

**CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**GCE Advanced Subsidiary Level and GCE Advanced Level**

## **MARK SCHEME for the May/June 2014 series**

### **9698 PSYCHOLOGY**

**9698/21**

Paper 2 (Core Studies 2), maximum raw mark 70

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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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### Section A

- 1 Baron-Cohen et al. used the eyes task to collect quantitative data from the participants. An alternative way to investigate theory of mind would be to collect qualitative data.**

**(a) Define qualitative and quantitative data using examples. [5]**

Any five correct points, 1 mark for each point up to a maximum of five points.  
 Examples of methods used to collect this data (e.g. interviews/questionnaires) as well as examples of the data (including from the studies) itself are creditworthy.  
 No credit is given to strengths and weaknesses of the data.  
 Just describing one type of data is worth a maximum of 3 marks.

Indicative content:

Quantitative data – Numerical data, data that produces statistics/bar charts, Likert scale questions, closed questions, rating scales

Qualitative data – Descriptive/in-depth data, open questions

Any other appropriate point

No answer or incorrect answer, 0

Be aware it is possible to collect data on thoughts, feelings and behaviour with both qualitative and quantitative data. Therefore suggesting one type collects this type of information is incorrect as it does apply to both.

No credit given to qualitative data being non numerical.

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**(b) Design an alternative investigation which tests theory of mind and collects qualitative data. [10]**

Candidates should describe the who, where, what and how.

Major omissions include the what and how. Candidates must describe what behaviour is being measured (e.g. questions asked) and give some indication of how the data is collected (e.g. verbal questions to participants).

Minor omissions include who and where or any lack of clarity in the what/how. If the candidate indicates different sampling methods were used for the different groups of participants these must all be described. Many will choose to use the same eyes task. Just naming this can count but it must be described in order for it not be a minor omission (e.g. 40 sets of eyes).

Room/lab okay for where.

Evaluation of the research is **not** creditworthy although any further details of the procedure given can receive credit.

It is possible to achieve 9 marks with a small minor omission (e.g. sampling method).

Alternative study is incomprehensible.	0
Alternative study is muddled and impossible to conduct.	1–2
Alternative study is muddled but possible and/or there are major omissions.	3–4
Alternative study is clear with a few minor omissions.	5–6
Alternative study is described with one minor omission and in some detail.	7–8
Alternative study is described in sufficient detail to be replicable.	9–10

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(c) Evaluate this alternative way of studying theory of mind in methodological and practical terms. [10]

Indicative content –

Candidate needs to consider a number of points regarding their study. These points can be both positive and/or negative.

Appropriate points could include a discussion about

- Validity of data collection method (e.g. participants could lie, find it difficult to express their answers)
- Cannot compare participant's responses to each other or other groups
- Ethics of asking intrusive questions (e.g. participants may not like having to explain their answers)
- Reliability of collecting qualitative data
- Researcher bias when interpreting data
- Demand characteristics
- Ecological validity (not normal practice to be asked these type of questions)
- Generalisability of the sample
- Ecological validity of the task (could be the eyes task)
- Any other appropriate point.

In order to achieve higher marks the candidate must link their points to their investigation described in part (b).

No evaluation.	0
Evaluation is muddled and weak.	1–2
Evaluation is simplistic and/or not specific to the investigation. May include one point that is brief and specific to investigation.	3–4
Evaluation is simplistic but usually specific to the investigation (may include general evaluation). May include one detailed point.	5–6
Evaluation is good and specific to the investigation. Two or more points.	7–8
Evaluation is very detailed and directly relevant to the investigation. <b>2 or more points.</b>	9–10

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**2 Mann et al. conducted a study to investigate deceptive and truthful behaviour.**

**(a) What is meant by ecological validity? [2]**

1 mark partial  
2 marks full

Possible response – real life or generalisability – 1 mark (partial)  
Whether the features of a study are similar to real life experiences – 2 marks (full)  
How realistic a study is. How similar it is to everyday life. – 2 marks (full)

**(b) Explain why the Mann et al. study has high ecological validity. [3]**

1–2 marks partial  
3 marks full (clearly explains why the study is high in ecological validity)

Possible response –  
Mann’s study used real interviews – 1 mark  
The study used videos of **real** police interviews with **real** suspects – 2 marks  
The study used videos of **real** police interviews with **real** suspects which is a real life data from high stake liars – 3 marks

Note – all points must relate directly to Mann et al.

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- (c) Discuss the strengths and weaknesses of having a study high in ecological validity using the Mann et al. study as an example. [10]

Appropriate strengths and weaknesses will be varied. These could include –

Weaknesses

- Difficult to control variables in the natural environment.
- Could be unethical as participants do not know they are in a study.
- Can be unreliable as difficult to replicate.

Strengths

- Useful as the study is naturalistic so can be applied to everyday life.
- Participants do not know they are in a study so results are more natural.
- Participants do not know they are in a study so results are more valid.
- Any other appropriate point.

Do not credit the generalisability/representativeness of the sample.

No comment on the strengths and weaknesses of high ecological validity.	0
Comment given but muddled and weak.	1–2
Consideration of at least a strength and a weakness not specific to investigation. <b>OR</b> Consideration of either a strength/weakness that is specific to ecological validity and investigation.	3–4
Consideration of two or more points (at least one strength and one weakness) which are clear and specific to investigation.	5–6
Consideration of at least two strengths and two weaknesses which are clear and specific to investigation.	7–8
Consideration of at least two strengths and two weaknesses which are good and directly relevant to the investigation.	9–10

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(d) Discuss the extent to which the Mann et al. study has useful applications. [10]

Candidates may discuss how the findings of the study by Mann et al. are useful and to whom without discussing the extent to which the study is useful. Give a maximum of 4 marks to these candidates. A general discussion of the findings/conclusions of the study with no reference to usefulness is **not** creditworthy.

Appropriate comments could include linking usefulness to –

- Sample is not generalisable
- Researcher bias in interpreting data
- Ecological validity of the study
- Controls used in the study and the effect of this on reliability
- Coding of the video footage and the strengths and weaknesses of this method
- Good reliability of the coding between the raters
- Scientific nature of the study
- Any other appropriate comment.

Note – points can be positive as well as negative

No comment on usefulness.	0
Comment on usefulness.	1–2
Comment on usefulness which is not specific to the investigation. <b>OR</b> Consideration of extent of usefulness which is simplistic but specific to investigation.	3–4
Consideration of usefulness is simplistic but specific to investigation and somewhat detailed. This could include one point. <b>OR</b> Consideration of usefulness which is detailed but not specific to investigation. <b>OR</b> Evaluation points specific to the investigation without a clear reference to usefulness.	5–6
Consideration of usefulness is good but brief (2 or more points) and specific to investigation. <b>OR</b> Consideration of usefulness with one issue which is detailed and directly relevant to the investigation and the other issue(s) is more simplistic.	7–8
Consideration of usefulness (2 or more points) which is detailed and directly relevant to the investigation. The discussion should make clear references to the effects on the usefulness of the study.	9–10

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**Section B**

**3 (a) Outline what is meant by the ‘developmental approach’ in psychology. [2]**

1 mark partial, 2 marks full

The developmental approach is the study of childhood. – 1 mark

The developmental approach is the study of how behaviour changes as we age. – 2 marks

Appropriate responses could also include assumptions of the developmental approach.

**No credit** for a description of the findings/conclusions of one of the core studies.



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

Freud (little Hans)  
 Bandura et al. (aggression)  
 Nelson (children's morals)

(b) Describe the developmental processes that were investigated in each of these studies. [9]

**Indicative content:** Most likely answers (any appropriate answer receives credit):

**Freud:** Investigated the psychosexual stages of development. He looked at moving from the phallic stage to the latency stage. He investigated how the Oedipus complex was resolved in little Hans.

**Bandura et al.:** Investigated aggression in children. He wanted to show that aggression is a learned behaviour. He found the children imitated the aggressive behaviour of the model.

**Nelson:** Investigated the morality of children. He wanted to show that morality changes as children get older but even very young children of the age of 3 use morals to interpret behaviour. Young children generally rely on one cue to make their decision whereas older children (7–8 years old) can use both even if these are incongruent.

Must describe the development that is investigated to get into top band.  
 Descriptions of how the data is collected on its own **cannot** receive more than 1 mark.

For each study:	
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 developmental processes from the study. The description may be very brief or muddled.	1
Description of point about developmental processes from the study. (Comment with lack of understanding). A clear description that may lack some detail.	2
As above but with analysis (comment with comprehension) about developmental processes from the study. A clear description that is in sufficient detail.	3
Max mark	9

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**(c) What problems may psychologists have when they investigate developmental processes in children? [9]**

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 unethical as children are vulnerable, difficult to obtain consent, give debrief due to young age of children.
- Children may respond more to the demand characteristics as they are eager to please.
- Can be invalid as children may find it difficult to express themselves or find the task confusing due to young age.
- Children may react more to the lack of ecological validity.
- Children have short attention spans.
- Difficult to find a wide and varied sample due to issues of access and consent.
- Any other appropriate advantage.

<b>Marks per point up to a MAXIMUM of three points.</b>	
No answer or incorrect answer.	0
Brief description of problem.	1
Description of problem related to investigating developmental processes. <b>OR</b> A weak description of problem related to investigating developmental processes and applied to a study.	2
Description of problem related to investigating developmental processes and applied to the study effectively.	3
Max mark	9

**4 (a) Outline what is meant by the term ‘situational explanations of behaviour’ in psychology. [2]**

1 mark partial – 2 marks full

An example of a situational explanation could achieve a maximum of 1 mark

Example answer –

The situation is used to explain behaviour – 1 mark

Participants’/peoples’ behaviour is explained due to the environment the person is in and how this is effecting them. – 2 marks

No credit for describing the dispositional explanation on its own although it can be used as a comparison, no credit for a description of the findings of one of the core studies.

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

**Piliavin et al. (subway Samaritans)**

**Milgram (obedience)**

**Thigpen and Cleckley (multiple personality disorder)**

**(b) Describe how the data were collected in each of these studies. [9]**

**Piliavin et al.:** The observers sat in the adjacent area of the subway and recorded quantitative data – gender and race of the helper, number of people on subway, time taken to help, etc. They also recorded comments made by the passengers during the study.

**Milgram:** How far up the shock generator was recorded, participants were videotaped and their behaviour and comments were recorded (e.g. seizure, sweating, etc.). Participants were given a 14-point scale to rate how painful the shocks were at the end of the study.

**Thigpen and Cleckley:** Used therapy and hypnosis to analyse Eve. They recorded over 100 hours of therapy sessions over 14 months. An outside expert was brought in who did IQ test, memory test and analysed Eve’s behaviour. In addition, an EEG, ink blot and human figure tests were done on Eve during the study.

Up to full credit can be given for examples of the data. Candidates do not need to describe every feature of the how the data were collected to obtain full marks.

<b>For each study:</b>	
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 data collection from the study. The description may be very brief or muddled.	1
Description of point about data collection from the study. (Comment with lack of understanding). A clear description that may lack some detail.	2
As above but with analysis (comment with comprehension) about data collection from the study. A clear description that is in sufficient detail.	3
Max mark	9

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**(c) What advantages may psychologists have when they investigate situational explanations of behaviour? [9]**

Emphasis on advantage, answers supported with named (or other) studies. Each advantage does not need a different study; can use same study.

**Indicative content:**

- Studies are often realistic so have good ecological validity
- If participants know they are in the study it will be ethical
- Useful applications as we can alter situations
- If study is done in a lab has good control so more reliable and/or valid
- Lack of demand characteristics/social desirability if the situation is realistic
- Offers an explanation of behaviour/theory about human behaviour
- Or any other relevant advantage

<b>Marks per point up to a MAXIMUM of three points.</b>	
No answer or incorrect answer.	0
Identification of advantage.	1
Description of advantage related to situational explanations. <b>OR</b> A weak description of an advantage related to situational explanation and applied to a study.	2
Description of advantage related to situational explanations and applied to the study effectively.	3
Max mark	9