be general statements with anecdotal evidence or vague reference to supporting psychological evidence.   | [3–4]  |
| A number of points are made which are focused on the question and are generally accurate. There is some supporting psychological evidence but there is little detail and no attempt to justify the points. OR as for 7–8 marks but with only two points.  | [5–6]  |
| Four points (best four) are made which are focused on the question and are accurate. There is supporting psychological evidence with an attempt to justify the points. There is increased detail but the range of arguments is limited and there may be an imbalance. OR as for 9–10 marks but with only 3 points.  | [7–8]  |
| A range of different points (best four) is made which are accurate and show understanding. Each point has appropriate supporting psychological evidence. The arguments are well expressed, well considered, are balanced, i.e. expressing both sides of the argument, and reflect understanding which extends beyond specific studies. There may well be a consideration of the implications and effects. | [9–10] |

[max: 10]

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7 Ethnocentric bias can refer to favouring one group over another.

Using the studies from the list below, answer the questions which follow.

Gould (intelligence testing)  
 Deregowski (picture perception)  
 Hraba and Grant (doll choice)  
 Tajfel (intergroup categorisation)

(a) Describe the ethnocentric bias in each of these studies. [10]

*Emphasis on study. Answers must be related to named studies. One point from each study.*

**Indicative content:**

**Gould:** Yerkes believed the results of the IQ tests on the army recruits highlighted a genetic difference in the races. The results of the IQ showed a difference between the races. The tests were used to determine officer placement. The tests were used to create the Immigration Restriction Act. Any examples from the tests that show they are culturally biased.

**Deregowski:** The behaviour/comments by the Africans were viewed as childish. Split style drawings were viewed as childish. The way the 2D perceivers judged the pictures was viewed as not as good as 3D perceivers rather than just different.

**Hraba and Grant:** The children in the study showed racial preference towards the doll of the same race as themselves. This increased with age.

**Tajfel:** The boys in this study favoured their own/in group and discriminated against the out group.

*For each point up to a maximum of FOUR points:*

|   |     |
|---|-----|
| No answer or incorrect answer.  | [0] |
| Identification of point relevant to question but not related to study or comment from study but no point about ethnocentric bias. The description may be very brief or muddled.   | [1] |
| Description of point about ethnocentric bias. (Comment without comprehension.) A clear description but may lack some detail. Any answer that focuses on the results of the study and not the ethnocentric bias should get a maximum of 2 marks. | [2] |
| As above but with analysis (comment with comprehension) about the ethnocentric bias in the study. A clear description that is detailed.   | [3] |

[max: 10]



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**(b) What problems may psychologists have when they study ethnocentric bias? [10]**

*Emphasis on problem. Answers supported with named (or other) studies. Each problem does not need a different study; can use same study.*

**Indicative content:**

Validity of the measuring device, language barriers in studying different cultures, ethics of the tests, generalisability of restricted samples

1 mark: The problem is the lack of validity of the tests.

2 marks: One problem with studying ethnocentric bias is that the tests used on the participants lack validity.

3 marks: One problem with studying ethnocentric bias is that the tests used on the participants lack validity. For example, the pictures in Derogowski's study used popular Western depth cues which made it more difficult for the African participants to perceive depth.

*For each point up to a maximum of FOUR points:*

|  |     |
|--|-----|
| Incorrect problem with the study.  | [0] |
| Identification of problem not related to studying ethnocentric bias.   | [1] |
| Description of problem related to studying ethnocentric bias <b>or</b> a weak description of a problem related to studying ethnocentric bias and applied to a study. | [2] |
| Description of problem related to studying ethnocentric bias and applied effectively to study.   | [3] |

[max: 10]

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- (c) 'All psychological studies have ethnocentric bias.' To what extent do you agree with this statement? Give reasons for your answer. [10]

*Emphasis on point. Answers supported with named study (or other) studies/evidence.*

|   |        |
|---|--------|
| One or two general statements which may be inaccurate, incomplete or muddled.   | [1–2]  |
| General statements are made which are focused on the question but are basic, lacking in detail and have no supporting evidence. For four marks there may be general statements with anecdotal evidence or vague reference to supporting psychological evidence.   | [3–4]  |
| A number of points are made which are focused on the question and are generally accurate. There is some supporting psychological evidence but there is little detail and no attempt to justify the points. OR as for 7–8 marks but with only two points.  | [5–6]  |
| Four points (best four) are made which are focused on the question and are accurate. There is supporting psychological evidence with an attempt to justify the points. There is increased detail but the range of arguments is limited and there may be an imbalance. OR as for 9–10 marks but with only 3 points.  | [7–8]  |
| A range of different points (best four) is made which are accurate and show understanding. Each point has appropriate supporting psychological evidence. The arguments are well expressed, well considered, are balanced, i.e. expressing both sides of the argument, and reflect understanding which extends beyond specific studies. There may well be a consideration of the implications and effects. | [9–10] |

[max: 10]

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**8 Physiological psychology looks at the interaction between biology and behaviour.**

Using the studies from the list below, answer the questions which follow.

**Sperry (split brain)**

**Raine, Buchsbaum and LaCasse (brain scans)**

**Dement and Kleitman (sleep and dreaming)**

**Schachter and Singer (emotion)**

**(a) Outline the physiological processes investigated in each of these studies. [10]**

*Emphasis on study. Answers must be related to named studies. One point from each study.*

**Indicative content:**

**Schachter and Singer:** Emotion has physiological and psychological component.

**Sperry:** Behaviour determined by interaction of hemispheres. Localisation of function.

**Dement and Kleitman:** Process of dreaming, REM, NREM, etc.

**Raine, Buchsbaum and LaCasse:** Functions of areas of brain.

*For each point up to a maximum of FOUR points:*

|   |     |
|---|-----|
| No answer or incorrect answer.  | [0] |
| Identification of point relevant to question but not related to study. The description may be very brief or muddled.                                | [1] |
| Description of point about the physiological processes in the study. (Comment without comprehension.) A clear description but may lack some detail. | [2] |
| As above but with analysis (comment with comprehension) about the physiological processes in the study. A clear description that is detailed.       | [3] |

[max: 10]

|         |                                |          |       |
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**(b) What problems may psychologists have when they investigate physiological processes? [10]**

*Emphasis on problem. Answers supported with named (or other) studies. Each problem does not need a different study; can use same study.*

**Indicative content:**

Can be reductionist: behaviour is more than just physiology.

Subjective data equally important and this is ignored by physiological.

Measuring devices can be problematic due to inaccuracies of the equipment.

Lack of generalisability due to a restricted sample.

Asking participants to do an unrealistic test which then does not show us physiological processes in everyday life.

1 mark: Tests given to participants are unrealistic.

2 marks: Asking participants to do an unrealistic test which then does not show us physiological processes in everyday life.

3 marks: Asking participants to do an unrealistic test which then does not show us physiological processes in everyday life. For example in the Raine study the participants were asked to do a continuous performance task for 30 minutes prior to the scan. This sort of repetitive task isn't done in everyday life.

*For each point up to a maximum of FOUR points:*

|  |     |
|--|-----|
| Incorrect problem with the study.  | [0] |
| Identification of problem not related to studying physiological processes.   | [1] |
| Description of problem related to studying physiological processes <b>or</b> a weak description of a problem related to studying physiological processes and applied to a study. | [2] |
| Description of problem related to studying physiological processes and applied effectively to study.   | [3] |

[max: 10]

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- (c) 'Physiological psychology tells us very little about human behaviour and experience.'  
To what extent do you agree with this statement? Give reasons for your answer. [10]

*Emphasis on point. Answers supported with named study (or other) studies/evidence.*

|   |        |
|---|--------|
| One or two general statements, which may be inaccurate, incomplete or muddled.  | [1–2]  |
| General statements are made which are focused on the question but are basic, lacking in detail and have no supporting evidence. For four marks there may be general statements with anecdotal evidence or vague reference to supporting psychological evidence.   | [3–4]  |
| A number of points are made which are focused on the question and are generally accurate. There is some supporting psychological evidence but there is little detail and no attempt to justify the points. OR as for 7–8 marks but with only two points.  | [5–6]  |
| Four points (best four) are made which are focused on the question and are accurate. There is supporting psychological evidence with an attempt to justify the points. There is increased detail but the range of arguments is limited and there may be an imbalance. OR as for 9–10 marks but with only 3 points.  | [7–8]  |
| A range of different points (best four) is made which are accurate and show understanding. Each point has appropriate supporting psychological evidence. The arguments are well expressed, well considered, are balanced, i.e. expressing both sides of the argument, and reflect understanding which extends beyond specific studies. There may well be a consideration of the implications and effects. | [9–10] |

[max: 10]